

Annual Report 2021

Vivoryon Therapeutics N.V.
Amsterdam, The Netherlands

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PDF/printed version:
This document is the PDF/printed version of the 2021 Annual Report of Vivoryon Therapeutics N.V. in the European single electronic reporting format (ESEF) and has been prepared for ease of use. The ESEF reporting package is available on the company’s website at www.vivoryon.com. In any case of discrepancies between this PDF version and the ESEF reporting package, the latter prevails.

Forward Looking Statements

This Annual Report has been prepared and issued by Vivoryon Therapeutics N.V. (the ‘Company’, ‘Vivoryon Therapeutics’ or ‘Vivoryon’) and has not been independently verified by any third party. No representation or warranty is given as to the achievement or reasonableness of, and no reliance should be placed on, any projections, targets, estimates or forecasts and nothing in this Annual Report is or should be relied on as a promise or representation as to the future.

All statements other than statements of historical fact included in this Annual Report are or may be deemed to be forward-looking statements, including, without limitation, those regarding the business strategy, management plans and objectives for future operations of the Company, estimates and projections with respect to the market for the Company’s products and forecasts and statements as to when the Company’s products may be available. Words such as ‘anticipate,’ ‘believe,’ ‘estimate,’ ‘expect,’ ‘forecast,’ ‘intend,’ ‘may,’ ‘plan,’ ‘project,’ ‘predict,’ ‘should’ and ‘will’ and similar expressions as they relate to the Company are intended to identify such forward-looking statements. These forward-looking statements are not guarantees of future performance; rather they are based on the Management’s current expectations and assumptions about future events and trends, the economy and other future conditions. The forward-looking statements involve a number of known and unknown risks and uncertainties. These risks and uncertainties and other factors could materially adversely affect the outcome and financial effects of the plans and events described herein. Actual results, performance or events may differ materially from those expressed or implied in such forward-looking statements and from expectations. As a result, no undue reliance should be placed on such forward-looking statements. This Annual Report does not contain risk factors. Certain risk factors that may affect the Company’s future financial results are discussed in the published financial statements of the Company.

This Annual Report, including any forward-looking statements, speaks only as of the date of this Annual Report. The Company does not assume any obligation to update any information or forward-looking statements contained herein, save for any information required to be disclosed by law.

No reliance may be placed for any purpose whatsoever on the information or opinions contained in this Annual Report or on its completeness, accuracy or fairness, and any reliance a recipient places on them will be at the recipient’s sole risk. No representation or warranty, express or implied, is made or given by or on behalf of the Company or any of its respective directors, officers, employees, affiliates, agents or advisers as to the accuracy, completeness or fairness of the information or opinions contained in this Annual Report and no responsibility or liability is accepted by any of them for any such information or opinions. The information set out herein may be subject without notice to updating, revision, verification and amendment which may materially change such information.

This Annual Report does not constitute an offer to sell or a solicitation of an offer to buy any securities of the Company in any jurisdiction.

1 Report by Vivoryon`s Executive Management Board

This management report as referred to in Section 2:391 of the Dutch Civil Code (the ‘Management Report’) has been prepared in compliance with the requirement of Dutch law, including the Dutch corporate governance code (the ‘Code’). The board of directors of Vivoryon Therapeutics N.V. (the ‘board’) and its controlled subsidiary hereby present the Management Report for the financial year ended on December 31, 2021.

1.1 Overview of the Company

1.1.1 General information

Vivoryon Therapeutics N.V. is a Dutch public company with limited liability (*‘Naamloze Vennootschap’*) that has its statutory seat in Amsterdam, the Netherlands and branch offices in Halle (Saale) and Munich, Germany. This report includes the statutory financial statements of Vivoryon Therapeutics N.V. for the year ended December 31, 2021. The Company’s ordinary shares are listed under the ticker symbol ‘VVY’ on Euronext Amsterdam, the Netherlands. Vivoryon Therapeutics N.V. is a clinical stage biopharmaceutical company focused on discovering, developing, and potentially commercializing small molecule-based medicines that modulate the activity and stability of pathologically altered proteins.

Vivoryon Therapeutics Inc. in Chicago, Illinois, USA, has no operating activities. Considering the negligible significance of this subsidiary to the financial statements, in accordance with Section 407 under 1a of the Dutch Civil Code, the Company applies the exemption pertaining to the consolidation scope and does not prepare consolidated financial statements.

1.1.2 Organizational structure

The Company is registered with the name Vivoryon Therapeutics N.V. in the Trade Register of the Netherlands Chamber of Commerce under number 81075480. Its commercial name is Vivoryon Therapeutics and the administrative headquarters as well as the business operations remain in Halle (Saale) and Munich Germany. The Company’s business address is Weinbergweg 22, 06120 Halle (Saale), Germany.

The Company has a subsidiary, Vivoryon Therapeutics Inc. in Chicago, IL, USA. All operating activities and assets are concentrated in Vivoryon Therapeutics N.V.; currently, Vivoryon Therapeutics Inc. has no operating activities.

As at December 31, 2021, including Executive Directors, Vivoryon Therapeutics had 17 (2020: 18) employees, of which 47 % (2020: 44) were female.

1.1.3 Property, plant and equipment

Vivoryon has leased office and laboratory space in Halle (Saale), Germany and additional office space in Munich, Germany, both under an extendable lease.

1.1.4 General overview of the Company

We are a biopharmaceutical company focused on discovering, developing, and potentially commercializing small molecule-based medicines that modulate the activity and stability of pathologically altered proteins. We are determined to create novel therapeutics to treat diseases with exceptionally high unmet medical need. Our current drug development programs focus on novel therapeutics with a differentiated mode of action for treating Alzheimer’s disease (“AD”), cancer, and fibrotic indications. We are developing a proprietary pipeline of product candidates using operations focused on planning and managing Research and Development (“R&D”) programs. In addition to developing small molecule-based medicines, we also pursue antibody-based approaches in certain indications. Research work is mainly outsourced to CROs or academic collaboration partners on a fee-for-service basis. We strive to generate future revenues from licensing our product candidates to biopharmaceutical companies or, in selected cases, by commercializing products upon regulatory market approval by the relevant Competent Authorities.

AD is a disease with exceptionally high unmet medical need. Despite significantly increasing global case numbers, before the recent approval of Biogen’s Aduhelm, no AD treatment was approved in 18 years. All drugs approved before Aduhelm treat symptoms of the disease only and neither halt the progression nor provide sustainable improvement of the condition. The positive effects of these treatments on cognitive function and activities of daily living are slight and transient and accompanied by potential side effects.

Scientists have identified significant hallmarks of AD, including the accumulation of amyloid-beta (“Abeta”) peptides. These peptides were identified as the main constituent of senile plaques, historically regarded as the toxic component that destroys brain cells, a process referred to as neurodegeneration. Based on this hypothesis, therapeutic concepts were developed aiming at halting or slowing the progression of neurodegeneration (disease modification). The first generation of disease-modifying approaches focused on inhibiting the plaque formation or reducing existing plaques by targeting the generation of Abeta from its precursor protein Amyloid Precursor Protein (“APP”) through blocking the enzymes that catalyze this transformation, the beta and gamma secretases. These approaches were not as effective as expected. Around 30 different variants of Abeta can be found in brains affected by AD, which suggests that proteases other than the secretases and a group of post-translationally modifying enzymes are also involved in the generation of these variants.

Today’s prevailing scientific view is that, rather than the plaques, certain soluble forms of Abeta aggregates, called “Abeta oligomers,” cause the early pathological changes in AD. It has been shown that a specific form of Abeta can trigger the formation of these toxic soluble Abeta oligomers. This form, “N3pE” amyloid (synonyms: N3pG, pEAb 3-42, pGlu-Abeta, or pyroglutamate-Abeta), acts as a seeding element for Abeta aggregation. Several different scientific studies have confirmed that N3pE is a particularly neurotoxic variant of Abeta. N3pE amyloid is found only in AD patients, not in healthy individuals and its levels in the brain correlate with the cognitive ability of AD patients. Further hallmarks of AD pathology include intracellular accumulation of tau protein (tangles), neuroinflammation, and synaptic impairment. A proinflammatory protein that has been shown to be involved in both events is the chemokine CCL2.

In 2004, our scientists discovered that the transformation of Abeta peptides into N3pE amyloid requires the activity of a specific enzyme called glutaminyl cyclase (“QPCT” or “QC”). The discovery of this key enzymatic function and the ability to block N3pE formation by blocking QPCT is our basis for developing small molecule inhibitors as a specific N3pE-targeting treatment approach. The enzymatic activity of glutaminyl cyclases is also required for the stability and full potency of the proinflammatory protein CCL2, with QPCTL, an isoform of QPCT, upregulating CCL2 by converting it into pE-CCL2. Thus, blocking QPCTL holds the potential to reduce neuroinflammation. Moreover, CCL2 is also a promoter of the tau pathology, which, in turn is linked to synaptic impairment, enabling simultaneous targeting of these pathologies.

We are developing product candidates to specifically target toxic N3pE amyloid via two approaches we believe to be complementary: (i) inhibiting the production of N3pE; and (ii) clearing existing N3pE from the brain. Our current development pipeline in AD consists of the following product candidates:

(i) Small molecule inhibitor approach to inhibit the production of N3pE amyloid

Varoglutamstat (PQ912) — a nanomolar inhibitor of QPCT — is our lead product candidate and is currently in Phase 2b stage of clinical development and has recently been granted fast track designation in early AD by the Food and Drug Administration (“FDA”). Varoglutamstat (PQ912) was discovered, profiled, and nominated by us for regulatory development in 2010. In our preclinical studies, we have generated data demonstrating that cognitive parameters were improved in well-known AD mouse models treated with varoglutamstat (PQ912) compared to controls which were not treated with varoglutamstat (PQ912). In a completed Phase 1 clinical trial, QPCT activity under treatment was reduced by about 90% and a PK/PD relation in CSF and serum was measured; with the trial also yielding important information on dose response and target occupancy. A first in-patient Phase 2a trial in Europe, SAPHIR, started in March 2015 and reported results in June 2017. Results indicated that, while the majority of reported adverse events (AEs) were related to skin and gastrointestinal tract, mild to moderate and fully reversible in nature, 13 serious AEs occurred in the group treated twice daily with varoglutamstat (PQ912) at 800mg (compared to 5 serious AEs in the placebo group), meaning that a dose limiting toxicity was reached at this dose. This led to an adjusted dosing regimen between 150 and 600mg twice daily in our current Phase 2 trials VIVIAD and VIVA-MIND. The SAPHIR Phase 2a study met its primary safety endpoint and showed evidence of the potential disease-modifying activity of varoglutamstat (PQ912) in a number of analyzed parameters, namely biomarkers, EEG measurements, and cognitive assessment. Most importantly, a statistically significant ($p = 0.05$) change from baseline in working memory as measured by the One Back Test and a notable, although not statistically significant, change from baseline in attention were measured after 12 weeks of treatment. We are currently conducting two double-blind, placebo-controlled Phase 2 trials for varoglutamstat (PQ912), the Phase 2b VIVIAD trial in Europe, with the first patient enrolled in July 2020 and the complementary Phase 2a/b VIVA-MIND trial in the U.S., initiated in September 2021, for which an IND is active, which was granted by the FDA on July 31, 2020. On June 29, 2021, we entered into a strategic regional licensing partnership with Simcere Pharmaceutical Group Ltd (HKEX: 2096, “Simcere”) to develop and, if the necessary regulatory approvals are obtained, commercialize medicines targeting the neurotoxic amyloid species N3pE (“pGlu-Abeta”) to treat AD in Greater China. The agreement grants Simcere a regional license to develop and commercialize varoglutamstat (“PQ912”), Vivoryon’s Phase 2b-stage N3pE amyloid-targeting oral small molecule glutaminyl cyclase (“QPCT”) inhibitor with disease-

modifying potential for AD, as well as our preclinical monoclonal N3pE-antibody PBD-C06 in the Greater China region. Under the terms of the agreement, we will receive upfront payments and will also be eligible for payments upon achievement of certain development and sales milestones.

Varoglutamstat (PQ912) can inhibit both QPCT and QPCTL and with its dual mode of action of blocking formation of neurotoxic N3pE and modulating pE-CCL2, it offers the potential to address all important pathological hallmarks of AD: Abeta pathology, neuroinflammation, tau pathology, and synaptic impairment, leading to the protection of important brain functions.

(ii) Antibody-based approach to clear existing N3pE amyloid from the brain

Antibody-based approaches to clear Abeta plaques from the brain are widely regarded as a potential way to address cognitive dysfunction in AD, but a clear correlation of overall plaque load and cognitive impairment has not yet been demonstrated. In contrast, there is a proven correlation of the particularly neurotoxic species N3pE amyloid with cognition in AD patients, based on which we are developing PBD-C06, an antibody explicitly targeting N3pE amyloid. PBD-C06 is a monoclonal antibody currently in preclinical development. PBD-C06 binds to N3pE amyloid with high specificity. The rationale is to selectively clear the brain of N3pE via the immune system while leaving non-toxic forms of Abeta untouched. We believe that due to the high specificity of PBD-C06 for N3pE amyloid, the proportion of antibody reaching the brain will be sufficient to remove the toxic peptides. PBD-C06 has been optimized towards low immunogenicity to reduce the occurrence of anti-drug antibody in patients and towards low potency to induce amyloid-related imaging abnormalities (ARIAs), a major side effect in antibody-based AD therapies. We have made further development of PBD-C06 dependent on a partnership with a biopharmaceutical company, providing financial and development resources in the field of therapeutic antibodies. In June 2021, Sincere acquired a regional license to develop and commercialize PBD-C06 in the Greater China region if the necessary regulatory approvals are obtained (see “— (i) Small molecule inhibitor approach to inhibit the production of N3pE amyloid.”).

Other disease areas with exceptionally high medical requirements that we target include cancer and fibrotic indications. In both indications, we are looking to exploit the physiological relevance of the posttranslational modification mediated by glutaminy cyclases, the cyclization of an N-terminal glutamine or glutamate residue to form a pyro-glutamate. This cyclization has two physiological functions: it is required for (i) full maturation, potency, and stability of several proteins and peptides, and (ii) mediation of protein-protein interactions in cell-cell contacts. An example of (ii) is the requirement for a pyro-glutamate on the N-terminus of the membrane protein CD47 to be able to bind to its counterpart SIRPalpha expressed on macrophages. This interaction is an innate immune system checkpoint that provides a “do not eat me” signal to the macrophage and thus helps the tumor to escape the immune defense mechanism. An example for (i) is N-terminal cyclization of CCL2 for form pE-CCL2, which is the fully potent and stable form of this chemokine.

Oncology: In cancer therapy, we are investigating the use of the following glutaminy cyclase inhibitors in both of the above-mentioned pathologically relevant pathways: the CD47-SIRPalpha immune checkpoint and the CCL2-CCR2 chemokine axis. In both cases, we focus on the isoenzyme of QPCT, which is called QPCTL (glutaminy cyclase-like). QPCT and QPCTL (together “QPCT/L”) have the same physiological functions but differ in localization and substrate specificity. The expression of QPCTL is upregulated in a variety of cancer cells. In addition to varoglutamstat (PQ912), we have developed a series of nanomolar QPCTL inhibitors at the preclinical stage and are currently under investigation in animal tumor models to select the best fitting indication scenario.

Fibrotic Indications: Our most recent drug discovery project has been initiated in the field of fibrotic indications. The metal-dependent proteases, meprin alpha and meprin beta are emerging targets in kidney protection, fibrotic diseases, cancer, and potentially AD. Our focus is on developing meprin protease inhibitors to treat acute kidney injury (“AKI”) and fibrosis and this program is currently in the pre-clinical stage. While we have a broad portfolio of small molecule compounds, the current lead molecule achieved first in vivo proof of principle in an AKI mouse model. Increased expression of meprins and their delocalization has been associated with tissue damage and collagen deposition in fibrosis, resulting in the loss of organ function. Meprin-targeted protease inhibitors thus have the potential to target symptoms and treat a range of indications, including acute and chronic kidney disease and multiple organ fibrosis.

In cancer and fibrotic indications, we aim to nominate further candidates, QPCTL and meprin inhibitors, respectively, for clinical development within the next two to three years. In addition, we are constantly investigating other potential applications of our inhibitors to pursue potential novel findings and trends rapidly.

We have a patent portfolio directed to our product candidates and targets comprising composition of matter and medical use claims directed to AD and inflammatory diseases, oncology, and fibrotic indications. Our patent portfolio currently consists of 39 patent families, which comprise approximately 634 national patent applications

and issued patents. As of today, other than with Simcere, we have not entered into any partnering or licensing arrangements regarding our research and development activities in the field of AD, and our product candidates are currently mainly financed by equity and to a lesser extent by grants and subsidies.

1.1.5 Product candidates

AD pathology

Introduction to macroscopic and microscopic features of AD biology

Brains of patients with AD show several striking structural features, which are (i) shrinking of the brain, and (ii) distinct protein deposits called plaques and tangles.

The shrinking of the brain results from the loss of brain cells (neuron loss) and the loss of connections between such cells (synaptic loss) in different parts of the brain, which ultimately results in clinical manifestations of the disease.

Plaques and tangles are distinct features of the disease, which are considered the traditional pathological microscopic changes in the brain affected by AD. Plaques are mostly constituted of Amyloid beta (Abeta) peptides, while tangles primarily consist of the “Tau” protein. The relation between plaques and tangles in the context of disease progression has been a long-time focus of scientific investigation. It has recently been established that Abeta amyloid pathology appears to be a prerequisite for Tau precipitation in tangles to occur. The third AD hallmark is neuroinflammation. Whether neuroinflammation is the trigger for amyloid beta deposition or whether amyloid beta deposition leads to increased neuroinflammation is still under debate. It could be concluded that these processes are closely associated and are interdependent.

Amyloid cascade and specific role of oligomers and the toxic culprit N3pE amyloid, formed by QPCT activity.

The plaques mainly consist of an abnormal extracellular deposition of the Abeta peptide, which derives from the physiological metabolism of the APP that occurs in the brain. In AD however, the process of Abeta formation and clearance is distorted. This distortion triggers a cascade, often called the amyloid cascade, that, via multiple steps, ultimately results in the formation of plaques. Over the years, substantial evidence has built up that Abeta has an early and key role in all forms of AD. For the specific role of our main target, the pGlu modified Abeta, N3pE see below. Abeta peptides display high heterogeneity in AD and various arguments have been established outlining that the underlying mechanism by which Abeta contributes to AD is specific for certain forms of Abeta:

- Post-mortem analysis of tissue from AD patients and controls suggests that the level of soluble and modified Abeta species found in the brain and the cerebrospinal fluid correlates with clinical AD symptoms, rather than the level of amyloid plaques themselves.
- Normal unchanged Abeta itself may play a protective physiological role.
- Over 25 different variants of Abeta peptides have been identified in brains affected by AD. Shorter forms of Abeta (Abeta38 and Abeta40) have been described as preventing the aggregation of the “full-length” peptide Abeta42.

Further research has led to the understanding that soluble Abeta oligomers (which consist of aggregates of around 20-30 Abeta molecules) are key factors in Abeta pathology. These soluble Abeta oligomers are clusters of Abeta of different size, 3-dimensional structure and length. It has now been established that these soluble oligomers are neurotoxic and are considered to be a key factor in the development of AD pathology. Presence of soluble Abeta oligomers in the brain is also considered to constitute a decisive difference between normal aging and AD.

The toxic Abeta oligomers are assumed to cause synaptic impairment directly at the synapses — the contact points between neurons — and reduced neuronal connectivity early in AD, which correlates with first memory impairments, and which is followed by Tau-pathology and inflammation leading to chronic neurodegeneration. The toxic effect of Abeta oligomers has been shown to be mediated via interaction with various types of cell membrane receptors, amongst others, selected glutamatergic transmitter receptors. The acute and chronic toxicities of soluble Abeta oligomers suggest that they are an interesting therapeutic target for AD drug development.

Together with our academic partners, our proprietary research has led to important insights into the underlying molecular events of Abeta oligomer formation and function. We and others identified that a specific variant of Abeta, namely N3pE, is a key trigger and building block for toxic oligomer formation. N3pE is formed via a modification (cyclization) of Abeta species truncated at position 3 which carry a glutamate residue at the N-terminus.

N3pE was first identified in brain biopsies from AD patients in 1995. Since then, extensive scientific evidence suggesting oligomers containing N3pE play a crucial role as a driver of the amyloid pathology has been accumulated by us and others to the current stage:

- N3pE has been shown to accumulate in the course of development of sporadic AD. Importantly, N3pE has been shown to be specifically increased within the soluble Abeta pool from AD tissue, while being underrepresented in normal aging tissue.
- N3pE species exert a much higher neurotoxicity compared to full-length (normal) Abeta. Moreover, N3pE is able to transfer its molecular properties and “infect” other non-modified peptides to form new neurotoxic oligomers.
- N3pE is implicated to play a role in the relationship between Abeta and Tau, suggesting that N3pE is upstream of Tau in the toxicity cascade.

Our scientists first discovered that N3pE requires an enzyme to be produced and does not arise spontaneously. The identified enzyme is QPCT, which catalyzes the conversion of N-terminal glutamate into cyclic pyroglutamate. Subsequently, we established QPCT’s correlation with AD pathology through continued preclinical research together with its academic partners.

QPCT is an important link between Abeta and neuronal death and cognitive decline. By blocking QPCT activity and thus the formation of N3pE specifically, we differentiate our own approach from other Abeta-directed drug development approaches, which are aimed at reducing normal Abeta or Abeta plaques.

1.1.6 Pipeline

Vivoryon has established a diverse pipeline of programs in different stages of development, with our most advanced activities focused on novel oral small molecule-based therapeutics with a differentiated mode of action for treating AD, cancer, and fibrotic indications. In addition, our pipeline also includes an antibody in development to treat AD.

Program	Approach	Discovery	Preclinical	Phase 1	Phase 2a	Phase 2b	Phase 3	Status
 Varoglutamstat (PQ912)	SMI QPCT/L	VIVIAD - Ph2b in EU					Ongoing; Interim safety readout mid-2022; Final readout H2-2023	
	SMI QPCT/L	VIVA-MIND - Ph2a/b in US					Ph 2a ongoing; Stage-gate decision to Ph2b H1-2023	
	SMI QPCT/L	CTA approval in China					Partnered with Simcere in Greater China; Ph1 planned in H1-2022	
PBD-C06	mAb N3pE amyloid						Pre-IND; Partnered with Simcere in Greater China	
 Multiple	SMI QPCTL						Pre-IND	
	 Multiple	SMI QPCTL						Pre-IND
		 Multiple	SMI Meprin					

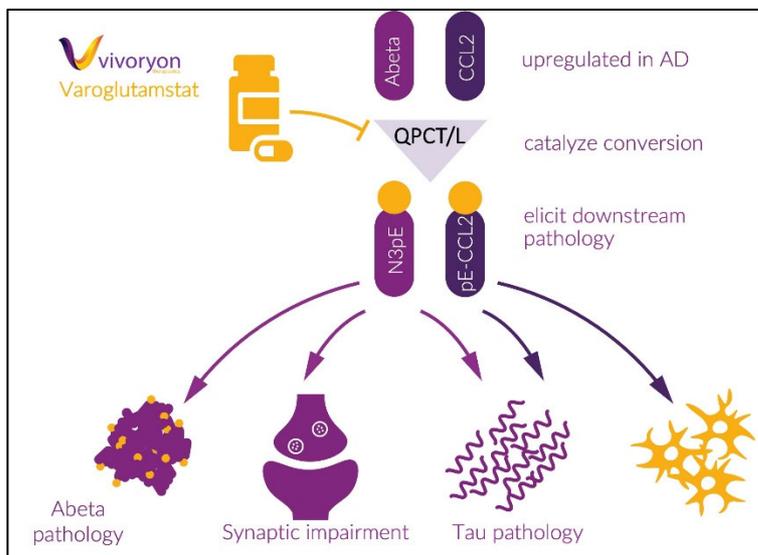
Lead compound varoglutamstat (PQ912) — a small molecule inhibitor of QPCT and QPCTL Pharmacology¹

Varoglutamstat (PQ912) is a proprietary, potent (nanomolar) and selective inhibitor of human QPCT and QPCTL being developed for AD. To verify the usefulness of the compound as a potential AD-treatment, the tolerability of this compound has been characterized in various in vitro and in vivo animal models.

¹monoclonal antibody (mAb), small molecule inhibitor (SMI), Clinical Trial Application (CTA)

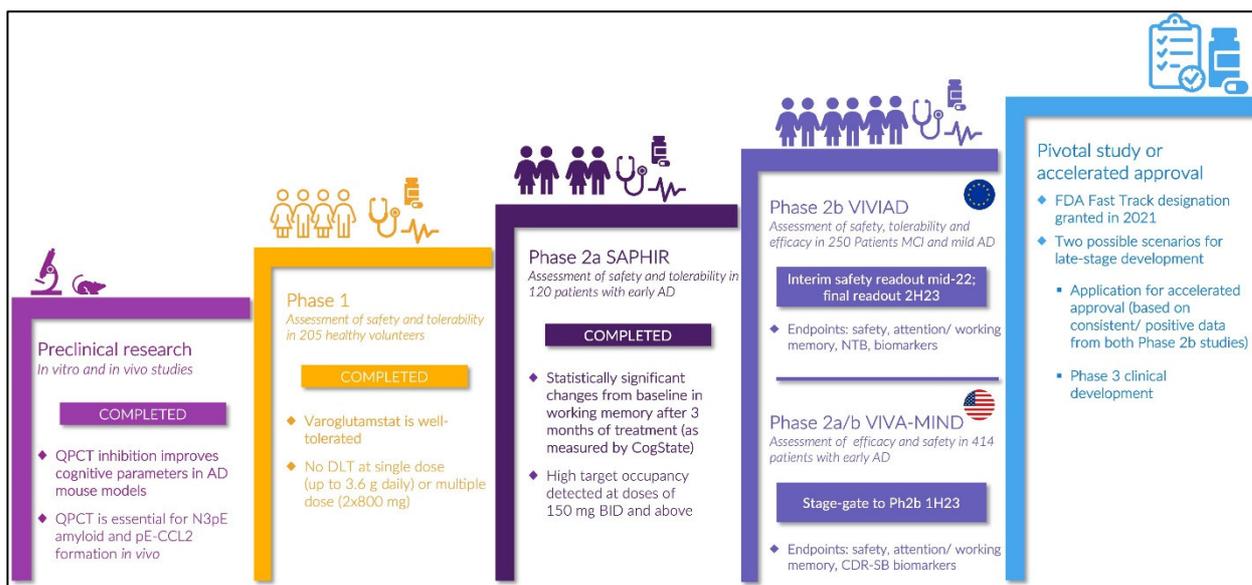
1.1.7 Varoglutamstat (PQ912)

Vivoryn discovered QPCT-mediated formation of a neurotoxic Abeta variant, N3pE amyloid (pGlu-Abeta), as driver of AD pathology. The Company is developing small molecule inhibitors to prevent N3pE amyloid formation, rather than aiming to clear existing plaques. varoglutamstat (PQ912) is a first-in-class, highly specific and potent small molecule inhibitor of glutaminyl cyclases. The oral small molecule inhibitor varoglutamstat (PQ912) inhibits the enzymatic function of the enzymes QPCT and QPCTL. This prevents transformation of Abeta into the neurotoxic N3pE amyloid variant, which, in turn, reduces neuroinflammation, tau neuropathy and synaptic impairment. A further reduction of these pathophysiologic features of AD is achieved by blocking the QPCTL-dependent activity and potency of the pro-inflammatory chemokine CCL2.



Mode-of action of varoglutamstat (PQ912) and of PBD-C06. The oral small molecule inhibitor varoglutamstat (PQ912) inhibits the enzymatic function of the enzymes QPCT and QPCTL. This prevents transformation of Abeta into the neurotoxic N3pE amyloid variant, which, in turn, reduces neuroinflammation, tau neuropathy and synaptic impairment. A further reduction of these pathophysiologic features of AD is achieved by blocking the QPCTL-dependent activity and potency of the pro-inflammatory chemokine CCL2. The monoclonal antibody PBD-C06 is highly selective for N3pE amyloid and is designed to remove this variant and its aggregates from the brain by immunologic processes

A Phase 2a study (SAPHIR) revealed significant improvements in a cognition parameter.



Clinical Development Strategy

Clinical Phase 2b — VIVIAD Trial

In June 2020, we initiated a Phase 2b trial, VIVIAD, in Europe in early-stage AD. VIVIAD is a multicenter, randomized, double-blind, placebo-controlled, parallel group dose finding study to evaluate the safety, tolerability and efficacy of varoglutamstat (PQ912).

The study aims to enroll approximately 250 patients with mild cognitive impairment and mild dementia due to AD. The primary endpoints of the trial include the assessment of the safety, tolerability and efficacy of varoglutamstat (PQ912) compared to the placebo over 48 to 96 weeks of treatment. On July 15, 2020, we announced that the first patient has been enrolled into the trial. VIVIAD is recruiting patients from Denmark, Germany and the Netherlands, where all sites are active, and is preparing to further expand the recruiting potential to sites in Spain and Poland.

VIVIAD is led by internationally renowned experts at up to 20 clinical sites in Europe. On January 14, 2020, we entered into an agreement with Nordic Bioscience to collaborate on the clinical development of varoglutamstat (PQ912) for AD. In addition to taking on the role as CRO for our Phase 2b VIVIAD trial, we will benefit from Nordic Bioscience's world leading expertise in the development of blood-based biomarkers for the identification of specific patients that may benefit most from treatment with varoglutamstat (PQ912), our Phase 2 clinical-stage candidate in AD.

The trial includes an initial 12 week dose titration phase and after a data and safety monitoring board decision patients will be treated twice-daily with either 300mg or 600mg varoglutamstat (PQ912) or placebo.

Clinical Phase 2a/b — VIVA-MIND Trial

A Phase 2a/b trial, VIVA-MIND, has been started in the United States and is supported by a \$15 million grant from the National Institutes of Health (NIH). The VIVA-MIND trial in the United States aims to enroll in total 414 patients with 18 months treatment on stable doses of varoglutamstat (PQ912). To conduct the U.S. trial, we entered into a formal collaboration agreement with ADCS at the University of California, San Diego Campus, a U.S. federal government initiative for clinical studies in AD. This agreement with ADCS is a service agreement entered into for the sole purpose of ADCS coordinating and conducting our U.S. Phase 2a/b trial, VIVA-MIND. It is a fee-for-service agreement, without intellectual property transfer and no milestone payments, royalty payments, profit or revenue sharing arrangements.

VIVA-MIND is designed as a Phase 2a multi-center, randomized, double-blind, placebo-controlled, parallel group study of varoglutamstat (PQ912), with a stage gate to Phase 2b. In Phase 2a there will be adaptive dosing evaluation of three dose levels with exposure to varoglutamstat (PQ912) or placebo for a minimum of 24 weeks, with preliminary evaluation of both cognitive function and pharmacodynamic changes on EEG spectral analysis in approximately 180 participants. In the event that the stage gate for Phase 2b is reached, then Phase 2b will assess efficacy and long-term safety in a larger study group, i.e., 414.

Phase 2a will determine the highest dose that is both safe and well tolerated. During this phase, there is an adaptive dosing evaluation, using a well-defined safety stopping boundary, of three dose levels with exposure to varoglutamstat (PQ912) or placebo for a minimum of 24 weeks to help determine which dose will be carried forward in Phase 2b. A sequential dose design will be employed in Phase 2a where each of three dose cohorts are randomized equally to placebo or varoglutamstat (PQ912) and treated for at least 8 weeks at the originally assigned full dose. Participants will be randomized 1:1 to varoglutamstat (PQ912) or placebo, and stratified between mild AD and MCI, as well as by site.

Phase 2a also includes preliminary evaluation of both cognitive function and pharmacodynamics changes on electroencephalogram (EEG) spectral analysis.

In the event that the stage gate for Phase 2b is reached from data in this Phase 2a study, then Phase 2b will assess the long-term efficacy and safety of varoglutamstat (PQ912) in a larger study group, using the highest dose selected in Phase 2a. In Phase 2b, a composite cognitive and functional measure as well as PD biomarkers will be used to evaluate efficacy during the extended treatment period.

1.1.8 Preclinical antibody PBD-C06 — an antibody designed to clear N3pE oligomers from brains affected by AD

The monoclonal antibody PBD-C06 is highly selective for N3pE amyloid and is designed to remove this variant and its aggregates from the brain by immunologic processes.

PBD-C06 binds to N3pE amyloid with high specificity. The rationale of its application is to selectively clear the brain from N3pE via the immune system while leaving non-toxic forms of Abeta untouched. We believe that due

to the high specificity of PBD-C06 for N3pE amyloid, the amount of antibody levels reaching the brain will be sufficient to remove the toxic peptides. We have made further development of PBD-C06 dependent on a partnership with a biopharmaceutical company, providing financial and development resources in the field of therapeutic antibodies. In this regard we've signed a licensing deal with Simcere Pharmaceutical in 2021. This licensing deal includes the development and marketing rights for greater China region of PBD-C06. Currently Simcere works on all steps to achieve IND application. The final IND package will be made available to Vivoryon to file for a global IND.

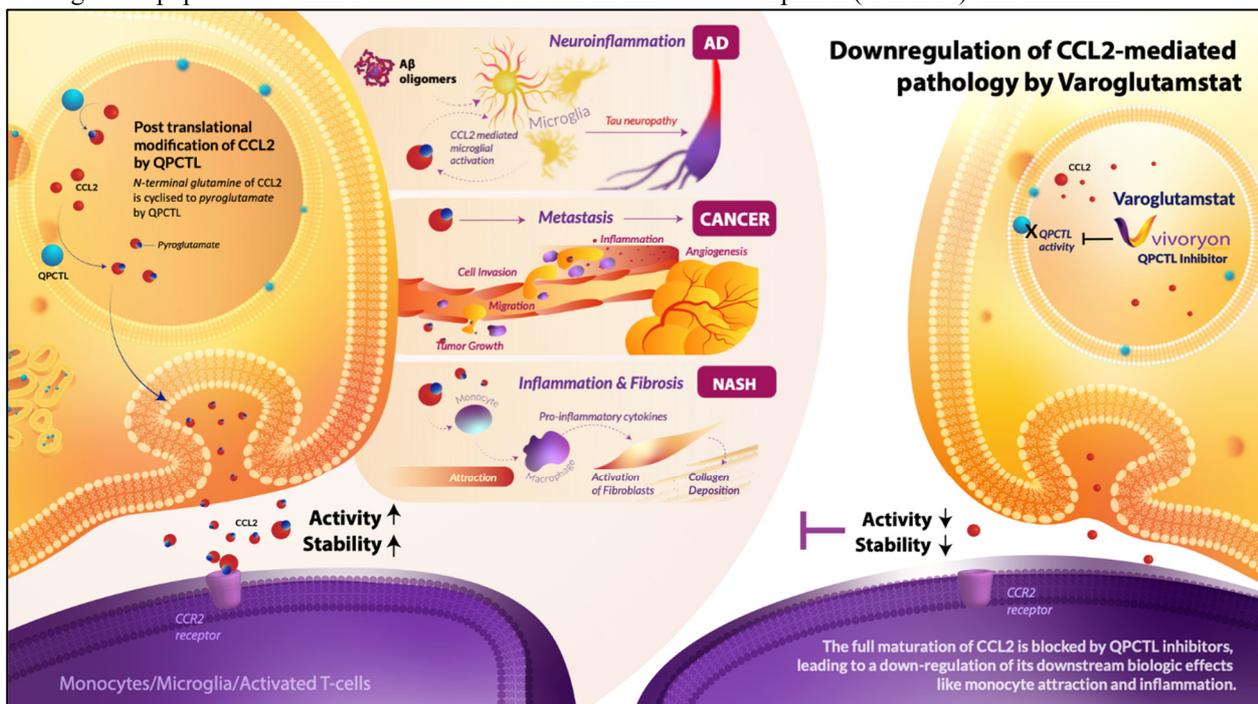
The antibody is designed to be less immunogenic and to induce less ARIA (amyloid related imaging artefacts). This sets it apart from the monoclonal antibody donanemab of Eli Lilly, where the most recent clinical trial results showed the occurrence of a high number of anti-drug antibodies (90 % of the patients) and ARIA (38.9 % of the patients). ARIAs are of relevance as they can cause severe headaches which could lead to the withdrawal of patients from the study.

We believe that by targeting a neo-epitope, N3pE, and by circumventing inflammatory issues (complement inactivation) and immunogenicity (de-immunization), PBD-C06 has great potential to clear the most toxic Abeta aggregates and improve cognition in AD patients at effective doses and with an acceptable safety profile.

1.1.9 Novel QPCTL inhibitors with differentiated mode of action to treat cancer and fibrosis

The relevance of QPCTL in the full maturation of the CCL chemokines CCL2, CCL7, CCL8, CCL13 — all of which get transformed into their potent and stable form pE-CLL — opens up another field of application for our QPCTL inhibitors. Increased activity and expression of these chemokines is connected to poor prognosis in several cancers like glioma, lung, colorectal, renal, urothelial, prostate and others.

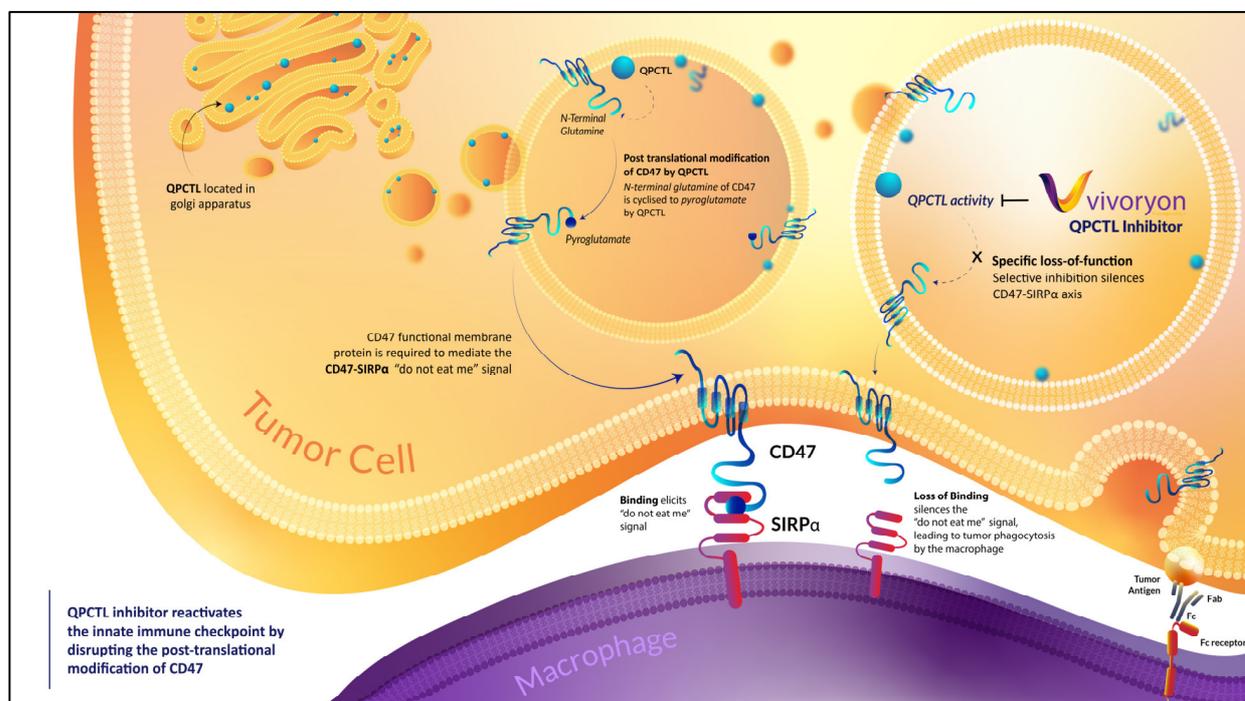
In addition, we and others could show that QPCTL is a viable target for alleviating CCL2 inflammation in a non-alcoholic fatty liver disease (“NAFLD”) mouse model. NAFLD is the most prevalent form of hepatic pathology in the general population which could advance to non-alcoholic steatohepatitis (“NASH”) and cirrhosis.



Mode-of action of varoglutamstat (PQ912) on CCL induced pathophysiology: Varoglutamstat (PQ912) and other QPCTL inhibitors block pyroglutamate formation on the N-terminus of chemokines CCL 2, 7, 8, and 13, leading to their decreased activity and stability. Thus, the downstream biological effects of these chemokines such as inflammation, fibrosis and metastasis are downregulated.

More recently, it has been discovered that small molecule QPCTL inhibitors could also represent an attractive approach for modulating a myeloid immune checkpoint as QPCTL is essential for the pyroglutamate formation on CD47, a crucial signaling protein in the immune response to cancer. Inhibitors of QPCTL, like varoglutamstat (PQ912) and other small molecule compounds protected under our patents, have been shown to silence the checkpoint signal from the CD47-SIRPalpha axis, and are thus offering a novel strategy to augment the efficacy of

anti-tumor antibody therapies. We own a broad set of highly promising QPCTL inhibiting compounds in advanced preclinical stages of development. As opposed to antibody approaches in clinical development, our small molecule QPCTL inhibitors are a novel and innovative approach with a differentiated mode of action designed with the objective to improve anti-tumor antibody therapies. Moreover, we can conclude from our clinical data with varoglutamstat (PQ912) that this compound class will not induce anemia — a side effect frequently seen with the CD47 antibody therapies in clinical development.



Mode-of action of QPCTL inhibitors in immune-oncology. Therapeutic anti-tumor antibodies (bottom right) connect tumor cells with cells of the immune system like macrophages. A tumor escape mechanism is provided by the binding of cell surface protein CD47 which is upregulated in many cancers to its counterpart SIRPalpha expressed on cells of the innate immune system like macrophages. This protein-protein interaction provides a “do not eat me” signal to the macrophage. By preventing the pyroglutamate formation on the N-terminus of CD47 with QPCTL inhibitors the binding to SIRPalpha is blocked. The loss of binding silences the “do not eat me signal” leading to tumor response by innate immune cells like macrophages.

We are currently investigating the application of QPCTL inhibitors in several cell based ADCP models, tumor and NASH animal models. Based on current discovery and research data, the QPCTL inhibitors PQ1565, PQ2020 and/or PQ2043 might be included in the group of compounds we will advance further towards clinical studies in cancer and/or fibrosis.

1.1.10 Novel Meprin protease inhibitors to treat fibrotic diseases, inflammation and cancer

We extended our portfolio in 2020 by acquiring patents from the Fraunhofer-Gesellschaft (FHG)/ Institute for Cell Therapy and Immunology (IZI) for the further development of Meprin protease inhibitors. Our agreement with FHG/IZI is a licensing agreement entered into for the acquisition by us of licenses to small molecule Meprin inhibitors. The agreement contemplates:

- An upfront payment by us of EUR 550 thousands (paid on May 20, 2020) as well as the acquisition by us of intellectual property rights.
- A 1.5 % fee to be paid by us (or our licensees) to FHG/IZI on potential future net sales for each product based on the acquired intellectual property rights. The program for the further development of Meprin protease inhibitors is currently at an early development stage, consequently there are no sales yet, no such fee has been incurred and no fee payments have been made to date.
- The receipt of a fee by FHG/IZI from us equalling 5% of any one-time payments, down payments or milestone payments that we will receive from a potential future licensing agreement with a co-development partner on the basis of the acquired intellectual property. Vivoryon has not yet entered into such a licensing

agreement with a co-development partner, consequently no such fee has been incurred and no payments have been made to date.

Meprin alpha and beta are emerging targets for the treatment of a range of indications including acute and chronic kidney disease and multiple organ fibrosis, and cancer. We are developing novel low-molecular weight Meprin inhibitors in collaboration with the original inventors at the IZI. Meprin isoforms alpha and beta differ in their substrates and cellular location. They are primarily expressed in renal brush border membranes and upregulated or mislocated in various cancers or fibrotic diseases. Both enzymes are metalloproteinases and catalyze cleavage and thus activation or deactivation of their respective substrates. The unique substrate recognition pattern of Meprins allow for the design of selective inhibitors which do not block other metalloproteinases like MMPs. The main physiological function of Meprins include the regulation of the maturation of fibrillar procollagens into collagen fibrils, and the maturation of pro inflammatory cytokines like IL-1 and IL-6. They are crucially involved in extra cellular matrix remodeling which makes them attractive for targeting cancer cell evasion and metastasis.

A broad set of alpha/beta dual specific and isoform specific nanomolar small molecule inhibitors has been designed and characterized. An in vivo proof-of-concept has been performed with one of our compounds in a model for acute kidney injury. We are further optimizing the physicochemical and kinetic properties of our Meprin inhibitors and intend to have identified an early development candidate in 2024, by which time we will also have decided for which indication(s) we aim to develop Meprin inhibitors.

1.1.11 Intellectual property

As of December 31, 2021, our patent portfolio consisted of 39 owned patent families, which comprise approximately 47 issued U.S. patents, 5 pending U.S. applications, 503 issued foreign patents and 79 pending foreign patent applications. Our patent portfolio is focused on our R&D programs relating to glutaminyl cyclase (“QC”), isoenzyme (“isoQC”) and N-terminally modified forms of Abeta peptide as the medical targets.

1.2 Operating review

1.2.1 Overall economic development and trends in the pharmaceutical and biotechnology industry

The healthcare sector is one of the most important economic divisions worldwide with a key growth factor lying in the increasing aging population, which brings with it an urgent need for medical treatment. In conjunction with this, the demand for innovative products and therapies for a wide range of diseases is also on the rise.

The pharmaceutical industry is a key component of the German healthcare system. According to 2021 pharma data from the Bundesverband der Pharmazeutischen Industrie (BPI), the pharma industry generated sales of over EUR 43.0 billion and employed more than 143,000 individuals. Germany is one of the leading locations for pharmaceutical research and development in the world. Thirty-two member companies of the German Association of Research-Based Pharmaceutical Companies (Verband Forschender Arzneimittelhersteller, vfa) coordinate clinical trials. These companies spend more than EUR 7.3 billion per year on research and development in Germany alone. Currently, their focus is on the following areas in particular: cancer, inflammatory diseases, cardiovascular diseases, metabolic diseases, Alzheimer's disease and dosage forms and application aids for medications.

The need for developments in Alzheimer's disease research remains critical. Until very recently, only a handful of AD drugs were on the market, which were approved more than a decade ago and treated only the symptoms of cognitive decline. This situation has changed in 2021 due to the FDA granting accelerated approval for the Abeta oligomer and plaque targeting antibody aducanumab of Biogen on June 7. In addition, the FDA granted breakthrough therapy designations for other drugs in development to treat AD (lecanemab, donanemab, gantenerumab). As such AD treatment is currently in a transition between conventional drugs that only affect symptoms and new pharmacological strategies aimed at slowing or even halting the underlying nerve cell death and disease progression. Global demand for new therapeutic treatments for this challenging indication remains high given the aging global population and rapidly growing number of people affected by the disease.

1.2.2 Alzheimer's drug development in 2021

AD is estimated to affect over 50 million people worldwide and the number is anticipated to grow to over 150 million by 2050. The disease has a high and growing economic burden - with currently available symptomatic drugs having no impact on slowing, halting or reversing the advance of the disease. A full approval for a disease-modifying treatment (DMT) has been elusive thus far. Despite the accelerated approval of Aducanumab and several breakthrough designations for drugs with the same mode-of-action (lecanemab, donanemab, gantenerumab) 2021 was marked by mixed news as several investigators and institutions question the efficacy of aducanumab.

Nevertheless, the recent decisions by FDA encouraged further investment and innovation in the field of AD drug development. Thus, in the coming years the number DMT programs with new and different therapeutic approaches is expected to increase significantly.

In June 2021, the FDA granted accelerated approval to aducanumab. Due to expensive therapy cost and an efficacy questioned by many investigators and clinicians the market uptake was quite slow since then (sales of just above USD 300.000). FDA requires Biogen to deliver data from a confirmatory trial in the next years to grant full approval. Several drugs with the same mode-of-action as aducanumab (Aβ plaque clearance) have achieved expedited program designations by FDA including breakthrough designations for Donanemab of Lilly in June, for Lecanemab of Eisai/Biogen in June and for gantenerumab of Roche in October.

In January 2021, Lilly announced that a clinical Phase 2 trial (TRAILBLAZER-ALZ) had met its primary endpoint, with donanemab slowing decline on the iADRS by 32 percent compared to placebo at 18 months. The company claimed improvement on all secondary endpoints of cognition and function, although not all were statistically significant.

In mid 2021 two clinical stage 2 antibody therapeutics directed against extracellular Tau protein did not reach clinical significance in efficacy and were discontinued by Abbvie (Tilavonemab) and Lilly (Zagotenemab) respectively.

In October 2021 Cortexyme announced that atuzaginstat (COR388) failed to meet its primary endpoints in a Phase 2/3 trials. Cortexyme announced that it will continue development focussing on a subgroup (with detectable p.gingivalis in saliva) that showed statistical significance.

Alzheimer's disease licensing deals in 2021 included: Our strategic partnership to develop and commercialise medicines targeting the neurotoxic amyloid species N3pE to treat Alzheimer's disease in Greater China with Simcere Pharmaceutical (see section 1.2.5). In July Alector and Galxo Smith Kline announced their collaboration to co-develop progranulin-elevating monoclonal antibodies, AL001 and AL101, for a range of neurodegenerative diseases, including Alzheimer's disease. Companies will co-commercialise and share profits in the US; GSK will retain exclusive commercialisation rights outside the US. Alector will receive \$700 million in upfront payments, up to \$1.5 billion in potential milestone payments, profit sharing and royalties.

1.2.3 Business activities – research & development

The primary focus in 2021 remained on the clinical trials and the development of varoglutamstat (PQ912), an inhibitor of the enzymes QPCT and QPCTL for the treatment of Alzheimer's and other diseases. In December the 90th patient has been enrolled in VIVIAD, a Phase 2b, randomized and multi-center clinical study in Europe. The study evaluates the safety and efficacy of Vivoryon's lead candidate, varoglutamstat (PQ912), in patients with AD. Also late 2021 we have started the U.S. Phase 2 clinical trial program, VIVA-MIND, for varoglutamstat (PQ912) in AD. At the end of 2021 half a dozen sites have been activated and the first patients are in screening. The randomization of the first patient into the trial occurred beginning of March 2022. Following Vivoryon's business model the operational work was and is carried out by external service providers, contract research organizations, contract manufacturers, and other cooperation partners.

Since the acquisition of composition of matter and assay patents on Meprin protease inhibitors from the Fraunhofer Institute for Cell Therapy and Immunology (IZI) we are advancing this preclinical program towards the nomination of an early clinical development candidate. The metal-dependent proteases, Meprin alpha and Meprin beta, are emerging targets in kidney protection, fibrotic diseases, cancer and Alzheimer's disease. Increased Meprin expression and their mislocalization has been associated with tissue damage and collagen deposition in fibrosis, which can result in the loss of organ function. Meprin-targeted protease inhibitors thus have the potential to not only target symptoms, but also treat a range of indications including acute and chronic kidney disease and multiple organ fibrosis.

Moreover, Vivoryon continued to explore the use of QPCT and QPCTL inhibitors in further disease areas like Cancer, Fibrosis and Inflammation. This work is expected to deliver further clinical development candidates for diseases with unmet medical need in the upcoming years.

1.2.4 Corporate events

Despite the 2021 economy being marked by the COVID pandemic, Vivoryon was well-positioned to continue moving its AD clinical trials forward while exploring the potential of its unique proprietary position in cancer and fibrosis as well as identifying additional opportunities within the small molecule therapeutics pipeline.

Corporate events in 2021:

- We entered into a license agreement with Simcere Pharmaceutical Co., Ltd. (“Sincere”) in June 2021, granting Simcere development and marketing rights for Greater China region for our lead compound varoglutamstat (PQ912) as well as our antibody program PBD-C06. We refer to section 1.2.5.
- We advanced our program for Meprin protease inhibitors with intended therapeutic use in fibrosis, cancer and AD: on April 16, 2020, Vivoryon Therapeutics has entered into a research collaboration with the IZI (Fraunhofer Institute for Celltherapie and Immunology, Leipzig) and acquired related patents from the Institute for a Meprin protease inhibitor and assay platform. This collaboration will combine Vivoryon’s expertise in translating basic research into marketable small molecule therapeutics with the department’s focus on discovery and development of new therapeutics that target putative pathologic post-translational modifications.
- We entered into a number of early stage discussions with potential pharma partners on the use of QPCT/L inhibitors in oncology.
- Enrollment of 90 patients in VIVIAD on December 2, 2021: VIVIAD, a Phase 2b, randomized and multi-center clinical study in Europe. The study will evaluate the safety and efficacy of Vivoryon’s lead candidate, varoglutamstat (PQ912), in patients with AD. Enrollment of Patient 90 is the prerequisite to reach the interim DSMB safety decision of that trial about 7 months later.
- Activation of the first group of clinical sites and screening for the first patients eligible to be included into VIVIA-MIND, a Phase 2a, randomized and multi-center clinical study in the U.S. The study will evaluate the safety and efficacy of Vivoryon’s lead candidate, varoglutamstat (PQ912), in patients with AD.
- IND Application in China: In December 2021, our partner Simcere announced that the clinical trial application (IND) has been filed with the authorities in China. Final acceptance of the IND occurred in February 2022.
- On December 22, 2021 we announced that varoglutamstat received the fast track designation by the FDA for the treatment of early Alzheimer’s disease. Fast track designation is part of the expedited program designations set up by FDA to boost drug development for diseases with high unmet medical need.

1.2.5 License agreement with Simcere Pharmaceutical Co., Ltd.

The Company entered into a license agreement with Simcere Pharmaceutical Co., Ltd. (“Sincere”) in June 2021, granting Simcere a regional, exclusive, royalty bearing and sublicensable license under our know-how and patents covering the lead compound varoglutamstat (PQ912) and any pharmaceutical product that contains PQ912, to research, develop, manufacture and commercialize PQ912 in mainland China, Hong Kong, Macao and Taiwan. Pursuant to the agreement, Simcere will be responsible for clinical development of PQ912 in patients with early AD through the clinical development program in mainland China, Hong Kong, Macao and Taiwan to complement our efforts in Europe and the US. Subject to certain exceptions, Simcere is required to use commercially reasonable efforts to develop and commercialize at least one product for at least three indications in all fields excluding oncology.

The Company also granted Simcere an option to advance a backup compound and product, PQ1565, or another backup compound having similar selectivity profile for the target glutaminyl cyclase. After interim data read out from the Phase 2 clinical trial of PQ912 and review of such data, Simcere may exercise such option at any time after such review and discussion by providing the Company with a written ninety-day advance notice. In exchange for the option, Simcere will pay us a one-time option fee of a low seven-digit figure in USD. If Simcere timely exercises its option, all rights and licenses granted by the Company to Simcere under the agreement with respect to PQ912 and any products containing it will terminate. In addition, upon the exercise of such option by Simcere, the Company will be prohibited from developing or commercializing PQ912 and any products containing it itself in mainland China, Hong Kong, Macao and Taiwan; however the Company may enter into any collaboration or license agreement with any third party, whereby such third party would have the right to develop and commercialize PQ912 and any such products in such regions. The Company have also granted Simcere the exclusive option to develop and commercialize our antibody PBD-C06 developed against N3pE amyloid and any products containing PBD-C06, which option may be exercised by Simcere by delivering written notice to the Company at any time before the later of (i) submission for the first marketing authorization application for products containing PQ912 to the National Medical Products Administration of China or (ii) conditional marketing authorization approval of products containing PQ912 by the National Medical Products Administration of China. Under the option granted for products containing PBD-C06, Simcere agrees to pay the Company a low seven-digit figure. If Simcere timely exercises such option, then PBD-C06 and any products containing it will be included under the agreement, and Simcere will use

commercially reasonable efforts to conduct preclinical development of such products through any IND filing in mainland China and provide the Company with access to the data and regulatory materials to support the Company's development of products containing PBD-C06 outside mainland China, Hong Kong, Macao and Taiwan.

Simcere agreed to grant to the Company the exclusive, fully paid, royalty free and sublicensable license under any data, findings, and other intellectual property rights to research, develop, manufacture and commercialize PQ912 outside the greater China region, if the necessary regulatory approvals are obtained. The Company has the first right to file, prosecute and maintain all licensed patents throughout the world, at the Company's own cost and expense.

Under the terms of the agreement, Simcere agreed to a combined upfront and early milestone consideration of USD 12.8 million (which includes an option fee) and is required to make additional payments upon the achievement by Simcere of certain additional development and sales milestones (up to USD 553.7 million). If the milestones are not reached, Simcere has no further payment obligation. As of December 31, 2021, the Company has received an aggregate amount of EUR 4.5 million (USD 5.3 million) under the agreement, for the first part of the upfront payments. In line with the contract, no further payments have been made up to December 31, 2021.

The additional development milestones payments can be broken down on a product-by-product basis as follows: (i) up to a mid-eight-digit figure in USD for products containing PQ912; (ii) up to a low eight-digit figure in USD for PQ1565 or similar compounds that have similar selectivity as agreed by the parties, and (iii) up to a low eight-digit figure in USD for products containing PBD-C06. The aggregate sales milestone payments can be broken down on a product-by-product basis as follows: (i) up to a low nine-digit figure in USD for PQ912; (ii) up to a low nine-digit figure in USD for PQ1565; and (iii) up to a low nine-digit figure in USD for products containing PBD-C06.

In addition, Simcere will be required to pay the Company royalties on net sales of licensed products (with staggered rates from USD 100 million to USD 750 million annual net sales) with (i) high single digit to low double digit percentage royalty rates for products containing PQ912, (ii) single digit percentage royalty rates for products containing PQ1565, and (iii) single digit percentage royalty rates for products containing PBD-C06. Simcere's obligation to pay royalties shall expire on a licensed product-by-licensed product and region-by-region basis, upon the later of (i) the expiration of the last-to-expire valid claim in the licensed patents that claims the composition of matter of such licensed product in such region, (ii) the expiration of all regulatory exclusivity for such licensed product in such region; and (iii) ten years after the first commercial sale of such licensed product in such region.

Unless terminated earlier, the license agreement will continue on a licensed product-by-licensed product and region-by-region basis, until the expiration of the Simcere's royalty obligations for such product and region. Either party may terminate the license agreement if the other party is in material breach, subject to a cure period. Simcere may terminate this agreement for convenience by providing a written 90 days' notice of termination to the Company. Upon expiration or termination, all rights and licenses granted to Simcere under the license agreement will terminate.

1.3 Financial review

1.3.1 Introduction

The following discussion is based on Vivoryon Therapeutics' financial information prepared in accordance with IFRS (International Financial Reporting Standards) as adopted by the EU (European Union). The following discussion includes forward-looking statements that involve risks, uncertainties and assumptions. The actual results may differ materially from those anticipated in these forward-looking statements as a result of many factors, including but not limited to, those described under 'Risk Factors' and 'Forward looking statements.'

The board declares that, to the best of its knowledge, the annual financial statements for the year ended December 31, 2021 provide a true and fair view of the assets, liabilities, financial position and profit or loss of the Company in accordance with IFRS as adopted in the EU, and this Annual Report provides a true and fair view of the position of the Company as at December 31, 2021 and the development of the business during the financial year 2021, accompanied by a description of the principal risks the Company faces.

1.3.2 Revenue

<i>kEUR</i>	2021	2020	Change
Revenue			
Recognized at a point in time	10,764	—	10,764
Recognized over time	—	—	—
Total revenue from contracts with customers	10,764	—	10,764
Geographical information			
Greater China	10,764	—	10,764
Total revenue from contracts with customers	10,764	—	10,764

Our revenue for 2021 amounted to EUR 10.8 million, compared to nil in 2020. Our revenue for this period is derived from our regional licensing partnership with Simcere Pharmaceutical Group Ltd for Greater China (Mainland China, Hong Kong, Macao and Taiwan), which was signed on June 29, 2021.

Other than pursuant to the strategic regional licensing partnership we entered into with Simcere on June 29, 2021, relating to the development and commercialization of varoglutamstat (PQ912), we have not yet generated any revenue from our product candidates and we do not expect to generate any revenues from any product candidates that we are developing until we either sign a licensing agreement or obtain regulatory approval and commercialize our products or enter into collaborative agreements with third parties. We expect losses as we continue the development of, and seek regulatory approvals for, varoglutamstat (PQ912) and other product candidates and, if approved, begin to commercialize any approved products.

The ability to generate revenue for each product candidate for which we receive regulatory approval will depend on numerous factors, including level of competition, availability of reimbursement from payers, commercial manufacturing capability, market acceptance and approved use by regulators.

1.3.3 Research and development expenses

<i>kEUR</i>	2021	2020	Change
Research and development expenses			
Third-party research and development services	(14,294)	(10,597)	(3,697)
<i>thereof manufacturing</i>	<i>(6,049)</i>	<i>(3,764)</i>	<i>(2,285)</i>
<i>thereof clinical research and development activities</i>	<i>(6,055)</i>	<i>(6,087)</i>	<i>32</i>
<i>thereof pre-clinical research and development activities</i>	<i>(1,861)</i>	<i>(201)</i>	<i>(1,660)</i>
<i>thereof other research and development activities</i>	<i>(329)</i>	<i>(545)</i>	<i>216</i>
Personnel expenses	(2,066)	(1,308)	(758)
<i>thereof share-based payment expenses</i>	<i>(878)</i>	<i>(82)</i>	<i>(796)</i>
Patent-, legal and consulting fees	(947)	(845)	(102)
Other expenses	(145)	(460)	315
Total	(17,452)	(13,210)	(4,242)

In 2021 research and development expenses increased by EUR 4.2 million compared to the year ended December 31, 2020. This increase is primarily attributable to a EUR 3.7 million higher expenses for our clinical trial, VIVIAD, and the related production of PQ912, as well as EUR 0.8 million higher expenses for share-based payments.

The increase in third-party expenses in the year ended December 31, 2021 for manufacturing activities by EUR 2.3 million, was principally due to the VIVIAD Phase 2b clinical trial and the related manufacturing costs for the study drug supply. The remaining third-party expense increase is mainly related to our pre-clinical research and development activities with EUR 1.7 million.

The increase in share-based payment expenses in the year ended December 31, 2021 is due to an share option grant to management in December 2020. Accordingly the year 2020 discloses one month of in share-based expenses while in 2021 a full twelve month period is included.

Research and development expenses consist of costs incurred that are directly attributable to the development of the company's platform technology and product candidates. Those expenses include:

- salaries for research and development staff and related expenses, including management benefits and expenses for share-based compensation;

- costs for production of drug substances by contract manufacturers;
- service fees and other costs related to the performance of clinical trials and preclinical testing;
- costs of related facilities, materials and equipment;
- costs associated with obtaining and maintaining patents and other intellectual property;
- amortization and depreciation of intangible and tangible assets used to discover and develop the Company's clinical compounds and pipeline candidates; and
- other expenses directly attributable to the development of the Company's product candidates and preclinical pipeline;
- patent related, legal and consulting expenses.

In 2020 other expenses included portions of the Company's total administrative expenses. Since 2021, such flat-rate allocations were replaced by expense allocations per cost center. As a result, compared to 2020 there was a shift of approx. EUR 0.2 million to general and administrative expenses (mainly office and facility expenses).

Research and development expenses are recognized as expenses when incurred. Costs incurred on development projects are recognized as intangible assets as of the date when it can be established that it is probable that future economic benefits attributable to the asset will flow to Vivoryon considering its technological and commercial feasibility. This is not the case before regulatory approval for commercialization is achieved and costs can be measured reliably. Given the current stage of the development of Vivoryon's projects, no development costs have yet been capitalized. Intellectual property-related costs for patents are part of the costs for the research and development projects. Therefore, registration costs for patents are expensed when incurred as long as the research and development project concerned does not meet the criteria for capitalization.

The research and development expenses relate to the following key programs:

- Varoglutamstat (PQ912): In 2020, VIVIAD, the Phase 2b, randomized and multi-center clinical study in Europe, has been enrolled the first patient. In the fourth quarter of 2021 also VIVA-MIND, the U.S. Phase 2a/b core program for varoglutamstat (PQ912) has started with the first patient screening activities. The Company anticipates that the research and development expenses will increase substantially in connection with the commencement of these clinical trials. In addition, Vivoryon is also incurring expenses related to the manufacturing of clinical trial material and investigating commercial scale production options.
- Meprin: In 2020 we started a new development program for Meprin protease inhibitors with intended therapeutic use in fibrosis, cancer and AD. This drug development program with focus on small molecule inhibitors of Meprin proteases, which are primarily expressed in renal brush border membranes and upregulated or mislocated in various cancers or fibrotic diseases. The main physiological functions of Meprins are the maturation of fibrillar procollagens in the connective tissue, regulation of the intestinal barrier and immunological processes..

The successful development of the product candidates is uncertain. At this time, Vivoryon cannot reasonably estimate the nature, timing and estimated costs of the efforts that will be necessary to complete the development of, or the period, if any, in which material net cash inflows may commence from, any of Vivoryon's product candidates. This is due to numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

- clinical trials or the product candidates producing negative or inconclusive results, including failure to demonstrate statistical significance;
- the scope, rate of progress, results and cost of the clinical trials, nonclinical testing, and other related activities;
- delays in reaching, or failing to reach, agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites or prospective CROs, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- the cost of manufacturing clinical supplies and establishing commercial supplies of the product candidates and any products that we may develop;
- third-party contractors failing to comply with regulatory requirements or meet their contractual obligations to the in a timely manner, or at all;
- the number and characteristics of product candidates that we pursue;

- undesirable side effects or other unexpected characteristics, causing Vivoryon or the investigators, regulators or institutional review boards to suspend or terminate the trials;
- potential additional safety monitoring or other studies requested by regulatory agencies;
- the cost, timing, and outcomes of regulatory approvals;
- the number of trials required for approval;
- the duration of patient follow-up;
- the cost and timing of establishing sales, marketing, and distribution capabilities; and
- the terms and timing of any collaborative, licensing and other arrangements that we may establish, including any milestone and royalty payments thereunder.

A change in the outcome of any of these variables with respect to the development of VIVIAD and VIVA-MIND or any other product candidate that Vivoryon may develop could mean a significant change in the costs and timing associated with the development of such product candidate.

1.3.4 General and administrative expenses

<i>kEUR</i>	2021	2020	Change
General and administrative expenses			
Personnel expenses	(1,867)	(982)	(885)
<i>thereof share-based payment expenses</i>	<i>(885)</i>	<i>(77)</i>	<i>(808)</i>
Legal and consulting fees	(1,917)	(1,303)	(614)
Compensation expense for Non-Executive directors	(200)	(195)	(5)
Office and facility expenses	(243)	(40)	(203)
Depreciation and amortization expenses	(128)	(107)	(21)
Other expenses	(194)	(180)	(14)
Total	(4,549)	(2,807)	(1,742)

General and administrative expenses were EUR 4.5 million in 2021, compared to EUR 2.8 million in 2020. The increase of EUR 1.7 million was largely attributable to EUR 0.8 million higher expenses for share based payments as well as EUR 0.6 higher expenses for legal and consulting services in connection with preparation of a US listing.

Our general and administrative expenses consist principally of:

- employee-related expenses, including salaries, benefits and stock-based compensation expense based upon employees' role within the organization;
- professional fees for auditors and consulting expenses not related to research and development activities;
- professional fees for lawyers not related to the filing, prosecution, protection and maintenance of our intellectual property; and
- cost of facilities, communication and office expenses. As our business expands and we progress towards more advanced stages in preclinical and clinical studies, commercialization and marketing with respect to our product candidates and future products, we expect that our administrative costs will increase further.

Since we started researching and developing therapies for the treatment of AD, we have established a patent portfolio that addresses the composition of matter and medical use of QPCT-inhibitors in AD, inflammatory diseases and other indications. Overall, we have rights to 39 patent families, which comprise approximately 634 patent applications and issued patents, including with respect to PQ912, PBD-C06 and further small molecule compounds including PQ1565, PQ2020 and PQ2043 as well as small molecule inhibitors of Meprin alpha and Meprin beta. As a result of increasing competition in the development of drug products targeting AD, we might incur higher expenses in connection with maintaining, expanding and protecting our intellectual property portfolio which form part of the general and administrative expenses. Furthermore, if any of the risks associated with the protection of our intellectual property rights or knowhow are realized, this would increase the expenses accordingly.

General administrative expenses are also expected to continue to increase as a result of being a publicly listed entity and becoming a reporting company in the United States as a result of this offering, including expenses for fulfillment of post-listing requirements, compliance with reporting obligations, investor relations, preparation of

interim financial statements, preparation and conduct of annual general meetings for a larger shareholder base, additional personnel, additional legal fees, audit fees and directors' and officers' liability insurance premiums.

1.3.5 Finance result

<i>kEUR</i>	2021	2020	Change
Finance income			
Foreign exchange income	920	79	841
Reversed impairments on quoted money market funds	26	—	26
Interest income	21	26	(5)
Total	967	105	862
Finance expenses			
Impairments on quoted money market funds	(102)	(26)	(76)
Expected credit loss allowance on financial assets	(100)	—	(100)
Foreign exchange expense	(166)	(555)	389
Other	(24)	(23)	(1)
Total	(392)	(604)	212
Finance result	575	(499)	1,074

Finance income in 2021 predominately results from FX-valuation of cash held in USD (2021: EUR 0.5 million, 2020: nil) and the valuation of receivables in USD (2021: EUR 0.4 million, 2020: nil). Interest income results from the Company's U.S. Dollar term deposits and distributions from our money market funds.

Finance expense mainly includes valuation result of the money market funds at fair value (2021: EUR (0.1) million, 2020: EUR (0.0) million), FX-valuation of cash held in USD (2021: EUR (0.1) million, 2020: EUR (0.6) million) and the valuation of liabilities in USD (2021: EUR (0.1) million, 2020: nil).

The expected credit loss allowance was deducted from two receivables resulting from a license deal. Other finance expenses mainly includes interest expenses from pension obligations (2021: EUR 18 thousands, 2020: EUR 16 thousands).

1.3.6 Critical judgement and accounting estimates

The preparation of the financial statements in conformity with EU-IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

In preparing these financial statements, the critical judgments made by the board in applying the accounting policies involves the accounting estimates identified in note 5.3 'Use of judgements and estimates' to Vivoryon's financial statements included elsewhere in this Annual Report.

1.3.7 New standards and interpretations not yet adopted

The standards, amendments to standards and interpretations that are effective for annual periods beginning after December 31, 2021 and have not been applied in preparing these consolidated financial statements are disclosed in note 6.2 'New standards and interpretations' to the financial statements included elsewhere in this Annual Report.

1.3.8 Liquidity and capital resources

1.3.8.1 Overview

The Company's liquidity requirements are primarily related to the funding of research and development expenses and our general and administrative expenses. The net loss for the year ended December 31, 2021 was EUR 12.7 million compared to EUR 16.5 million in the year ended December 31, 2020. The Company's primary uses of cash are for working capital, operating leases and general corporate purposes. Historically, the Company was funded by equity investments, the issue of convertible bonds and the receipt of public grants and subsidies. Also, the Company received cash funds from an initial public offering of shares in 2014, follow-on private placements in 2015, 2016 and 2019 as well as from a public offering in the form of a rights issue in October 2019. We refer to note '9.6 Subsequent events' to our 2021 Financial Statements with regards to the issue of share capital on March 31,

2022. Management will also actively seek to obtain appropriate grants and subsidies in the future. Furthermore, management will seek to find suitable collaboration partners in order to generate revenues in the future from our research and development programs and the Company's product candidates. Finally, the Company may raise additional funds in the future by issuing additional shares or convertible bonds or other financial instruments.

1.3.8.2 Cash and cash equivalents

As at December 31, 2021, Vivoryon held cash and cash equivalents of EUR 14.7 million. The cash and cash equivalents primarily consist of money-market funds and cash. The banks and the issuer of the money-market funds are all investment graded.

1.3.8.3 Cash flows

The table below summarizes the statement of cash flows for the years ended December 31, 2021 and 2020:

<i>kEUR</i>	December 31, 2021	December 31, 2020
Net cash flow from provided / (used in):		
Operating activities	(11,257)	(14,012)
Investing activities	(28)	(640)
Financing activities	(827)	(90)
Net decrease in cash and cash equivalents	(12,112)	(14,742)
Cash and cash equivalents at the beginning of the period	26,306	41,524
Effect of exchange rate fluctuation on cash held	467	(476)
Cash and cash equivalents at the end of the period	14,661	26,306

Operating activities

Negative cash flows from operating activities was EUR 11.3 million in 2021, compared to EUR 14.0 million in the year 2020. The decrease in negative cash flows by EUR 2.8 million was mainly due to the EUR 10.8 million revenues shown in connection with the regional licensing partnership with Simcere, partially offset by the increase of research and development expenditures in connection with our clinical trial, VIVIAD, and the related production of PQ912.

Investing activities

Net cash used for investing activities decreased by EUR 0.6 million in the year ended December 31, 2021 mainly due to lower investments in intangible assets.

Financing activities

Cash flows from financing activities were EUR (0.8) million for the year 2021 compared to cash used in financing activities of EUR 0.1 million in 2020. The change mainly relates to exercise of share options with EUR 1.1 million in 2021, fully offsetted by a capitalization of capital raising costs (EUR (1.9) million).

1.3.8.4 Funding requirements

The primary goal of Vivoryon's financial management is to ensure the liquidity reserves required for advancing its assets into those clinical stages of development that are considered as attractive in-licensing opportunities by international biopharmaceutical companies. This approach requires significant financial resources, which Vivoryon aims to raise via capital increases and the utilization of other financial instruments, e.g. loans, convertibles etc.

Vivoryon expects, that the operating expenses increase in 2021 as well as in subsequent years. With ongoing clinical trials, the operating costs are expected to increase accordingly. The Company aims to generate new sources of income from the new product pipeline. Both, the AD trials and the new product pipeline will need substantial funding, hence Vivoryon aims to finance its cash needs through a combination of equity offerings, other financial instruments like convertibles and licensing arrangements. We also refer to note 3 of the 2021 Financial Statements.

1.3.9 Post-balance sheet date events

We refer to note '9.6 Subsequent events' to our 2021 Financial Statements.

1.4 Company outlook

The mid-term focus of Vivoryon's business activities can be summarized as follows:

- Start Phase 2b clinical study program for varoglutamstat (PQ912) in the U.S.,
- Continuing the development of QPCTL inhibitors in oncology,
- Conclusion of further industrial partnerships,
- Further scientific analysis of potential indications for the use of QC and iso-QC inhibitors,
- Further strengthening Vivoryon's financial resources.

As a result of the continuing costs being incurred for development activities and the running Phase 2b-study in Europe and the Phase 2a study in the U.S., which are not yet off-set by any sales, the Company also projects a net loss for the financial year 2022 which, based on the current budget, is expected to be higher than that of 2021.

Due to its business model, Vivoryon is dependent upon additional capital to implement its development strategy until such time at which an industrial partnership is concluded and potentially beyond that. This can be provided in the form of equity on the basis of a capital increase or via alternative financing forms such as loans, convertible bonds, option bonds, etc. Under the Company's articles of association, the board is authorized to issue shares and right to acquire shares and exclude related pre-emptive rights until November 27, 2025 so as to provide the Company with sufficient flexibility to react to potential options.

The Company is well-positioned in the development of new therapeutic concepts for the treatment of AD. Through the continued program development, Vivoryon will lay the groundwork for a mid-term option for a profitable industrial partnership or an M&A transaction as well as the further generation of substantial company value.

1.5 Risk management

1.5.1 Risk management and control systems

For the leadership of the Company, a continuous and systematic management of the entrepreneurial opportunities and risks is of essential importance. For this reason, the Company implemented internal risk management and control systems. The board on a regular basis assesses on the current developments in the Company. In the audit committee, the supervision of the effectiveness of the accounting processes as well as the supervision of the independence of the auditor are reviewed.

The business of the Company is exposed to specific industry risks, as well as general business risks. The financial condition or results of operations could be materially and adversely affected if any of these risks occurs, and as a result, the market price of the Company's shares could decline. This Annual Report also contains forward-looking statements that involve risks and uncertainties. The actual results could differ materially and adversely from those anticipated in these forward-looking statements as a result of certain factors.

1.5.1.1 Opportunities

The Company operates in an industry characterized by constant change and innovation. The challenges and opportunities in the healthcare sector are influenced by a wide variety of factors. Global demographic changes, medical advances and the desire to increase quality of life provide excellent growth opportunities for the pharmaceutical and biotechnology industries. However, companies must also grapple with growing regulatory requirements in the field of drug development as well as cost pressure on healthcare systems.

The main opportunities for the Company and its shareholders are based on an increasing interest in AD, the generation of additional positive data from the Company's proprietary programs, licensing agreements due to the Company's very comprehensive and well-positioned patent portfolio as well as takeovers and M&A opportunities with the Company as a potential target.

1.5.1.2 Risks

On the other hand, the Company is exposed to various individual risks, which are described in detail in "Risk factors" of the Management Report, relating to the Annual Financial Statements 2021. The occurrence of these risks can, individually or in the aggregate have a material adverse effect on the business activities, the realization of significant Company goals and/or the Company's ability to refinance. Moreover, the risks could have substantial negative implications on the Company's net assets, financial position and results of operations. In the worst case,

this could force the Company to file for insolvency. Currently only a few factors have been identified which could, in the short-term, impair the development of the Company. Overall, the Company is well-positioned. As per the Company's current planning, the cash and cash equivalents as of December 31, 2021 and the issuance of new shares on March 31, 2022 (note '9.6 Subsequent events' to our 2021 financial statements) provide for the Company's financing beyond the upcoming twelve months.

1.5.1.3 Risk management

The Company has an active, systematic risk management on the basis of which risks are to be identified, monitored and, on the basis of appropriate measures, minimized. The board analyses in a continuous process the potential risks, evaluating impact and likelihood, and determining appropriate measures to mitigate and minimize these risks.

Vivoryon Therapeutics operates in an industry characterized by constant change and innovation. The challenges and opportunities in the healthcare sector are influenced by a wide variety of factors. Global demographic changes, medical advances and the desire to increase quality of life provide excellent growth opportunities for the pharmaceutical and biotechnology industries. However, companies must also grapple with growing regulatory requirements in the field of drug development as well as cost pressure on healthcare systems. The main opportunities for Vivoryon Therapeutics and its shareholders are based on an increasing demand of efficacious AD therapies, the generation of additional positive data from Vivoryon's proprietary programs, licensing agreements on the basis of Vivoryon's comprehensive and well-positioned patent portfolio as well as takeovers and M&A opportunities with Vivoryon as a potential target. On the other hand, Vivoryon Therapeutics is exposed to various individual risks, which are described in detail in "Risk factors" of this report.

1.5.2 Risks associated with the COVID pandemic

Despite strict national lockdown regulations, Vivoryon has managed to maintain the work ability of all employees. For this purpose, individual solutions such as working from home and time-shifted working in the offices were used. Business travel typically used to identify potential investors or cooperation partners, was largely replaced by using video conference systems. All employees of the Company are still encouraged to act in accordance with the recommendations for protection against Sars-CoV2 infections, i.e., comply with the specified minimum distances and, where this is not possible, wear mouth and nose protection. Business trips should only be undertaken if absolutely necessary.

Vivoryon sources certain services from contract research organizations (CROs) in its development projects. The lockdown regulations in Europe, the United States and India have had a negative impact on the timelines of projects resulting in a slight delay of patient enrollment in the Phase 2b, randomized and multi-center clinical VIVIAD study in Europe ("VIVIAD"). Moreover, with the outbreak of the pandemic, Vivoryon carried out a respective risk analysis for its projects. Since Alzheimer's patients are mostly elderly individuals and thus are representing a particular risk group towards severe COVID progressions, Vivoryon has made the initiation of its clinical study in relation to the community-spreading situations in participating countries (Denmark, the Netherlands, Germany). Additionally, appropriate precautionary measures have been established at all test centers. These analyses and measures were part of the applications to the respective competent national authorities for approval of the clinical trial.

This situation is being re-evaluated at regular intervals and, if necessary, appropriate measures will be implemented which may include the complete stop of the recruitment of study participants leading to a delay of the trial timelines and study results.

A further risk resulting from the pandemic, is the increased vulnerability of the supply chain for clinical study materials. To mitigate this risk, the Company has been establishing a second source for the synthesis of the active pharmaceutical ingredient (API).

1.5.3 Disclosure controls and procedures

The board of Vivoryon Therapeutics is responsible for reviewing the Company's risk management and control systems in relation to the financial reporting by the Company. The board has charged its audit committee with the periodic oversight of these risk management and control systems, with reports being provided to the board. The audit committee assists the board, among other things, in reviewing and discussing with the board and the independent auditor the audit plan as well as the annual audited financial statements and condensed interim financial statements prior to the filing of the respective annual and interim reports.

The success as the business depends on the ability to identify opportunities while assessing and maintaining an appropriate risk appetite. The risk management of Vivoryon Therapeutics considers a variety of risks, including those related to the industry and business, those related to the ongoing relationship with the shareholders of Vivoryon and those related to the intellectual property. The approach to risk management is designed to provide reasonable, but not absolute, assurance that the assets are safeguarded, the risks facing the business are being assessed and mitigated and all information that may be required to be disclosed is reported to the senior management including, where appropriate, to the Chief Executive Officer.

As of December 31, 2021, under the supervision and with the participation of the board, the company performed an evaluation of the effectiveness of the design and operation of Vivoryon's disclosure controls and procedures. There are inherent limitations to the effectiveness of any disclosure controls and procedures system, including the possibility of human error and circumventing or overriding them. Even if effective, disclosure controls and procedures can provide only reasonable assurance of achieving their control objectives.

Based on such evaluation, the board discussed a material weakness that was detected in 2021 and necessary remediation measures (we refer to note '4 Risk management system' of the financial statements), but given the progress reached until year end the board concluded that the core disclosure controls and procedures are effective to provide reasonable assurance that the information the company is required to disclose in the reports it files or submits are recorded, processed, summarized and reported within the time periods specified in section 5:25d of the Dutch Financial Supervision Act (Wet op het financieel toezicht (Wft)).

Any material failings in, material changes to, and/or material improvements of the Company's risk management and control systems which have been observed, made and/or planned, respectively, during the financial year to which this report relates, have been discussed with the audit committee and with the Non-Executive Directors.

1.5.4 Summary of key risk factors

Vivoryon Therapeutics has an active, systematic risk management on the basis of which risks are to be identified, monitored and, with appropriate measures, minimized. Vivoryon's current business risks are primarily in the research and development of novel active pharmaceutical ingredients, the protection of intellectual property, the cooperation with a network of service providers and partners as well as maintaining equity in the Company's mid-to long-term financing. These risks are continuously assessed with the goal to optimize the Company's opportunities/risks position. For further details on the opportunities, the risks and the risk management please refer to "1.6 Risk factors" and "1.6.5 Risk control measures".

1.6 Risk factors

1.6.1 Risk relating to Vivoryon's business

1.6.1.1 Risks related to the development of products and technologies

Drug development is a highly speculative undertaking and involves a substantial degree of uncertainty. We are dependent on the development success of our main product candidate, varoglutamstat (PQ912), and cannot be certain that it will be effective and in turn licensed to a global biopharmaceutical company on commercial terms which allow our further and sustainable growth. Failure to succeed in clinical development of varoglutamstat (PQ912) would have a material adverse effect on our business.

We are a biopharmaceutical company that focuses on research, development and potential future commercialization of new therapeutic products for diseases with exceptionally high unmet medical needs. Our current drug development programs focus on novel therapeutics with a differentiated mode of action for treating AD, cancer, and fibrotic indications. Our future opportunities depend on the success of our research and development programs. As a product-orientated biotechnology company, we are subject to the risks generally inherent in the drug development business (i.e., whether we will eventually succeed in developing a product that can be successfully and profitably licensed out to a biopharmaceutical company, approved by FDA, European Medicines Agency ("EMA"), and other applicable regulatory authorities, and ultimately commercialized). Such risks are particularly pronounced in the biotechnology industry especially because of the long development time of the individual product candidates. Development of a drug may take 10 to 15 years or even longer and so far, drug companies have failed to develop disease-modifying drugs for the treatment of AD (i.e., drugs that alter, stop or cure the development of the disease, instead of merely alleviating symptoms).

Prior to potential licensing partnerships, our product candidates have to pass preclinical development stages, followed by individual phases of clinical studies in humans when the effectiveness of the drugs and their potential

side effects are investigated. Only after it has been demonstrated with substantial evidence through well-controlled clinical studies that the product candidates are safe and effective for use, we will be positioned as an attractive licensing partner by global pharmaceutical companies.

So far, based on study results, we believe that our clinical product candidate varoglutamstat (PQ912) will be well tolerated in humans. Success in early preclinical or clinical studies does however not mean that future larger clinical studies will be successful. Product candidates in later-stage clinical studies may fail to demonstrate sufficient safety and efficacy despite having shown promising results in and progressed through early clinical studies. Similarly, the outcome of preclinical testing and early clinical studies may not be predictive of the success of later clinical studies, and interim results of a clinical study do not necessarily predict final results. Progress in studies of one product candidate does not indicate that we will make similar progress in additional studies for that product candidate or in studies for other product candidates. A number of companies in the pharmaceutical industry, including those with greater resources and experience than us, have suffered significant setbacks in advanced clinical studies and have stopped their development programs, even after obtaining promising results in earlier clinical studies. Also, there can be significant variability in safety and /or efficacy results between different studies of the same product candidate due to numerous factors, including changes in study protocols, differences in size and type of the patient populations, adherence to the dosing regimen and other study protocols and the rate of dropout among clinical study participants. We therefore cannot predict whether any Phase 2, Phase 3 or other clinical studies conducted will demonstrate consistent or adequate efficacy and safety to obtain regulatory approval to market our product candidates. We also cannot guarantee that our product candidates will show sufficient efficacy in patients in future studies, or will not display harmful side effects or other relevant adverse events or that other findings will not exclude the further development of our respective product candidates. Any such findings may result in significant delay or even termination of the development of the relevant product candidate which could have a material adverse effect on our business, prospects, liquidity position, financial condition and results of operations.

Competing product candidates could be approved in the market and may be more effective, tolerable or preferred by Competent Authorities and/or by potential licensing partners over our products.

Our competitors also develop new product candidates in the therapeutic areas targeted by us. These competitive product candidates may have a better effectiveness, tolerability or side effect profile and might also be preferred by the Competent Authorities in the approval process. As a result, our product candidates may not be approved for the market or may not be sustainably established in the market once approved, if ever. In addition, we may fail to agree on licensing partnerships for the licensing of our product candidates or the potential cooperation or licensing partner may fail to further develop, file for market approval or market our relevant product candidate. As a consequence, we may not be able to receive revenues or potential milestone payments or license fees or revenue participation out of licensing agreements with pharmaceutical or biotechnical companies in the future which could have material adverse effects on our business, prospects, financial condition and results of operations.

We have concentrated a substantial portion of our research and development efforts on the treatment and detection of AD, an area of research that has historically seen significant failure rates. Further, our product candidates are based on new scientific approaches and novel technology, which makes it difficult to predict the time and cost of product candidate development.

We are currently focusing the substantial majority of our research and development efforts on developing our lead candidate, varoglutamstat (PQ912), for the treatment of AD. Collectively, efforts by biopharmaceutical companies in the field of neurodegenerative diseases, such as AD, have seen many failures and limited success in drug development. While we are encouraged by the FDA's recent approval of aducanumab for the treatment of AD via the FDA's accelerated approval pathway, this is the first such approval for an AD treatment in nearly 20 years, despite the completion of many large clinical studies with the intent to successfully develop a drug that treats AD during such timeframe. Our future success is highly dependent on the successful development of our product candidates for treating AD. Developing and, if approved, commercializing our product candidates for treatment of AD subjects us to many challenges, including obtaining regulatory approval from the FDA and other regulatory authorities who have only a limited set of precedents to rely on. We cannot be sure that our approach will yield satisfactory therapeutic products that are safe and effective, scalable, or profitable.

We may encounter difficulties enrolling patients in our clinical studies, and our clinical development activities could thereby be delayed or otherwise adversely affected.

The timely completion of a clinical study in accordance with its protocol depends, among other things, on our ability to enroll enough patients who remain in the study until its conclusion. We may experience difficulties in patient enrollment in our clinical studies for a variety of reasons, including:

- the size and severity of disease in the patient population;

- the patient eligibility criteria defined in the protocol, including biomarker-driven identification and/or certain highly specific criteria related to stage of disease progression, which may limit the patient populations eligible for our clinical studies to a greater extent than competing clinical studies for the same indication that do not have biomarker-driven patient eligibility criteria;
- the size of the study population required for analysis of the trial's primary endpoints;
- the design of our study protocol;
- our ability to recruit clinical study investigators with the appropriate competencies and experience;
- competing clinical studies for similar therapies or targeting patient populations meeting our patient eligibility criteria;
- clinicians' and patients' perceptions as to the potential advantages and side effects of the product candidate being studied in relation to other available therapies and product candidates;
- our ability to obtain and maintain patient consents;
- physicians' patient referral practices that are out of our control;
- our ability to adequately monitor patients and their caregivers during and after treatment; and
- the risk that patients enrolled in clinical studies will not complete such studies, for any reason.

If any of our drug candidates causes or contributes to a death or a serious injury before or after approval, we will be subject to medical reporting regulations, which can result in voluntary corrective actions or agency enforcement actions.

Our product candidates targeting AD are aimed at a patient population largely made up of frail, elderly patients that are in a state of perpetual cognitive decline. Under the FDA's medical reporting regulations, we are required to report to the FDA instances in which our product candidate has or may have caused or contributed to a death or serious injury. Any such serious adverse event involving our product candidates could result in future FDA action, such as an inspection, enforcement action or warning, or in more serious cases, a complete shutdown of our clinical program. Any corrective action, whether voluntary or involuntary, and either pre- or post-market (if applicable), needed to address any serious adverse event may require the dedication of substantial time and capital, distract management from operating our business, and harm our reputation and financial results.

1.6.1.2 Risks related to our financial position and need for additional capital

We produce operating losses and have an accumulated deficit. We expect to incur losses for the foreseeable future and our recurring losses from operations and financial condition may cast significant doubt about our ability to continue as a going concern.

We were founded in 1997 and have focused since 2004 on the identification, research and development of drug candidates. On the basis of these research and development activities, we have not yet generated recurring revenues, with the exception of smaller licensing revenues (see licensing arrangements Simcere under section 1.2.5). We reported a net loss of EUR 12.7 million for the year ended December 31, 2021 and EUR 16.5 million for the year ended December 31, 2020; the accumulated deficit reported was EUR 92.3 million for the year ended December 31, 2021 and EUR 79.6 million for the year ended December 31, 2020. As we are a pre-revenue stage company, the generated losses result from the lack of revenues on the one hand and the costs and expenses for research and development and administrative expenses on the other hand.

We will only become profitable if we succeed in generating substantial revenues from the commercialization of our product candidates, such as advance payments, milestone payments, commissions or fees from licensing agreements or partnerships with pharmaceutical or biotechnology companies. For as long as we do not generate sufficient revenues that enable us to offset our costs and expenses, and possibly even then, we are and will remain dependent on additional financing. Our future profitability largely depends on the success of the preclinical and clinical studies and on our ability to commercialize our products and/or product candidates, which may require us to find a suitable partner. It cannot be excluded that some or even all of our development programs in respect of our product candidates may need to be terminated in the research and development stage prior to out-licensing or thereafter, so that no revenues from such product candidates are generated. Because numerous factors influence the development of product candidates, it is uncertain whether we will ever achieve any substantial revenues. Likewise, the point in time when we may operate profitably, if ever, cannot be predicted. Therefore, because we will continue to incur expenses for research and development and general administration in the future, we expect that we will continue to report losses for the foreseeable future. If we fail to generate sufficient revenues to cover our costs and

expenses and /or to obtain sufficient funding to continue our business activities, we will be forced to file for insolvency or to go into liquidation. This could in turn lead to the total loss of your capital investment.

To date the Company largely financed its operations through equity raises, licensing proceeds and government grants. On March 31, 2022, a European Private Investment in Public Equity was completed pursuant to which the Company sold an aggregate of 2,000,000 common shares with a nominal value of €1.00 per share, resulting in gross proceeds from the sale of common shares of EUR 21.0 million. In addition the Company is seeking to complete an initial public offering (“IPO”) of its common shares on the Nasdaq Global Market to fund the phase 2b clinical trial in the US and other operational costs beyond 2023.

We will likely need substantial additional funding in the future, which may not be available on commercially acceptable or sensible terms when needed or may not be available at all.

We rely mainly on equity financing for the funding our operations complemented by public grants or other financing instruments, e.g., loans and convertible debt instruments. Our future financing needs will depend on many factors, including the progress, costs and timing of our research and development activities and clinical studies, the costs and timing of obtaining regulatory approvals, the costs of obtaining, maintaining and enforcing our patents and other intellectual property rights, the costs and timing of obtaining manufacturing of our product candidates, the costs and timing of establishing sales and marketing capabilities and the terms and timing of establishing collaborations, license agreements and other partnerships.

Our ability to raise additional funds in the future will depend on financial, economic and market conditions and other factors over which we may have no or limited control, and we cannot exclude that additional funds may not be available to us when necessary on commercially acceptable or sensible terms, if at all. In case the necessary funds are not available when needed, or not at commercially acceptable or sensible terms, we may need to seek funds through collaborations and licensing arrangements earlier than planned or other alternatives, which may require us to reduce or relinquish significant rights to our research and development programs and product candidates, to grant licenses on our technologies to partners or third parties or to enter into cooperation agreements, the terms of which could be less favorable to us than originally expected. In addition, the perception that we may not be able to continue as a going concern may cause others to choose not to deal with us due to concerns about our ability to meet our contractual obligations.

We expect to finance our operations in the foreseeable future primarily with equity-related transactions. However, intended equity-related transactions such as the issue of new shares may not be successful, whether due to market conditions or otherwise.

Further, we may be required to finance our cash needs with debt financing. Any debt financing could involve substantial restrictions on activities and creditors could seek assignments or pledges of some or all of our assets including patents.

If adequate funds are not available on commercially acceptable or sensible terms when needed, we may also be forced to delay, reduce or terminate the development or marketing of all or part of our products or product candidates and we may be unable to take advantage of future business opportunities all of which could have a material adverse effect on our business, prospects, financial condition and results of operations.

We may be unable to utilize our tax loss carry forwards.

In the past, we have accumulated substantial tax loss carry forwards for German corporate income tax (EUR 173.6 million as of December 31, 2021, EUR 158.5 million as of December 31, 2020) and trade tax purposes (EUR 173.4 million as of December 31, 2021, EUR 158.4 million as of December 31, 2020). The use of our existing tax loss carry forwards and ongoing losses for German corporate income and trade tax purposes may be forfeited or may have already been forfeited in the case of a direct or indirect transfer of shares, including the issue of new shares from a capital increase, subject to certain limited exceptions. Such restriction applies to both German corporate income tax and trade tax.

Under current German tax laws, tax loss carryforwards can generally be used for an unlimited period of time but any change of control — including as a result of a capital increase — could result in the forfeiture of such tax loss carryforwards and of any current year losses if, subject to further prerequisites, more than 50% of our subscribed capital or voting rights will be, directly or indirectly, transferred to an acquirer (including parties related to the acquirer constituting a group of acquirers with aligned interests) within five years or a comparable acquisition occurs. However, tax loss carryforwards and unused current losses taxable in Germany will not expire to the extent that they are covered by built in gains taxable in Germany at the time of such acquisition (Stille-Reserven-Klausel, the “Hidden-Reserves Clause”). Pursuant to the Hidden Reserves-Clause, any share transfer that would otherwise be subject to the loss forfeiture rule above does not result upon application in forfeiture of tax loss carryforwards and

interest carryforwards resulting from our current business operations, if our current business operations remained the same (i) from the time of its establishment; or (ii) during the last three business years prior to the share transfer and such business operations are maintained after the transfer (fortführungsgebundener Verlustvortrag). The determination of whether the business operations have been maintained is assessed on the basis of qualitative factors, such as the produced goods and services, target markets, customer and supplier bases, etc. However, the tax loss carryforwards will be forfeited in any circumstance if, after the share transfer, our business operations become dormant, are modified or substantially restructured, we become a partner in an operating partnership (Mitunternehmerschaft), we become a fiscal unity parent, or assets are transferred from us and recognized at a value lower than the fair market value. This requirement is monitored until the retained tax loss carryforwards have been fully utilized.

In case the utilization of tax loss carry forwards is forfeited, they cannot be set off against future taxable profits which would result in increased tax burdens. This would negatively affect our financial condition and results of operations.

1.6.1.3 Risks related to the regulatory environment

Nearly all aspects of our activities are subject to substantial regulation. No assurance can be given that any of our product candidates will fulfill regulatory requirements. Failure to comply with such regulatory requirements could result in delays, suspensions, refusals and withdrawals of approvals as well as fines and could make it impossible for our licensing partner to commercialize our products and/or product candidates.

The international biopharmaceutical and medical technology industry is highly regulated by legislation and Competent Authorities that impose substantial requirements covering nearly all aspects of our activities, notably on research and development, manufacturing, preclinical tests, clinical studies, labeling, marketing, sales, storage, record keeping, promotion and pricing of its research and development programs, product candidates and future products. Applicable laws and regulations include, which are subject to ongoing reform and regular review by the Competent Authorities which may result in changes in the applicable regulation. If we do not comply with one or more of these factors in a timely manner, or at all, we could experience significant delays as a result of the EMA in the EU, the FDA in the United States or another Competent Authority recommending non-approval or restrictions on approval for a product candidate, leading to an inability to successfully commercialize any of our products and/or product candidates, which could materially harm our business. Any failure of any of our product candidates in clinical studies or in receiving regulatory approval could have a material adverse effect on our business, results of operations, financial condition and prospects. If any of our product candidates fails to obtain approval on the basis of any applicable condensed regulatory approval process, this will prevent such product candidate from obtaining approval in a shortened time frame, or at all, resulting in increased expenses.

Compliance with the standards laid down by local Competent Authorities is required in each country where we, or any of our partners or licensees, conduct our activities. The Competent Authorities include the EMA and the FDA. In order to market our future products in regions such as the European Economic Area, United States of America, Asia Pacific, and other jurisdictions, our licensing partners must obtain separate regulatory approvals. The approval procedures vary among countries and can require additional clinical testing, and the time required to obtain approval may differ from that required to obtain for example an approval from the FDA or EMA. Moreover, clinical studies conducted in one country may not be accepted by regulatory authorities in other countries. Approval by the FDA or EMA does not ensure approval by Competent Authorities in other countries, and approval by one or more foreign regulatory authorities does not ensure approval by regulatory authorities in other countries or by the FDA or EMA.

There can be no assurance that our product candidates will fulfill the criteria required to obtain necessary regulatory clearance to access the market. Also, we cannot predict the exact nature, precise timing and detailed costs and expenses in respect of the efforts that will be necessary to complete our research and development programs and product candidates. Each Competent Authority may impose its own requirements, revoke an approval, refuse to grant approval, or require additional data before granting approval, notwithstanding that approval may have been granted by one or more other Competent Authorities. Competent Authorities may also approve a product candidate for fewer or more limited indications or patient sub-segments than requested or may grant approval subject to the performance of post-marketing studies. Approvals may be delayed, limited or denied for a number of reasons, many of which are beyond our control. Such reasons could include, among others, the production process or site not meeting the applicable requirements for the manufacturing of regulated products, or the product candidates not meeting applicable requirements for safety or efficacy during the clinical development stage or after marketing of the product candidates commences. No assurance can be given that clinical studies will be approved by Competent Authorities or that product candidates will be approved for marketing by Competent Authorities in any pre-

determined indication or intended use. Competent Authorities may also disagree with our interpretation of data submitted for their review.

Our product candidates may become subject to changes in the regulatory framework or market conditions. Regulatory guidelines may change during the course of drug development and review processes, which may render the chosen development strategy suboptimal. Market conditions may change resulting from the emergence of new competitors or new treatment guidelines or otherwise which may require alterations to the research and development strategy. Changes in the regulatory framework or the market conditions may result in significant delays, increased costs, and significant changes in the commercial assumptions and may prevent our product candidates from obtaining approval necessary for marketing and thus may dramatically limit our revenues from licensing partnerships, e.g., regulatory and commercial milestones as well as royalties.

Any of the abovementioned regulatory risks could have a material adverse effect on our liquidity position, business, prospects, financial condition and results of operations.

Changes in regulatory requirements could result in delays or discontinuation of development of our product candidates or unexpected costs in obtaining regulatory approval.

Regulatory policies may change or additional government regulations or legislation may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we fail to comply with existing requirements, are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any regulatory approval that we may have obtained or face regulatory or enforcement actions, which may materially adversely affect our business, prospects, financial condition and results of operations.

If any of our product candidates is approved, our product labeling, advertising and promotion will be subject to regulatory requirements and continuing regulatory review. Regulatory authorities strictly regulate the promotional claims that may be made about prescription products. For example, a product may not be promoted for uses that are not approved by the FDA as reflected in the product's approved labeling. If we receive marketing approval for a product candidate, physicians may nevertheless prescribe it to their patients in a manner that is inconsistent with the approved label. If we are found to have promoted such off-label uses, we may become subject to significant liability. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant sanctions. The U.S. federal government has levied large civil and criminal fines against companies for alleged improper promotion and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize our product candidates.

Further, the policies of FDA, EMA and other comparable regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we are slow or unable to adapt to changes in existing requirements or to adopt new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in Europe, the United States or elsewhere.

Our research and development programs and product candidates must undergo rigorous preclinical tests and clinical studies, the start, timing of completion, number and results of which are uncertain and could substantially delay or prevent the product candidates from ever reaching the market.

Preclinical tests and clinical studies are expensive and time-consuming, and their results are uncertain. We, our collaborative partners or other third parties may not successfully complete the preclinical tests and clinical studies of the research and development programs as well as our product candidates, which could delay or prevent the commercialization of our product candidates. We cannot guarantee that their research and development programs as well as our product candidates will demonstrate sufficient safety or efficacy or performance in our preclinical tests and clinical studies to obtain marketing approval in any given country or at all, and the results from earlier preclinical tests and clinical studies may not indicate the results of later-stage preclinical tests and clinical studies. At any stage of development, based on a review of available preclinical and clinical data, the estimated costs for the continued development of our product candidates, market assessments and other factors could change, and the

development of any of our research and development programs and its product candidates may be suspended or discontinued.

Clinical studies can be delayed for a variety of reasons, including delays in obtaining regulatory approval to commence a study, in reaching agreement on acceptable terms with prospective CROs, CMOs and clinical study sites, in obtaining ethics committee approval, in recruiting suitable patients to participate in a study, in having patients complete a study or return for follow-up, in adding new sites or in obtaining sufficient supplies of clinical study materials or clinical sites dropping out of a study and in the availability to us of appropriate clinical study insurances. Furthermore, we, our collaborative partners or regulators may require additional preclinical tests and clinical studies. Such delays or additional testing could result in increased costs and delay or jeopardize our ability to obtain regulatory approval and thus the commencement of the marketing of our product candidates as expected.

Successful and timely completion of clinical studies will require the enrolment of a sufficient number of patient candidates. Studies may be subject to delays as a result of patient enrolment taking longer than anticipated or patient withdrawal. Many factors affect patient enrolment, including the size and nature of the patient population, the severity of the disease under investigation, the patient eligibility criteria for the study in question, the ability to monitor patients adequately during and after the treatment, our payments for conducting clinical studies, the proximity of patients to clinical sites, the design of the clinical study, clinicians' and patients' perceptions as to the potential advantages of the product candidates being studied in relation to other available therapies, including any new products that may be approved for the indications we are developing and whether the clinical study design involves comparison to placebo or standard of care. In addition, some of our competitors have on-going clinical studies for product candidates that treat the same indications as our product candidates, and patients who would otherwise be eligible for our clinical studies may instead enroll in clinical studies of product candidates of our competitors. If we experience lower than expected enrolment in the studies, the studies may not be completed as envisaged or may become more expensive to complete.

The realization of any of the above risks may have a material adverse effect on our liquidity position, business, prospects, financial condition and results of operation.

If serious adverse side effects are identified for any of our product candidates, we may need to abandon or limit our development of that product candidate, which may delay or prevent a licensing partnership.

Not all adverse effects of drugs can be predicted or anticipated. Serious unforeseen side effects from any of our product candidates could arise either during clinical development or, if approved by Competent Authorities, after the approved product has been marketed. All of our product candidates are still in clinical or preclinical development.

Any of these events could prevent us or any potential future commercializing partners from achieving or maintaining market acceptance of the affected product or could substantially increase commercialization costs and expenses which could delay or prevent us from generating significant revenue from the out-licensing of our products and therefore could have a material adverse effect on our liquidity position, business, prospects, financial condition and results of operations.

The regulatory approval processes of the FDA, EMA and other Competent Authorities are lengthy, time consuming and inherently unpredictable and if we fail to obtain regulatory approval in any jurisdiction, we will not be able to commercialize our products in that jurisdiction and our business, results of operations, financial condition and prospects, may be materially adversely affected.

The time required to obtain approval by the FDA, EMA and other Competent Authorities is unpredictable and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval laws, regulations, policies or the type and amount of clinical data or other information necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. We have not obtained regulatory approval for any product candidate, and it is possible that none of our existing product candidates or any product candidates we may seek to develop in the future will ever obtain regulatory approval.

Our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA, EMA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA, EMA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;

- the designs or our execution of clinical trials might not be considered adequate, or the results of clinical trials may not meet the level of statistical significance required, by the FDA, EMA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA, EMA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected may not be sufficient to support the submission of a BLA or other submission, or to obtain regulatory approval in the United States, the EU or elsewhere;
- the FDA, EMA or comparable foreign regulatory authorities may fail to approve our manufacturing processes or facilities or those of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the laws, regulations or policies of the FDA, EMA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data or other regulatory submissions insufficient for approval.

This lengthy approval process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory approval to market any of our product candidates, which would significantly harm our business, results of operations and prospects. The FDA, the EMA and other regulatory authorities have substantial discretion in the approval process and determining when or whether regulatory approval will be obtained for any of our product candidates. Even if we believe the data collected from clinical trials of our product candidates are promising, such data may not be sufficient to support approval by the FDA, the EMA or any other regulatory authority.

In order to commercialize our products in more than one jurisdiction, we will be required to obtain separate regulatory approvals in each market and to comply with numerous and varying regulatory requirements. The approval procedures vary from country to country and may require additional testing, administrative review periods, agreements with pricing authorities or other steps. Satisfying these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. In addition, in many countries outside the United States and in particular in many of the Member States of the EU, a product must undergo health economic assessments to agree on pricing and/or be approved for reimbursement before it can be approved for sale in that country, or before it becomes commercially viable. The FDA and the EMA may come to different conclusions regarding approval of a marketing application. Approval by the FDA or EMA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or by the FDA or EMA. In addition, our failure to obtain regulatory approval in any country may delay or have negative effects on the process for regulatory approval in other countries. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries. We may not obtain regulatory approvals on a timely basis, if at all. We may not be able to submit applications for regulatory approvals and may not receive necessary approvals to commercialize our products in any market. We may be required to conduct additional preclinical studies or clinical trials, which would be costly and time consuming. If we or any future partner are unable to obtain regulatory approval for our product candidates in one or more significant jurisdictions, then the commercial opportunity for our product candidates, and our business, results of operations, financial condition and prospects, may be materially adversely affected.

If we obtain regulatory approval for a product candidate, the approved product will remain subject to on-going regulatory obligations.

If we obtain regulatory approval in a jurisdiction, legislation or Competent Authorities may still impose significant restrictions on the indicated uses or marketing of the product and impose on-going requirements for potentially costly post-approval studies or post-market surveillance. There can be no guarantee that such additional data or studies, if required, will corroborate earlier data. Post-approval manufacturing and marketing of our products may show different safety and efficacy profiles to those demonstrated in the data on which the approval to test or market such products was based. As we intend to conduct clinical tests of our products with other therapeutic products (combination therapy), our products would be exposed to any risk identified in relation to such other therapeutic products. Such risks could lead to the withdrawal, restriction on use or suspension of approval, which could have a material adverse effect on our business, prospects, financial condition and results of operations. Advertising and promotional materials must comply with applicable rules and regulations and are subject to review by the Competent Authorities. In addition, Competent Authorities may not approve or may challenge the labeling claims or advertisements that are necessary or desirable for the successful commercialization of our possible future

products. In some jurisdictions, competitors may challenge such labeling claims or advertisements in accordance with principles of unfair competition law.

For example, if we seek FDA approval in the United States, our product candidate varoglutamstat (PQ912) will be classified as a drug product for which a New Drug Application (“NDA”) must be submitted and approved before the candidate may be marketed in the United States, after which such product (if approved at all) will be subject to the burdensome drug regulations implemented under the federal Food, Drug & Cosmetic Act (“FDCA”), among other applicable laws and regulations. Similarly, PBD-C06 would likely be classified as a biological product, which is a type of drug that is regulated under both the FDCA and the federal Public Health Services (“PHS”) Act and, therefore, can only be sold if we obtain a Biologics License Application (“BLA”) from the FDA. The holder of an NDA or a BLA is obligated to monitor and report adverse events and any failure of a product to meet the specifications in the NDA or BLA. The holder of an NDA or a BLA must also submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. Failure to comply with the specific conditions outlined in the NDA or BLA for a given product or any other on-going regulatory obligation may result in the suspension or revocation of such NDA or BLA, fines, and/or imprisonment, among other possible enforcement actions.

The FDA also may require post market testing, known as Phase 4 studies and/or place conditions on an NDA or BLA approval that could restrict the distribution or use of a product. In addition, quality control, drug manufacture, packaging, and labeling procedures must continue to conform to current good manufacturing practices (“cGMPs”) after approval. Drug manufacturers and certain of their subcontractors are required to register their establishments with FDA and certain state agencies. Registration may result in periodic announced or unannounced inspections by the FDA and/or applicable state agencies, during which the agency inspects manufacturing facilities to assess compliance with cGMP. Accordingly, manufacturers must continue to expend time, money, and effort in the areas of production and quality control to maintain compliance with cGMPs. Regulatory authorities may withdraw product approvals or request product recalls if a company fails to comply with regulatory standards, if it encounters problems following initial marketing, or if previously unrecognized problems are subsequently discovered. In addition, other regulatory actions may be taken, including, among other things, warning letters, the seizure of products, injunctions, consent decrees placing significant restrictions on or suspending manufacturing operations, refusal to approve pending applications or supplements to approved applications, civil penalties, and criminal prosecution.

The FDA and other federal regulatory agencies closely regulate the marketing and promotion of drugs through, among other things, standards and regulations for direct-to-consumer advertising, communications regarding unapproved uses, industry-sponsored scientific and educational activities, and promotional activities involving the Internet. None of our product candidates can be commercially promoted before receiving FDA approval. After approval, product promotion can include only those claims relating to safety and effectiveness that are consistent with the labeling approved by FDA. Healthcare providers are permitted to prescribe drugs for “off-label” uses — that is, uses not approved by the FDA and, therefore, not described in the drug’s labeling — because FDA does not regulate the practice of medicine. However, FDA regulations prohibit the marketing of drug products for any such off-label uses or in any way that deviates from the specific indications for which the product was approved, including any applicable conditions on, or prerequisites to, the product’s use.

Competent Authorities have broad enforcement powers and a failure by us or our present or future collaboration partners to comply with applicable regulatory requirements can, among other things, result in recalls or seizures of products, operating and production restrictions, withdrawals of previously granted marketing approvals, total or partial suspension of regulatory approvals for ongoing clinical studies, refusals to approve pending applications, warning letters, injunctions, penalties, fines, civil proceedings, criminal prosecutions and imprisonment. Competent authorities may also refuse to allow us to enter into supply contracts, including government contracts. Further, any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity.

The occurrence of any event or penalty described above may delay the commercialization of our possible future products, increase costs and expenses and materially adversely affect our business, prospects, financial condition and results of operation.

The United Kingdom’s withdrawal from the EU, or Brexit, could result in increased regulatory and legal complexity, and impose additional challenges in securing regulatory approval of our product candidates in the United Kingdom.

We could face heightened risks with respect to seeking marketing approval in the United Kingdom as a result of the recent withdrawal of the United Kingdom from the EU, commonly referred to as Brexit.

Pursuant to the formal withdrawal arrangements agreed between the United Kingdom and the EU, the United Kingdom withdrew from the EU, effective December 31, 2020. On December 24, 2020, the United Kingdom and the EU entered into a Trade and Cooperation Agreement (“TCA”). The TCA sets out certain procedures for approval and recognition of medical products in each jurisdiction. We cannot predict whether or not the United Kingdom will significantly alter its current laws and regulations in respect of the pharmaceutical industry or how the TCA will be interpreted and, if so, what impact any such alteration or interpretation would have on us or our business. The TCA is subject to formal approval by the European Parliament and the Council of the EU before it comes into effect and has been applied provisionally since January 1, 2021. Because the agreement merely sets forth a framework in many respects and will require complex additional bilateral negotiations between the United Kingdom and the EU as both parties continue to work on the rules for implementation, significant uncertainty remains about how the precise terms of the relationship between the parties will differ from the terms before withdrawal. The Medicines and Healthcare products Regulatory Agency (“MHRA”) was appointed as the United Kingdom’s standalone medicines and medical devices regulator (responsible for designating Review Bodies), effective January 1, 2021, and new legislation has been introduced in the United Kingdom.

Moreover, we cannot predict the impact that Brexit will have on (i) the marketing of pharmaceutical products, (ii) the process to obtain regulatory approval in the United Kingdom for product candidates or (iii) the award of exclusivities that are normally part of the EU legal framework.

As a result of Brexit, other European countries may seek to conduct referenda with respect to their continuing membership with the EU. Given these possibilities and others we may not anticipate, as well as the absence of comparable precedent, it is unclear what financial, regulatory and legal implications the withdrawal of the United Kingdom from the EU would have and how such withdrawal would affect us, and the full extent to which our business could be adversely affected.

In addition, following the Brexit vote, the EU decided to move the headquarters of the EMA from the United Kingdom to the Netherlands. The EMA is currently finishing its relocation process to the Netherlands. However, as a result of the move, the EMA has lost a significant percentage of its employees and was not able to hire at least the same amount of employees that left the EMA upon the movement of its headquarters from the United Kingdom to the Netherlands. This raises the possibility that new drug approvals in the EU could be delayed as a result of such employee shortage.

Price controls may adversely affect our future profitability.

In some countries, particularly member states of the EU, the pricing of prescription drugs is subject to governmental control or control by associations of health insurers. In these countries, pricing negotiations with governmental authorities can take considerable time after receipt of marketing approval for a product. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various countries and parallel distribution, or arbitrage between low-priced and high-priced countries, can further reduce prices. In some countries, in particular in many member states of the EU, we may be required to conduct a clinical trial or other studies that compare the cost-effectiveness of our product candidates to other available therapies in order to obtain or maintain reimbursement or pricing approval. Publication of discounts by third-party payors or authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, we may remain unprofitable for longer or may never achieve profitability.

We are subject to stringent privacy laws, information security laws, regulations, policies and contractual obligations related to data privacy and security and changes in such laws, regulations, policies and contractual obligations could adversely affect our business.

We are subject to data privacy and protection laws and regulations that apply to the collection, transmission, storage and use of personal information, including personal data and personally identifying information, which, among other things, impose certain requirements relating to the privacy, security and transmission of personal information. The legislative and regulatory landscape for privacy and data protection continues to evolve in jurisdictions worldwide, and there has been an increasing focus on privacy and data protection issues with the potential to affect our business. Failure to comply with any of these laws and regulations could result in enforcement action against us, including fines, imprisonment of company officials and public censure, claims for damages by affected individuals, damage to our reputation and loss of goodwill, any of which could have a material adverse effect on our business, financial condition, results of operations or prospects.

There are numerous U.S. federal and state laws and regulations relating to privacy and security of personal information. In particular, regulations promulgated pursuant to the Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) establish privacy and security standards that limit the use and disclosure of individually identifiable health information, or protected health information, and require the implementation of administrative, physical and technological safeguards to protect the privacy of protected health information and ensure the confidentiality, integrity and availability of electronic protected health information. Determining whether protected health information has been handled in compliance with applicable privacy standards and our contractual obligations can be complex and may be subject to changing interpretation.

If we are unable to properly protect the privacy and security of protected health information, we could be found to have breached our contracts. Further, if we fail to comply with applicable privacy laws, including applicable HIPAA privacy and security standards, we could face civil and criminal penalties. The U.S. Department of Health and Human Services (“HHS”) has the discretion to impose penalties without attempting to first resolve violations. HHS enforcement activity can result in financial liability and reputational harm, and responses to such enforcement activity can consume significant internal resources. In addition, state attorneys general are authorized to bring civil actions seeking either injunctions or damages in response to violations that threaten the privacy or security of the personal information of state residents. We cannot be sure how these regulations will be interpreted, enforced or applied to our operations. In addition to the risks associated with enforcement activities and potential contractual liabilities, our ongoing efforts to comply with evolving laws and regulations at the federal and state level may be costly and require ongoing modifications to our policies, procedures and systems.

Data privacy remains an evolving landscape at both the domestic and international level, with new regulations coming into effect. For example, the State of California enacted the California Consumer Privacy Act of 2018 (“CCPA”), which went into effect on January 1, 2020 and requires companies that process information on California residents to make new disclosures to consumers about their data collection, use and sharing practices, allow consumers to opt out of certain data sharing with third parties and

provide a new cause of action for data breaches. Additionally, California voters approved a new privacy law, the California Privacy Rights Act (“CPRA”), in the November 3, 2020 election. Effective starting on January 1, 2023, the CPRA will significantly modify the CCPA, including by expanding consumers’ rights with respect to certain sensitive personal information. The CPRA also creates a new state agency that will be vested with authority to implement and enforce the CCPA and the CPRA. New legislation proposed or enacted in various other states will continue to shape the data privacy environment nationally. Certain state laws may be more stringent or broader in scope, or offer greater individual rights, with respect to confidential, sensitive and personal information than federal, international or other state laws, and such laws may differ from each other, which may complicate compliance efforts.

In addition, all 50 U.S. States and the District of Columbia have enacted breach notification laws that may require us to notify patients, employees or regulators in the event of unauthorized access to or disclosure of personal or confidential information experienced by us or our service providers. These laws are not consistent, and compliance in the event of a widespread data breach is difficult and may be costly. Moreover, states have been frequently amending existing laws, requiring attention to changing regulatory requirements. We also may be contractually required to notify patients or other counterparties of a security breach.

Although we may have contractual protections with our service providers, any actual or perceived security breach could harm our reputation and brand, expose us to potential liability or require us to expend significant resources on data security and in responding to any such actual or perceived breach. Any contractual protections we may have from our service providers may not be sufficient to adequately protect us from any such liabilities and losses, and we may be unable to enforce any such contractual protections. In addition to government regulation, privacy advocates and industry groups have and may in the future propose self-regulatory standards from time to time. These and other industry standards may legally or contractually apply to us, or we may elect to comply with such standards.

In addition, the EU’s General Data Protection Regulation (EU) 2016/679 (“GDPR”), became enforceable on May 25, 2018. The GDPR imposes onerous accountability obligations requiring controllers and processors to maintain a record of their personal data processing and policies. The GDPR imposes certain other onerous obligations, including: obligations for controllers and processors to appoint data protection officers in certain circumstances; increased transparency obligations to data subjects for controllers (including presentation of certain information in a concise, intelligible and easily accessible form about data, how their personal data is used and their rights vis-à-vis that data and its use); the obligation to carry out so-called data protection impact assessments in certain circumstances; limitations on the collection and retention of personal data through “purpose,” “data minimization” and “storage limitation” principles; obligations to implement “privacy by design”; obligations to

honor increased rights for data subjects (such as rights for individuals to be “forgotten,” rights to data portability, rights to object, etc. in certain circumstances); a heightened and codified standard of data subject consent; obligations to implement certain technical and organizational safeguards to protect the security and confidentiality of personal data; obligations to agree to certain specific contractual terms and to take certain measures when engaging third-party processors and joint controllers; and the obligation to provide notice of certain significant personal data breaches to the relevant supervisory authority or authorities and affected individuals. In addition, the GDPR materially expanded the definition of what constitutes personal data (including, for example, by expressly clarifying that the GDPR applies to “pseudonymized” and key-coded data).

The GDPR imposes strict rules on the transfer of personal data to countries outside the EEA, including the United States. In response, the EU and United States agreed in 2016 to a transfer framework for data transferred from the EU to the United States, called the EU-US Privacy Shield, but the EU-US Privacy Shield was invalidated in July 2020 by the Court of Justice of the EU, or CJEU, in a case known colloquially as “Schrems II.” The standard contractual clauses issued by the European Commission, or the EC, for the transfer of personal data, or any successor version(s) of those clauses, may be similarly invalidated by the CJEU in all or certain circumstances. While the CJEU upheld the adequacy of the standard contractual clauses in principle in Schrems II, it made clear that reliance on those clauses alone may not necessarily be sufficient in all circumstances. Use of the standard contractual clauses must now be assessed on a case-by-case basis taking into account the legal regime applicable in the destination country, in particular regarding applicable surveillance laws and relevant rights of individuals with respect to the transferred data. In the context of any given transfer, where the legal regime applicable in the destination country may or does conflict with the intended operation of the standard contractual clauses, the decision in Schrems II and subsequent guidance from the European Data Protection Board, or EDPB, would require the parties to that transfer to implement certain supplementary technical, organizational and/or contractual measures to rely on the standard contractual clauses as a GDPR-compliant “transfer mechanism.” However, the aforementioned guidance from the EDPB on such supplementary technical, organizational and/or contractual measures appears to conclude that no combination of such measures could be sufficient to allow effective reliance on the standard contractual clauses in the context of transfers of personal data “in the clear” to recipients in countries where the power granted to public authorities to access the transferred data goes beyond that which is “necessary and proportionate in a democratic society” — which may, following the CJEU’s conclusions in Schrems II on relevant powers of U.S. public authorities and commentary in that EDPB guidance, include the United States in certain circumstances (e.g., where Section 702 of the U.S. Foreign Intelligence Surveillance Act applies). Furthermore, the European Commission adopted modernized standard contractual clauses for international transfers of personal data on June 4, 2021, which take into consideration Schrems II. The final implementing decision of the European Commission was published in the Official Journal of the EU on June 7, 2021, and the new standard contractual clauses can therefore be used from June 27, 2021, onwards. On June 27, 2021, a transition period of 18 months will also commence, during which all agreements using the former standard contractual clauses must be replaced by the new set of standard contractual clauses, taking into account the rules for the use of standard contractual clauses pursuant to Schrems II and the guidance from the EDPB in this respect. As supervisory authorities issue further guidance on personal data export mechanisms, including circumstances where the standard contractual clauses can and cannot be used, and/or start taking enforcement action, we could suffer additional costs, complaints, and/or regulatory scrutiny, investigations or fines, and/or if we are otherwise unable to transfer personal data between and among countries and regions in which we operate, it could affect the manner in which we perform our operations or provide our services, the geographical location or segregation of our relevant systems and operations, and/or could adversely affect our financial results and generally increase compliance risk.

Fines for non-compliance with the GDPR are significant — the greater of EUR 20 million or 4% of the total worldwide annual turnover of the preceding financial year (calculated on a group level). In addition to administrative fines, a wide variety of other potential enforcement powers are available to competent supervisory authorities in respect of potential and suspected violations of the GDPR, including extensive audit and inspection rights, and powers to order temporary or permanent bans on all or some processing of personal data carried out by non-compliant actors. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR.

Notwithstanding the notes above pertaining to the broadly uniform manner in which the GDPR has direct effect in the laws of EEA member states, the GDPR also provides that EEA member states make their own further laws and regulations to introduce specific requirements related to the processing of “special categories of personal data,” including (without limitation) personal data related to health, biometric data used for unique identification purposes and genetic information, as well as personal data related to criminal offences or convictions. This fact may lead to greater divergence on the law that applies to the processing of such data types across the EEA, compliance with which, as and where applicable, may increase our costs and could increase our overall compliance risk. Such

member state specific regulations could also limit our ability to collect, use and share data in the context of our EEA establishments (regardless of where any processing in question occurs), and/or could cause our compliance costs to increase, ultimately having an adverse impact on our business, and harming our business and financial condition.

In addition to the foregoing, a breach of privacy laws or data security laws, particularly those resulting in a significant security incident or breach involving the misappropriation, loss or other unauthorized use or disclosure of sensitive or confidential patient or consumer information, could have a material adverse effect on our business, reputation and financial condition. As a controller, we are accountable for any third-party service providers we engage to process personal data on our behalf, including our CROs. We attempt to manage the associated risks by performing security assessments and due diligence of our vendors and taking appropriate steps to require all such third-party providers with data access to sign agreements that accord with the requirements of the GDPR, and obligating such providers to only process data according to our instructions and to take sufficient security measures to protect such data. There is no assurance that these contractual measures and our own privacy and security-related safeguards will protect us from all risks associated with the third-party processing, storage and transmission of such information.

Compliance with the GDPR has been and will continue to a rigorous and time-intensive process that may increase our cost of doing business or require us to change our business practices, and despite those efforts, there is a risk that we may be subject to fines and penalties, litigation, and reputational harm in connection with our activities carried out in the context of our EEA operations.

It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our practices and our efforts to comply with the evolving data protection rules may be unsuccessful. If so, this could result in government-imposed fines or orders requiring that we change our practices, which could adversely affect our business. We must devote significant resources to understanding and complying with this changing landscape. Failure to comply with federal, state and international laws regarding privacy and security of personal information could expose us to penalties under such laws. Any such failure by us or our third-party processors to comply with data protection and privacy laws could result in government-imposed fines or orders requiring that we change our practices, claims for damages or other liabilities, regulatory investigations and enforcement action, litigation and significant costs for remediation, any of which could adversely affect our business. Even if we are not determined to have violated these laws, government investigations into these issues typically require the expenditure of significant resources and generate negative publicity, which could harm our business, financial condition, results of operations or prospects.

1.6.1.4 Risks related to the development, clinical testing and commercialization of our product candidates and other market risks

New technologies could facilitate or enhance the development of product candidates from competitors or limit or eliminate the market opportunity for our product candidates.

As AD is proving challenging to today's societies and healthcare systems, it is also by nature a competitive therapeutic area, since many companies are competing to be the first with a disease modifying drug on the market. On the other hand, recent complete or partial clinical trial failures have prompted a couple of key players either to withdraw at least some of their most advanced developmental drugs or to halt and reconsider their efforts in relation to certain approaches (Biogen, Roche). The field in which we operate is characterized by rapid technological change and innovation. Our competitors include many established pharmaceutical and biotechnology enterprises, universities and other research or commercial institutions many of which have substantially greater financial, research and development resources than ours.

Competing products may gain faster or greater market acceptance than our possible future products, without necessarily being more effective or safer, and medical advances or rapid technological development by competitors may result in our product candidates becoming non-competitive or obsolete before we are able to recover our investments made in research and development and marketing. If we fail to effectively compete with our products in the market this would have a material adverse effect on our business, prospects, financial condition and results of operations.

Even if we eventually gain approval for any of our product candidates, we may be unable to commercialize them.

We have neither a sales or marketing infrastructure nor experience in the sale or marketing of pharmaceutical products. To achieve commercial success for any approved product, we would have to develop or acquire a sales and marketing organization, outsource these functions to third parties or enter into partnerships with parties that are able and willing to commercialize our future products, but such partnerships or marketing arrangements could be difficult to find.

We may decide to establish our own sales and marketing capabilities and promote our possible future products if we have obtained the necessary regulatory approvals for the marketing of our products. Even if we establish our own sales and marketing capabilities, we may fail to launch or market our products effectively given we have no experience in the sales and marketing of pharmaceutical products. In addition, recruiting and training a suitable sales force is subject to a wide variety of operational risks, likely will be expensive and time consuming and could delay any product launch and marketing activities. In the event that a product launch or marketing activities are delayed or do not occur for any reason, we would have commercialization expenses and our investment could be lost if we cannot retain or reposition our sales and marketing force when market conditions require, or new products are developed. Factors that may adversely affect our efforts to commercialize our future products on our own include:

- our inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to or persuade adequate numbers of physicians to prescribe our products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines;
- unforeseen costs and expenses associated with creating an independent sales and marketing organization; and
- costs of marketing and promotion above those anticipated by us.

If we enter into arrangements with third parties to perform sales and marketing services, the expenses associated therewith could be higher than if we were to market and sell our possible future products ourselves and thus have a negative effect on our profitability. In addition, we may not be successful in entering into arrangements with third parties to sell and market our future products or may only be able to do so on terms that are not favorable for us. Arrangements with partners may also place the commercialization of our future products outside of our control and could make us subject to a number of risks including that we may not be able to control the amount or timing of resources that our partner devotes to the marketing and sale of our products or that such partner may not be willing or able to fulfill its obligations under the arrangements or the partner's performance may be adversely affected by business combinations or significant changes in its business strategy.

If we do not establish successfully sufficient and efficient sales and marketing capabilities, either on our own or with third parties, we may not be able to successfully commercialize our future products which would have a material adverse effect on our business, prospects, financial condition and results of operations.

We currently have no drug developed that is approved for marketing and we do not expect to be able to market any of our product candidates in the foreseeable future. The future commercial success of our product candidates will depend on the degree of market acceptance among physicians, patients, healthcare payers and the medical community.

Our product candidates are at varying stages of development and we may never develop a drug that is commercially successful. To date, we have no drug developed that is approved for marketing and we do not expect to be able to market any of our product candidates in the foreseeable future. However, even if we eventually succeed in developing a marketable product, we cannot ensure that such product will gain the market acceptance necessary for us to achieve profitability. Market acceptance of our possible future products by physicians, patients and healthcare payers will depend on a number of factors, many of which are beyond our control, including for example:

- the wording of the drug label;
- acceptance by physicians, patients and third-party healthcare payers of each drug as safe, effective and cost-effective;
- ease of use, ease of administration and other perceived advantages over alternative drugs;
- prevalence and severity of side effects or other adverse events (e.g., publicity);
- limitations, precautions or warnings listed in the summary of drug characteristics, patient information leaflet, package labeling or instructions for use;
- the cost of treatment with our possible future products in relation to alternative treatments;
- the extent to which drugs are approved for inclusion and reimbursed on formularies of hospitals and managed care organizations;
- whether drugs are designated in the label and /or under physician treatment guidelines or under reimbursement guidelines as a first-line therapy or as a second-line or third-line or last-line therapy;

- changes in the standard of care for the targeted indications for any possible future products; and
- sales, marketing and distribution support.

The level of acceptance achieved by our product candidates, once they have entered the marketing stage, will have a direct effect on our business, prospects, financial condition and results of operations.

The price setting and availability and level of adequate reimbursement by third parties is uncertain and may impede our ability to generate sufficient operating revenues to offset operating expenses.

The biotech industry is subject to midterm and long-term developments of national and international healthcare systems and healthcare policies, e.g., health insurance companies and governmental health care institutions may increase the pressure to reduce the overall healthcare costs.

Our commercial success will depend on the conditions for setting the sales price of our drugs by the relevant public authorities, commissions and bodies and the conditions of their reimbursement by the health care agencies or insurance companies in the individual countries where we intend to market our product candidates. The current context of healthcare cost control and economic and financial crisis that many countries are currently facing or have faced, coupled with the increase in health care budgets caused, inter alia, by the aging population creates additional pressure on health care spending in most if not all countries. Consequently, the pressure on sales prices and reimbursement levels is expected to further intensify in particular due to:

- price controls imposed by many countries, if not all;
- the increasing reimbursement limitations of some drugs under budgetary policies; and
- the increased difficulty in obtaining and maintaining a satisfactory reimbursement rate for drugs.

Obtaining adequate pricing decisions and the return that can be generated on the investment incurred for the development of product candidates developed by us is therefore uncertain. Our ability to manage our expenses and cost structure to adapt to increased pricing pressure is also uncertain.

All of these factors will have a direct impact on our ability to generate profits on the drugs developed by us and could have a material adverse effect on our business, prospects, financial condition and results of operations.

Interim, “top-line,” and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data becomes available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose preliminary or top-line data from our preclinical studies and clinical trials, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the top-line or preliminary results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Top-line data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, top-line data should be viewed with caution until the final data are available.

From time to time, we may also disclose interim data from our preclinical studies and clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data becomes available or as patients from our clinical trials continue other treatments for their disease. Adverse differences between preliminary or interim data and final data could significantly harm our business prospects and reputation. Further, disclosure of interim data by us or by our competitors could result in volatility in the price of our common stock after this offering.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and impact us in general.

If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed and result in increased costs and longer development periods or otherwise adversely affected.

We will be required to identify and enroll a sufficient number of patients for our planned clinical trials. Trial participant enrollment could be limited in future trials given that many potential participants may be ineligible

because of pre-existing conditions, medical treatments or other reasons. We may not be able to initiate or continue clinical trials required by the FDA, EMA or other foreign regulatory agencies or any of our other product candidates that we pursue if we are unable to locate and enroll a sufficient number of eligible patients or volunteers to participate in these clinical trials.

Patient enrollment is affected by other factors, including:

- severity of the disease under investigation;
- design of the clinical trial protocol;
- size and nature of the patient population;
- eligibility criteria for the trial in question;
- perceived risks and benefits of the product candidate under trial;
- perceived safety and tolerability of the product candidate;
- proximity and availability of clinical trial sites for prospective patients;
- availability of competing therapies and clinical trials;
- clinicians' and patients' perceptions as to the potential advantages of the drug being studied in relation to other available therapies, including standard-of-care and any new drugs that may be approved for the indications we are investigating;
- efforts to facilitate timely enrollment in clinical trials;
- effects of the COVID pandemic on our clinical trial sites;
- patient referral practices of physicians; and
- our ability to monitor patients adequately during and after treatment.

We also may encounter difficulties in identifying and enrolling such patients with a stage of disease appropriate for our ongoing or future clinical trials. In addition, the process of finding and diagnosing patients may prove costly. Our inability to enroll a sufficient number of patients for any of our clinical trials would result in significant delays or may require us to abandon one or more clinical trials.

1.6.1.5 Risks related to our dependence on third parties and key personnel

We rely and will continue to rely on collaborative partners regarding our research and development programs and our product candidates.

We are, and expect to continue to be, dependent on collaborations with partners relating to the development and commercialization of our existing and future research and development programs and product candidates. We currently have collaborative research relationships with various academic and research institutions worldwide for the development of our product candidates. Further, we have and will continue to have discussions on potential partnering opportunities with various pharmaceutical companies. If we fail to enter into or maintain collaborative agreements on reasonable terms or at all, our ability to develop our existing or future research and development programs and product candidates could be delayed, the commercial potential of our product candidates could change, and our costs of development and commercialization could increase. Our dependence on collaborative partners is subject to a number of risks, including, but not limited to, the following:

- We rely on information and data received from third parties regarding our research and development programs and product candidates and will not have control of the process conducted by the third party in gathering and composing such data and information. We may not have formal or appropriate guarantees from our contract parties with respect to the quality and the completeness of such data;
- a collaborative partner may develop a competing product either by itself or in collaboration with others, including one or more of our competitors;
- our collaborative partners' willingness or ability to fulfill their obligations under our collaboration arrangements may be adversely affected by business combinations or significant changes in a collaborative partner's business strategy;
- we may not be able to control the amount or timing of resources that collaborative partners devote to our research and development programs and product candidates;

- we may be required to relinquish significant rights, including intellectual property, marketing and distribution rights;
- our anticipated payments under any collaboration agreement (e.g., royalty payments for licensed products) may not materialize;
- we may experience delays in, or increases in the costs of, the development of our research and development programs and our product candidates due to the termination or expiration of collaborative research and development arrangements;
- we may have disagreements with collaborative partners, including disagreements over proprietary rights, contract interpretation or the preferred course of development, which might cause delays or termination of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborative partners may not properly maintain or defend our intellectual property rights or may use proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation; and/or
- collaborative partners may infringe the intellectual property rights of third parties which may expose us to litigation and potential liability.

We face significant competition in seeking appropriate collaborative partners. Our ability to reach a definitive agreement for collaboration will depend upon, among other things, an assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. These factors may include the design or results of clinical studies, the likelihood of regulatory approval, the potential market for the relevant product candidate, the costs and complexities of manufacturing and delivering such product to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership regardless of the merits of the challenge, and industry and market conditions generally. The collaborating partner may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such collaboration could be more attractive than the one with us. Any of the above factors could have a material adverse effect on our ability to enter into successful collaborative arrangements and, consequently, our business, prospects, financial condition and results of operations.

We rely upon third-party contractors and service providers for the execution of most aspects of our development programs. Failure of these third parties to provide services of a suitable quality and within acceptable timeframes may cause the delay or failure of our development programs.

We outsource and expect to outsource the majority of functions, tests and services to CROs, medical institutions and other specialist providers in relation to, among others, assays, animal models, toxicology studies, and pharmacokinetic/pharmacodynamic studies. We furthermore rely on these third parties for quality assurance, clinical monitoring, clinical data management and regulatory expertise. We have engaged, and may in the future engage, CROs to run all aspects of a clinical study on our behalf, e.g., we entered into service agreements with Julius Clinical, Zeist, the Netherlands and the VU Medical Center, Amsterdam, the Netherlands, regarding the planning and execution of the Phase 2a study of varoglutamstat (PQ912).

There is no assurance that such individuals or organizations will be able to provide the functions, tests or services as agreed upon or with the necessary quality which could result in significant delays in the development of our product candidates.

There is also no assurance that these third parties will not make errors in the design, management or retention of our data or data systems. The failure of such third parties could lead to loss of data, which in turn could lead to delays in commercialization. These third parties may not pass FDA, EMA or other regulatory audits, which could delay or prohibit regulatory approvals. In addition, the cost of such services could significantly increase over time. If these third parties do not successfully carry out their contractual duties or meet expected timelines, obtaining regulatory approval for manufacturing and commercialization of our product candidates may be delayed or prevented, which would have a material adverse effect on our business prospects, results of operations and/or financial condition.

We rely on third parties to supply and manufacture our product candidates, and we expect to rely on third parties to manufacture our products, if approved. The development of such product candidates and the commercialization of any products, if approved, could be stopped or delayed if any such third party fails to manufacture or provide sufficient quantities of product candidates or products or fails to do so at acceptable

quality levels or prices or fails to maintain or achieve satisfactory regulatory compliance.

We do not currently have, nor do we plan to acquire, the infrastructure or capability internally to manufacture our product candidates for use in the conduct of our clinical or preclinical studies or for commercial supply, once (and if) our product candidates are approved for marketing. Instead, we rely on, and expect to continue to rely on CMOs. We currently rely mainly on Patheon (Thermo Fischer), Durham, NC for manufacturing of varoglutamstat (PQ912) but are not exclusively committed to them. We do not control the manufacturing processes of the CMOs and we are dependent on those third parties for the production of our product candidates and future approved products, if any, in accordance with relevant regulations which include, among other things, quality control, quality assurance and the maintenance of records and documentation.

If we were to experience an unexpected loss of supply of, or if any supplier were unable to meet our demand for, any of our product candidates, we could experience delays in our research and development activities or planned clinical studies or commercialization of approved products. We could be unable to find alternative suppliers of acceptable quality who can deliver appropriate volumes at acceptable cost.

Moreover, our suppliers are often subject to strict manufacturing requirements and rigorous testing requirements, which could limit or delay the production. The long transition periods involved in the change of manufacturers and suppliers, if necessary, would significantly delay our clinical studies of product candidates and the commercialization of product candidates or products, if approved, which would materially adversely affect our business, prospects, financial condition and results of operation.

In complying with the manufacturing regulations of Competent Authorities, we and our third-party suppliers must spend significant time, money and effort in the areas of design and development, testing, production, record-keeping and quality control to assure that the products meet applicable specifications and other regulatory requirements. The failure to comply with these requirements could result in an enforcement action against us, including the seizure of products and shutting down of production. Any of these third-party suppliers and us may also be subject to audits by the Competent Authorities. If any of our third-party suppliers fails to comply with applicable good manufacturing practices (“GMP”) or other applicable manufacturing regulations, our ability to develop and commercialize products and/or product candidates could suffer significant interruptions. We face risks inherent in relying on a single CMO, as any disruption, such as a fire, natural hazards or vandalism at the CMO could significantly interrupt our manufacturing capability. We currently do not have alternative production plans in place or disaster- recovery facilities available. In case of a disruption, we will have to establish alternative manufacturing sources. Additionally, we would likely experience months or years of manufacturing delays if we decide to build or lease manufacturing facilities and seek to obtain the necessary regulatory approvals. If this occurs, we will be unable to satisfy manufacturing needs on a timely basis, if at all. Further, business interruption insurance may not adequately compensate us for any losses that may occur and we would have to bear the additional cost of any disruption. For these reasons, a significant disruptive event at the CMO could have a material adverse effect on our business, prospects, financial condition and results of operations.

We depend on the ability to attract and retain key personnel and Executive Directors, and the loss of their services would materially harm our business.

We have only a small number of management executives responsible for managing our core business. Our success significantly depends on the performance of our management executives and highly qualified employees in key positions, in particular executive board members and other management executives with substantial sector experience. The services of our management executives are essential for the success of our business, research, development and regulatory strategies. Management executives may terminate their contracts any time.

Additionally, it is important for our success to attract, retain and motivate highly qualified clinical and scientific personnel. Many of the other biotechnology and pharmaceutical companies and academic institutions that we compete against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than us. Therefore, we might not be able to attract or retain such key persons on conditions that are economically acceptable or enforce non-competition undertakings, where necessary. In the event of a loss of certain clinical and scientific personnel or management executives, our research and development efforts may be materially adversely affected. Our anticipated growth and expansion into areas and activities requiring additional expertise such as clinical studies, registration, manufacturing and marketing, are expected to place increased demands on our resources. These demands are expected to require the addition of new personnel or managers and/or the development of additional expertise by current executives.

The failure to attract the needed personnel, the loss of certain clinical and scientific personnel or management executives or the failure to develop or obtain the necessary expertise could have a material adverse effect on our business, prospects, financial condition and results of operations.

Our success significantly depends on our cooperation with certain external key advisors.

Certain of our management functions are the responsibility of external long-term advisors, who act as research and development advisers in the field of the preclinical and clinical development of QPCT, one of our core research activities.

Other biotechnology and pharmaceutical companies and academic institutions that we compete with for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than we do and therefore may offer better conditions than those we are able to offer. The advisory agreements may be terminated or may expire without us having an adequate substitute advisor for the relevant field. Due to the specific and detailed knowledge and experience of these advisors with our organization, our business and competitive environment, the loss of these advisors without having an adequate substitution in place, may have a material adverse effect on our business, prospects, financial condition and results of operations.

We depend on the recruitment of sufficient numbers of suitable volunteers and patients for clinical studies.

A clinical study requires a sufficient number of suitable volunteers and patients who meet the specific requirements of such clinical study, e.g., in the case of the Phase 2b study of varoglutamstat (PQ912), early-stage AD patients. Due to the complex conditions of the environment of the study, e.g., attractiveness of study, design of study, competitive situation, patient population, locations etc., studies may be rather slow or delayed. In addition, the study center — for example, due to other ongoing clinical studies — may not be able to include a sufficient number of patients on time in the clinical study. This could jeopardize the timely planning and execution of the clinical study or cause delays. As a result, and to progress the study, we may be forced to include additional study centers in the current study, which may substantially increase the costs and, therefore, could have a material adverse effect on our business, prospects, financial condition and results of operations.

1.6.1.6 Risks related to our intellectual property rights

If we are unable to obtain and maintain patent protection for our product candidates and technology, or if the scope of the patent protection obtained is not sufficiently broad or robust, our competitors could develop and commercialize products and technology similar or identical to ours, and our ability to successfully commercialize our product candidates and technology may be adversely affected.

Our success depends, in large part, on our ability to obtain and maintain patent protection in the United States and other countries with respect to our product candidates and our technology. We have sought, and intend to seek, to protect our proprietary position by filing patent applications in the United States and abroad related to our product candidates and our technology that are important to our business. As of December 31, 2021, we owned 47 issued U.S. patents, 5 pending U.S. applications, 503 issued foreign patents and 79 pending foreign patent applications. We typically follow a policy of filing priority applications primarily in the United States or Europe. Within 12 months after filing such priority application in the United States or Europe, an international patent application (PCT application) is filed, which is later typically nationalized in countries of interest. With regard to such PCT applications and national phase patent applications, if we do not timely file such patent applications, we may lose our priority date with respect to our priority patent applications and any patent protection on the inventions disclosed in such priority patent applications. While we intend to timely file such PCT and national phase patent applications, we cannot predict whether any such patent applications will result in the issuance of patents that provide us with any competitive advantage.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has, in recent years, been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or product candidates or which effectively prevent others from commercializing competitive technologies and product candidates. Since patent applications in the United States and most other countries are confidential for a period of time after filing, and some remain so until issued, we cannot be certain that we were the first to file a patent application relating to any particular aspect of a product candidate. Furthermore, if third parties have filed such patent applications, an interference proceeding in the United States can be initiated by such third party, or by the U.S. Patent and Trademark Office (“USPTO”), itself, to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. As a result of these and other factors, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

Moreover, we may be subject to a third-party pre-issuance submission of prior art or become involved in opposition, derivation, reexamination, inter partes review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others. The costs of defending our patents or enforcing our proprietary rights in post-issuance administrative proceedings and litigation can be substantial and the outcome can be uncertain. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

The patent prosecution process is expensive, time-consuming and complex, and we may not be able to file, prosecute, maintain, enforce or license all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

We have not pursued or maintained, and may not pursue or maintain in the future, patent protection for our product candidates in every country or territory in which we may sell our products, if approved. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from infringing our patents in all countries outside the United States, or from selling or importing products that infringe our patents in and into the United States or other jurisdictions.

Moreover, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Even if the patent applications we license or own do issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors or other third parties from competing with us or otherwise provide us with any competitive advantage. Our competitors or other third parties may be able to circumvent our patents by developing similar or alternative products in a non-infringing manner.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and product candidates. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our intellectual property may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

Furthermore, certain of our owned patents are, and in the future any in-licensed patents may be, subject to a reservation of rights by one or more third parties. For example, the research resulting in certain of our patents and technology, including patents and technology relating to our QC inhibitors, was funded in part by the German Ministry of Education and Research (BMBF). Results of such government-funded research projects must, subject to certain conditions, be made available free of charge for academic research and teaching in Germany and must be published in half-yearly interim reports and a final report following completion of the funded work. Information relating to intellectual property generated, commercial expectations, scientific chances of success and next steps and certain additional information must be disclosed to the German government and must be disclosed to third parties for academic research and teaching upon request under a written confidentiality agreement. The BMBF additionally has, in the case of a special public interest, a nonexclusive and transferable right to use intellectual property generated as part of the funded work. Contracts with third parties relating to the exploitation of the results of the funded work must be disclosed to the BMBF and any such contracts with parties outside of the EU require the prior consent of the BMBF to the extent they deviate from an exploitation plan previously approved by the BMBF. Additionally, if we fail to use or commercialize the results of the funded work we may be required to grant third parties licenses to use such results. In certain scenarios, including if we come under the decisive influence of foreign investors, the funded results are exclusively or predominantly used outside of Germany without the prior consent of the BMBF or if we are in breach of our obligations under the grant, the grant funding, including funding already received, can be revoked.

We have been and may become involved in legal proceedings in relation to intellectual property rights and to protect or enforce our patents, which may result in costly litigation and could result in us having to pay substantial damages or limit our ability to commercialize our products and/or product candidates.

Competitors and other third parties have and in the future may infringe, misappropriate or otherwise violate our issued patents or other intellectual property. In addition, our patents may become involved in inventorship or priority disputes. Our pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. To counter infringement or other unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents or that our patents are invalid or unenforceable. In a patent infringement proceeding, a court may decide that a patent of ours is invalid or unenforceable, in whole or in part, construe the patent's claims narrowly or refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology. An adverse result in any litigation proceeding could put one or more of our owned or licensed patents at risk of being invalidated, held unenforceable or interpreted narrowly. We may find it impractical or undesirable to enforce our intellectual property against some third parties. In addition, the enforcement may be unsuccessful, e.g., if the judicial system is not regulated in a sufficient manner or the relevant jurisdictions do not recognize in a sufficient manner the enforcement of intellectual property rights. Our failure to enforce our intellectual property rights against the infringement by third parties could have a material adverse effect on our business, prospects, financial condition and results of operations.

In addition, we may not be able to enforce our intellectual property rights against a competitor's products until and through clinical Phase 3 because of the so-called research exemption or safe harbor exemption, which provides for an exemption from patent infringement regarding research and tests carried out in order to obtain regulatory approval for human medicinal products. The extent of this exemption varies from country to country. In certain jurisdictions, we may challenge these competitors based on our intellectual property rights only after market approval and market entry of the competitors' drugs. The enforcement of our intellectual property rights against any infringer, before courts or otherwise, may divert the time and efforts of the management from our core business and cause additional costs and expenses.

For example, we initiated infringement proceedings against the Stichting het Nederlands Kanker Instituut-Antoni Van Leeuwenhoek Ziekenhuis (Dutch Cancer Institute)¹³, the Academisch Ziekenhuis Leiden h.o.d.n. LUMC (Academic Hospital Leiden) and Scenic Biotech B.V. before the District Court of The Hague in connection with certain of our patents related to varoglutamstat (PQ912) and other QPCT inhibitors. An oral hearing as part of these proceedings was held on March 5, 2021. A ruling on the case is pending and expected in 2022. There can be no assurance that we will be successful in these proceedings and any adverse ruling may have a material adverse effect on our business, prospects, financial condition and results of operations.

Our commercial success also depends upon our ability, and the ability of any third party with which we may partner, to develop, manufacture, market and sell our product candidates and/or products, if approved, and use our patent-protected technologies without infringing the patents of third parties. There is considerable patent litigation in the biotechnology and pharmaceutical industries. As the biopharmaceutical industry expands and more patents are issued, we face increased risks that there may be patents issued to third parties that relate to our product candidates and technology of which we are not aware or that we must challenge to continue our operations as currently contemplated.

We may become involved in proceedings, including oppositions, post grant reviews, interferences, derivation proceedings, inter parties reviews, patent nullification proceedings, or re-examinations challenging our patent rights or the patent rights of others, and the outcome of any such proceedings are uncertain.

An adverse determination in any such proceeding could reduce the scope of, or invalidate, important patent rights, allow third parties to commercialize our technology, products and/or product candidates and compete directly with us without being obligated to make any payments to us, or result in our inability to manufacture or commercialize products and/or product candidates without infringing third-party patent rights. Litigation or other proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees.

Our product candidates may infringe or may be alleged to infringe existing patents or patents that may be granted in the future. Because patent applications in Europe, the United States and many foreign jurisdictions are typically not published until 18 months after filing, and publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patents that may cover its technologies, its product candidates or the use of its product candidates. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover our technologies, our product candidates or the use of our product candidates. As a result, we may become party to, or threatened with, future adversarial proceedings or litigation regarding patents with respect to our product candidates and technology. The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the

patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our drug candidates. We may incorrectly determine that our product candidates are not covered by a third-party patent or may incorrectly predict whether a third party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our drug candidates. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our drug candidates.

If we are sued for patent infringement, we would need to demonstrate that our product candidates or technology either do not infringe the patent claims of the relevant patent or that the patent claims are invalid, and we may not be able to do this. If we are found to infringe a third party's patent, we could be required to obtain a license from such third party to continue developing and marketing our product candidates and technology or we may elect to enter into such a license in order to settle litigation or in order to resolve disputes prior to litigation. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we are able to obtain a license, it could be non-exclusive, thereby giving its competitors access to the same technologies licensed to us and could require us to make substantial royalty payments. We could also be forced, including by court order, to cease commercializing the infringing technology or product candidate. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business. Claims that we have misappropriated confidential information or trade secrets of third parties could have a similar negative impact on our business. Any such claims or infringement or misappropriation are likely to be expensive to defend, and some of our competitors may be able to sustain the costs of complex patent litigation more effectively than us if they have substantially greater resources. Moreover, even if we are successful in defending any infringement proceedings we may incur substantial costs and divert management's time and attention. In addition, the uncertainties associated with litigation could compromise our ability to raise the funds necessary to continue our clinical trials, continue our internal research programs needed technology or other product candidates. There could also be public announcements of the results of the hearing, motions or other interim proceedings or developments. If securities analysts or investors perceive those results to be negative, it could cause the price of shares of our common stock to decline. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates. Even if our patent applications are successfully issued as patents, they may not be issued in a form that will provide us with any meaningful protection, prevent competitors from competing with us, or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our patents by developing similar or alternative technologies or products in a non-infringing manner.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigations in general, there is a risk that some of our confidential information could be compromised by disclosure during intellectual property litigation or proceeding. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Most of our competitors are larger than we are and have substantially greater resources. They are, therefore, likely to be able to sustain the costs of complex intellectual property litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing, misappropriating or otherwise violating our intellectual property.

Any of the above events could materially adversely affect our business, prospects, financial condition and results of operation.

If we fail to adequately protect our inventions and know-how to a sufficient extent our business would be materially harmed.

Some of our technologies and processes do not fulfill the requirements for patent or trademark protection or are not protected by patent or trademark rights for other reasons, e.g., secrecy. To protect these business secrets, know-how, technologies and processes, we enter into non-disclosure, confidentiality and other contractual agreements with our employees, agents, advisors and cooperation partners. In accordance with these agreements, employees, agents, advisors and cooperation partners are required to transfer developments, discoveries and inventions to us and support us with regard to the intellectual property rights proceedings.

However, there is no guarantee that such agreements will not be breached, that they will provide sufficient protection for our business secrets and proprietary information or that adequate remedies will be available in the event of an unauthorized use or disclosure of such information. It cannot be excluded that we do not have, or cannot

enforce, legal remedies that are effective at economically acceptable costs. Further, the violation of a non-disclosure agreement might be difficult to prove because business secrets and know-how may be developed independently by, or become otherwise known to, third parties. In addition, it may be difficult to quantify the damages which have occurred and to obtain legal remediation, or to undo the damages caused, by legal remedies. Our failure to effectively protect our business secrets and know-how could have material adverse effects on our business, prospects, financial condition and results of operations.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting, maintaining, defending and enforcing patents and other intellectual property rights on our product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions.

Competitors may use our technologies in jurisdictions where we have not obtained patent protection or other intellectual property rights to develop their own products and may export otherwise infringing, misappropriating or violating products to territories where we have patent or other intellectual property protection, but enforcement rights are not as strong as those in the United States. These products may compete with our product candidates, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of some countries do not favor the enforcement of patents and other intellectual property rights, which could make it difficult for us to stop the infringement, misappropriation or other violation of our intellectual property rights generally. Proceedings to enforce our intellectual property rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful.

Many countries, including EU countries, India, Japan and China, have compulsory licensing laws under which a patent owner may be compelled under specified circumstances to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In those countries, we may have limited remedies if patents are infringed or if we are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license, which could adversely affect our business, financial condition, results of operations and prospects.

Changes in either the patent laws or interpretation of the patent laws may diminish the value of our patents or narrow the scope of its patent protection.

Obtaining and enforcing patents in the pharmaceutical industry is inherently uncertain, due in part to ongoing changes in the patent laws. Depending on decisions by Congress, the federal courts, and the USPTO and equivalent institutions in other jurisdictions, the laws and regulations governing patents, and interpretation thereof, could change in unpredictable ways that could weaken our and our collaborators' ability to obtain new patents or to enforce existing or future patents. For example, the U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. Therefore, there is increased uncertainty with regard to our and our collaborators' ability to obtain patents in the future, as well as uncertainty with respect to the value of patents once obtained.

Changes in either the patent laws or interpretation of the patent laws may diminish the value of our or our collaborators' patents or narrow the scope of such patent protection and could increase the uncertainties and costs surrounding the prosecution of our or any future collaborators' patent applications and the enforcement or defense of any issued patents. For instance, on September 16, 2011, the Leahy-Smith America Invents Act (the "Leahy-Smith Act") was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. The Leahy-Smith Act includes provisions that affect the way patent applications are prosecuted and may also affect patent litigation. These include allowing third party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO-administered post-grant proceedings, including post-grant review, inter partes review and derivation proceedings. Assuming that other requirements for

patentability are met, prior to March 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 2013, under the Leahy-Smith Act, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. The USPTO recently developed new regulations and procedures to govern administration of the Leahy-Smith Act. However, many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, only became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation, as any other possible future changes in the patent laws or their interpretation, could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of issued patents, all of which could have a material adverse effect on our business, prospects, financial condition and results of operation.

We may not be able to prevent disclosure of our trade secrets, know-how or other proprietary information, and the value of our technology and product candidates could be significantly diminished.

We rely on trade secret protection and confidentiality agreements to protect our interests in our trade secrets, know-how, technology or other proprietary information and processes, all of which constitute confidential information. Trade secrets and know-how can be difficult to protect and we may not be able to protect our confidential information adequately. We have a policy of requiring our consultants, contract personnel, advisers and third-party partners to enter into confidentiality agreements and our employees to enter into invention, non-disclosure and non-compete agreements. However, no assurance can be given that we have entered into appropriate agreements with all of our consultants, contract personnel, advisers, third-party partners or other parties that have had access to our confidential information. There is also no assurance that such agreements will provide for a meaningful protection of confidential information in the event of any unauthorized use or disclosure of information. Furthermore, we cannot provide assurance that any of our employees, consultants, contract personnel or third-party partners, either accidentally or through willful or intentional misconduct, will not cause serious damage to our programs and/or strategy, by, for example, disclosing confidential information to our competitors. It is also possible that confidential information could be obtained by third parties as a result of breaches of our physical or electronic security systems, our consultants, advisers, third-party partners or other parties that have had access to our confidential information. Any disclosure of confidential information into the public domain or to third parties could allow our competitors to learn such confidential information and use it in competition against us. In addition, others may independently discover our confidential information. Any action to enforce our rights against any misappropriation or unauthorized access, use and/or disclosure of confidential information is likely to be time-consuming and expensive, and may ultimately be unsuccessful, or may result in a remedy that is not commercially valuable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent them from using that technology or information to compete with us. Any of the above events could materially adversely affect our business, prospects, financial condition and results of operation.

Obtaining and maintaining patent protection depends on compliance with various procedures, document submissions, fee payments and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated in case of non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid by us to the relevant patent agencies in several stages over the lifetime of the patents and /or applications. The relevant patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent application process. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which the failure to comply with the relevant requirements can result in the abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to use our technologies and know-how which could have a material adverse effect on our business, prospects, financial condition and results of operation.

If we fail to comply with our obligations under the agreements pursuant to which we license intellectual property rights from third parties, or otherwise experiences disruptions to our business relationships with our licensors, we could lose the rights to intellectual property that is important to our business.

We expect that we may need to enter into license agreements in the future under which we are granted rights to intellectual property that are important to our business. We expect that future license agreements may impose on us various development obligations, payment of royalties and fees based on achieving certain milestones as well as

other obligations. If we fail to comply with our obligations under these agreements, the licensor may have the right to terminate the license. In addition, if the licensor fails to enforce its intellectual property, the licensed rights may not be adequately maintained. The termination of any license agreements or failure to adequately protect such license agreements could prevent us from commercializing our product candidates or possible future products covered by the licensed intellectual property. Several of such future license agreements may be sublicenses from third parties which are not the original licensor of the relevant intellectual property. Under these agreements, we must rely on our licensor to comply with its obligations under the primary license agreements under which such third party obtained rights in the applicable intellectual property, where we may have no relationship with the original licensor of such rights. If the licensors fail to comply with their obligations under these upstream license agreements, the original third-party licensor may have the right to terminate the original license, which may lead also to the termination of the sublicense. In such a case, we would no longer have rights to the relevant intellectual property and, in the case of a sublicense, if we were not able to secure our own direct license with the owner of the relevant rights, which we may not be able to do at reasonable costs or on reasonable terms, it may adversely affect our ability to continue to develop and commercialize our product candidates or possible future products incorporating the relevant intellectual property. Any of these events could materially adversely affect our business, prospects, financial condition and results of operation.

We may be subject to claims by third parties that our employees, consultants or independent contractors have infringed upon, misappropriated or otherwise violated their intellectual property rights, or claiming ownership of what we regard as our own intellectual property.

We employ individuals who were previously employed at other biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors will inadvertently or otherwise have used or disclosed intellectual property including trade secrets, proprietary information or confidential information of our employees' former employers or other third parties. Litigation may be necessary to defend any such claims.

In addition, we may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or other intellectual property as an inventor or co-inventor. While it is our policy to require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact conceives, develops or reduces to practice intellectual property that we regard as our own. Our and their assignment agreements may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property.

There is no guarantee of success in defending or prosecuting any such claims, and if we do not prevail, we could be required to pay substantial damages and could lose rights to important intellectual property.

Even if we are successful, litigation could result in substantial costs, delay development of our product candidates and be a distraction to our management and other employees. Any of the above events could materially adversely affect our business, prospects, financial condition and results of operation.

Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired for a product candidate, we may be open to competition from competitive medications, including generic medications. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such product candidates might expire before or shortly after such product candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing product candidates similar or identical to ours.

Depending upon the timing, duration and conditions of any FDA marketing approval of our product candidates, one or more of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments, and one or more of our foreign patents may be eligible for patent term extension under similar legislation, for example, in the EU. In the United States, the Hatch-Waxman Amendments permit a patent term extension of up to five years for a patent covering an approved product as compensation for effective patent term lost during product development and the FDA regulatory review process. However, there are no assurances that the FDA or any comparable foreign

regulatory authority or national patent office will grant such extensions, in whole or in part. For example, we may not receive an extension if we fail to exercise due diligence during the testing phase or regulatory review process, fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. Only one patent per approved product can be extended, the extension cannot extend the total patent term beyond 14 years from approval, and only those claims covering the approved drug, a method for using it or a method for manufacturing it may be extended. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for the applicable product candidate will be shortened, and our competitors may obtain approval to market competing products sooner. As a result, our revenue from applicable products could be reduced. Further, if this occurs, our competitors may take advantage of our investment in development and trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case, and our competitive position, business, financial condition, results of operations and prospects could be materially harmed.

We may not be able to protect and enforce our trademarks and trade names, or build name recognition in our markets of interest thereby harming our competitive position.

We intend to rely on both registered and common law rights for our trademarks. We have not yet registered certain of our trademarks in all of our potential markets, including our “Vivoryon” and Vivoryon logo. We are currently applying to register these trademarks with the USPTO and may in the future seek to register additional trademarks in the United States and other countries. Our current and future trademark applications may not be allowed for registration in a timely fashion or at all, and our registered trademarks may not be maintained or enforced. In addition, the registered or unregistered trademarks or trade names that we own may be challenged, infringed, circumvented, declared generic, lapsed or determined to be infringing on or dilutive of other marks. We may not be able to protect our rights in these trademarks and trade names or may be forced to stop using these names, which we need for name recognition by potential partners or customers in our markets of interest. In addition, third parties may file for registration of trademarks similar or identical to our trademarks, thereby impeding our ability to build brand identity and possibly leading to market confusion. If they succeed in registering or developing common law rights in such trademarks, and if we are not successful in challenging such rights, we may not be able to use these trademarks to develop brand recognition of our technologies, products or services. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names.

During the trademark registration process, we may receive Office Actions from the USPTO or from comparable agencies in foreign jurisdictions objecting to the registration of our trademark. Although we would be given an opportunity to respond to those objections, we may be unable to overcome such rejections. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and/or to seek the cancellation of registered trademarks. Opposition or cancellation proceedings may in the future be filed against our trademark applications or registrations, and our trademark applications or registrations may not survive such proceedings. In addition, third parties may file first for our trademarks in certain countries. If they succeed in registering such trademarks, and if we are not successful in challenging such third-party rights, we may not be able to use these trademarks to market our products in those countries. If we do not secure registrations for our trademarks, we may encounter more difficulty in enforcing them against third parties than we otherwise would. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Certain of our employees and patents are subject to German law.

A significant number of our personnel work in Germany and are subject to German employment law. Inventions which may be the subject of a patent or of protection as a utility model as well as technical improvement proposals for other technical innovations that may not be the subject of a patent or of protection as a utility model made by such employees are subject to the provisions of the German Act on Employees’ Inventions (Gesetz über Arbeitnehmererfindungen), which regulates the ownership of, and compensation for, inventions made by employees. We face the risk that disputes may occur between us and our current or former employees pertaining to the sufficiency of compensation paid by us, allocation of rights to inventions under this act, or alleged non-adherence to the provisions of this act, any of which may be costly to resolve and take up our management’s time and efforts whether we prevail or fail in such dispute. In addition, under the German Act on Employees’ Inventions, certain employees retain rights to patents they invented or co-invented and disclosed to us prior to October 1, 2009, if the employee inventions were not actively claimed by us after notification by the employee inventors. While we believe that all of our current and past German employee inventors have assigned to us their interest in inventions

and patents they invented or co-invented, there can be no assurance that all such assignments are fully effective. Therefore, there can be no assurance that present or former employees do not hold rights to intellectual property used by us or that such employees will not demand the registration of intellectual property rights in their name or demand damages pursuant to the German Act on Employees' Inventions or other applicable laws. Even if we lawfully own all inventions of our employee inventors who are subject to the German Act on Employees' Inventions, we are required under German law to reasonably compensate such employees for the use of such inventions. If we are required to pay increased compensation or face other disputes under the German Act on Employees' Inventions, our business, financial condition, results of operations, and prospects could be adversely affected.

The German Act on Employees' Inventions does not apply to managing directors, supervisory directors, freelancers or agents who are not employees under German labor law. Unless the German Act on Employees' Inventions has been referred to in the respective services agreements, inventions and intellectual property rights created by such inventors must be assigned to us by contract. While we believe that all of our directors, freelancers or agents which are not employees have assigned to us their interest in inventions and patents required for our course of business, there can be no assurance that all such assignments are fully effective. If any of our current or past employees, directors, freelancers or agents obtain or retain ownership of any inventions or related intellectual property rights that we believe we own, we may lose valuable intellectual property rights and be required to obtain and maintain licenses from such persons to such inventions or intellectual property rights, which may not be available on commercially reasonable terms or at all, or may be non-exclusive. If we are unable to obtain and maintain a license to any such person's interest in such inventions or intellectual property rights, we may need to cease the development, manufacture, and commercialization of one or more of our product candidates or the product candidates we may develop. In addition, any loss of exclusivity of our intellectual property rights could limit our ability to stop others from using or commercializing similar or identical technologies and products. Any of the foregoing events could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. The following examples are illustrative:

- competitors may be able to develop products that are similar to our product candidates but are not covered by the claims of the patents that we have, obtain and/or license;
- the patents of competitors may have an adverse effect on our business. For instance, if one of our product candidates would prove to be effective against a specific indication not covered by our patents or patent applications and/or if we do not have priority in this indication, we may be confronted with existing patents covering such indication;
- we and/or our collaborators might not have been the first to make the inventions covered by an issued patent or pending patent application;
- we and/or our collaborators might not have been the first to file patent applications covering an invention;
- others may independently develop similar or alternative technologies, design around our patents or duplicate any of our technologies without infringing our intellectual property rights;
- pending patent applications may not lead to issued patents or not with the initially desired scope of protection;
- issued patents may not provide us with competitive advantages, or may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in these and other markets targeted by us; and
- we may not develop additional proprietary technologies that are patentable.

Any of these events could have a material adverse effect on our business, prospects, financial condition and results of operation.

1.6.1.7 Risks related to the operation of our business

We may not be able to manage future additional operational challenges.

As the pipeline of our product candidates matures, we will face new and additional challenges, such as increased administrative internal tasks which will place a significant strain on our management and our operational and financial resources. To manage these challenges, we will have to augment our operational, financial, internal controls and management systems and hire and train additional qualified personnel (see also 1.5.3). Our failure to manage the additional operational challenges effectively, or to fail to implement improved risk management systems, if needed, could have a material adverse effect on our business, financial condition and results of operations.

If any product liability lawsuits are successfully brought against us or any of our partners, we may incur substantial liabilities and may be required to limit the commercialization of our product candidates or possible future products.

We are exposed, and will be exposed in the future, to the risk of liability claims, especially drug or product liability, inherent in businesses relating to researching, developing, manufacturing, testing, marketing and selling of pharmaceutical products. We could face the risk of substantial liability for damages if our product candidates were to cause adverse side effects in clinical studies or on the market. We may not be able to accurately predict the possible side effects that may result from the use of our products and /or product candidates. Product liability claims may be brought against us or our partners by participants enrolled in clinical studies, practitioners, researchers and other health/research professionals or others using, administering or selling any of our future approved products. If we cannot successfully defend ourselves against any such claims, it may incur substantial liabilities. Regardless of their merit or eventual outcome, liability claims may result in:

- withdrawal of clinical study participants;
- termination of clinical study sites or entire study programs;
- increased regulatory scrutiny;
- decreased demand for our future products;
- damage to our reputation;
- significant litigation costs;
- substantial monetary awards to or costly settlement with patients or other claimants;
- product recalls or a change in indications for which they may be used;
- loss of revenue;
- diversion of management and scientific resources from our business operations; and
- the inability to commercialize products and /or product candidates.

As of the date of this prospectus, no such claims or legal actions have been filed against us. However, it cannot be excluded that legal actions based on product liability may be initiated, in particular as our product candidates have not yet been approved for commercial sale. Any such future claims could have material adverse effects on our business, prospects, financial condition and results of operations.

We may not have, or be able to obtain, adequate insurance cover, in particular in connection with drug or product liability risk.

We may not have, or be able to obtain, adequate insurance cover in particular in connection with potential drug or product liability risks. We face the risk of substantial liability for damages if our product candidates were to cause adverse side effects in clinical studies or on the market and we cannot predict any possible side effects that may result from the use of our future products or the potential costs or damages for which we may become liable in relation to any side effects.

We maintain product liability insurance for our clinical studies. In the future, we intend to seek additional drug and product liability insurance, i.e., for commercially marketed products, when approved, if (i) it is required by law or (ii) it is economically feasible to do so, given the level of premiums and the risk and magnitude of potential liability. If drug and product liability insurance is necessary in respect of one or more of our product candidates or future products, we may not be able to obtain full liability coverage as insurance coverage in the pharmaceutical and biotechnical industry is becoming increasingly expensive. Hence, we may face liability for claims that may not be covered by our insurance or our liabilities could exceed the limits of the insurance coverage, which may have a material adverse effect on our business, prospects, financial condition and results of operations. Moreover, product

or drug liability claims (particularly class actions) may require significant financial and managerial resources, may materially harm our reputation if the market perceives our product candidates to have unforeseen side effects or to be ineffective, and may limit or prevent the further development or marketing of our product candidates.

Our employees, principal investigators, consultants and collaborative partners may engage in misconduct or other improper activities, including non-compliance with regulatory requirements.

We are exposed to the risk of employees, independent contractors, principal investigators, consultants, collaborative partners or vendors engaging in fraud or other misconduct. Such misconduct could, inter alia, include intentional failures to comply with regulations stipulated by the EMA, the FDA or other Competent Authorities, to provide accurate information to the FDA, EMA or other Competent Authorities or to comply with manufacturing standards we have established.

Misconduct could also involve scientific data fraud or the improper use of information obtained in the course of clinical studies, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, such actions could have material adverse effects on its business, including the imposition of significant fines or other sanctions, and our reputation.

If any of the above risks realizes this could have a material adverse effect on our business, prospects, financial condition and results of operations.

Our business may be adversely affected as a result of computer system failures.

The operation of our business depends also on information technology systems. Any of the internal computer systems belonging to us or our third-party service providers are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failure. The regulatory and legal environment of our industry requires maintaining records for long periods of time, sometimes forever. In most cases, those records are kept only in electronic form and without paper copies. Any system failure, accident or security breach that causes interruptions in its own or in third-party service provider operations could result in a material disruption of our product development programs. For example, the loss of clinical study data from completed or future clinical studies could result in delays in our or its partners' regulatory approval efforts and significantly increase the costs in order to recover or reproduce the lost data. To the extent that any disruption or security breach results in a loss or damage to its data or applications, or inappropriate disclosure of confidential or proprietary information, we may incur liability, our product development programs and competitive position may be affected adversely and the further development of our product candidates may be delayed. Furthermore, we may incur additional costs to remedy the damage caused by these disruptions or security breaches. If any of these risks are realized this could have a material adverse effect on our business, prospects, financial condition and results of operations.

Cyber-attacks or other failures in our or our third-party vendors', contractors' or consultants' telecommunications or information technology systems could result in information theft, data corruption and significant disruption of our business operations.

We utilize information technology, or IT, systems and networks and cloud computing services to process, transmit and store electronic information in connection with our business activities. We manage and maintain our applications and data utilizing a combination of on-site systems, managed data centers and cloud-based data centers. We utilize external security and infrastructure vendors to manage our information technology systems and data centers. These applications and data encompass a wide variety of business-critical information, including research and development information, commercial information, and business and financial information. We face a number of risks relative to protecting this critical information, including loss of access risk, inappropriate use or disclosure, inappropriate modification, and the risk of our being unable to adequately monitor, audit and modify our controls over our critical information. This risk extends to the third-party vendors and subcontractors we use to manage this sensitive data. Despite the implementation of security measures, given the size and complexity of our internal IT systems and those of our third-party vendors, contractors and consultants, and the increasing amounts of confidential information that they maintain, such IT systems are potentially vulnerable to breakdown or other damage or interruption from service interruptions, system malfunction, natural disasters, terrorism, war, and telecommunication and electrical failures. Such IT systems are additionally vulnerable to security breaches from inadvertent or intentional actions by our employees, third-party vendors, contractors, consultants, business partners, and/or other third parties, or from cyber-attacks by malicious third parties (including the deployment of harmful malware,

ransomware, denial-of-service attacks, social engineering, and other means to affect service reliability and threaten the confidentiality, integrity, and availability of information). These threats pose a risk to the security of our systems and networks, the confidentiality and the availability and integrity of our data and these risks apply both to us, and to third parties on whose systems we rely for the conduct of our business.

Cyber threats are persistent and constantly evolving. Such threats have increased in frequency, scope and potential impact in recent years, which increase the difficulty of detecting and successfully defending against them. We may not be able to anticipate all types of security threats, and we may not be able to implement preventive measures effective against all such security threats. The techniques used by cyber criminals change frequently, may not be recognized until launched, and can originate from a wide variety of sources, including outside groups such as external service providers, organized crime affiliates, terrorist organizations, or hostile foreign governments or agencies. There can be no assurance that we or our third-party service providers, contractors or consultants will be successful in preventing cyber-attacks or successfully mitigating their effects. Similarly, there can be no assurance that such third-party service providers, contractors or consultants will be successful in protecting our clinical and other data that is stored on their systems. If the IT systems of our third-party vendors and other contractors and consultants become subject to disruptions or security breaches, we may have insufficient recourse against such third parties and we may have to expend significant resources to mitigate the impact of such an event, and to develop and implement protections to prevent future events of this nature from occurring. Any cyber-attack or destruction or loss of data could have a material adverse effect on our business, financial condition, results of operations, and prospects. For example, if such an event were to occur and cause interruptions in our operations, or those of our third-party vendors and other contractors and consultants, it could result in a material disruption or delay of the development of our product candidates. In addition, we may suffer reputational harm or face litigation or adverse regulatory action as a result of cyber-attacks or other data security breaches and may incur significant additional expense to implement further data protection measures. As cyber threats continue to evolve, we may be required to incur material additional expenses in order to enhance our protective measures or to remediate any information security vulnerability.

Exchange rate fluctuations or abandonment of the euro currency may materially affect our results of operations and financial condition.

Potential future expense and revenue may be incurred or derived from outside the EU, particularly the United States. As a result, our business and share price may be affected by fluctuations in foreign exchange rates between the euro and other currencies, particularly the U.S. dollar, which may also have a significant impact on our reported results of operations and cash flows from period to period. In addition, the abandonment of the euro by one or more members of the EU could lead to the re-introduction of individual currencies in one or more EU member states, or in more extreme circumstances, the dissolution of the EU. The effects on our business of the abandonment of the euro as a currency, the exit of one or more EU member states from the EU (such as Brexit) or a potential dissolution of the EU, are impossible to predict with certainty, and any such events could have a material adverse effect on our business, financial condition and results of operations.

We may become taxable in a jurisdiction other than Germany and this may increase the aggregate tax burden on us.

Since our incorporation we have had, on a continuous basis, our place of “effective management” in Germany. For German tax purposes, we will therefore qualify as a tax resident of Germany on the basis of German domestic law and subject to German taxes. For Dutch tax purposes, a company is considered a tax resident of the Netherlands, irrespective the company’s place of “effective management”, if it is incorporated under Dutch law (the so-called “Incorporation Rule”) and will as such in principle be subject to Dutch taxes.

On the basis of the Decree published by the Dutch tax authorities dated March 10, 2019, no. 2019-30576 (in which Decree the Dutch tax authorities take the position that entities incorporated under Dutch law remain considered incorporated under Dutch law for purposes of the Incorporation Rule, and therefore remain a tax resident of the Netherlands for Dutch tax purposes, following the change of their registered address to a jurisdiction other than the Netherlands and the subsequent change of their legal form if the legal personality of the relevant entity does not end) and in the absence of Dutch case law in this respect, we take the position that for purposes of the Incorporation Rule the Company continues to be incorporated under German law, and not under Dutch law, following our change of our legal form from a German stock corporation to a Dutch N.V. (the “Conversion”), and thus not considered a tax resident of the Netherlands. However, in the event the Dutch tax authorities would take a different position, the following should be noted.

In the event that it is determined that we are incorporated under Dutch law for purposes of the Incorporation Rule, we would also be a tax resident of the Netherlands on the basis of the Incorporation Rule. This would result in the Company being a tax resident in both Germany and the Netherlands. In such event, the so-called tie-breaker

provision (the “Tie-Breaker Provision”) included in Article 4(3) of the 2012 Convention between the Federal Republic of Germany and the Kingdom of the Netherlands for the avoidance of double taxation with respect to taxes on income (the “German-NL Tax Treaty”) as in effect on the date hereof, determines that we should qualify solely as a tax resident in Germany for purposes of the German-NL Tax Treaty, provided that our place of “effective management” is in Germany.

The test of “effective management” is largely a question of fact and degree based on all the circumstances, rather than a question of law. Nevertheless, the relevant case law and OECD guidance suggest that the Company is likely to be regarded as having become German tax resident from incorporation and remaining so if, as the Company intends, (i) most meetings of its Executive Directors are prepared and held in Germany (and none will be held in presence in the Netherlands) with a majority of Executive Directors present in Germany for those meetings; (ii) at those meetings there are full discussions of, and decisions are made regarding, the key strategic issues affecting the Company and its subsidiaries; (iii) those meetings are properly minuted; (iv) a majority of our Executive Directors, together with supporting staff, are based in Germany; and (v) the Company has permanent staffed office premises in Germany. These facts and circumstances may change (for example, the directors or the place where board of directors meetings take place may change), and this may result in us becoming (also) a tax resident of the Netherlands or another jurisdiction.

Furthermore, the applicable tax laws or interpretations thereof, applicable tax treaties, including the German-NL Tax Treaty and the Tie-Breaker Provision, may change. It should be noted in this respect that the current Tie-Breaker Provision is subject to the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (the “MLI”). While the MLI generally provides that when a company is a resident of two countries it will continue to be so treated until the countries reach an agreement on its tax residency, Germany specifically reserved with respect to the Tie-Breaker Provision such that the Tie-Breaker Provision remains in effect (the “MLI Tie-Breaker Reservation”). In the event that the German-NL Tax Treaty would change, or if Germany decides to change its MLI Tie-Breaker Reservation with respect to the German-NL Tax Treaty, we may become (also) a tax resident of the Netherlands (at least until the moment Germany and the Netherlands will reach an agreement on our tax residency for purposes of the German-NL Tax Treaty).

Moreover, we may become subject to income taxes in other countries with regard to the income generated in the respective other country, for example, due to the existence of a permanent establishment or a permanent representative in such other country.

As a consequence, our overall effective income tax rate and income tax expense could materially increase, which could have a material adverse effect on our business, results of operations, financial condition and prospects, which could cause our share price and trading volume to decline.

1.6.1.8 Risks related to the shares

The market price of our equity securities may fluctuate substantially.

It is likely that the price of our common shares will be significantly affected by many factors, some of which are beyond our control, including:

- the failure of financial analysts to continue to cover our common shares after this offering or changes in financial estimates by analysts;
- actual or anticipated variations in our operating results;
- changes in financial estimates by financial analysts, or any failure by us to meet or exceed any of these estimates, or changes in the recommendations of any financial analysts that elect to follow our common shares or the shares of our competitors;
- announcements by us or our competitors of significant contracts or acquisitions;
- future sales of our shares; and
- investor perceptions of us and the industries in which we operate.

In addition, trends in research and product developments in the field of AD, such as failures or the premature termination of development programs of our competitors, the willingness of investors to invest in companies active in the field of AD as well as general developments in the stock market and fluctuations therein could also influence our share price irrespective of factors directly connected with our own business.

These and other factors may cause the market price and demand for our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of common stock and may

otherwise negatively affect the liquidity of our common stock. In addition, the stock market in general has from time-to-time experienced extreme price and volume fluctuations, including in recent months, that have often been unrelated or disproportionate to the operating performance of particular companies affected. These broad market and industry factors may materially harm the market price of our common shares, regardless of our operating performance. In the past, following periods of volatility in the market price of certain companies' securities, securities class action litigation has been instituted against these companies. This litigation, if instituted against us, could adversely affect our financial condition or results of operations.

If securities or industry analysts do not continue to publish research or publish inaccurate or unfavorable research about our business, our share price and trading volume could decline.

The trading market for our common shares depends in part on the research and reports that securities or industry analysts publish about us or our business. If securities or industry analysts do not continue to cover us, the trading price for our common shares would likely be negatively impacted. In addition, if one or more of the analysts who cover us downgrades our common shares or publishes inaccurate or unfavorable research about our business, our share price may decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, demand for our shares could decrease, which might cause our share price and trading volume to decline.

In particular due to our business model, we may experience a significant fluctuation of liquidity and revenues that may have a material adverse effect on our share price.

Our liquidity and cash position has fluctuated significantly in the past and we expect significant fluctuations to continue for the foreseeable future. Currently, we have not entered into any licensing or partnering agreements and are not eligible to receive any milestone payments or royalties from any such agreements. In the future, our revenues are expected to primarily consist of advance payments, milestone payments and royalties from the licensing and /or partnering of product candidates and other proceeds from research collaborations. The timing and amount of any future payments will greatly depend on the timely and successful preclinical and clinical development of our product candidates, the conditions of future cooperation agreements, and possible changes of applicable accounting rules. Significant fluctuation of liquidity and revenues could adversely affect our financial condition or results of operations which may have a material adverse effect on our share price.

We have been and may become involved in legal proceedings in relation to our redomiciliation from Germany to the Netherlands, which may result in costly litigation and us having to pay substantial amounts to dissenting shareholders.

On September 30, 2020, certain of our shareholders collectively holding around 120,000 shares raised an objection (Widerspruch) against our transformation from a German stock corporation (Aktiengesellschaft) into a Dutch N.V. and the transfer of the official seat to the Netherlands as resolved upon by our shareholders' meeting held on September 30, 2020. The objection does not challenge the transformation as such, but seeks a revaluation of our business to increase the compensation amount offered by us to dissenting shareholders who tendered their shares to us in connection with the transformation. In the ongoing appraisal proceedings (Spruchverfahren) before the district court at Halle (Saale), Germany, the claimants intend to increase the compensation amount per share beyond the amount originally offered by us (i.e., EUR 9 per share). Based on the expert valuation report we had commissioned before determining the compensation amount and the opinion of an independent auditor appointed by the court confirming the offered amount to be adequate, we believe that the compensation amount offered by us is adequate and that there are no valid grounds for an adjustment. However, should the competent court decide that a revaluation is required, the compensation amount we have to offer could be adjusted based on a new valuation report to be prepared by another independent expert appointed by the court. The amount of such adjustment cannot be predicted. For instance, if a potential revaluation were to take into account the then current trading price of our common shares, it is likely that the resulting compensation amount would be significantly higher than the amount of EUR 9 per share offered by us.

An adverse determination in the abovementioned legal proceeding or in similar legal proceedings to which we may be subject in the future could materially adversely affect our financial condition and share price.

Certain significant shareholders may have different interests from us and may be able to influence us, including the outcome of shareholder votes.

We have and will continue to have a small number of significant shareholders. We are not aware that any of our current shareholders has entered or intends to enter into a shareholders' agreement with respect to the exercise of their voting rights in the Company. Nevertheless, our significant shareholders could, alone or together, have the ability to elect or dismiss members of the board of directors, and, depending on the attendance at the shareholders' meeting and on how broadly our shares are held, take certain other shareholders' decisions that require 50 % or more of the votes of the shareholders that are present or represented at shareholders' meetings where such items are

submitted to shareholders for approval. In addition, to the extent that these shareholders have insufficient votes to determine the outcome of certain shareholders' resolutions, they could have the ability to block proposed shareholders' resolutions that require 50 % or more of the votes of the shareholders that are present or represented at shareholders' meetings where such items are submitted to shareholders for approval, such as change in control transactions. Any such voting by these shareholders may not be in accordance with our interests or the interest of other shareholders.

Institutional proxy advisors may influence the voting in general shareholders' meetings.

Institutional proxy advisors are frequently used by institutional investors. Institutional proxy advisors evaluate the agenda items of general shareholders' meetings and recommend to their clients as to how they should vote on such agenda items. Usually, the institutional investors follow the recommendations of the institutional proxy advisors, although no statistical evidence exists on this point. Depending on the shareholder structure and the shareholdings of those who follow the recommendations of the institutional proxy advisors, the latter can have a significant influence on the voting results in general shareholders' meetings. In particular, if our board of directors proposes a certain item on the agenda of the shareholders' meeting and the institutional proxy advisors recommend not to vote in favor of such proposal it cannot be excluded that such proposal may fail to be passed for the lack of sufficient votes, which may not be in our best interest and the best interest of our shareholders.

We do not anticipate being able to pay any cash dividends in the foreseeable future.

On the basis of the development activities in the field of AD, we have not yet generated any revenues over the three preceding years. Because of numerous factors of influence on the development of product candidates, the time when we may operate profitably cannot be predicted. Likewise, it is uncertain whether we will ever achieve any substantial revenues in the future.

We intend to retain all available funds and future earnings for use in the development and commercialization of our product candidates and technologies and the expansion of our business. Payment of future dividends to shareholders will be subject to a decision of our annual shareholders' meeting and subject to legal restrictions as provided under applicable laws. Furthermore, financial restrictions and other limitations may be contained in future credit agreements that may impair our ability to distribute dividends.

Therefore, and under consideration of indispensable future research and development expenses, we expect to continue to report losses in the foreseeable future and cannot predict if and when we will be able to pay dividends to our shareholders.

Accordingly, investors may have to sell their shares in order to generate cash flows from their investment and capital appreciation, if any, will be the sole source of gains from the investment. Investors may however never receive a gain on their investment when they sell shares and may lose the entire amount of their investment.

We are not obligated to, and do not, comply with all best practice provisions of the Dutch Corporate Governance Code.

We are subject to the Dutch Corporate Governance Code, or the Code. The code contains both principles and best practice provisions on corporate governance that regulate relations between the Executive Directors, the board of directors and the general meeting and matters in respect of financial reporting, auditors, disclosure, compliance and enforcement standards. The code is based on a "comply or explain" principle. Accordingly, companies are required to disclose in their annual reports, filed in the Netherlands, whether they comply with the provisions of the Code. If they do not comply with those provisions (for example, because of a conflicting Nasdaq requirement), the company is required to give the reasons for such noncompliance. We do not comply with all best practice provisions of the Code. See 1.12 "Compliance with the Dutch Corporate Governance Code." This may affect your rights as a shareholder and you may not have the same level of protection as a shareholder in a Dutch company that fully complies with the Code.

1.6.2 Risks resulting from infectious disease outbreaks

We may face continued business disruption and related risks resulting from of the COVID pandemic, which could have a material adverse effect on our business plan or clinical trials

The development of our product candidates could be disrupted and materially adversely affected by the COVID global pandemic. The extent to which the COVID pandemic impacts our business will depend on future developments that are highly uncertain and cannot be accurately predicted, including new information that may emerge concerning COVID and the evolving actions to contain COVID or treat its impact, among others. The pandemic has resulted in national and local governments in affected countries around the world implementing

stringent measures to help control the spread of the virus, including quarantines and nationwide lockdowns, which have been subject to change, sometimes at short notice, since the start of the pandemic.

Site initiation, participant recruitment and enrollment, participant dosing, distribution of clinical trial materials, study monitoring and data analysis may be paused or delayed (or continue to be paused or delayed) due to changes in hospital or university policies, federal, state or local regulations or restrictions, prioritization of hospital resources toward pandemic efforts, travel restrictions, concerns for patient safety in a pandemic environment, or other reasons related to the pandemic. Patient recruitment for our product candidates may be adversely impacted. For example, at some German clinical sites, COVID related patient and staff protection policies were implemented that slowed down recruitment of patients into our VIVIAD study.

Some of our pre-clinical and clinical trial sites are located in countries, which have experienced a shortage of medical staff due to the COVID pandemic. In the event that clinical trial sites are adversely impacted or closed to enrollment in our trials, such impacts or closures could have a material adverse effect on our clinical trial plans and timelines. We may face difficulties enrolling or retaining patients in our ongoing and planned clinical trials if patients are affected by the virus or are fearful of visiting or traveling to our clinical trial sites because of the pandemic. In addition, due to the disruption of the pandemic to the global business outlook, we may face a shortage in the supply of materials that are necessary for the production of our product candidates. We cannot predict whether we will be able to continue to enroll new patients in our clinical trials, whether the clinical sites will continue to operate in a reduced capacity for the long term and whether strict restrictions on social distancing and mobility will resume due to a second wave of COVID. For example, some countries that lifted restrictions imposed due to COVID have reported increasing number of COVID cases and as a result re-imposed restrictions that could delay our clinical trials. Due to the continually evolving situation with respect to COVID, we are unable to predict the long-term consequences of COVID on our business and ability to progress clinical development of our product candidates.

Moreover, if COVID continues to spread, we may experience ongoing disruptions that could severely impact our business, preclinical studies and clinical trials, including:

- delays in receiving authorization from local regulatory authorities to initiate our planned clinical trials;
- changes in local regulations as part of a response to the COVID pandemic which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or to discontinue the clinical trials altogether;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others, or interruption of clinical trial subject visits and study procedures, the occurrence of which could affect the integrity of clinical trial data;
- risk that participants enrolled in our clinical trials will acquire COVID while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events;
- delays in necessary interactions with local regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees;
- limitations in employee resources that would otherwise be focused on the conduct of our clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;
- refusal of the FDA, the EMA or other Competent Authority to accept data from clinical trials in affected geographies; and
- interruption or delays to our sourced discovery and clinical activities.

These and other disruptions in our operations and the global economy could negatively impact our business, operating results and financial condition.

In addition, quarantines, travel restrictions, shelter-in-place and similar government orders, or the perception that such orders, shutdowns or other restrictions on the conduct of business operations could occur, related to COVID or other infectious diseases could impact personnel at third-party manufacturing facilities upon which we

rely or may rely in the future, or the availability or cost of materials, which could disrupt the supply chain for our product candidates.

Although transmission rates have shown signs of slowing at various points during the course of the pandemic, and the potential for the roll-out of vaccines and other therapeutic treatments are anticipated to lessen the severity of the pandemic in the coming months and years, considerable uncertainty regarding the economic impact of the COVID pandemic is likely to result in sustained market turmoil and severe global economic disruption.

In line with the generally recommended measures of the governmental and regulatory authorities, we have taken a series of actions aimed at safeguarding our employees and business associates, including regular PCR-based COVID testing, implementing a work-from-home policy for employees, and these arrangements may cause reduced productivity of our employees and/or delays or disruptions of our business operations.

Our suppliers or collaborators could also be disrupted by conditions related to COVID, possibly resulting in disruption to our supply chain, clinical trials, partnerships or operations. If our suppliers, contract manufacturing organizations (“CMOs”), contract research organizations (“CROs”) or collaborators are unable or fail to fulfill their obligations to us for any reason, our ability to continue meeting clinical supply demand for our product candidates or otherwise advancing development of our product candidates may become impaired. For example, in May 2020 we were notified that a temporary shortage of employees due to COVID caused a delay in the production process at a CMO we engaged for the production of the active pharmaceutical ingredient (“API”) for varoglutamstat (PQ912).

The spread of COVID and actions taken to reduce its spread may also materially affect us economically and negatively affect our liquidity and financial position. COVID and actions taken to reduce its spread continue to evolve. As new information regarding COVID variants continues to emerge, it is difficult to predict the full extent to which the disease will adversely impact our operating and financial performance. Even after the COVID pandemic has lessened or subsided, we may continue to experience adverse impacts as a result of its global economic impact.

We continue to assess the impact COVID may have on our clinical trial timelines, our ability to enroll candidates for clinical trials and obtain the materials that are required for the production of our product candidates, but there can be no assurance that this assessment will enable us to avoid part or all of any impact from the spread of COVID or its consequences. The extent to which COVID and global efforts to contain its spread may impede the development of our product candidates, reduce the productivity of our employees, disrupt our supply chains, delay our clinical trials, reduce our access to capital or limit our business development activities, will depend on future developments, which are highly uncertain and cannot be predicted with confidence.

To the extent the COVID pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this “Risk Factors” section, such as those relating to the timing and results of our clinical trials, our ability to obtain materials that are required for the production of our product candidates, and our financing needs.

1.6.3 Geo-political conflicts

Geopolitical conflicts, including but not limited to the Russian invasion of the Ukraine in late February 2022, could negatively affect availability and price of various materials and services. The Russian invasion is destabilizing the global economy and might also affect global financial markets. The conflict may have a wide range of supply chain implications. This large-scale conflict in Europe, also affecting Poland, may have a negative impact on our four clinical sites contributing to the VIVIAD clinical Phase IIb study (4 out of 23 sites are located in Poland). Currently, our operations do not suffer from such adverse events. We are monitoring potential risks and necessary mitigating measures.

The development of current geo-political conflicts is subject to considerable uncertainty and as such the impact on our business will be monitored and assessed going forward.

1.6.4 Climate-related risk

Climate change presents risks to our operations, including the potential for additional regulatory requirements and associated costs, and the potential for more frequent and severe weather events and water availability challenges that may impact our facilities and those of our suppliers. We cannot provide assurance that physical risks to our facilities or supply chain due to climate change will not occur in the future. We periodically review our vulnerability to potential weather-related risks and other natural disasters and update our assessments accordingly. Based on our reviews, we do not believe these potential risks are material to our operations at this time.

To address the increasing relevance of climate change, the board has initiated to discuss the implementation of an Environmental, Health and Safety Policy reflecting our organization's commitment to minimize our carbon footprint.

We have analyzed the impact of climate-related risks on our financial statements and conclude that the effect of climate-related risks do not have a material impact on accounts and disclosures, including judgements and estimates in the financial statements.

1.6.5 Risk control measures

Due to its size and history, the Company does not yet have a fully deployed and formalized risk detection, evaluation, and management system in place. The Company currently does not set, report and monitor risk appetite levels for the risk identified given the size of operations. Management monitors operational risks as they arise and evolve, assesses their development and implements necessary countermeasures in regular internal meetings. The risks are reported and discussed during regular quarterly board meetings.

Risks related to our financial position and need for additional capital

The Company has a budget and forecast process that monitors, plans and approves costs for at least the next 24 months. This planning process is supplemented by cash planning. The results are discussed regularly in management and with the Board. This enables the Company to prepare capital measures at the right points in time and to adequately finance our future development activities.

Risks related to the discovery, development and commercialization of our product candidates

We use highly experienced staff for our research and clinical studies, as well as very experienced consultants. The results of our studies are constantly, closely and systematically monitored. This enables us to react early to new findings in manufacturing process, as well as in the conduct of pre-clinical and clinical activities. The close monitoring of the costs associated with these activities through our regular internal forecasting process further allows us to recognize any deviations from our financial plans early on in the conduct of these activities and initiate appropriate countermeasures in time.

Risks related to our dependence on third parties

Since we are highly dependent on third parties, we take special care in selecting our contractors. Before we select a contractor, the company convinces itself of the quality and experience in a detailed selection process, moreover, several service providers are considered. Major clinical trial and manufacturing service providers are selected through a stringent selection process including all management team members. The operational performance of third parties is subject to constant review and assessment by management.

Risks related to employee matters and managing growth

Our management pays very close attention to the fact that the respective department heads announce personnel requirements at an early stage and that adequate resources are available. Personnel planning is discussed by the management on a regular basis. In addition, we take care to retain key employees in our company.

Risks related to our intellectual property

We use only highly specialized consultants and attorneys to secure and monitor our IP. In addition, Management monitors ongoing patent protection and potential conflicts on a regular basis.

Risks Resulting from Infectious Disease Outbreaks

The company has implemented a series of measures to protect employees and third-party service providers from the risks of infection while attending our premises for the performance of their duties. The measures are in line with the generally recommended measures of the governmental and regulatory authorities. Furthermore, we are closely monitoring the progress of our clinical activities and production of varoglutamstat (PQ912) to anticipate any negative developments resulting from the pandemic. To date, there have been delays in the conduct of our clinical trial. However, these delays have not had a significant impact on the study. Apart from the operational risks described above the Company believes no additional material risk will apply due to the pandemic situation.

To mitigate risk during the COVID pandemic, the Company has contracted manufacturing sites on three continents. Varoglutamstat (PQ912) is produced by Carbogen Amcis, located in Switzerland, at its subsidiary in Shanghai, China, and by Patheon API Inc. (part of Thermo Fischer Scientific), located in Florence, North Carolina, USA. Both manufacturers have successfully produced varoglutamstat (PQ912) in the past and all sites act in accordance with GMP and regulatory standards required for the manufacture of drug substances and products. The drug product "study drug" is manufactured, filled, labeled, packaged and distributed by Haupt Pharma, a subsidiary

of the Aenova Group located in Wülfig, Germany. For the VIVA-MIND study in the United States the Company has an additional agreement with Caligor-Coghlán, located in Bastrop, Texas, USA, which will take over secondary packaging and distribution to U.S. study sites.

1.7 Legal proceedings

With the exception of the proceeding described below, the Company is not involved in any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which management is aware) which management believes may have, or have had, a significant effect on the Company's financial position or profitability.

On July 19, 2019, the Company initiated proceedings on the merits with the District Court of The Hague against Dutch cancer Institute, the academic Hospital Leiden and Scenic Biotech B.V. in connection with certain of our patents related to varoglutamstat (PQ912) and the other QPCT inhibitors. An oral hearing as part of these proceedings was held on March 5, 2021. A ruling in the case is pending and expected in 2022.

Shareholders collectively holding around 120,000 shares raised an objection (Widerspruch) against the Company's transformation from a German stock corporation (Aktiengesellschaft) into a Dutch N.V. and the transfer of the official seat to the Netherlands as resolved upon by the Company's shareholders' meeting held on September 30, 2020. The objection does not challenge the transformation as such, but seeks a revaluation of the Company's business to increase the compensation amount offered by us to dissenting shareholders tendering their shares to us. In the ongoing appraisal proceedings (Spruchverfahren) before the district court at Halle (Saale), Germany, the claimants intend to increase the compensation amount per share beyond the amount originally offered by us, i.e., EUR 9 per share. Based on the expert valuation report the Company had commissioned before determining the compensation amount and the opinion of an independent auditor appointed by the court confirming the offered amount to be adequate, the Company believes that the compensation amount offered by the Company is adequate and that there are no valid grounds for an adjustment. However, should the competent court decide that a revaluation is required, the compensation amount the Company has to offer could be adjusted by the court based on a new valuation report to be prepared by another independent expert appointed by the court. The amount of such adjustment cannot be predicted. Although such revaluation must be based on circumstances prevailing at the time the of shareholders' meeting that has resolved upon the transformation, it cannot be excluded that a potential revaluation would also take into account the trading price of our common share, which was continuously above the offered compensation amount since the beginning of the year 2021. In case the revaluation came to the conclusion that the offered amount would have to be adjusted to for instance EUR 18.00, thereby doubling the compensation amount originally offered, this would lead to an additional payment obligation on the Company's side amounting to approximately EUR 1.08 million. In return, the Company would acquire the shares of the dissenting shareholders. The Company has been and may become involved in legal proceedings in relation to its redomiciliation from Germany to the Netherlands, which may result in costly litigation and the Company having to pay substantial amounts to dissenting shareholders.

1.8 Corporate governance

1.8.1 Introduction

This chapter summarizes certain information concerning the Board and the Company's corporate governance. It is based on the relevant provisions of Dutch law, including the Dutch Corporate Governance Code (the 'Code') the text of which can be accessed at www.mccg.nl, as in effect on the date of this management report, the board rules and the articles of association. The articles of association in effect as of June 29, 2021 can be found on the Company's website www.vivoryon.com.

This chapter does not purport to give a complete overview and should be read in conjunction with, and is qualified in its entirety by reference to the relevant provisions of Dutch law as in force on the date of this management report, the articles of association and the board rules.

1.8.2 Code of conduct and other corporate governance practices

The Company has adopted a code of conduct, which explicitly incorporates and refers to core values of the Company, being honesty, accountability, integrity, professionalism and fairness. The text of the Company's code of conduct can be accessed at www.vivoryon.com. The Company does not voluntarily apply other formal codes of conduct or corporate governance practices.

1.8.3 Board

1.8.3.1 Board rules

The Company maintains a one-tier board (the "board"). The articles of association provide that the board shall consist of one or more Executive Directors and one or more Non-Executive Directors. The number of Non-Executive Directors must always exceed the number of Executive Directors. As of the date of this Management Report, the provisions in the DCC (Dutch Civil Code) that are commonly referred to as the 'large company regime' (*structuurregime*) do not apply to the Company. On December 31, 2021, the board consisted of three Executive Directors and four Non-Executive Directors.

Directors are appointed by the General Meeting as an Executive Director or a Non-Executive Director.

In the event two or more Executive Directors are in office, the board may grant titles to the individual Executive Directors, including (but not limited to) those of 'Chief Executive Officer' (CEO), 'Chief Financial Officer' (CFO) and 'Chief Business Officer' (CBO). In the event one Executive Director is in office, that Executive Director shall be granted the title of CEO and CFO. The board shall appoint one of the Non-Executive Directors as chair of the board (Chair) and may appoint another Non-Executive Director to be the vice-Chair of the board (Vice-Chair). The composition of the board shall be balanced considering the respective skills, experience and knowledge of each of the Directors.

If a Director is to be appointed, the board shall make a binding nomination. The General Meeting may at all times set aside such binding nomination by a resolution adopted by a majority of at least two-thirds of the votes cast, such majority representing more than one-half of the issued capital of the Company. A second meeting as referred to in Section 2:120 (3) DCC cannot be convened. If the General Meeting sets aside the binding nomination, the board shall make a new binding nomination. The nomination shall be included in the notice of the General Meeting at which the appointment shall be considered. The Executive Directors shall not take part in the discussions and decision-making by the board in relation to nominations for the appointment of Directors. If no nomination has been made for the appointment of a Director, this shall be stated in the notice of the General Meeting at which the appointment shall be considered and the General Meeting shall then be free to appoint a Director at its discretion. A resolution to appoint a Director that was not nominated by the board can only be adopted by a majority of at least two-thirds of the votes cast, such majority representing more than one-half of the issued capital of the Company. A second meeting as referred to in Section 2:120(3) DCC cannot be convened.

A Director may be suspended or removed by the General Meeting at any time. A resolution to suspend or remove a Director can only be adopted by a majority of at least two-thirds of the votes cast, such majority representing more than one-half of the issued capital of the Company, unless the proposal to suspend or remove the relevant Director was made by the board, in which case the resolution can be adopted by a simple majority of the votes cast. A second meeting as referred to in Section 2:120(3) DCC cannot be convened. An Executive Director may also be suspended by the board. A suspension by the board may at any time be discontinued by the General Meeting. Any suspension may be extended one or more times, but may not last longer than three months in the aggregate. If, at the end of that period, no decision has been taken on termination of the suspension or on removal, the suspension shall end.

The Directors are collectively responsible for the Company's management and the general affairs of the Company's business. In discharging its duties, the board shall be guided by the interests of the Company and its business; it shall take into account the relevant interests of all those involved in the Company (including Shareholders). The board is responsible for the continuity of the Company and must establish a position on the relevance of long-term value creation for the Company and its business and take into account the relevant stakeholder interests. The board shall adopt values for the Company and the Company's business that contribute to a culture focused on long-term value creation. The board is responsible for the incorporation and maintenance of these values within the Company and the Company's business. The Directors may divide their tasks by mutual consultation, provided that (i) the day-to-day management of the Company shall be entrusted to the Executive Directors and (ii) the task to supervise the performance by the Directors of their duties cannot be taken away from the Non-Executive Directors. The responsibilities of the board include:

- the achievement of the Company's operational and financial objectives;
- determining the strategy and policy designed to achieve the objectives;
- corporate social responsibility issues that are relevant to the Company's business;
- the general state of affairs in and the results of the Company;

- identifying and managing the risks connected to the business activities;
- ensuring that effective internal risk management and control systems, including its disclosure controls and procedures and internal control over financial reporting, are in place and reporting on this in the Management Report;
- maintaining and preparing the financial reporting process;
- compliance with legislation and regulations;
- compliance with and maintaining the corporate governance structure of the Company;
- publishing the corporate structure of the Company and any other information required under the Code, through the Company's website, publication in the Management Report and otherwise;
- preparing the annual accounts and drawing up the annual budget and important capital investments of the Company;
- facilitating the audit committee in relation to the selection process of the external auditor and the nomination of the external auditor for appointment by the General Meeting;
- ensuring that internal procedures are established and maintained which safeguard that all relevant information is known to the board in a timely fashion;
- ensuring that the external auditor receives all necessary information to perform his work in a timely fashion; and
- ensuring that the draft audit plan is discussed with the external auditor before the external auditor presents the plan to the audit committee.

Notwithstanding the responsibilities of the board, the responsibilities of the Non-Executive Directors include:

- selecting and recommending the external auditor for appointment (upon a proposal by the board) by the General Meeting;
- selecting and recommending individuals for appointment (upon a proposal by the board) by the General Meeting as Directors;
- preparing the Remuneration Policy to be adopted (upon a proposal by the board) by the General Meeting, establishing the remuneration (in accordance with the Remuneration Policy) and contractual terms and conditions of employment of the Executive Directors;
- proposing the remuneration of the Non-Executive Directors for adoption by the General Meeting;
- reviewing the performance of the board and individual Directors and discussing the conclusions that must be drawn on the basis of this review at least on an annual basis; and
- preparing up the Company's diversity policy for the composition of the board.

These responsibilities may be carried out by the respective committees of the board consistent with the rules of the committees as drawn up by the board. The board rules and profile can be found on the Company's website www.vivoryon.com/investors-news/corporate-governance/.

1.8.3.2 Composition of the board

The following table as at December 31, 2021, lists our current Executive Directors, who are also executive officers, and our current Non-Executive Directors, as well as their ages, gender, term served, the year of expiration of their term as directors of Vivoryon Therapeutics N.V. and position:

<i>Name</i>	Age, gender	Term served	Year in which the term expires	Position
Dr. Ulrich Dauer	56, m	April 2021 – Present	2024	Executive director, CEO
Dr. Michael Schaeffer	53, m	September 2021 – Present	2024	Executive director, CBO
Florian Schmid	47, m	April 2021 – Present	2024	Executive director, CFO
Dr. Erich Platzer	71, m	2007 – Present	2022	Non-Executive director, Chair
Dr. Dinnies von der Osten	60, m	2007 – Present	2022	Non-Executive director, Vice-Chair
Charlotte Lohmann	51, f	2015 – Present	2022	Non-Executive director
Dr. Jörg Neermann	54, m	2011 – Present	2022	Non-Executive director

The term of each Non-Executive Directors will end on the date of the annual general meeting (AGM) of shareholders in the year indicated above.

Dr. Ulrich Dauer

Dr. Dauer has been our Chief Executive Officer since May 2018 and has the German nationality. He has had a career spanning more than 20 years in the biopharmaceutical industry in both public and private companies. As one of the founders, Dr. Dauer previously worked as CEO of 4SC AG for 14 years, attracting multiple private and, upon the company's IPO at the Prime Standard of the Frankfurt Stock Exchange in 2005, public investors. Under his leadership, 4SC closed multiple industry partnerships with international biopharmaceutical companies. In subsequent leadership positions in the biotech industry, he executed the EUR130 million trade sale of Activaero in 2014 and later took up CEO positions of two privately held biotech companies (Omeicos GmbH, Ventaleon GmbH). Currently, Dr. Ulrich Dauer is also a non-executive board member (Vorsitzender des Beirats) of Atriva Therapeutics GmbH. Dr. Dauer holds a PhD in Chemistry from the Julius Maximilians University of Würzburg, Germany.

Dr. Michael Schaeffer

Dr. Schaeffer has been our Chief Business Officer since October 2018 and has the German nationality. He has close to 20 years of experience across pharma and biotech in strategic business development, scientific project and alliance management. Dr. Schaeffer is a highly experienced serial entrepreneur and was founder, CEO and Managing Director of the biotech companies CRELUX GmbH and SiREEN AG prior to joining Vivoryon. CRELUX is a world leader in biophysical and structure-based drug discovery services. Dr. Schaeffer was responsible for integrating CRELUX into WuXiAppTec, a leading Shanghai based CRO with over 20,000 employees globally, following the acquisition of CRELUX by WuXiAppTec in 2016. Dr. Schaeffer received his PhD in Molecular Biology from the Ludwig Maximilians University in Munich, Germany.

Florian Schmid

Mr. Schmid has been Chief Financial Officer at Vivoryon since April 1, 2021 and has the German nationality. He has more than 20 years of finance leadership experience in public biopharmaceutical, technology and consulting businesses. Mr. Schmid joined us from InflaRx N.V., where he served as Director Finance & Controlling supporting various financing transactions including a U.S. IPO. Prior to that role, Mr. Schmid spent six years at T-Systems International GmbH, where he most recently led the Global Deal & Business Support department. Mr. Schmid started his career as certified Tax Advisor and Public Accountant at Arthur Andersen and Ernst & Young. Mr. Schmid holds a degree in business economics from the Ludwig- Maximilians-University in Munich, Germany.

Dr. Erich Platzer

Dr. Platzer has served as a non-executive director on our board of directors since 2007 and has the Swiss nationality. He is a business angel and board member of Swiss angel organization StartAngels-Network, focusing on

Life Sciences and technology investments. In addition, he serves as a board member and healthcare partner at Swiss venture capital firm MTIP in Basel, which focuses on medtech and e-health investments. Prior to this, he was an investment advisor and industry partner at HBM Partners AG, a venture capital company, which he co-founded in 2001. Dr. Platzer has been chairman or board member of various biotech companies, public or private, in the US and Europe and he currently serves on the boards of the privately held life sciences companies, AOT, LMD, Peripal and Panavance as well as the public biotech company Aptose Biosciences (NASDAQ, TSE). Until 1999, Dr. Platzer worked in various functions in product development and marketing at F. Hoffmann — La Roche, Basel, most recently as Business Director Oncology (worldwide). Prior to that, Dr. Platzer worked in academic medicine and research and had a key role in the team at MSKCC that purified natural human G-CSF, which led to the development of Neupogen® and Neulasta®. Dr. Platzer holds an MD from the Medical Faculty of the University of Erlangen, Germany, where he also earned his MD PhD (Habilitation).

Dr. Dinnies Johannes von der Osten

Dr. von der Osten has been member of the non-executive board since 2007. He has the German nationality and is CEO and Partner at GoodVent Beteiligungsmanagement GmbH & Co. KG since 2007. He is managing director of Elector GmbH. He is a former member of the board of directors at Market Logic Software AG as well as at Acktar Ltd, Israel. He has served as member of the board of directors at numerous private and public companies in the tech sector. Dr. von der Osten spent over 20 years in the venture and private capital sector in various positions. Until 2017 he served as CEO of Cedrus Private Equity. Between 1998 and 2007 he was sole managing director of IBG Beteiligungsgesellschaft Sachsen-Anhalt mbH. Before that he worked as managing director of VWM Waste und Beteiligungsgesellschaft mbH (1994 – 1997) after having been responsible for business development of TechnoCommerz GmbH, a Treuhandanstalt owned company (1993 – 1994). Dr. von der Osten holds a Ph.D. in Economics from the Freie Universität Berlin, Germany, a diploma in Economics from the Ludwig Maximilians University in Munich, Germany and a Bachelor of Business and Engineering from the TU Karlsruhe, Germany.

Charlotte Lohmann

Ms. Lohmann has been member of the non-executive board since 2015 and has the German and Swedish nationality. She is a member of the Executive Committee at MorphoSys AG in Planegg, Germany, since July 2020 and serves as General Counsel at MorphoSys since 2012, and, since 2018, in her role as Senior Vice President. Prior to this, she spent eleven years at Wilex AG in Munich, most recently as Senior Vice President Legal Affairs & Human Resources. Prior to her position at Wilex, she practiced law at the law firm KPMG Treuhand & Goerdeler GmbH in Munich. She started her career in the tax and law department of the auditing company KPMG Deutsche Treuhand-Gesellschaft AG. Ms. Lohmann received her degree in law from the Ludwig Maximilians University of Munich and is a licensed attorney.

Dr. Jörg Neermann

Dr. Neermann has been member of the non-executive board since 2011 and has the German nationality. He is currently the CEO of Curexsys GmbH, a privately held, German Biotech company, active in exosome and anti-aging technologies. Between 2007 and 2020 he was Partner at LSP, a leading European Venture Capital group, and from September 2009 onwards Managing Partner at LSP Services Deutschland GmbH, the German subsidiary of LSP. Prior to that he was Managing Partner at DVC Deutsche Venture Capital, a venture subsidiary of Deutsche Bank, where he joined in 1998. Dr. Neermann started his venture capital career as an associate with Atlas Venture in 1996. Since April 2019, he has served as a non-executive member of the board of directors of Immunic Inc. (NASDAQ: IMUX), New York, USA, and since April 2016, as chairman of the board of Immunic AG Munich, Germany (now a 100% subsidiary of Immunic Inc.). He also served on the boards of various private and public biotech companies, where he accompanied numerous private financings, IPOs and M&As. In the last five years he served as a non-executive member on the boards of: Imcyse S.A. (Liège, Belgium, July 2019 – January 2021); ViCentra B.V. (Utrecht, Netherlands, January 2016 to January 2021); Eyesense AG (Basel, Switzerland, July 2012 – January 2021); Ventaleon GmbH (Gemünden, Germany, July 2012 – December 2020); and Kuros AG (Zurich, Switzerland, August 2015 – May 2017). Dr. Neermann studied Biotechnology at TU Braunschweig and at the Massachusetts Institute of Technology (Cambridge, MA, USA) and holds a Master's degree and a Ph.D. in biotechnology from TU Braunschweig, Germany. He also studied economics at TU Braunschweig and Harvard Business School (Cambridge, MA, USA).

1.8.3.3 Board meetings and resolutions

The meetings of the board shall be presided over by its chair or his deputy. The chairperson of the meeting shall appoint a secretary for the meeting.

All resolutions of the board shall be adopted by a simple majority of the votes cast. However, the board may determine that certain resolutions of the board require the consenting vote of a majority of the Non-Executive Directors. Such resolutions must be clearly specified and laid down in writing. In the board, each Director may cast one vote. If there is a tie in voting, the proposal shall be deemed to have been rejected.

A Director shall not take part in the discussions and decision-making by the board if he has a direct or indirect personal interest therein that conflicts with the interests of the Company or the business connected with it. The provision of the first full sentence shall not apply if as a result no resolution can be adopted.

1.8.4 Committees

1.8.4.1 Audit committee

The audit committee consists of Dr. Dinnies Johannes von der Osten (as chair), Charlotte Lohmann and Dr. Jörg Neermann. The duty of the audit committee is to prepare the decision-making of the board regarding the integrity and quality of the Company's financial reporting and the effectiveness of the Company's internal risk management and control systems. The responsibilities of the audit committee include monitoring the board with regard to:

- relations with, and compliance with recommendations and following up of comments by the external auditor;
- the funding of the Company;
- the application of information and communication technology by the Company, including risks relating to cybersecurity; and
- the Company's tax policy.

In addition, the audit committee shall, *inter alia*:

- inform the board of the outcome of the statutory audit and explain how the statutory audit contributed to the integrity of financial reporting and what the role of the audit committee was in that process;
- monitor the financial reporting process and submit recommendations or proposals to ensure its integrity;
- monitor the effectiveness of the Company's internal risk management and control systems in relation to the financial reporting of the Company including review and discuss flaws in the effectiveness of the internal controls;
- monitor the statutory audit of the annual accounts, in particular the performance thereof, taking into account any findings and conclusions by the Dutch Authority for the Financial Markets;
- review and monitor the independence of the external auditor, and in particular the appropriateness of the provision of non-audit services to the Company, and request from the external auditor a formal written statement at least annually delineating all relationships between the external auditor and the Company consistent with applicable requirements of the Public Company Accounting Oversight Board regarding the external auditor's communications with the audit committee concerning independence;
- be responsible for the procedure for the selection of an external auditor and recommend an external auditor to be appointed in accordance with Article 16 of Regulation (EU) No 537/2014, as well as submit a proposal to the board for the relevant external auditor's engagement to audit the annual accounts;
- assist the Company in preparing the disclosure to be included in the Company's applicable filings as required by the Securities and the Exchange Act and their related rules; and
- assist and discuss the effectiveness of the design and operation of the Company's internal controls with the board, the CEO and the CFO, as appropriate.

The board has determined that each of Dr. Dinnies Johannes von der Osten, Charlotte Lohmann and Dr. Jörg Neermann satisfies the "independence" requirements set forth in Rule 10A-3 under the Exchange Act and that Dr. Dinnies Johannes and Dr. Jörg Neermann qualify as "audit committee financial experts," as such term is defined in the rules of the SEC. The composition of our audit committee is consistent with the best practice provisions of the Code.

The audit committee rules can be found on the Company's website www.vivoryon.com/investors-news/corporate-governance/.

1.8.4.2 Compensation committee

The compensation committee consists of Jörg Neermann (as chair), Charlotte Lohmann and Erich Platzer. The task of the compensation committee is to prepare the decision-taking of the board regarding the Company's compensation policy and benefits policies generally and the compensation of the Company's executive officers and the individual directors. The compensation committee rules can be found on the Company's website www.vivoryon.com/investors-news/corporate-governance/.

The compensation committee was installed on November 2, 2021 whereby the composition of the compensation committee was completed and thereby the compensation committee became operational on December 10, 2021. Given the limited time the compensation committee was operational until the end of the year, the compensation committee has not held any meetings during 2021. As a result thereof, no items were discussed by the compensation committee. The board as a whole has reviewed and decided on the remuneration of the Executive Directors prior to the compensation committee becoming operational.

1.8.4.3 Nomination and corporate governance committee

The nomination and corporate governance committee consists of Charlotte Lohmann (as chair), Jörg Neermann and Erich Platzer. The task of the nomination and corporate governance committee is to prepare the decision-taking of the board regarding the selection and appointment procedure for the Company's executive officers and individual directors, as well as developing and monitoring the compliance of the Company's code of conduct. The composition of our nomination and corporate governance committee is consistent with the best practice provisions of the Code. The nomination and corporate governance committee rules can be found on the Company's website www.vivoryon.com/investors-news/corporate-governance/.

The nomination and corporate governance committee was installed on November 2, 2021 and became operational on December 10, 2021. Given the limited time the nomination and corporate governance committee was operational until the end of the year, the nomination and corporate governance committee has not held any meetings during 2021.

1.8.5 Meeting participation

The table below shows the meeting participation per committee or board meeting:

<i>Name</i>	Board meetings	Audit committee meetings	Compensation committee meetings	Nomination/corporate governance committee meetings
Dr. Ulrich Dauer	9/9	–	–	–
Dr. Michael Schaeffer	9/9	–	–	–
Florian Schmid	7/9	–	–	–
Dr. Erich Platzer	9/9	–	–	–
Dr. Dinnies von der Osten	9/9	4/4	–	–
Charlotte Lohmann	8/9	3/4	–	–
Dr. Jörg Neermann	9/9	4/4	–	–

1.8.6 Allocation of profits

According to the articles, the board shall determine the amount of the profits accrued in a financial year that shall be added to the reserves of the Company. The allocation of the remaining profits shall be determined by the General Meeting. The board shall make a proposal for that purpose. Distribution of profits shall be made after adoption of the annual accounts if permissible under the laws of the Netherlands given the contents of the annual accounts.

1.9 Shareholders and the general meeting

1.9.1 Introduction

The general meeting should be able to exert such influence on the policies of the board that it plays a fully-fledged role in the system of checks and balances in the Company. As good corporate governance practice, the Company promotes the fully-fledged participation of shareholders in the decision-making in the General Meeting.

1.9.2 Stakeholder dialogue

At Vivoryon Therapeutics, a key principle of corporate communication is to inform institutional investors, private shareholders, financial analysts, employees and all other stakeholders simultaneously and fully of the Company's situation through regular, transparent and timely communication. Shareholders have immediate access to the information provided to financial analysts and similar recipients. The Company is committed to a fair information policy.

1.9.3 Shares and shareholdings

The authorized share capital (maatschappelijk kapitaal) amounts to EUR 60,000,000, divided into 60,000,000 common shares, each with a nominal value of EUR 1.00, numbered 1 through 60,000,000. The Company's issued share capital amounts to EUR 20,050,482.

Shares may be issued pursuant to a resolution of the General Meeting or of the board if and insofar as the board has been designated for that purpose pursuant to a resolution of the General Meeting for a fixed period, not exceeding five years. On such designation the number of Shares which may be issued must be specified. The designation may be extended, each time for a period not exceeding five years. Unless the designation provides otherwise, it may not be withdrawn. A resolution of the General Meeting to issue Shares or to designate the board as the competent body to issue Shares can only be adopted at a proposal by the board. In addition, pursuant to article 40 of the Company's articles of association the board has been designated as the body of the Company authorized to issue Shares and grant rights to subscribe for Shares (including but not limited to any options, warrants, or convertible loans or bonds entitling the holder thereof to subscribe for Shares) and (ii) to limit or exclude pre-emptive rights upon issuance of Shares, for a period of five years that will end on November 27, 2025, which designation applies to 100 % of the Shares of the Company's authorized capital as this reads or will read from time to time.

Upon issuance of Shares, each Shareholder shall have a pre-emptive right in proportion to the aggregate nominal value of his Shares, subject to the provisions of article 7 of the articles of association. Shareholders shall have a similar pre-emptive right if rights are granted to subscribe for Shares.

The Company's issued capital and voting rights are notified to the Dutch Authority for the Financial Markets (AFM). Shareholders notify the AFM when their holding or short position reach, exceed or fall below certain thresholds between 3 and 95 %. These reportings by the Company and significant shareholders can be found at www.afm.nl/en/professionals/registers.

Pursuant to the register kept by the AFM, through December 31, 2021, the below table specifies the persons having notified a substantial holding, i.e. a holding of 3% or more, in the share capital or voting rights of the Company (i.e. until July 23, 2021 599,264 shares, at December 31, 2021 601,514 or more shares/voting rights):

	Voting rights	Share capital	Date of notification
Den Danske Forskningsfond	1,999,547	10%	January 18, 2021
T&W Holding A/S	1,999,547	10%	January 18, 2021
Mackenzie Financial Corporation, via Mackenzie Investments Europe Limited	1,032,184	5%	February 19, 2020
C. Christiansen	1,000,000	5%	April 15, 2019
Federal state of Saxony-Anhalt, Ministry of Finance, via IBG Risikokapitalfonds I GmbH & Co. KG	490,269	2%	June 22, 2021
Federal state of Saxony-Anhalt, Ministry of Finance, via IBG Risikokapitalfonds II GmbH & Co. KG	400,720	2%	October 25, 2019
LSP IV Management B.V., via LSP IV Coöperatief U.A.	636,289	3%	October 25, 2019
GS&P Kapitalanlagegesellschaft S.A.	600,000	3%	July 13, 2021

1.9.4 Quorum and voting requirements

Each common share confers the right on the holder to cast one vote at the general meeting of shareholders. Shareholders may vote by proxy. No votes may be cast at a general meeting of shareholders on shares held by the Company or its subsidiaries or on shares for which the Company or its subsidiaries hold depositary receipts. The Company must make a proxy form available to shareholders and others with voting rights when convening a general meeting. As a matter of Dutch law, the board of directors must allow and facilitate that shareholders and others with voting rights can provide the proxy to the Company by electronic means of communication (e.g., via e-mail). Nonetheless, the holders of a right of use and enjoyment (*vruchtgebruik*) and the holders of a right of pledge (*pandrecht*) in respect of shares held by the Company or its subsidiaries in the Company's share capital are not excluded from the right to vote on such shares, if the right of use and enjoyment (*vruchtgebruik*) or the right of pledge (*pandrecht*) was granted prior to the time such shares were acquired by the Company or any of its subsidiaries. Neither the Company nor any of its subsidiaries may cast votes in respect of a share on which the Company or such subsidiary holds a right of use and enjoyment (*vruchtgebruik*) or a right of pledge (*pandrecht*). Shares which are not entitled to voting rights pursuant to the preceding sentences will not be taken into account for the purpose of determining the number of shareholders that vote and that are present or represented, or the amount of the share capital that is provided or that is represented at a general meeting of shareholders.

Decisions of the general meeting of shareholders are taken by a simple majority of votes cast, except where Dutch law or the Articles of Association provide for a qualified majority or unanimity.

1.9.5 Powers of the general meeting

All powers that do not vest in the board pursuant to applicable law, the articles of association or otherwise, vest in the general meeting. The main powers of the general meeting of shareholders include, subject in each case to the applicable provisions in the articles of association:

- the appointment, suspension and dismissal of the Directors;
- the approval of certain resolutions of the board concerning a material change to the identity or the character of the Company or its business;
- the reduction of the Company's issued share capital through a decrease of the nominal value, or cancellation, of shares in its capital;
- the adoption of the Company's statutory financial statements;
- the appointment of the Dutch independent auditor to examine the Company's statutory financial statements;
- amendments to the articles of association;
- approving a merger or demerger by the Company, without prejudice to the authority of the board to resolve on certain types of mergers and demergers if certain requirements are met; and
- the dissolution of the Company.

In addition, the general meeting of shareholders has the right, and the board must provide, any information reasonably requested by the general meeting of shareholders, unless this would be contrary to an overriding interest of the Company.

1.9.6 Annual general meeting

An AGM must be held within six months from the end of the preceding financial year of the Company. The agenda for this AGM shall in any case contain the following business to be discussed:

- discussion of the management report;
- discussion and submission for advisory vote of the remuneration report (Section 2:135b DCC);
- discussion and adoption of the annual financial statements;
- discussion of the reservation and dividend policy, allocation of profits; and
- release from liability of Directors.

1.9.7 Extraordinary general meeting

Other general meetings may be convened by the board as often as the board deems necessary. Shareholders and/or persons with meeting rights alone or jointly representing in the aggregate at least one-tenth of the Company's

issued capital may request the board in writing to convene a general meeting, stating specifically the business to be discussed. If the board has not given proper notice of a general meeting within two weeks following receipt of such request such that the meeting can be held within eight weeks after receipt of the request, the applicants can at their request be authorized by the preliminary relief judge of the district court to convene a meeting.

A general meeting must also be held within three months after the board has decided that it is likely that the Company's equity has decreased to or below 50 % of its paid up and called up share capital.

Each general meeting must be held in Amsterdam or Schiphol ('Haarlemmermeer').

For purposes of determining who have voting rights and/or meeting rights at a general meeting of shareholders under Dutch law, the board may set a record date. The record date, if set, shall be the 28th day prior to that of the general meeting. Under Dutch law, those who have voting rights and/or meeting rights on the record date and are recorded as such in one or more registers designated by the board shall be considered to have those rights at the general meeting of shareholders, irrespective of any changes in the composition of the shareholder base between the record date and the date of the meeting. The articles of association require shareholders and others with meeting rights to notify the Company of their identity and their intention to attend the general meeting of shareholders. This notice must be received by the Company ultimately on the date specified in the notice of the meeting.

1.9.8 Shareholder meetings in 2021

Extraordinary general meeting on March 12, 2021

The shareholders approved all resolutions proposed by the Company's board with a large majority, including:

- The appointment of KPMG Accountants NV. as auditor for the financial year 2020 (accepted with 100 % of the votes),
- Re-appointment of Dr. Ulrich Dauer as executive member of the board (accepted with 99 % of the votes),
- Appointment of Mr. Florian Schmid as executive member of the board (accepted with 99 % of the votes).

Annual general meeting on June 28, 2021

The Company's AGM that took place virtually on June 28, 2021. 9,463,115 shares or 47 % of the voting shares were represented. The shareholders approved all resolutions proposed by the Company's board with a large majority, including:

- Adoption of the remuneration report 2020 (accepted with 99 % of the votes),
- Adoption of the financial statements for the year 2020 (accepted with 100 % of the votes),
- The discharge of the executive and non-executive members of the board with respect to the 2020 financial year (both accepted with 100 % of the votes),
- Adoption of the remuneration policy (accepted with 99 % of the votes),
- Re-appointment of Dr. Michael Schaeffer as executive member of the board (accepted with 100 % of the votes),
- Approval of the long term incentive plan (accepted with 99 % of the votes),
- Amendments to the company's articles of association (accepted with 97 % of the votes),
- Re-appointment of KPMG Accountants NV. as auditor for the financial year 2021 (accepted with 100 % of the votes),
- Authorization to acquire own shares (accepted with 100 % of the votes).

1.10 Remuneration report

This remuneration report (the Remuneration Report) gives an overview of the remuneration of the board in 2021 and explains how this relates to the policy of the Company on the remuneration of its board (the Remuneration Policy) as adopted at the 2021 AGM. This Remuneration Report has been prepared in line with Section 2:135b Netherlands Civil Code and best practice provision 3.4.1 of the code and is separately made available on the Company's website.

The General Meeting's advisory vote relating to the previous remuneration report was taken into account when preparing this Remuneration Report.

1.10.1 Remuneration policy

With due observance of the Remuneration Policy, the authority to establish remuneration and other conditions of employment for Executive Directors is vested in the board. The Executive Directors shall not take part in the discussions and decision-making by the board in relation to the establishment of the remuneration and other conditions of employment of the Executive Directors.

As indicated in the articles of association and in this Remuneration Report, the Remuneration Policy was adopted by the General meeting on June 28, 2021, at the proposal of the board. The Remuneration policy can be found on the Company's website www.vivoryon.com/investors-news/corporate-governance/.

1.10.2 Remuneration for Executive Directors

1.10.2.1 Amount and structure

The annual remuneration for the Executive Directors has the following components:

- fixed compensation, comprising an annual base salary and possibly also (optional) benefits for the capacity of Executive Director, such as medical insurance, retirement benefits, travel expenses and/or representation allowances;
- variable compensation, comprising an annual performance-based compensation (depending on achievement of individual management corporate / management goals as defined on an annual base respectively);
- and may also comprise Share-based compensation.

1.10.2.2 Fixed remuneration

The amount of the fixed compensation depends on the Executive Director's function and responsibilities as well as on what is common in the industry and in the market, especially in comparison with similar listed companies in the biotechnology sector. The fixed remuneration is paid out as a monthly salary.

1.10.2.3 Variable remuneration

The variable compensation consists of annual performance-based compensation measured in terms of one year. The remuneration package of the Executive Directors is designed to be weighted towards fixed pay and benefits. The packages are structured so that at least 74% of the remuneration is fixed. This allocation does not consider share option expenses or one-time special bonuses (e.g. carve-out incentive).

Pursuant to Dutch law, the variable remuneration of the Executive Directors may be reduced, or Executive Directors may be obliged to pay (part of) their variable remuneration to the Company if certain circumstances apply:

- test of reasonableness and fairness – pursuant to Dutch law, any variable remuneration payable to an Executive Director may be adjusted by the board to an appropriate level if payment of the variable remuneration were to be unacceptable according to the criteria of reasonableness and fairness; or
- claw back – the board will have the authority under Dutch law to recover from an Executive Director any variable remuneration paid based on incorrect financial or other data.

1.10.2.4 Share based remuneration

Where the Company has awarded Share-based remuneration, the following applies:

- such Share-based remuneration has the form of options for shares or other awards like SARs (stock appreciation rights), restricted stock, RSUs (restricted stock units) performance awards or other share-based awards;
- these options for Shares or other warrants may not be transferred, pledged or otherwise encumbered;
- the share options can be exercised during applicable exercise periods after the achievement of performance and vesting conditions as described in note 8.12 'Share based payments' to the financial statements;
- no additional holding periods apply to option for Shares or Shares acquired upon exercise of options for Shares, unless determined differently upon the grant of the options for Shares in accordance with the provisions of the respective Share Option Plan; and

- the Share based remuneration contributes to the Company's business strategy, long-term interests and sustainability by creating an alignment of long-term interests between the Company and its Directors.

1.10.2.5 Contribution to long term performance and value creation

The remuneration of the Executive Directors is consistent with and supports the strategy of the Company. The remuneration also supports the ongoing efforts of the Company aimed at improving the overall performance, facilitating growth and sustainable success and enhancing the other long-term value and interests of the Company, as it has been designed to provide remuneration packages that are competitive to attract the required executive and non-executive talent and expertise for reaching these objectives in accordance with the Company's long-term strategy. As a result of the foregoing, the remuneration is aimed to enable the Company to compete in a global market, including the challenging US labor market, to attracting both the required top talent to execute the Company's long-term strategy and the required Non-Executive Directors' expertise to effectively supervise such execution, creating long-term value and sustainable growth in the best interest of the Company and all of its stakeholders.

1.10.2.6 Evolution of the company's performance

The following table shows the performance of the Company's share price in 2021 and the preceding four years compared to stock indices of the industry and thus describes the effectiveness of performance targets addressed by the Remuneration Policy.

<i>kEUR</i>	2021	2020	2019	2018	2017
Euronext next biotech	2,781	2,791	2,979	1,855	1,859
Year-on-year difference %	0%	(6)%	61%	(0)%	—
Nasdaq Biotechnology	4,729	4,759	3,787	3,044	3,357
Year-on-year difference %	(1)%	26%	24%	(9)%	—
Vivoryon Therapeutics N.V.	19.00	9.01	5.44	2.56	10.60
Year-on-year difference %	111%	66%	113%	(76)%	—

1.10.2.7 Executive directors' remuneration 2021

A detailed listing of the individual remuneration of the Executive Directors is presented in the tables below.

<i>kEUR</i>	Dr. Ulrich Dauer, CEO			Dr. Michael Schaeffer, CBO			Florian Schmid, CFO, since Apr 1, 2021		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Fixed compensation	273	240	240	240	220	220	154	—	—
Health insurance contribution	5	5	5	5	5	4	4	—	—
Direct insurance	—	—	—	5	5	5	—	—	—
Total fixed compensation	278	245	245	250	230	229	158	—	—
Annual performance-based compensation	78	60	55	54	40	37	27	—	—
Carve-out incentive	—	—	195	—	—	49	—	—	—
Total variable compensation	78	60	250	54	40	86	27	—	—
Share-based compensation	885	78	—	885	78	—	—	—	—
Total compensation	1,241	383	495	1,189	348	315	185	—	—
Proportion of fixed compensation, excluding incentives or share-based compensation expenses	78%	80%	82%	82%	85%	86%	85%	—	—

1.10.2.8 Change in remuneration

The table below provides an overview of the annual compensation of each individual Director for the financial year 2021 and the preceding four years. The amounts in the table below are include fixed compensation and where applicable, variable and share-based compensation.

<i>KEUR</i>	2021	2020	2019	2018	2017
Executive Directors					
Dr. Ulrich Dauer since, since 2018	1,241	383	530	223	—
Year-on-year difference %	224%	(28)%	138%	—	—
Dr. Michael Schaeffer, since 2018	1,189	348	347	57	—
Year-on-year difference %	242%	0%	509%	—	—
Florian Schmid, since 2021	185	—	—	—	—
Year-on-year difference %	—	—	—	—	—
Former board members till 2018	—	—	—	557	1,053
Year-on-year difference %	—	—	—	—	(29)
Total Executive Directors	2,615	731	877	837	1,053
Year-on-year difference	258%	(17)%	5%	(21)%	—
Non-Executive Directors					
Total Non-Executive Directors	200	195	105	112	137
Year-on-year difference %	3%	86%	(6)%	(18)%	—

1.10.2.9 Liability insurance and indemnity

The Company maintains D&O (Directors and Officers) insurance where all the Executive Directors are included, with a reasonable retained amount.

Pursuant to article 23 of the Company's articles of association, Executive Directors are indemnified, held harmless and reimbursed by the Company for all expenses, financial effects of judgements, fines and amounts paid in settlement actually and reasonably incurred by him in connection with an action, suit, proceeding or investigation against him in his capacity as Executive Director.

1.10.2.10 Shareholdings of Executive Directors

According to the information available to the Company as of December 31, 2021, the Executive Directors held less than 1 % of the shares of the Company.

1.10.2.11 Compliance with remuneration policy

The remuneration of the Executive Directors over the financial year 2021 fully complies with the Remuneration Policy as adopted by the General meeting on June 28, 2021.

1.10.2.12 Scenario analysis

The board (whereby the Executive Directors have not taken part in the discussions and decision-making by the board) have performed - before determining the remuneration of individual Executive Directors - analyses of the possible results of the variable remuneration components and the way in which this affects the remuneration of the Executive Directors. The board has also considered whether scenario analyses result in appropriate levels of remuneration, and whether measures are required to limit the remuneration.

1.10.2.13 Performance assessment

The variable compensation of the Executive Directors is determined by the board (whereby the Executive Directors have not taken part in the discussions and decision-making by the board) based on an annual performance assessment and professional judgement. The variable remuneration is linked to the performance against a set of financial and non-financial targets that is consistent with and supportive of the strategy and long-term interests of the Company. These targets include, among other topics, performance, business development, strategy, investor relations and general management. Risk alignment is also embedded in the target setting to promote sound and effective risk management. The variable remuneration is paid out according to how the Company's business develops, the scope of the individual Executive Director's achievement, as well as the realization of the Company's general objectives.

At the end of the financial year 2021, the board has assessed to what extent the financial and non-financial targets have been met and determined the amounts of the variable remuneration of each of the Executive Directors. The board has determined that over the financial year 2021, Dr. Ulrich Dauer is entitled to a variable compensation

of EUR 78 thousands, Dr. Michael Schaeffer is entitled to a variable compensation of EUR 54 thousands and Florian Schmid is entitled to a variable compensation of EUR 27 thousands.

1.10.3 Remuneration for Non-Executive Directors

From the Company's perspective, it should especially be in the Non-Executive Directors' interest to focus on the Company's sustainable and long-term successful development. As such, the Company believes that fixed remuneration for the Non-Executive Directors is effective. Regardless of their remuneration, all Executive Directors are entitled to reimbursement for their travel expenses.

1.10.3.1 Remuneration

For the financial year 2021, the Non-Executive Directors were entitled to the following fixed remuneration.

<i>kEUR</i>	Base compensation	Committees	Total
Dr. Erich Platzer			
Chair, Member of the compensation committee and nomination and corporate governance committee	60	2	62
Dr. Dinnies von der Osten			
Vice-Chair, Chair of the audit committee	40	5	45
Ms. Charlotte Lohmann			
Chair of the nomination and corporate governance committee, Member of the audit committee and compensation committee	40	7	47
Dr. Jörg Neermann			
Chair of the compensation committee, Member of the audit committee, nomination and corporate governance committee	40	7	47

1.10.3.2 Liability insurance and indemnity

The Company maintains D&O insurance where all the Non-Executive Directors are included.

Pursuant to article 23 of the Company's articles of association, Non-Executive Directors are indemnified, held harmless and reimbursed by the Company for all expenses, financial effects of judgements, fines and amounts paid in settlement actually and reasonably incurred by them in connection with an action, suit, proceeding or investigation against them in their capacity as Non-Executive Director.

1.10.3.3 Shareholdings of Non-Executive Directors

According to the Company's information as of December 31, 2021, the Non-Executive Directors held a total of approximately 1.3 % of the Company's shares.

1.10.4 Pay ratio

Based on best practice provision 3.4.1 of the Code, the Company shall disclose the pay ratio between the remuneration of the Executive Directors and that of a representative reference group of employees of the Company and, if applicable, comment on any important variation in the pay ratios in comparison with the previous financial year.

The average Executive Director-to-employee pay ratio stands at 3.41 in 2021 compared to 3.71 in 2020. The decrease in pay ratio results from the decrease in the average fixed and variable compensation of Executive Directors in 2021.

The calculation of the pay ratios is based on the average of the remuneration received by the employees of the Company, excluding Directors. The remuneration of the employees of the Company taken into account was the remuneration received during the year concerned (i.e. if a variable compensation was paid in 2021 relating to activities performed in 2020, the compensation was taken into account when calculating the pay ratio of the financial year 2021). The Company used both fixed and variable remuneration components when determining the pay ratio for a given year. To allow comparison highly volatile expenses from share-based compensation were excluded.

The full time equivalence of each employee is calculated based on the number of hours worked by the employee in each period, compared to the maximum number of hours/period allowed as per the local law prevalent in the country of operation. As at December 31, 2021, there were 14.9 FTEs.

<i>KEUR</i>	2021	2020	2019	2018	2017
Full time equivalent employees (FTE)	15	16	13	14	14
Average remuneration per FTE	90	98	82	97	95
Year-on-year difference %	(8)%	20%	(15)%	2%	—

1.11 Diversity

The Company has a diversity policy with respect to the composition of the board. This is the diversity policy of the Company as prepared by the Non-Executive Directors in accordance with best practice provision 2.1.5 of the Code. The board recognizes the importance of diversity within the board and believes that the Company's business gains from a wide range of skills and a variety of different backgrounds. A diverse composition of the board contributes to a robust decision-making and proper functioning of the board. The board furthermore recognizes that diversity should not be limited to the board, but should extend to all areas of the Company's business, including but not limited to other key leadership positions. However, the importance of diversity, in and of itself, should not set aside the overriding principle that someone should be recommended, nominated and appointed for being 'the right person for the job'. The Company believes that it is important for the board to represent a diverse composite mix of personal backgrounds, experiences, qualifications, knowledge, abilities and viewpoints. The Company seeks to combine the skills and experience of long-standing members of the board with the fresh perspectives, insights, skills and experiences of new members.

Under the Company's diversity policy, to the extent possible and practicable, the Company intends for the composition of the board to be such that at least 30 % of the Directors are men and at least 30 % of them are women, consistent with applicable Dutch law. In addition to age and gender, the Company recognizes and welcomes the value of diversity with respect to race, ethnicity, nationality, sexual orientation and other important cultural differences. The Company is committed to seeking broad diversity in the composition of the board and will consider these attributes when evaluating new candidates in the best interests of the Company and its stakeholders. In terms of experience and expertise, the Company intends for the board to be composed of individuals who are knowledgeable in one or more specific areas detailed in the Company's diversity policy.

The composition of the board in 2021 (14 % of the Directors are female and 86 % are male) is not yet in line with above diversity policy. In 2021, there were no vacancies in the board. As part of our strategy, diversity is a key focus area and business priority embedded in the operational plans.

1.12 Compliance with the Dutch Corporate Governance Code

The Company is incorporated under Dutch law and adheres to the Code. The code contains best practice provisions that apply to the Company's corporate governance structure. Except as set out below, the Company complies with the principles and best practice provisions of the Code:

- Internal audit function (principle 1.3): The Company has not established an internal audit department. The Non-Executive Directors and the audit committee will remain involved in the execution of the internal audit function as stipulated in best practice provisions (bpp) 1.3.1 to 1.3.5. The board is of the opinion that adequate alternative measures have been taken in the form of the Company's risk management and control systems, as outlined elsewhere in this report, and that it is presently not necessary to establish an internal audit function.
- Appointment and dismissal - bpp 1.3.1, assessment of the internal audit function bpp 1.3.2, Internal audit plan bpp 1.3.3, performance of work 1.3.4, Reports of findings bpp 1.3.5: The Company has not established an internal audit department. We refer to our explanation under principle 1.3.
- Company secretary bpp 2.3.10: Given its limited size and as the lines of communication between the Directors are short and the procedures of the board are fairly straight forward, during the financial year to which this report relates, the board has decided not to appoint a company secretary.
- Remuneration policy proposal bpp 3.1.1, remuneration committee's proposal 3.2.1: The Company has a one-tier board, and therefore, the board as a whole proposes the remuneration policy upon a proposal by the

compensation committee to the general meeting for adoption, based on a recommendation of the Non-Executive Directors.

- Remuneration – supervisory board (principle 3.3): The Company has a one-tier board. Therefore, the board as a whole upon a proposal by the compensation committee proposes the remuneration for its Non-Executive Directors to the general meeting.
- Remuneration report (principle 3.4.1): Due to the Company’s one-tier board structure, the Remuneration Report is prepared by the compensation committee and adopted by the board as a whole.
- Majority requirements for dismissal and overruling binding nominations bpp 4.3.3: The Directors are appointed by the general meeting upon the binding nomination by the board. The general meeting may only overrule the binding nomination by a resolution passed by a two thirds majority of votes cast, provided such majority represents more than half of the Company's issued share capital. In addition, except if proposed by the board, the directors may be suspended or dismissed by the general meeting at any time by a resolution passed by a two thirds majority of votes cast, provided such majority represents more than half of the Company's issued share capital. The possibility to convene a new general meeting as referred to in Section 2:120(3) DCC in respect of these matters has been excluded in the articles of association. The Company believes that these provisions support the continuity of the Company and its business and that those provisions, therefore, are in the best interests of the shareholders and the other stakeholders.

2 Report by the Vivoryon’s Non-Executive Board

2.1 Introduction

The Company’s Non-Executive Directors are entrusted with supervising the performance by the members of the board of their respective duties. The board also acts as a collegial body and as such, the board discussed and budgeted for the coming financial year. Also, at least one a year, the board monitors the operation of the internal risk management and control systems and carries out a systematic assessment of their design and effectiveness. This monitoring covers all material control measures relating to strategic, operational, compliance and reporting risks. Attention is given to observed weaknesses, instances of misconduct and irregularities, indications from whistleblowers, lessons learned and findings from the auditor.

For information on the composition and profile of our non-executive board members, please refer to our section 1.8.3.2 of this report. For information on the attendance at meetings of our Non-Executive board members, please refer to our section 1.8.5 of this report.

2.2 Independence

A Non-Executive Director shall not be considered independent from the Company if one of the criteria as included in best practice provision 2.1.8 of the code apply to him, her, or his or her spouse, registered partner or other life companion, foster child or relative by blood or marriage up to the second degree. The board shall function independently from any instructions by third parties outside the Company. The composition of the board shall be such that the Non-Executive Directors are able to operate independently and critically vis-à-vis one another, the Executive Directors and any particular interests involved. In particular, the following criteria apply to the Non-Executive Directors:

- at most one non-executive board member is not independent pursuant to best practice provision 2.1.8 sections (i) to (v) inclusive of the Code;
- less than half of the total number of non-executive board members is not independent pursuant to best practice provision 2.1.8 of the Code; and
- for each shareholder or group of affiliated shareholders who directly or indirectly hold more than 10 % of the shares in the Company, there is at most one non-executive board member who can be considered to be affiliated with or representing them as stipulated to in best practice provision 2.1.8 sections (vi) and (vii) of the Code.

All Non-Executive Directors are independent within the meaning of the Code.

2.3 Board profile

The size and composition of the board, including the number and the selection of Non-Executive Directors are established in conformity with the board profile available on the Company’s website. The Non-Executive Directors aim to ensure a diverse composition that contributes to a proper functioning of the board. In order to meet the

board's diversity targets as laid down in its diversity policy, diversity aspects shall be considered and be taken into account. The board profile and diversity policy can be found on the Company's website www.vivoryon.com/investors-news/corporate-governance/

2.4 Evaluation

The board is responsible for the quality of its own performance. It discusses, once a year, without the presence of the Executive Directors, its own performance, as well as the performance of its individual members, its committees, the Executive Directors and its individual members.

Performance of the Executive Directors for 2021 was discussed in the last board meeting of the year. Without the presence of the Executive Directors, target achievement for the Executive Directors was discussed individually and in the aggregate.

In addition the Non-Executive Directors conducted an evaluation through a self-assessment regarding their own performance in 2021. The self-assessment was based on a detailed questionnaire that was completed by all Non-Executive Directors. The feedback from the individual Directors was summarized and subsequently evaluated. In the questionnaire specific attention was given to functioning of the committees, functioning and performance of the entire board, interaction with the Executive Directors, ethics, compliance, long-term value creation and the external auditor. The Non-Executive Directors concluded that they are operating well, with open discussions and constructive contributions from all members. It assessed the expertise of the individual members and whether the combined expertise is in line with the characteristics of the Company and its business. Several suggestions were made for further improvement. These relate among other things to succession planning and future board dynamics.

For 2021, the board's performance evaluation resulted in a positive assessment of the board and its individual members.

3 Financial Statements

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Vivoryon Therapeutics N.V. Financial Statements
Statement of Profit or Loss and Other Comprehensive Income for the Years Ended December 31, 2021 and 2020

<i>in kEUR, except for share data</i>	Note	2021	2020
Revenue	6.1, 7.1	10,764	—
Cost of Sales	7.2	(1,569)	—
Gross profit		9,196	—
Research and development expenses	7.3	(17,452)	(13,210)
General and administrative expenses	7.4	(4,549)	(2,807)
Other operating income		7	6
Operating loss		(12,798)	(16,011)
Finance income	6.16, 7.6	967	105
Finance expense	6.16, 7.6	(392)	(604)
Finance result		575	(499)
Result before income taxes		(12,223)	(16,510)
Income taxes	6.16, 7.7	(432)	—
Net loss for the period		(12,655)	(16,510)
Items not to be reclassified subsequently to profit or loss			
Remeasurement of the net defined benefit pension liability	6.11, 8.13	83	(93)
Total other comprehensive income / (loss)		83	(93)
Comprehensive loss		(12,572)	(16,603)
Loss per share in EUR (basic and diluted)	6.19, 8.11.2	(0.63)	(0.83)

The accompanying notes are an integral part of these financial statements.

Vivoryon Therapeutics N.V.
Statements of Financial Position as December 31, 2021 and 2020

<i>in kEUR</i>	Notes	2021	2020
ASSETS			
Non-current assets			
Intangible assets	6.8, 8.1	533	565
Property, plant and equipment	6.7, 8.2	66	80
Right-of-use assets	6.18, 8.3	219	310
Financial assets	6.5, 8.8, 9.1	3,473	3
Total non-current assets		4,291	958
Current assets			
Financial assets	8.8,	3,074	21
Other current assets and prepayments	8.9	2,494	2,487
Cash and cash equivalents	6.5, 8.10	14,661	26,306
Total current assets		20,229	28,793
TOTAL ASSETS		24,520	29,751
Equity			
Share capital	6.6, 8.11	20,050	19,975
Share premium		83,211	82,143
Other capital reserves	6.10, 8.12	6,168	4,404
Accumulated other comprehensive loss	0	(572)	(655)
Accumulated deficit		(92,300)	(79,646)
Total equity		16,557	26,221
Non-current liabilities			
Pension liability	6.11, 8.13, 8.14	1,823	1,981
Provisions long-term	6.12	12	—
Lease liabilities	6.18, 8.6	132	224
Other liabilities	9.1	513	—
Deferred tax liabilities		432	—
Total non-current liabilities		2,912	2,205
Current liabilities			
Provisions	6.12	35	47
Trade payables	6.5, 9.1	4,360	911
Lease liabilities	6.18, 8.6	92	90
Other liabilities	8.15	564	276
Total current liabilities		5,051	1,325
Total Liabilities		7,963	3,530
TOTAL EQUITY AND LIABILITIES		24,520	29,751

The accompanying notes are an integral part of these financial statements.

Vivoryon Therapeutics N.V.

Statements of Changes in Shareholders' Equity for the Years Ended December 31, 2021 and 2020

<i>In kEUR</i>	Share capital	Share premium	Other capital reserves	Accumulated other comprehensive loss	Accumulated deficit	Total equity
January 1, 2020	19,975	82,143	4,245	(562)	(63,136)	42,665
Net loss for the period	—	—	—	—	(16,510)	(16,510)
Remeasurement of the net defined benefit pension liability	—	—	—	(93)	—	(93)
Comprehensive income / (loss)	—	—	—	(93)	(16,510)	(16,603)
Share-based payments	—	—	159	—	—	159
December 31, 2020	19,975	82,143	4,404	(655)	(79,646)	26,221
Net loss for the period	—	—	—	—	(12,655)	(12,655)
Remeasurement of the net defined benefit pension liability	—	—	—	83	—	83
Comprehensive income / (loss)	—	—	—	83	(12,655)	(12,572)
Share-based payments	—	—	1,763	—	—	1,763
Proceeds from exercise of share options	75	1,069	—	—	—	1,144
December 31, 2021	20,050	83,211	6,168	(572)	(92,300)	16,557

The accompanying notes are an integral part of these financial statements.

Vivoryon Therapeutics N.V.

Statements of Cash Flows for the Years ended December 31, 2021 and 2020

<i>in kEUR</i>	<u>Notes</u>	<u>2021</u>	<u>2020</u>
Operating activities			
Result before income taxes		(12,223)	(16,510)
Adjustments for:			
Finance result	6.16, 7.6	(575)	499
Depreciation and amortization	8.5	165	146
Share based payments	6.10, 8.12	1,763	159
Other non-cash adjustments		178	(5)
Changing in			
Financial assets	8.8	(6,522)	310
Other current assets and prepayments	8.9	1,852	1,056
Pension liabilities	6.11, 8.13, 8.14	(158)	(80)
Provisions	6.12	—	35
Trade payables	6.5, 9.1	3,449	372
Other liabilities	8.15	800	(12)
Interest received		21	26
Interest paid		(7)	(7)
Taxes paid	0, 7.7	—	—
Cash flows used in operating activities		(11,257)	(14,012)
Investing activities			
Purchase of plant and equipment		(20)	(64)
Purchase of intangible assets		(8)	(576)
Cash flows used in investing activities		(28)	(640)
Financing activities			
Capital raising costs	8.9	(1,881)	—
Payment of lease liabilities	8.6	(90)	(90)
Proceeds from exercise of share options	8.12	1,144	—
Cash flows provided by /(used in) financing activities		(827)	(90)
Net decrease in cash and cash equivalents		(12,112)	(14,742)
Cash and cash equivalents at the beginning of period	6.5, 8.10	26,306	41,524
Effect of exchange rate fluctuation on cash held		467	(476)
Cash and cash equivalents at the end of period	6.5, 8.10	14,661	26,306

The accompanying notes are an integral part of these financial statements.

Vivoryon Therapeutics N.V.

Notes to the Financial Statements

1 Company information

Vivoryon Therapeutics N.V. is a Dutch public company with limited liability (*'Naamloze Vennootschap'*) that has its statutory seat in Amsterdam, the Netherlands and branch offices in Halle (Saale) and Munich, Germany. The Company's ordinary shares are listed under the ticker symbol 'VVY' with NL00150002Q7 on Euronext Amsterdam, the Netherlands. The Company is registered with the name Vivoryon Therapeutics N.V. in the Trade Register of the Netherlands Chamber of Commerce under number 81075480 (until November 28, 2020 Vivoryon Therapeutics AG). The Company's registered office and business address is Weinbergweg 22, 06120 Halle (Saale), Germany.

Vivoryon Therapeutics N.V. (hereinafter also referred to as 'Vivoryon' or the 'Company'), has activities in the areas of research, preclinical and clinical development of therapeutic drug candidates. The product pipeline currently includes several research and development programs with a focus on the inhibition of the enzyme Glutaminyl Cyclase ('QC' or 'QPCT') and its iso-form iso-Glutaminyl Cyclase (iso-QC or QPCTL) for the treatment of Alzheimer's disease and other diseases. Vivoryon Therapeutics extended its portfolio in 2020 by acquiring patents for the further development of Meprenolone protease inhibitors which have a therapeutic potential for a range of indications including acute and chronic kidney disease and multiple organ fibrosis. The activities of the Company are carried out in Germany being the primary location for its development activities.

The financial statements of Vivoryon Therapeutics N.V. for the year ended December 31, 2021 were authorized for issue by a resolution of the board of directors on April 25, 2022.

2 Financial reporting period

These financial statements cover the year 2021 and 2020, which ended at the balance sheet date of December 31, 2021, respectively December 30, 2020. The transfer of the statutory seat from Germany to the Netherlands in 2020, and the change of its legal form did not result in a change of the financial period.

3 Going concern

As a clinical stage biopharmaceutical company, the Company has incurred operating losses since inception. For the year ended December 31, 2021, the Company incurred a net loss of € 12.7 million (including a operating loss amounting to € 12.8 million, resulting in an operating cash outflow of € 11.3 million). As of December 31, 2021, the Company had generated an accumulated deficit of € 92.3 million and had an equity position amounting to € 16.6 million. The Company expects it will continue to generate significant operating losses for the foreseeable future due to, among other things, costs related to research funding, development of its product candidates and its preclinical programs, strategic alliances and its administrative organization.

To date the Company largely financed its operations through equity raises, licensing proceeds and government grants. On March 31, 2022 the Company completed a private placement by way of accelerated bookbuilding, placing 2,000,000 registered shares at an offering price of EUR 10.50 per share. The gross proceeds of the offering amount to approximately EUR 21.0 million. In addition the Company intends a secondary listing of its common shares on the Nasdaq Global Market within the next 12 months to fund the phase 2b clinical trial in the US and other operational costs beyond May 2023.

As of April 26, 2022, the issuance date of the Company's financial statements for the year ended December 31, 2021, the Company expects on the basis of its most recent financing and business plan that its existing cash and cash equivalents will be sufficient to fund its research and development expenses as well the general and administrative expenses and cash flows from investing and financing activities at least through May 31, 2023.

Management has considered the ability of the Company to continue as a going concern. Based on the Company's recurring losses from operations incurred since inception, expectation of continuing operating losses for the foreseeable future, and the need to raise additional capital to finance its future operations, as of April 26, 2022, the issuance date of the financial statements for the year ended December 31, 2021, the Company has concluded that there is no doubt about its ability to continue as a going concern for a period of at least one year from the date that these financial statements are issued. Consequently, the accompanying financial statements have been prepared on the basis that the Company will continue as a going concern, which contemplates the realization of assets and the satisfaction of liabilities and commitments in the normal course of business.

The future viability of the Company beyond May 31, 2023 is dependent on its ability to raise additional funds to finance its operations. In the event the Company does not complete a secondary listing of its common shares on

the Nasdaq Global Market, the Company expects to be required to seek additional funding through private equity financings, government or private-party grants, debt financings or other capital sources or through collaborations with other companies or other strategic transactions, including partnering deals for one or more of its product candidates. The Company is currently exploring various financing alternatives to meet the Company's future cash requirements, including seeking additional investors, pursuing industrial partnerships, or obtaining further funding from existing investors through additional funding rounds. The Company may not be able to obtain financing on acceptable terms, or at all, and the Company may not be able to enter into collaborations or other arrangements. The terms of any financing may adversely affect the holdings or rights of the Company's shareholders.

If the Company is unable to raise capital on acceptable terms or at all, the Company would be forced to delay, limit, reduce or terminate its product development or future commercialization efforts of one or more of our product candidates, or may be forced to reduce or terminate its operations. Although management continues to pursue these plans, there is no assurance that the Company will be successful in obtaining sufficient funding on terms acceptable to the Company to fund continuing operations, if at all.

4 Risk management system

In addition to operating business risks, Vivoryon is subject to the following risks as a result of the use of financial instruments: credit risks, liquidity risks, market risks (including exchange rate risk). The Company is in the process of establishing a clear and effective organization to monitor and control risks. To make risks controllable from the perspective of risk prevention, a risk management system has been implemented and is continuously being further developed to address identified deficiencies and the different risk areas. Predefined specific individual risks are continuously monitored using early warning signals.

The objective with respect to risk management is to define different risk management processes which make a timely identification of risks relating to quantity, probability of occurrence and damage amounts possible and which provide appropriate counter measures for those who have been named responsible for the processes.

Accordingly, in connection with a risk-oriented and forward-looking management approach, Vivoryon has developed and implemented a risk management system. The implementation of a functional risk management system is considered part of the overall leadership responsibility of management.

Responsibilities are clearly assigned to the individual organizational units which are involved in the risk management process.

Risk management is responsible for the active monitoring and controlling of the respective risk groups. Risk is reduced through risk minimization measures undertaken and by monitoring adherence to limits.

Internal Control Over Financial Reporting

We have historically operated with limited accounting personnel and other resources with which to address our internal controls over financial reporting. In connection with the audit of our financial statements for the years ended December 31, 2019 and 2020, and internal review procedures of our interim financial statements for the six months ended June 30, 2021, we identified a material weakness in our internal control over financial reporting, primarily related to a lack of sufficient accounting and supervisory personnel to ensure proper segregation of duties between the preparation and approval of journal entries or that allows effectively designed review controls over manual, judgmental and complex journal entries in the financial statement close process. As a result of the material weakness, we failed to identify adjustments in some areas of the closing process, including but not limited to completeness of accrued liabilities (cost of legal proceedings, completion of a manufacturing contract) and correct disclosures on forfeited share-based compensation.

To address this material weakness we are preparing a remediation plan, which includes improving the design of our internal control environment; as this remediation plan is not fully implemented, we may be exposed to errors. Our remediation plan aims to improve our controls over financial reporting, by enhancing the robustness of our processes. For example, we will advance our internal control procedures by broader four eyes-principle reviews and we will provide additional training to our finance staff. We will continue to engage third parties as required to assist with technical accounting, application of new accounting standards, tax matters and valuations of equity instruments. In 2021 we have started to address this weakness by adding a highly experienced Chief Financial Officer to our executive board who will lead our efforts to further improve the design and operational effectiveness of our internal control procedures. In addition we have eliminated the majority of manual spreadsheet solutions in the closing process, we now use use automated system-based procedures. In 2022 we will further increase our Finance & Controlling department headcount and thus advance our internal control procedures by broader four eyes-principle reviews and additional controls. While we are working to remediate the weakness as quickly and efficiently as possible, at this time we estimate that we will need Q2-2022 to staff our Finance Controlling

Department, that will enable us to implement additional controls in Q4-2044. To fully remediate this material weakness it may take until end of 2022/Q1-2023.

Executive board members

The risk management process begins with the executive board members which, in the course of overall management, on the basis of the risk bearing potential, provide a clear definition of the strategy, the business types, acceptable and unacceptable risks as well as the total justifiable risk.

Non-Executive board members

The non-executive board members are having a control function with respect to all measures for risk limitation and risk management in the Company.

4.1 Risk groups

In connection with its business operations, Vivoryon is subject to not only operating business risks but also to a multitude of financial risks including credit risks, liquidity risks and market risks as explained below.

4.1.1 Credit risks

Default risks exist for substantially all financial instruments recognized as assets. The amount of cash, cash equivalents and licensing receivables defines the maximum default risk. To the extent that risks are identified for individual financial instruments, these are taken into account by recording valuation adjustments.

Vivoryon's cash balances are held at Deutsche Bank, Landesbank Baden-Württemberg and Commerzbank. All three banks have a rating of bbb or better (S&P). In general, cash balances are only held with financial institutions with prime credit ratings which are subject to the depositor's guarantee fund of German banks. The default risk of the licensing partner Simcere (0, 0) is considered moderate and is monitored on a regular basis.

The maximum default risk for financial assets without considering possible security held or other credit improvements (e.g. right to offset) is estimated with carrying amount:

<i>in kEUR</i>	December 31, 2021	December 31, 2020
Maximum risk of default		
Non-current financial assets (8.8)	3,473	3
Current financial assets (8.8)	3,074	21 ⁽¹⁾
Cash and cash equivalents (8.10, 6.5)	14,661	26,306
Total	21,208	26,330

⁽¹⁾ This amount relates to a rental deposit that was disclosed under "Other current assets and prepayments" in the 2020 Annual Financial Statements.

As of December 31, 2021 and December 30, 2020, the fair value of current and non-current financial assets was in line with the net carrying amount. As of the reporting dates December 31, 2021 and December 31, 2020, the financial assets were neither impaired nor overdue.

4.1.2 Liquidity risk

Liquidity risks in the narrow sense exist when the Company does not have adequate funds to settle its ongoing payment obligations. The payment obligations result primarily from the ongoing cost of business operations and investing activities against which there are only minor cash receipts.

To manage the liquidity situation during the year, the Company utilizes appropriate financial planning instruments. As of December 31, 2021, cash and cash equivalents amounted to EUR 14,661 thousands. For detailed disclosures regarding going concern and liquidity requirements see note 3.

The table below presents an analysis of the remaining terms of all contractually agreed financial liabilities as of December 31, 2021 and December 31, 2020.

<i>in kEUR</i>	Carrying amount	Up to 30 days	1 to 3 months	3 months to 1 year	1 to 5 years
December 31, 2020					
Financial liabilities					
Trade payables	911	911	—	—	—
Lease liabilities*	325	8	24	72	221
Total	1,236	919	24	72	221
December 31, 2021					
Financial liabilities					
Trade payables	4,360	4,267	93	—	—
Lease liabilities (undiscounted payments)	229	8	16	72	133
<i>thereof lease liabilities (discounted)</i>	<i>224</i>	<i>8</i>	<i>15</i>	<i>69</i>	<i>132</i>
Total	4,589	4,275	109	72	133

4.1.3 Market risks

Market risks develop from a possible change in risk factors which lead to a negative change in market value of the financial assets and liabilities which are subject to this risk factor. General risk factors such as currency risks, risks attributable to changes in interest rates and price risks can be of relevance to Vivoryon (see next chapters).

4.1.4 Exchange rate risks

Vivoryon is currently exposed to exchange rate risks concerning cash held in USD as well as receivables and trade payables denominated in USD. A change of (5) % or 5 % in the foreign exchange rate of the USD compared to the EUR could impact net loss for the period and equity by EUR 699 thousands (1 USD = 0.9294 EUR) and EUR (633) thousands (1 USD = 0.8409 EUR).

Exchange rate risks could further develop if a portion of the future expenses or revenues from collaboration agreements or licensing agreements are realized US dollars or in another foreign currency.

4.1.5 Risk of changes in interest rates

Vivoryon does not have any interest-bearing assets or liabilities to a third party. As such, there is no risk with respect to changes in interest rates. Vivoryon has to deal with negative interest on EUR cash holdings, bank's fees range between 0.5 and 0.6 % p.a.. Thus, Vivoryon invested a part of the EUR cash into money market funds (8.10).

4.1.6 Price risks

At present, the financial commitments of the Company (9.2) do not contain variable price conditions and hence do not bear price risks.

4.1.7 Capital management

The primary objective of Vivoryon's capital management is to ensure that it maintains its liquidity to finance its operating activities and meet its liabilities when due. Following the present projections and based on current cash and cash equivalents, the maximum cash reach is through May 31, 2023. Management expects that future financing requirements may be satisfied by the Company's ability to raise funds in the form of equity and/or conduct a partnership agreement. For detailed disclosures regarding going concern and liquidity requirements see notes 3 and 4.

Vivoryon's focus on the long-term increase in the value of the Company is in the interest of its shareholders, employees and collaboration partners.

The objective is to sustainably increase the value of Vivoryon by continuing to generate positive data from studies, efficient processes in research and development, a forward-looking and value-oriented portfolio management as well as continuously increasing the level of awareness of Vivoryon and the approaches it applies in the pharmaceutical industry and, in the mid-term, the transfer of central assets of Vivoryon into industrial

collaborations. To achieve this, the business and financial risks along with financial flexibility are in managements' focus.

On March 31, 2022 the Company completed a private placement by way of accelerated bookbuilding, placing 2,000,000 registered shares at an offering price of EUR 10.50 per share. The gross proceeds of the offering amount to approximately EUR 21.0 million. In addition the Company is seeking to complete an initial public offering ("IPO") of its common shares on the Nasdaq Global Market to fund the phase 2b clinical trial in the US and other operational costs beyond 2023. Furthermore, Vivoryon currently has three share option programs from the years 2014, 2020 and 2021. For detailed disclosures see notes 6.10 and 8.12.

Vivoryon is not subject to any capital requirements stemming from the Articles of Association.

As of December 31, 2021, Vivoryon's equity amounted to EUR 16,557 thousands (December 31, 2020: EUR 26,221 thousands). The total liabilities amount to EUR 7,963 thousands (December 31, 2019: EUR 3,530 thousands).

5 Basis of preparation

5.1 Basis of preparation

5.1.1 Statement of compliance and basis of measurement

The financial statements of Vivoryon have been prepared in accordance with International Financial Reporting Standards (IFRS) of the International Accounting Standards Board, as adopted by the European Union (EU-IFRS) and with Section 2:362(9) of the Netherlands Civil Code.

The Company has a subsidiary, Vivoryon Therapeutics Inc. in Chicago, IL, USA. All operating activities and assets are concentrated in Vivoryon Therapeutics N.V.; currently, Vivoryon Therapeutics Inc. has no operating activities. Considering the negligible significance of this subsidiary to the financial statements, in accordance with Section 2:407 sub 1a of the Netherlands Civil Code, the Company applies the exemption pertaining to the consolidation scope and does not prepare consolidated financial statements.

The statement of profit and loss and other comprehensive income is prepared to classify the expenses by function; the classification of the statement of financial position is based on current and non-current distinction. Vivoryon classifies all amounts expected to be recovered or settled within twelve months after the reporting period as current and all other amounts as non-current.

The financial statements are prepared on the historical cost basis.

5.2 Functional and presentation currency

The financial statements are presented in Euro, which is the Company's functional currency. All amounts have been rounded to the nearest thousand, unless indicated otherwise. As a result, rounding differences may occur.

5.3 Use of judgements and estimates

In preparing these financial statements, management has made judgements and estimates that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized prospectively. Compared to 2020 there has not been a significant change in judgements and estimates.

5.3.1 Judgements

Information about judgements made in applying accounting policies that have the most significant effect on the amounts recognized in the financial statements is included in the notes.

Notes are presented, to the extent practicable, in a systematic order and are cross-referred to/from items in the primary statements. In determining a systematic manner of presentation, an entity considers the effect on the understandability and comparability of the financial statements. The Company has applied judgement in presenting related information together in a manner that it considers to be most relevant to an understanding of its financial performance and financial position. The order presented is only illustrative and entities need to tailor the organization of the notes to fit their specific circumstances.

5.3.2 Assumptions and estimation uncertainties

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the year ending December 31, 2021 is included in the following notes. The estimates may differ from the actual amounts recognized in subsequent periods. Changes in assumptions or estimates to be made are recognized in the statement of profit or loss and other comprehensive income at the time they become known. The circumstances in existence at the time of preparation of the financial statements are considered as well as the future development in the industry-related environment concerning the expected future business development of Vivoryon.

Revenue from contracts with customers

While recognizing revenue from contracts with customers critical judgments and accounting estimates may be required in the five-step approach of IFRS 15. With respect to the revenue recognized in these financial statements, management has made significant judgements and estimates in the following steps.

Management has applied judgement in the assessment if the transferred licenses fulfilled the IFRS 15 criteria for 'right-to-use' vs. 'right-to-access' license. Due to the transfer of the rights including the entire know-how and the lack of further involvement in the subsequent regulatory approval steps of a drug in Greater China, management has recognized a 'right-to-use' license in the year ended on December 31, 2021.

In a further step of IFRS 15 management identified variable compensation with highly probably outcome where significant reversals will not occur, i.e. when contractual prerequisites for milestones and related payments are unavoidable for the customer. Additionally, given the range of possible outcomes for milestones and related payments and the uncertainty for each scenario, management applied the expected value estimation method.

Recognition of research and development expenses

As part of the process of preparing the financial statements, Vivoryon is required to estimate its accrued expenses. This process involves reviewing quotations and contracts, identifying services that have been performed on its behalf, estimating the level of service performed and the associated cost incurred for the service when Vivoryon has not yet been invoiced or otherwise notified of the actual cost, see note 6.14.

Income Taxes

Uncertainties exist with respect to the interpretation of complex tax regulations, changes in tax laws, and the amount and timing of future taxable income. Given the differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax entries already recorded. Deferred tax assets are recognized for unused tax losses to the extent, that deferred tax liabilities exceed deferred tax assets, while the provisions of the German Tax Act on the utilization of loss carryforwards was also considered ('minimum taxation'/'*Mindestbesteuerung*'). Significant management judgement is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing of deferred tax liabilities that are compensated by deferred tax assets from loss carryforwards under the constraints of German tax law. Due to our history of loss-making over the last several years as well as our plans for the foreseeable future, we have not recognized any further deferred tax assets on tax losses carried forward.

5.3.3 Measurement of fair values

A number of the Company's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

The Company has established a control framework with respect to the measurement of fair values. The finance department regularly reviews significant unobservable inputs and valuation adjustments. If third party information is used to measure fair values, then the finance department assesses the evidence obtained from the third parties to support the conclusion that these valuations meet the requirements of the International Financial Reporting Standards, including the level in the fair value hierarchy in which the valuations should be classified.

5.3.4 Fair value hierarchy

The Company does not measure any financial asset or liability at fair value. The carrying amount of all financial instruments approximates their fair value due to their short term maturities, with the exception of money market funds which fair values are disclosed (see 9.1 under Cash and Cash Equivalents). When measuring the fair value of an asset or a liability, the Company uses market observable data as far as possible. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows.

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or a liability could be categorized in different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

The Company recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

6 Summary of significant accounting policies

6.1 Changes in accounting policies

The Company has consistently applied the accounting policies to all periods presented in these company financial statements.

With an effective date of January 1, 2021, the following amended standards and interpretations were required to be applied for the first time:

- Amendment to IFRS 16: COVID-Related Rent Concessions (June 1, 2020 and April 1, 2021)
- Amendments to IFRS 9, IAS 39 IFRS 7, IFRS 4 and IFRS 16 ‘Interest Rate Benchmark Reform – Phase 2’ (January 1, 2021)

The new standards and amendments do not have a material effect on the financial statements.

6.2 New standards and interpretations

The following amendments will be adopted effective January 1, 2022 or later and are not expected to have a material impact on the financial statements of Vivoryon:

- Amendment to IAS 37: Onerous Contracts – Cost of Fulfilling a Contract (January 1, 2022)
- Annual Improvements to IFRS Standards 2018–2020 (January 1, 2022)
- Amendment to IAS 16: Property, Plant and Equipment: Proceeds before Intended Use (January 1, 2022)
- Amendment to IFRS 3: Reference to the Conceptual Framework (January 1, 2022)
- Amendment to IAS 1: Classification of Liabilities as Current or Non-current (January 1, 2023)
- Amendment to IFRS 17 Insurance Contracts (January 1, 2023)
- Amendment to IFRS 1 and IFRS Practice Statement 2: Disclosure of Accounting Policies (January 1, 2023)
- Amendment to IAS 8: Definition of Accounting Estimates (January 1, 2023)
- Amendment to IAS 12: Deferred Tax related to Assets and Liabilities arising from a Single Transaction (January 1, 2023)
- Amendments to IFRS 10 and IAS 28: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture (Available for optional adoption/ effective date deferred indefinitely)

6.3 Foreign currency transactions

Transactions in foreign currencies are translated to the functional currency of the Company at the exchange rate at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the exchange rate at every reporting date. Foreign currency differences are generally recognised in profit or loss and presented within finance costs.

6.4 Determination of fair values

‘Fair value’ is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal or, in its absence, the most

advantageous market to which the Company has access at that date. The fair value of a liability reflects its non-performance risk.

When one is available, the Company measures the fair value of an instrument using the quoted price in an active market for that instrument. A market is regarded as active if transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

If there is no quoted price in an active market, then the Company uses valuation techniques that maximize the use of relevant observable inputs and minimize the use of unobservable inputs. The chosen valuation technique incorporates all of the factors that market participants would take into account in pricing a transaction.

If an asset or a liability measured at fair value has a bid price and an ask price, then the Company measures assets and long positions at a bid price and liabilities and short positions at an ask price.

The best evidence of the fair value of a financial instrument on initial recognition is normally the transaction price — i.e., the fair value of the consideration given or received. If the Company determines that the fair value on initial recognition differs from the transaction price and the fair value is evidenced neither by a quoted price in an active market for an identical asset or liability nor based on a valuation technique for which any unobservable inputs are judged to be insignificant in relation to the measurement, then the financial instrument is initially measured at fair value, adjusted to defer the difference between the fair value on initial recognition and the transaction price. Subsequently, that difference is recognized in profit or loss on an appropriate basis over the life of the instrument but no later than when the valuation is wholly supported by observable market data or the transaction is closed out.

6.5 Financial assets and liabilities — financial instruments

Definition

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. The Company's financial assets include predominantly two receivables from a licensing deal (0) and money market funds held in 'cash equivalents' (8.10). The financial liabilities comprise trade and other payables (incl. accrued liabilities from the R&D projects).

Criteria for the recognition and derecognition, initial measurement

In general purchases or sales of financial assets are recognized on the settlement date, i.e., the date that the Group renders or receives the counter performance (typically cash). The Company initially measures a financial asset at its fair value plus transaction costs.

The Company initially recognizes non-derivative financial liabilities on the date that they are originated at fair value net of directly attributable transaction costs. The Company derecognizes a financial liability when its contractual obligations are discharged, cancelled, or expire.

Classification and subsequent measurement

Considering the Company's business model for managing the financial assets, whose objective is to hold them in order to collect contractual cash flows, and their contractual cash flow characteristics, that are solely payments of principal. The financial assets are also subject to impairment.

The Company's financial liabilities are classified as subsequently measured at amortized cost which is calculated by considering any discount or premium on acquisition and fees or costs that are an integral part of the EIR (effective interest method). An analysis of the carrying amounts from the Statements of Financial Position by measurement category is disclosed under 9.1. Financial assets are not reclassified subsequent to their initial recognition unless the Company changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model. A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL (fair value through profit and loss):

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets — Business model assessment

The Company makes an assessment of the objective of the business model in which a financial asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes:

- the stated policies and objectives for the portfolio and the operation of those policies in practice. These include whether management’s strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realizing cash flows through the sale of the assets;
- how the performance of the portfolio is evaluated and reported to the Company’s management;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed;
- how managers of the business are compensated — e.g., whether compensation is based on the fair value of the assets managed or the contractual cash flows collected; and
- the frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the Company’s continuing recognition of the assets. Financial assets — Assessment whether contractual cash flows are solely payments of principal and interest.

For the purposes of this assessment, ‘principal’ is defined as the fair value of the financial asset on initial recognition. ‘Interest’ is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g., liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Company considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Company considers:

- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable-rate features;
- prepayment and extension features; and
- terms that limit the Company’s claim to cash flows from specified assets (e.g., non-recourse features).

A prepayment feature is consistent with the solely payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for early termination of the contract. Additionally, for a financial asset acquired at a discount or premium to its contractual par amount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

Financial assets — Subsequent measurement and gains and losses

Financial assets at amortized cost: These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

Classification of, subsequent measurement and gains and losses from financial liabilities: Financial liabilities are classified as measured at amortized cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss. Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognized in profit or loss. Any gain or loss on derecognition is also recognized in profit or loss. The Company does not apply hedge accounting.

Criteria for realization of income and expenses

Interest income, if any, would be accrued using the relevant EIR. Interest expense on liabilities, if any, is also accrued based on the effective interest rate.

Gains and losses on the disposal of financial instruments are recognized in full when all significant risks and rewards have been transferred. In the case of a partial transfer of risks and rewards, a distinction would be made as to whether control remains with the company or is transferred.

Impairment losses on financial assets are recognized in profit or loss. For the receivables from a licensing deal (0) the Company determines the exposure to credit default using customer specific default probabilities from external databases. The Company does not recognize an allowance for expected credit losses (ECLs) for the money market funds held in 'cash equivalents' as these money market funds have no term, are of high credit ratings and can be readily converted into cash.

6.6 Share capital

Incremental costs directly attributable to the issue of common shares (6.15), net of any tax effects, are recognized as a deduction from equity. Income tax relating to transaction costs of an equity transaction is accounted for in accordance with IAS 12. In 2021, capital raising costs (8.9) and deferred tax liabilities (7.7) were recognized accordingly.

6.7 Property, plant and equipment

Property, plant and equipment (PP&E) are recognized at cost less accumulated depreciation as well as any accumulated impairment losses which may have been recognized. Subsequent expenditure is capitalized only when it is probable that the future economic benefits associated with the expenditure will flow to the Company.

Depreciation is recognized on the straight-line basis over the useful life. The useful life for operating and office equipment ranges from three to ten years; for laboratory equipment from five to ten years. Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognized within 'other income' or 'other expenses' in the statement of profit or loss and other comprehensive Income.

6.8 Intangible assets

The intangible assets acquired by Vivoryon relate to intellectual property and other intangible assets and are recognized at cost less accumulated amortization as well as any impairment losses which may have been recognized. The amortization is recognized on the straight-line basis over the expected useful life.

Subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognized in profit or loss as incurred.

Amortization begins when an asset is available for use and amortization is calculated using the straightline method to allocate cost over the estimated useful lives. Intellectual property is amortized over the term of the patent rights (initially 18 years), other intangible assets are amortized over three to five years. The useful lives of intangible assets are reviewed at each reporting date. The effect of any adjustment to useful lives is recognized prospectively as a change of accounting estimate. The Company only owns intangible assets with a definite useful life.

6.9 Impairment of non-financial assets

At each reporting date, the Company reviews the carrying amounts of its non-financial assets (other than deferred tax assets) to determine whether there is any indication of impairment.

An impairment expense is recognized when the carrying amount of an asset or a cash-generating unit exceeds the recoverable value as of the reporting date. The Company determined that it has one cash-generating unit. The recoverable value is the higher of the amount representing the fair value less costs of disposal or the value in use. The fair value reflects the estimate of the amount which an independent third party would pay as of the measurement date for the asset or cash-generating unit. In contrast, the value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or cash-generating unit.

6.10 Share-based payment transactions

Vivoryon grants equity-settled share-based payments in the form of option rights to employees and members of the board. The share option programs allow the grantees to acquire the Company's shares. The fair value at grant-

date of the share options awarded is distributed as research and development or general administrative expenses with a corresponding increase in equity (share premium), over the vesting period of the awards. The fair value is based on the Monte-Carlo-simulation model. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognized is based on the number of awards that meet the related service and non-market performance conditions at the vesting date.

6.11 Pensions

Vivoryon has defined benefit pension commitments for two individuals. The pension commitments include entitlements to disability, retirement and survivor benefits in amounts specifically determined for these two individuals.

The pension commitments (defined benefit plans) are accounted for using the projected unit credit method in accordance with IAS 19. The measurement of the pension provision is based on actuarial calculations. The discount rate used represents the market yield at the end of the reporting period for highquality fixed-rate corporate bonds.

The defined benefit obligation and the related current service cost is based on the benefit to the period of service under the defined benefit plan's formula. Actuarial gains and losses are immediately recognized through equity in the other comprehensive income / (loss).

The remeasurement amount recognized in other comprehensive income / (loss) comprises the actuarial gains and losses resulting from the measurement of the pension obligation of defined benefit plans and the difference between the realized return on plan assets and the expected return at the beginning of the period based on the discount rate of the corresponding gross defined benefit obligation. Actuarial gains and losses result from changes in actuarial assumptions.

The net interest expense associated with defined benefit plans is presented in finance expenses.

6.12 Provisions

Provisions are recognized for present obligations which result from past events for which the timing of the future payment is uncertain. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability.

Provisions with a term over one year are recognized at their discounted settlement considering expected cost increases. The discount rate used reflects the current market interest rate and the risks specific to the liability. The unwinding of the discount is recognized as finance cost.

6.13 Revenue from contracts with customers

Furthermore the Company has initially adopted IFRS 15 'Revenues from Contracts with Customers' after the Company received license income from a regional licensing partnership in the third quarter of 2021 (we refer to note 7.1). The Company recognizes revenue in profit or loss for the first time. Explanations on the new accounting policy on IFRS 15 'Revenues from Contracts with Customers' are provided below.

Vivoryon Therapeutics N.V. is a clinical-stage biotechnology company focused on developing innovative small molecule-based medicines. Out-licensing of our technology is part of our ordinary business activities, but revenues from such transactions are infrequently, i.e. not recurring.

Revenue from contracts with customers are recognized over time over the licensing period or at a point in time, when the right (or license) to use intellectual property and the intellectual property is conveyed.

Revenue from the licensing of intellectual property for a certain period with a right to access such intellectual property as defined in IFRS 15 ('right to access' licenses), is recognized over time over the licensing period. Such contracts require, or the customer reasonably expects, that the Company will undertake activities that significantly affect the intellectual property to which the customer has rights. Furthermore, such rights granted by the Company directly would expose the customer to any positive or negative effects of the Company's activities mentioned before. And lastly it is necessary that those activities do not result in the transfer of a good or a service to the customer as those activities occur. If these three conditions are collectively not met, revenue is recognized as explained in the next paragraph. The three conditions described above were not met for the revenues recognized in the third quarter of 2021, we refer to the explanatory notes under 5.3.2.

Revenue from the licensing of intellectual property for a certain period ('right to use' licenses), usually in the structure of an upfront fee and later milestone payments, is recognized at a point in time, when the right (or

license) to use intellectual property and the intellectual property is conveyed. The transaction price for the licenses sold in the third quarter of 2021 comprises fixed (up-front payments) and variable elements (milestone payments and future royalties):

- The transaction price includes all of an amount of up-front payments ('fixed' consideration) as they are highly probable and significant reversal in the amount of cumulative revenue recognized will not occur.
- The transaction price also includes some or all of an amount of variable consideration to the extent described in the following steps. When a contract is signed and at each subsequent reporting date, the Company estimates the consideration for the contingent milestone payments. Given the range of possible outcomes for milestones and related payments and the uncertainty for each scenario, the Company applies the expected value estimation method. In a second step the Company estimates if it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur. The Company includes respective milestone payments in the total estimated transaction price when it is highly probable that the resulting revenue recognized would not have to be reversed in a future period.
- An exception is applied for variable consideration elements in exchange for a license of intellectual property, like sales- or usage-based royalties. These revenues are recognized only when (or as) the later of the following events occurs, the performance obligation to which some or all of the sales-based or usage-based royalty has been allocated has been satisfied; and the subsequent sale or usage occurs.

The revenues from other performance obligations (like supply of the Company's compound or special know-how) under contracts with customers are recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services, usually on delivery of the goods.

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Company satisfies a performance obligation by transferring control over goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognized for the earned consideration that is conditional. Contract assets are subject to impairment assessment. A receivable represents the Company's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due).

A contract liability is the obligation to transfer goods or services to a customer for which the Company has received consideration or an amount of consideration is due from the customer (whichever is earlier). If a customer pays consideration before the Company transfers goods or services to the customer, a contract liability is recognized when the payment is made, or the payment is due (whichever is earlier). Contract liabilities are recognized as revenue when the Company performs under the contract.

6.14 Research and development expenses

Research and development expenses comprise third party services, wages and salaries, cost of materials, intellectual property-related expenses, depreciation and amortization of relevant equipment and intangibles as well as overhead. Research and development expenses mainly consist of costs for clinical trials and manufacturing of the Company's clinical drug product. Additional costs are incurred by drug discovery and pre-clinical activities.

Research expenses are recognized as expenses when incurred. Costs incurred on development projects are recognized as intangible assets in case it is probable that future economic benefits attributable to the asset will flow to Vivoryon considering its technological and commercial feasibility. This is not the case before regulatory approval for commercialization is achieved, and costs can be measured reliably. Given the current stage of the development of Vivoryon's projects, no development costs have yet been capitalized. Intellectual property-related costs for patents are part of the costs for the research and development projects. Therefore, registration costs for patents are expensed when incurred as long as the research and development project concerned does not meet the criteria for capitalization.

6.15 General and administrative expenses

General and administrative costs relate to the operation of the business, unrelated to the research and development function or any individual program. General and administrative expenses consist primarily of personnel-related costs (salaries, benefits, including share-based compensation), and other costs for administrative or operational functions, like professional fees, accounting and legal services, directors' and officers' liability insurance premiums, costs associated with investor relations, costs for information/communication technology and facility-related costs. General and administrative expenses are recognized as expenses when incurred, except for

cost in relation to capital raising. Capital raising costs, are incremental costs directly attributable to the issue of common shares, such as professional fees, accounting and legal services. Such costs are initially capitalized under 'other assets and prepayments' (8.9) and later offset against share premium from a capital increase (6.6) or expensed if a capital increase did not materialize.

6.16 Finance income and expenses

Finance income and expenses are recognized in the appropriate period applying the effective interest rate method. Besides finance income and expenses, the financial result may include income from cash and cash equivalents and gains and losses from financial instruments which are recognized in other comprehensive income / (loss). In addition, net interest expenses associated with pension provisions are included.

6.17 Income tax

Income tax expense comprises current and deferred tax. It is recognized in profit or loss except to the extent that items are recognized directly in equity or in other comprehensive income / (loss).

Interest and penalties related to income taxes, including uncertain tax treatments, are accounted for under IAS 37 Provisions, Contingent Liabilities and Contingent Assets.

Current tax

Current tax comprises the expected tax payable or receivable on the taxable income or loss for the year and any adjustment to tax payable or receivable in respect of previous years. The amount of current tax payable or receivable is the best estimate of the tax amount expected to be paid or received that reflects uncertainty related to income taxes, if any. It is measured using tax rates enacted or substantively enacted at the reporting date. Current tax also includes any tax arising from dividends.

Current tax assets and liabilities are offset only if certain criteria are met. The Company offsets tax assets and liabilities if and only if it has a legally enforceable right to set off current tax assets, current tax liabilities, deferred tax assets and deferred tax liabilities which relate to income taxes levied by the same tax authority.

No current income tax was recognized in 2021 and 2020.

Deferred tax

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognized for:

- temporary differences on the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss;
- temporary differences related to investments in subsidiaries to the extent that the Company is able to control the timing of the reversal of the temporary differences and it is probable that they will not reverse in the foreseeable future.

Deferred tax assets are recognized for unused tax losses, unused tax credits and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be used. Future taxable profits are determined based on the reversal of relevant taxable temporary differences. If the amount of taxable temporary differences is insufficient to recognize a deferred tax asset in full, then future taxable profits, adjusted for reversals of existing temporary differences, are considered, based on the business plan of the Company. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized; such reductions are reversed when the probability of future taxable profits improves.

Unrecognized deferred tax assets are reassessed at each reporting date and recognized to the extent that it has become probable that future taxable profits will be available against which they can be used.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

The measurement of deferred tax reflects the tax consequences that would follow from the manner in which the Company expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset only if certain criteria are met.

No deferred tax was recognized in 2020.

6.18 Leases

At inception of a contract, the Company assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. At commencement or on modification of a contract that contains a lease component, the Company allocates the consideration in the contract to each lease component on the basis of its relative stand-alone prices.

The Company recognizes a right-of-use (RoU) asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Company by the end of the lease term or the cost of the right-of-use asset reflects that the Company will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Generally, the Company uses its incremental borrowing rate as the discount rate.

The Company determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased. Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Company is reasonably certain to exercise, lease payments in an optional renewal period if the Company is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Company is reasonably certain not to terminate early.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, if the Company changes its assessment of whether it will exercise a purchase, extension or termination option or if there is a revised in-substance fixed lease payment. When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

Short-term leases and leases of low-value assets

The company has elected not to recognize right-of-use assets and lease liabilities for leases of low-value assets and short-term leases. The company recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

6.19 Loss per share

Loss per share was determined in accordance with IAS 33. In the calculation of the loss per share, the results for the period attributable to the shareholders are divided by the weighted average number of shares outstanding. As of December 31, 2021 and 2020, no items had a dilutive effect. The Company is loss making and therefore any dilutive additional shares, e.g. stock options, were excluded from the diluted weighted average of common shares calculation because their effect would have been anti-dilutive.

6.20 Operating segments

In light of the development activities that are being performed and the development phase of the Company, the performance of the operations is monitored at the Company level and therefore no other reportable segments have been identified.

7 Material items from Statement of Profit or Loss and Other Comprehensive Income

7.1 Contracts with customers

On June 29, 2021, the Company and Simcere Pharmaceutical Group Ltd (HKEX: 2096, 'Simcere') entered into a strategic regional licensing partnership to develop and commercialize medicines targeting the neurotoxic amyloid species N3pE (pGlu-Abeta) to treat Alzheimer's disease (AD) in Greater China. The agreement grants Simcere a regional license to develop and commercialize varoglutamstat (PQ912), Vivoryon's Phase 2b-stage N3pE amyloid-targeting oral small molecule glutaminy cyclase (QPCT) inhibitor with disease-modifying potential for AD, as well as the Company's preclinical monoclonal N3pE-antibody PBD-C06 in the Greater China region.

The Company has identified the following performance obligations under the contract:

- The Company granted 'right to use' licenses to Simcere to manufacture, sell and market the licensed products in Greater China for the treatment of Alzheimer, furthermore
- upon Simcere's request and payment, Vivoryon will manufacture and supply the compound to Simcere.

Under the terms of the agreement, the Company received upfront payments and will also be eligible for payments upon achievement of certain development and sales milestones, with all components amounting to a total of over USD 565 million. In addition, the Company might receive double-digit royalties on sales. In September 2021 the Company received first upfront payments from Simcere with EUR 4.0 million (USD 4.8 million, after deduction of 10 % Chinese withholding tax (WHT)).

The 'fixed' considerations totaling EUR 7.4 million (USD 8.8 million) were recognized as revenue in the third quarter of 2021. In addition, the Company realized variable compensation also in September 2021 from the first development milestone in the amount of EUR 3.4 million in revenues. The following reasons led to the management's expectation that this variable consideration amount is highly probable and that significant reversal in the amount of cumulative revenue are not expected to occur:

- On June 29, 2021, the Company and Simcere entered into a strategic regional licensing partnership to develop and commercialize medicines targeting the neurotoxic amyloid species N3pE (pGlu-Abeta) to treat Alzheimer's disease (AD) in Greater China. Given the great unmet medical need of safe and effective AD treatments in Greater China and the advanced development stage of varoglutamstat (PQ912) in Europe and the U.S., enabling initiation of clinical development in Greater China is considered to be the primary rationale underlying the agreement. The above-mentioned first milestone payment is based on the initiation of the first human clinical trial of varoglutamstat in mainland China.
- Simcere is fully committed to achieving this milestone and has initiated clinical development planning currently focusing on preparations for IND (investigational new drug application) submission in China.
- Given Simcere's past history of successfully bringing in licensed compounds through clinical development to the market and based on clinical development of varoglutamstat for the treatment of Alzheimer's patients to date in Europe and the U.S., from IND approval through ongoing Phase 2 clinical development, management expects IND approval and subsequent initiation of the first human clinical trial of varoglutamstat in mainland China to be highly likely.
- Given the limited patent term and in light of potential competition from other pharmaceutical companies, management believes that our partner Simcere will do its utmost to start the trial as early as possible.
- Obtaining IND in China follows similar standards as compared to US IND or European CTA procedures.
- On February 28, 2022 Simcere announced that China's Center for Drug Evaluation of National Medical Products Administration has approved the Clinical Trial Application for varoglutamstat,
- For Simcere the steps to be taken prior to achieving the first milestone, which will follow standard procedures of low complexity.

For the reasons listed, management considers the achievement of the above mentioned varoglutamstat development milestone to be highly probable and has therefore recognized the related variable consideration in

revenue in the third quarter of 2021 with the amount of EUR 3.4 million. So far Simcere has made its payments in a timely manner, the Company expects with a very high probability that the revenues for the first variable consideration (EUR 3.4 million) will not be reversed in future. The transaction price was re-assessed and confirmed at December 31, 2021.

Future revenues from this agreement cannot be realized in these condensed interim financial statements, as they are contingent upon the achievement of certain development and sales milestones and significant reversal of related revenues are possible.

The Company's revenue is derived solely from the regional licensing partnership for Greater China (Mainland China, Hong Kong, Macao and Taiwan):

<i>in kEUR</i>	2021	2020
Revenue		
Recognized at a point in time	10,764	—
Recognized over time	—	—
Total revenue from contracts with customers	10,764	—
Geographical information		
Greater China	10,764	—
Total revenue from contracts with customers	10,764	—

7.2 Cost of Sales

<i>in kEUR</i>	2021	2020
Cost of Sales		
Chinese WHT on license payments received	(1,081)	—
Intermediary fee	(488)	—
Total Cost of Sales	(1,569)	—

The Chinese government claims 10 % WHT on the Company's license payments under the Simcere contract. In line with IAS 12 such WHT payments in China were recognized as an expense under 'Cost of Sales' and not as an income tax expense.

Furthermore the Company had engaged an intermediary to conclude the regional licensing partnership. The intermediary receives 5 % commission on license and milestone payments after the Company has received such payments from the Licensee. This commission is included in cost of sales in the period when related revenues are recognized. In 2021 the Company recognized EUR 488 thousands (2020 nil).

7.3 Research and development expenses

<i>in kEUR</i>	2021	2020
Research and development expenses		
Third-party research and development services	(14,294)	(10,597)
<i>thereof manufacturing</i>	(6,049)	(3,764)
<i>thereof clinical research and development activities</i>	(6,055)	(6,087)
<i>thereof pre-clinical research and development activities</i>	(1,861)	(201)
<i>thereof other research and development activities</i>	(329)	(545)
Personnel expenses	(2,066)	(1,308)
<i>thereof share-based payment expenses</i>	(878)	(82)
Patent-, legal and consulting fees	(947)	(845)
Other expenses	(145)	(460)
Total	(17,452)	(13,210)

The research and development expenses were EUR 17.5 million in the year ended December 31, 2021, compared to EUR 13.2 million in the year ended December 31, 2020. The increase of EUR 4.2 million was mainly

driven by a EUR 3.7 million increase in manufacturing and pre-clinical costs as well as EUR 0.8 million higher expenses for share-based payments.

The increase in third-party expenses in the year ended December 31, 2021 for manufacturing activities by EUR 2.3 million, was principally due to the VIVIAD Phase 2b clinical trial and the related manufacturing costs for the study drug supply. The remaining third-party expense increase is mainly related to our pre-clinical research and development activities with EUR 1.7 million.

The increase in share-based payment expenses in the year ended December 31, 2021 is due to an share option grant to management in December 2020. Accordingly the year 2020 discloses one month of in share-based expenses while in 2021 a full twelve month period is included.

In 2020 other expenses included portions of the Company's total administrative expenses. Since 2021, such flat-rate allocations were replaced by expense allocations per cost center. As a result, compared to 2020 there was a shift of approx. EUR 0.2 million to general and administrative expenses (mainly office and facility expenses, see 7.4).

7.4 General and administrative expenses

<i>in kEUR</i>	2021	2020
General and administrative expenses		
Personnel expenses	(1,867)	(982)
<i>thereof share-based payment expenses</i>	(885)	(77)
Legal and consulting fees	(1,917)	(1,303)
Compensation expense for Non-Executive Directors	(200)	(195)
Office and facility expenses	(243)	(40)
Depreciation and amortization expenses	(128)	(107)
Other expenses	(194)	(180)
Total	(4,549)	(2,807)

General and administrative expenses were EUR 4.5 million in 2021, compared to EUR 2.8 million in 2020. The increase of EUR 1.7 million was largely attributable to EUR 0.8 million higher expenses for share based payments as well as EUR 0.6 higher expenses for legal and consulting services in connection with preparation of a US listing.

7.5 Employee benefit expenses

<i>in kEUR</i>	2021	2020
Employee benefit expenses		
Wages and salaries	(1,964)	(1,917)
Social Security contributions (employer's share)	(205)	(213)
Equity or cash settled share-based payments	(1,763)	(159)
Total	(3,932)	(2,289)

During the 2021 financial year the number employees amounted to 17 (2020: 16). All employees were employed outside the Netherlands.

<i>in FTE</i>	2021	2020
Full time equivalents (FTE)		
Management	3	2
Research & Development	7	8
General & Administrative	5	6
Total	15	16

7.6 Finance result

<i>in kEUR</i>	2021	2020
Finance income		
Foreign exchange income	920	79
Reversed impairments on quoted money market funds	26	—
Interest income	21	26
Total	967	105
Finance expenses		
Impairments on quoted money market funds	(102)	(26)
Expected credit loss allowance and other impairments on financial assets	(100)	—
Foreign exchange expense	(166)	(555)
Interest expenses	(24)	(23)
Total	(392)	(604)
Finance result	575	(499)

Foreign exchange income and expense is mainly derived from the translation of the U.S. Dollar cash held by Vivoryon Therapeutics N.V. (8.10).

Interest income results from the Company's U.S. Dollar term deposits and distributions from money market funds.

The expected credit loss allowances (2021: EUR 96 thousands, 2020: nil) were deducted from receivables from the license deal (7.1, 0, 8.8) which have a term between 4 and 16 months at December 31, 2021, the Company determines the exposure to credit default using customer specific default probabilities from Bloomberg databases.

Interest expenses for 2021 as well as for 2020 includes interest expense from pensions and leasing.

7.7 Income taxes

Income taxes comprise current and deferred taxes. Current and deferred taxes are recognized in profit or loss except to the extent that they relate to items recognized directly in equity or other comprehensive loss. On December 31, 2021, Vivoryon had corporate income tax loss carry forwards of EUR 173.6 million (2020: EUR 158,5 million) and trade tax loss carry forwards of EUR 173.4 million (2020: 158,4 million). The tax losses can be carried forward for an unlimited time. The annual loss offset is limited to EUR 1 million, above this amount only 60% of the remaining loss carryforwards can be offset. Due to the Company's current losses and loss carry forwards no current taxes were recognized in 2021 and 2020.

For the determination of deferred taxes, German tax rates were applied as the Company is taxable in Germany only, no taxable activities in the Netherlands occurred. A corporation tax rate of 15 % plus a solidarity surcharge of 5.5 % as well as the trade income tax rate of 15.75 % was used for 2021 and 2020.

<i>in kEUR</i>	2021	2020
Income tax reconciliation		
Loss before income tax	(12,223)	(16,510)
Income tax rate	31.58%	31.58%
Expected tax benefits based on statutory rate	3,860	5,213
Tax losses not recognized	(3,487)	(4,997)
Non-deductible expenses/non-taxable income	(158)	(65)
Non-deductible FX-gains/ (losses)	218	(151)
Reported income tax gains/ (losses)	(432)	—

The significant differences between the expected and the actual income tax expense in the reporting period and the comparative period are explained below.

Differences that would result in deferred tax assets are essentially due to lease liabilities (2021: EUR 0.1 million, 2020: EUR 0.1 million), pension liabilities (2021: EUR 0.2 million, 2020: EUR 0.3 million) and loss carry forwards (2021: EUR 1.0 million, 2020: nil). The deferred tax liabilities arise from right-of-use-assets (2021: EUR 0.1 million, 2020: EUR 0.1 million), a receivable from the first development milestone of the Simcere licensing deal

(2021: EUR 0.9 million, 2020: nil), capitalized capital raising costs (2021: EUR 0.5 million, 2020: nil) and from FX-gains (2021: EUR 0.2 million, 2020: nil). As the Company offsets tax assets and liabilities which relate to income taxes levied by the same tax authority, only the resulting deferred tax liability excess of EUR 0.4 million was recognized in 2021 (2020: nil).

Although the Company has significant tax loss carryforwards, IAS 12 defines very narrow limits for the recognition of deferred tax assets from tax loss carryforwards. IAS12 does not permit deferred tax assets to be recognized just to offset deferred tax liabilities. Therefore in a first step the Company determined the amount that deferred tax assets are exceeded by deferred tax liabilities, before loss carryforwards are considered. In a second step these deferred tax assets from loss carryforwards were assessed in accordance with applicable tax law. Since German tax law limits the annual amounts to be offset per year as described above, the deferred tax assets are only recognized in the amount of EUR 1.0 million and not in the amount of EUR 1.4 million. The result is an excess of deferred tax liabilities of EUR 0.4 million and an equal tax expense in 2021 (2020: nil).

8 Material items from Statements of Financial Position

8.1 Intangible assets

<i>in kEUR</i>	Patents	Other intangible assets	Total
Acquisition costs			
Balance at January 1, 2020	—	384	384
Additions	550	26	576
Disposals	—	—	—
Balance at December 31, 2020	550	410	960
Additions	—	8	8
Disposals	—	(356)	(356)
Balance at December 31, 2021	550	62	612
Amortization			
Balance at January 1, 2020	—	368	368
Additions	(23)	(4)	27
Disposals	—	—	—
Balance at December 31, 2020	(23)	(372)	(395)
Additions	(30)	(9)	(39)
Disposals	—	355	355
Balance at December 31, 2021	(53)	(26)	(79)
Balance at December 31, 2020	527	38	565
Balance at December 31, 2021	497	36	533

On April 7, 2020, Vivoryon acquired IP-rights related to Meprin Substrates from Fraunhofer Gesellschaft/ Institute for Cell Therapy and Immunology (IZI) in the amount of net EUR 550 thousands. The remaining term for the patents is about 16 years (remaining amortization period).

8.2 Property, plant equipment

<i>in kEUR</i>	Hardware	Other PP&E	Total
Acquisition costs			
Balance at January 1, 2020	131	670	801
Additions	62	2	64
Disposals	(14)	(208)	(222)
Balance at December 31, 2020	178	465	643
Additions	20	—	20
Disposals	(87)	(315)	(402)
Balance at December 31, 2021	111	150	261
Depreciation			
Balance at January 1, 2020	(102)	(638)	(740)
Additions	(20)	(5)	(26)
Disposals	15	188	203
Balance at December 31, 2020	(107)	(456)	(563)
Additions	(30)	(3)	(33)
Disposals	86	315	401
Balance at December 31, 2021	(51)	(144)	(195)
Balance at December 31, 2020	71	9	80
Balance at December 31, 2021	60	6	66

Other PP&E merely consists of IT hardware and office/laboratory equipment.

All values for 2020 have been adjusted to the effect that acquisition costs and depreciation for right-of-use assets are now reported separately under 8.3.

8.3 Right-of-use assets

<i>in kEUR</i>	Buildings	IT assets	Total
Acquisition costs			
Balance at January 1, 2020	457	5	462
Additions	—	—	—
Disposals	—	—	—
Balance at December 31, 2020	457	5	462
Additions	—	—	—
Disposals	—	—	—
Balance at December 31, 2021	457	5	462
Depreciation			
Balance at January 1, 2020	(56)	(3)	(59)
Additions	(91)	(2)	(93)
Disposals	—	—	—
Balance at December 31, 2020	(147)	(5)	(152)
Additions	(91)	—	(91)
Disposals	—	—	—
Balance at December 31, 2021	(238)	(5)	(243)
Balance at December 31, 2020	310	—	310
Balance at December 31, 2021	219	—	219

Lease contracts consist of non-cancellable lease agreements mainly relating to the Company's leases of office space in Halle (Saale) and München (Germany) and IT assets. Other RoU assets consists of leased IT hardware with initial acquisition cost of more than EUR 5 thousands.

8.4 Expenses in connection with leases

<i>in kEUR</i>	2021	2020
Expenses in connection with leases		
Depreciation of RoU assets	(91)	(93)
Interest expense on lease liabilities	(6)	(7)
Leases of low-value assets	(1)	(9)
Total	(98)	(109)

8.5 Depreciation and Amortization

<i>in kEUR</i>	2021	2020
Expenses for depreciation and amortization		
Amortization of intangible assets	(40)	(27)
Depreciation of PP&E	(34)	(26)
Depreciation of RoU assets	(91)	(93)
Total	(165)	(146)

Depreciation of PP&E and RoU assets and amortization of intangible assets is included in the statements of operations and comprehensive loss within research and development expenses and general and administrative expenses.

8.6 Lease liabilities

Lease obligations consist of payments under non-cancellable lease agreements mainly relating to the Company's leases of office space in Halle (Saale) and München (Germany). In 2021 the Company had total cash outflows for leases of EUR 90 thousands (2020: EUR 90 thousands). Set out below, are the carrying amounts and the movements of Vivoryon's lease liabilities:

<i>in kEUR</i>	2021	2020
Lease liabilities		
Balance at January 1	315	405
Additions	—	—
Repayments	(96)	(98)
Interest	6	8
Balance at December 31	225	315
<i>thereof short-term lease liabilities</i>	<i>92</i>	<i>90</i>

8.7 Contract balances

The following table provides information about receivables, contract assets and contract liabilities from contracts with customers as of December 31, 2021 and December 31, 2020:

<i>in kEUR</i>	December 31, 2021	December 31, 2020
Contract balances		
Receivables included in 'Financial asset'		
Receiveable from first development milestone, non-current	3,532	—
<i>ECL allowance, non-current</i>	(73)	—
Receiveable from unavoidable license payment, current	3,090	—
<i>ECL allowance, current</i>	(23)	—
Total receivables included in 'Financial assets'	6,622	—
<i>Total receivables included in 'Financial assets' after ECL allowance</i>	<i>6,526</i>	<i>—</i>
Contract assets, which are included in 'Financial assets, current'	—	—
Contract liabilities which are included in 'Other liabilities, current'	—	—

The contract assets are disclosed when the Company has rights to consideration for work completed but not billed at the reporting date. The contract assets are transferred to receivables when the rights become unconditional. For the year ending December 31, 2021, the Company recognized unavoidable license payments (EUR 3.1 million), as the license and of know-how has been transferred and variable compensation for the first development milestone (EUR 3.5 million) under receivables. The contract liabilities would primarily relate to performance obligations of the company not yet fulfilled.

The company did not disclose any amounts in contract liabilities at the beginning of the period that have been recognized as revenue subsequently.

The amount of revenue recognized in the year ended December 31, 2021 from performance obligations satisfied in this period is EUR 10,764 thousands (2020: nil).

8.8 Financial assets

<i>in kEUR</i>	December 31, 2021	December 31, 2020
Financial assets, non-current		
Receiveable after ECL allowance (first development milestone, see 0)	3,459	—
Other non-current financial assets	14	3
	3,473	3
Financial assets, current		
Receiveable after ECL allowance (unavoidable license payment, see 0)	3,067	—
Other current financial assets	7	21
	3,074	21

For the year ending December 31, 2021, the Company recognized variable compensation for the first development milestone (EUR 3.5 million, see 0) under long-term receivables. The payment is contractually not due before April 30, 2023.

8.9 Other assets and prepayments

<i>in kEUR</i>	December 31, 2021	December 31, 2020
Other current assets and prepayments		
Capital raising costs	1,881	—
Prepayments	320	2,337
Value-added tax receivables	281	122
Other taxes	12	7
Total	2,494	2,466

Capital raising costs consists of expenses that have been capitalized as they relate to preparations for potential future issuance of new shares on Nasdaq.

As of December 31, 2021 the prepayments include advance payments for the conduct of VIVA-MIND the clinical 2a trial in amount of EUR 134 thousands (2020: nil) and VIVIAD the clinical 2b trial in amount of EUR 45 thousands (2020: EUR 2,227 thousands). These prepayments mainly relate to our clinical research organization, who are conducting our Alzheimer's Disease clinical trial. Prepayments on clinical contracts have decreased as of December 31, 2021 compared to December 31, 2020 due to advancing services.

Current VAT tax assets as of December 31, 2021 include regular tax reclaims from incoming invoices.

A rental deposit of EUR 21 thousands was disclosed under "Other current assets and prepayments" in the 2020 Annual Financial Statements and is disclosed under "other current/non-current financial assets" in 2021 (8.8).

8.10 Cash and cash equivalents

<i>in kEUR</i>	December 31, 2021	December 31, 2020
Cash and cash equivalents		
Cash equivalents		
Money market funds	861	16,966
Total	861	16,966
Cash at banks		
Cash held in U.S. Dollars	7,274	4,128
Cash held in Euro	6,526	5,212
Total	13,800	9,340
Total cash and cash equivalents	14,661	26,306

The banks and the issuer of the money-market funds (Commerzbank and Landesbank Baden Württemberg) are all investment graded (BBB or better; S&P). Observable quoted prices in active markets were used as fair value (level 1).

8.11 Equity

As of December 31, 2021, Vivoryon's issued capital comprised 20,050,482 registered no par common shares (as of December 31, 2020: 19,975,482). The nominal amount per share is EUR 1.00. All shares are fully paid up.

	2021	2020
Shares outstanding at January 1	19,975,482	19,975,482
Shares issued as a result of the exercise of share options (8.12)	75,000	—
Shares outstanding at December 31	20,050,482	19,975,482

8.11.1 Accumulated other comprehensive income/(loss)

The accumulated other comprehensive income/(loss) (OCI) amounts to EUR (572) thousands as of December 31, 2020. (December 31, 2020 EUR (655) thousands). The OCI solely consists of annual remeasurements of the net defined benefit pension liability.

8.11.2 Loss per share

As of December 31, 2021, Vivoryon's issue capital consisted of 20,050,482 common shares (December 31, 2020: 19,975,482). All common shares are registered with no par value common shares. The calculated nominal amount per share is EUR 1.00. The net loss for the period amounted to EUR 12,655 thousands in the financial year 2021 (2020: net loss of EUR 16,510 thousands). The loss per share was calculated as follows:

	2021	2020
Loss per share calculation		
Weighted average number of common shares outstanding	20,000,014	19,975,482
Loss for the period (in kEUR)	(12,655)	(16,510)
Loss per share (basic/diluted) in Euro	(0.63)	(0.83)

As of December 31, 2021 and 2020, no items had a dilutive effect. The Company is loss making and therefore any dilutive additional shares, e.g., share options, were excluded from the diluted weighted average of common shares calculation because their effect would have been anti-dilutive.

8.12 Share based payments

2014 Share Option Programme

Under the 2014 Share Option Programme ("2014 Plan") the Company granted rights to purchase common shares of Probiodrug AG ("Probiodrug"), the Company's former name, to certain members of the management board (as was installed at that time) and employees of Probiodrug. Under this share option program options were issued in the years 2014 to 2017. As of December 31, 2017, no new grants could be issued under the 2014 Plan.

2020 Share Option Programme

The Company further established a new share option programme on September 13, 2019 (amended on December 4, 2020) ("2020 Plan"), with the purpose of promoting the long-term loyalty of the beneficiaries to the Company. The 2020 Plan governs issuances of share options to current or future employees and members of the board. The initial maximum number of common shares available for issuance under option awards granted pursuant to the 2020 Plan equals 615,000 options. Under this program up to 615,000 options can be issued to current or future employees and executive directors in one or several steps until December 31, 2023. On December 4, 2020, 473,550 share options were issued to the executive members of the board of directors. Each director (Dr. Ulrich Dauer and Dr. Michael Schaeffer) received 236,775 options. These share options had a fair value of EUR 6,41 per option, or respectively a total fair value of EUR 3,035 thousands.

2021 Equity Incentive Plan

The Company established a new omnibus equity incentive plan on June 28, 2021 (the "2021 Plan") governing the issuance of equity incentive awards to enhance our ability to attract, retain and motivate key employees. The initial maximum number of common shares available for issuance under equity incentive awards granted pursuant to the 2021 Plan equals 2,000,000 common shares. On January 1, 2024 and on January 1 of each calendar year thereafter, an additional number of common shares equal to 3% of the total outstanding amount of common shares on December 31 of the immediately preceding year (or any lower number of common shares as determined by the board of directors) will become available for issuance under equity incentive awards granted pursuant to the 2021 Plan. No share options have been issued under the Plan 2021 until December 31, 2021. The plan is administered by the Compensation Committee, the committee determines designated Participants, number of shares to be covered as well as the terms and conditions of any award.

The key terms and conditions related to the grants under the share option programs 2021, 2020 and 2014 are as follows; all options are to be settled by the physical delivery of shares. The fair value of the options granted has been measured using the Monte Carlo Simulation. Service and non-market performance conditions attached to the option programs are not taken into account in measuring fair value.

Beneficiaries	Options available	Options outstanding	Vesting conditions	Option term
Plan 2021				
—	2,000,000	—	the Compensation Committee determines terms and conditions of any award	maximum term of 10 years
Plan 2020				
Granted to executive board members	141,450	473,550	Graded vesting over 3-year period (33,3% each after first, second and third year)	8 years, not exercisable before lapse of 4 years
Plan 2014				
Granted to former members of the board	—	239,501	Immediate vesting on date of grant for 40%, graded vesting over 3-year period (20% each after first, second and third year) period	8 years, not exercisable before lapse of 4 years
Granted to employees	—	92,874	Immediate vesting on date of grant for 40%, graded vesting over 3-year period (20% each after first, second and third year) period	8 years, not exercisable before lapse of 4 years
Total	2,141,450	805,925		

The number and weighted-average exercise prices of stock options under the stock option programs were as follows:

	2021		2020	
	Number of options	WAEP EUR	Number of options*	WAEP EUR
Outstanding at January 1	880,925	11.79	408,975	18.37
Exercised during the year	(75,000)	15.25	—	—
Granted during the year	—	—	473,550	6.10
Outstanding at December 31	805,925	11.46	880,925	11.79
Exercisable at December 31	332,375	19.11	399,375	18.40
Weighted average exercise price (WAEP)				

In the year ended December 31, 2021 75,000 share options were issued upon the exercise of share options under the 2014 Plan, resulting in EUR 1,144 thousands proceeds to the Company. In the year ended December 31, 2020, no shares were issued upon the exercise of share options.

The share options outstanding at December 31, 2021 had an exercise price in the range of EUR 6.10 to EUR 23.60 (December 31, 2020: EUR 6.10 to EUR 23.60) and a weighted-average contractual life of 4.5 years (December 31, 2020: 5.2 years). According to the terms and conditions of the share option programs, exercise is not possible during specified blackout periods and subject to a performance criterion concerning the average share price of Vivoryon shares during the twenty days before exercise.

In 2021 for option rights not yet vested the total expense recognized for the stock option program 2014 amounted to nil (2020: EUR 5 thousands) and for the stock option program 2021 to EUR 1,763 thousands. These amounts were credited to other capital reserves.

8.13 Pension liabilities

Vivoryon has defined benefit pension plan commitments to two former executive board members. The pension commitments include entitlements to disability, retirement and survivor benefits in amounts specifically determined by the individual.

The amount of the defined benefit obligation (DOB, actuarial present value of the accrued pension entitlements) is determined based on actuarial methodologies which require the use of estimates. The calculation was based on the Heubeck 2018 G mortality tables. In 2021 and subsequent years, there will be no further contributions to the plan.

The measurement of the pension benefits is based on a discount rate of 1.03 % in the year ended December 31, 2021, respectively 0.55 % in the year ended December 31, 2020.

<i>in kEUR</i>	2021	2020
As of January 1	1,783	1,751
Interest expense / (income)	9	16
Benefit payments	(78)	(77)
Actuarial (gains) / losses		
Change in financial assumptions	(98)	79
Experience adjustments	15	14
As of December 31	1,631	1,783

The following sensitivity analysis shows how the present value of the DBO would change if the interest rate changed holding other assumptions constant:

- Interest rate (0.5) %: Increase of the DBO by EUR 102 thousands (December 31, 2020: EUR 120 thousands)
- Interest rate 0.5 %: Decrease of the DBO by EUR 93 thousands (December 31, 2020: EUR 109 thousands)

In the reporting period, interest expenses in the amount of EUR 9 thousands (2020: EUR 16 thousands) associated with defined benefit obligations were recognized in the statements of operations and comprehensive loss.

The weighted average duration of the pension commitments is 12.3 years (December 2020: 12.7 years).

8.14 Pension liabilities — pension commitment using the provident fund

Vivoryon has further obligations for granted and vested pension commitment for a former board member in the context of a provident fund in the amount of EUR 14 thousands annually until 2035. This pension liability was calculated using a discount rate of 0.65 % and amounts to EUR 192 thousands as of December 31, 2021 (December 31, 2020: 0.82 % and EUR 198 thousands).

8.15 Other current liabilities

<i>in kEUR</i>	December 31, 2021	December 31, 2020
Liabilities from employee benefits	182	197
Provision for WHT	328	20
Social charges, wage tax	51	59
Other liabilities	3	—
Total	564	276

9 Other disclosures

9.1 Disclosures on financial instruments

The following table shows the carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy. The table does not include fair value information for financial assets and financial liabilities not measured at fair value if the carrying amount is a reasonable approximation of fair value.

<i>in kEUR</i>	Financial assets at				
	FVTPL	amortized cost	level 1	level 2	level 3
	carrying amount		fair value		
December 31, 2020					
Other non-current financial assets	—	3	—	—	—
Other current financial assets	—	*21	—	—	—
Cash and cash equivalents	—	26,306	—	—	—
Trade payables	—	911	—	—	—
December 31, 2021					
Other non-current financial assets	—	3,473	—	—	—
Other current financial assets	—	3,074	—	—	—
Cash and cash equivalents	—	14,661	—	—	—
Other non-current financial liabilities	—	159	—	—	—
Trade payables	—	4,360	—	—	—
Other current financial liabilities	—	3	—	—	—

* This amount relates to a rental deposit that was disclosed under “Other current assets and prepayments” in the 2020 Annual Financial Statements.

Financial assets mainly have increased due to two receivables from a licensing deal (8.8). As of December 31, the fair value of current and non-current financial assets is estimated with the carrying amount. The expected credit loss allowances (2021: EUR 96 thousands, 2020: nil) were deducted from the two licensing receivables (7.60).

Trade payables increased to EUR 4,360 thousands as of December 31, 2021, from € 911 thousands as of December 31, 2020 as a higher volume of services had not yet been paid as of the cut-off date.

9.2 Contingencies and other financial commitments

The Company enters contracts in the normal course of business with CROs and clinical sites for the conduct of clinical trials, professional consultants for expert advice and other vendors for clinical supply manufacturing or other services. Total contractual obligations as of December 31, 2021 were EUR 3.449 thousands and comprised research and development services as well as of consulting services (2020: EUR 5,441 thousands). Out of these commitments, EUR 3.360 thousands are due within one year (2020: EUR 5,363 thousands).

Beginning of 2021 few shareholders of Vivoryon applied for court procedures verifying the adequacy of our indemnity offer and of the compensation offered to all shareholders who opposed in November 2020 to the change of legal form into a Dutch N.V.. As of the reporting date the court did not decide on the acceptance of such a law mediation procedure.

9.3 Related party relationships

Related parties

The following individuals and entities were considered related parties of Vivoryon during the reporting period:

- Executive members of the board of directors of the Company or a shareholder of the Company
- Non-executive members of the board of directors

Transactions with key management personnel

The total compensation granted to Executive Board Members for the year is EUR 2,615 thousands (2020: EUR 731 thousands), and is specified below on an individual level. The amount of EUR 159 thousands (annual

performance-based compensation) wasn't paid to Executive Board Members but accrued (2020: EUR 100 thousands).

<i>kEUR</i>	Dr. Ulrich Dauer, CEO		Dr. Michael Schaeffer, CBO		Florian Schmid, CFO, since Apr 1, 2021	
	2021	2020	2021	2020	2021	2020
Fixed compensation	273	240	240	220	154	—
Health insurance contribution	5	5	5	5	4	—
Direct insurance	—	—	5	5	—	—
Total fixed compensation	278	245	250	230	158	—
Annual performance-based compensation	78	60	54	40	27	—
Total variable compensation	78	60	54	40	27	—
Share-based compensation	885	78	885	78	—	—
Total compensation	1,241	383	1,189	348	185	—

For the financial year 2021, the Non-Executive Board Members were entitled to the following fixed remuneration (base compensation and participation in committees).

<i>in kEUR</i>	2021	2020
Compensation		
Dr. Erich Platzer	61	60
Dr. Dinnies von der Osten	45	45
Ms. Charlotte Lohmann	47	45
Dr. Jörg Neermann	47	45
Total	200	195

The outstanding balances towards our Non-Executive Board Members amounted to EUR 200 thousands as of December 31, 2021 and EUR 195 thousands as of December 31, 2020. It is contractually agreed that the remuneration of Non-Executive Board Members is to be paid until January 31 of the following year.

9.4 Auditor's fee

The following fees were charged by KPMG Accountants N.V. to the company, its subsidiaries and other consolidated companies, as referred to in Section 2:382a(1) and (2) of the Dutch Civil Code.

<i>in kEUR</i>	KPMG Accountants N.V.	Other KPMG Network	Total
2020			
Audit of the financial statements	175	8	183
Other non-audit services	—	—	—
Total	175	8	183
2021			
Statutory audit of the financial statements	175	—	175
Audit of the financial statements according to the PCAOB ¹ auditing standards	1,211	—	1,211
Other non-audit services	—	—	—
Total	1,386	—	1,386

The fees mentioned in the table for the audit of the financial statements 2021 (2020) relate to the total fees for the audit of the financial statements 2021 (2020), irrespective of whether the activities have been performed during the financial year 2021 (2020). In 2021 and 2020 no services were performed by KPMG that related to tax and other non-audit services. Until 2020 KPMG AG Wirtschaftsprüfungsgesellschaft, Germany was the auditor for Vivoryon.

¹ The Public Company Accounting Oversight Board (PCAOB) is a nonprofit corporation in the U.S. created by the Sarbanes-Oxley Act of 2002 to oversee the audits of public companies.

KPMG Accountants N.V. was appointed as new auditor for 2021 by resolution of the extraordinary general meeting of Vivoryon Therapeutics N.V. on March 12, 2021.

9.5 COVID pandemic

Despite strict national lockdown regulations, Vivoryon has managed to maintain the work ability of all employees. For this purpose, individual solutions such as working from home and time-shifted working in the offices were used. Business travel typically used to identify potential investors or cooperation partners, was largely replaced by using video conference systems. All employees of the Company are still encouraged to act in accordance with the recommendations for protection against Sars-CoV2 infections, i.e. comply with the specified minimum distances and, where this is not possible, wear mouth and nose protection. Business trips should only be undertaken if absolutely necessary.

Vivoryon sources certain services from contract research organizations (CROs) in its development projects. The lockdown regulations in Europe, the United States and India have had a negative impact on the timelines of projects resulting in a slight delay of patient enrollment in the Phase 2b, randomized and multi-center clinical VIVIAD study in Europe (“VIVIAD”). Moreover, with the outbreak of the pandemic, Vivoryon carried out a respective risk analysis for its projects. Since Alzheimer's patients are mostly elderly individuals and thus are representing a particular risk group towards severe COVID progressions, Vivoryon has made the initiation of its clinical study in relation to the community-spreading situations in participating countries (Denmark, the Netherlands, Germany). Additionally, appropriate precautionary measures have been established at all test centers. These analyses and measures were part of the applications to the respective competent national authorities for approval of the clinical trial.

This situation is being re-evaluated at regular intervals and, if necessary, appropriate measures will be implemented which may include the complete stop of the recruitment of study participants leading to a delay of the trial timelines and study results.

A further risk resulting from the pandemic, is the increased vulnerability of the supply chain for clinical study materials. To mitigate this risk, the Company has been establishing a second source for the synthesis of the active pharmaceutical ingredient (API).

9.6 Subsequent events

Geo-political conflicts

The recent conflict in Europe between Russia and the Ukraine resulted in sanctions and will further provoke retaliatory measures. This change may have a wide impact on the availability and price of various materials and services and might also sustainably effect global financial markets. Cost inflation may negatively impact our cash reach while capital markets disruptions may adversely affect investor's demand and thus financing possibilities. The development of current geo-political conflicts is subject to considerable uncertainty and as such the impact on our business will be monitored and assessed going forward.

Issue of share capital and related party transactions

On March 31, 2022 the Company completed a private placement by way of accelerated bookbuilding, placing 2,000,000 registered shares at an offering price of EUR 10.50 per share. The new shares from the capital increase represents 10.0% of Vivoryon's existing share capital and have been issued from the Company's authorized capital under exclusion of the existing shareholders' pre-emptive rights. As a consequence, the Company's issued share capital has increased to EUR 22,050,482. The gross proceeds of the offering amount to approximately EUR 21.0 million. Vivoryon intends to use the net proceeds from the offering to support the ongoing clinical development of its lead candidate varoglutamstat, currently in Phase 2 in Europe and the United States for the treatment of patients with Alzheimer's disease, as well as for general corporate purposes.

Pursuant to the Pricing and Volume Agreement from April 1, 2022, in the aggregate 2,000,000 new shares were issued, of which 133,331 new shares have been directly subscribed by Executive Board Members (4,761 shares) and Non-Executive Board Members (128,570 shares). There were no further events of particular significance subsequent to the balance sheet date.

Signature page to the annual report of Vivoryon Therapeutics N.V. for the financial year ended December 31, 2021.

By signing this signature page, the annual report of Vivoryon Therapeutics N.V. for the financial year ended December 31, 2021, is approved.

Dr. Ulrich Dauer

Dr. Michael Schaeffer

Florian Schmid

Dr. Erich M. O. Platzer

Dr. Dinnes J. von der Osten

Charlotte Lohmann

Dr. Jörg Neermann

4 Other Information

Provisions in the Articles of Association governing the profit appropriation

Under article 26 of the Company's Articles of Association, the Board shall determine the amount of the profits accrued in a financial year that shall be added to the reserves of the Company. The allocation of the remaining profits shall be determined by the General Meeting. The Board shall make a proposal for that purpose.

Independent auditor's Report

The independent auditor's report is set forth on the following pages.



Independent auditor's report

To: the General Meeting of the Board of Directors of Vivoryon Therapeutics N.V.

Report on the audit of the financial statements 2021 included in the annual report

Our opinion

In our opinion the accompanying financial statements give a true and fair view of the financial position of Vivoryon Therapeutics N.V. as at December 31, 2021 and of its result and its cash flows for the year then ended, in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code.

What we have audited

We have audited the financial statements 2021 of Vivoryon Therapeutics N.V. (the 'Company') based in Amsterdam, The Netherlands.

The financial statements comprise:

- 1 the statement of financial position as at December 31, 2021;
- 2 the following statements for 2021: the statement of profit or loss and other comprehensive income, changes in shareholders equity and cash flows; and
- 3 the notes comprising a summary of the significant accounting policies and other explanatory information.

Basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the 'Our responsibilities for the audit of the financial statements' section of our report.

We are independent of Vivoryon Therapeutics N.V. in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

Our audit procedures were determined in the context of our audit of the financial statements as a whole. Our observations in respect of going concern, fraud and non-compliance with laws and regulations and the key audit matters should be viewed in that context and not as separate opinions or conclusions.

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Audit approach



Summary

Materiality

- Materiality of EUR 400.000
- 3.98% of loss before tax from continuing operations

Going concern, Fraud/Noclar and Climate

- Going concern: no significant going concern risks identified
- Fraud & Non-compliance with laws and regulations (Noclar): management override of controls (presumed fraud risk)
- Climate: the Company's strategy in relation to climate change was initiated and under discussion with the management and those charged with governance. We have considered the impact of climate-related risks on our identification and assessment of risks of material misstatement in the financial statements.

Key audit matters

- IFRS 15 variable consideration for License agreement development milestones

Opinion

Unqualified

Materiality

Based on our professional judgement we determined the materiality for the financial statements as a whole at EUR 400.000 (2020: EUR 525.000). The materiality is determined with reference to loss before tax from continuing operations (3.98%). We consider loss before tax from continuing operations as the most appropriate benchmark based on our analysis of the common information needs of users of the financial statements and stakeholders of the Company. On this basis, and given the stage of the Company's research & development projects, we believe that loss before tax from continuing operations is the most relevant metric to determine materiality. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

We agreed with the Board Directors that misstatements identified during our audit in excess of EUR 20.000, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

Audit response to going concern – no significant going concern risks identified

As explained in Note 3 of the financial statements, the management board has performed its going concern assessment and concluded that there are no events and conditions that may cast significant doubt on the Company's ability to continue as a going concern.

To assess the management board's assessment, we have performed, inter alia, the following procedures:

- we considered whether the management board's assessment of the going concern risks includes all relevant information of which we are aware as a result of our audit;



- we questioned the management board on the key assumptions and principles underlying the management board’s assessment of the going concern risks;
- we analyzed the operating results forecast and the related cash flows compared to the previous financial year, developments in the business sector and any information of which we are aware as a result of our audit;
- we evaluated whether the management board’s assessment of going concern is adequately disclosed on page 80 of the financial statements.
- we analyzed the company’s financial position as at year-end and compared it to the previous financial year in terms of indicators that could identify significant going concern risks.
- we inspected subsequent to year-end proceeds from the private placement of share capital completed by the Company.

The outcome of our risk assessment procedures did not give reason to perform additional audit procedures on management’s going concern assessment.

Audit response to the risk of fraud and non-compliance with laws and regulations

In chapter Risks related to the operation of our business of the annual report, the management board describes its procedures in respect of the risk of fraud and non-compliance with laws and regulations.

As part of our audit, we have gained insights into the Company and its business environment, and assessed the design and implementation of the Company’s risk management in relation to fraud and non-compliance. Our procedures included, among other things, assessing the Company’s code of conduct, whistleblowing procedures, incidents register and its procedures to investigate indications of possible fraud and non-compliance. Furthermore, we performed relevant inquiries with management and those charged with governance and other relevant functions, such as the finance department. As part of our audit procedures, we:

- assessed other positions held by management board members and/or other employees and paid special attention to procedures and governance/compliance in view of possible conflicts of interest;
- evaluated hotline reports on indications of possible fraud and non-compliance.

In addition, we performed procedures to obtain an understanding of the legal and regulatory frameworks that are applicable to the Company and identified the following areas as those most likely to have a material effect on the financial statements:

- pharmaceutical and intellectual property laws and regulations (reflecting the Company’s requirement to follow regulatory approval processes of the FDA, EMA and other Competent Authorities).

We evaluated the fraud and non-compliance risk factors to consider whether those factors indicate a risk of material misstatement in the financial statements.

We assessed the presumed fraud risk on revenue recognition as irrelevant, because we identified only one revenue agreement with Simcere Pharmaceutical Group Ltd. for the license partnership to treat Alzheimer's disease in the Greater China region that has limited incentives, rationalizations, and/or opportunities to fraudulently report revenue in the audited period due to the following:



- The shareholders and potential investors of the Company are primarily focused on the successful results from clinical trials and the effective utilization of cash from the operations. The cash movements are not simultaneous to revenue recognized from the licensing agreement;
- The Company's performance is not assessed in the light of year-over-year revenue growth due to clinical stage in the research and development areas. The major financial results are not the primary driver for share price movements that can impact the market.

Based on the above and on the auditing standards, we identified the following presumed fraud risk laid down in the auditing standards risk that is relevant to our audit , and responded as follows:

— **Management override of controls (a presumed risk)**

Risk:

- Management is in a unique position to manipulate accounting records and prepare fraudulent financial statements by overriding controls that otherwise appear to be operating effectively.

Responses:

- We evaluated the design and the implementation of internal controls that mitigate fraud and non-compliance risks, such as processes related to journal entries.
- We performed a data analysis of high-risk journal entries related revenue and expense accounts and evaluated key estimates and judgments for bias by the Company's management. Where we identified instances of unexpected journal entries or other risks through our data analytics, we performed additional audit procedures to address each identified risk, including testing of transactions back to source information.
- We evaluated the business rationale for significant transactions that are outside the normal course of business for the entity, or that otherwise appear to be unusual.
- We performed inquiries of individuals involved in the financial reporting process about inappropriate or unusual activity relating to the processing of journal entries and other adjustments.
- We incorporated elements of unpredictability in our audit, including: 1) decrease the level of materiality in comparison with the prior audit; 2) modifying the timing and extent of audit procedures over the trade payable balance; 3) engaging the new audit team members with various experience in the audit practice.

Our procedures to address the identified risk of fraud did not result in a key audit matter.

We communicated our risk assessment, audit responses and results to management and directors.

Our audit procedures did not reveal indications and/or reasonable suspicion of fraud and non-compliance that are considered material for our audit.



Audit response to climate-related risks

The management is responsible for preparing the financial statements in accordance with the applicable financial reporting framework, including considering whether the implications from climate-related risks and commitments have been appropriately accounted for and disclosed.

The management has performed its analysis of the impact of climate-related risks on the company's business and operations going forward and on its accounting in the current financial statements. In the climate Risk factors chapter note 1.6.4 of the annual report, the company concluded that the effect of climate-related risks do not have a material impact on accounts and disclosures, including judgements and estimates in the financial statements.

The evaluation of the effectiveness of management's strategy against internal or external goals set is not in scope of our audit of the financial statements. As part of our audit we consider potential effects of climate-related risks on the accounts and disclosures, including estimates and judgements in the current year's financial statements to determine whether the financial statements are free from material misstatements. This includes discussion of the company's strategy in relation to climate change with management and those charged with governance and inspecting minutes and external communications for significant climate related commitments, strategies and plans made by the management.

Our key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the Board of Directors. The key audit matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on this key audit matter.

Compared to last year the key audit matter with respect to Conversion Vivoryon Therapeutics AG into Vivoryon Therapeutics N.V. is not included, as this specifically relates to the financial year 2020.

IFRS 15 variable consideration for License agreement development milestones

Description

On June 29, 2021, Vivoryon Therapeutics N.V. and Simcere Pharmaceutical Group Ltd. entered into a licensing agreement to develop and commercialize medicines targeting the neurotoxic amyloid species N3pE (pGlu-Abeta) to treat Alzheimer's disease (AD) in the Greater China region.

Based on the agreement Vivoryon Therapeutics N.V. initially adopted IFRS 15 'Revenues from Contracts with Customers' and recognized revenue in Statement of Profit or Loss and Other Comprehensive Income for the first time since its inception. The revenue recognized consists of fixed consideration and variable consideration to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

The variable consideration is determined after the achievement of certain development milestones. The Company's process of estimating the variable consideration involves uncertainty associated with the future occurrence or outcome of events and conditions underlying the significant assumptions, such as when contractual terms for development milestones and related payments are unavoidable for the customer. Given the complex estimations and judgements involved, we considered this as a key audit matter for our audit.

Further reference is made to Note 5.3.2 Assumptions and estimation uncertainties, Note 6.1 Changes in accounting policies and Note 7.1 Revenue from contracts with customers as included in the financial statements.

Our response

Our audit procedures performed to address this key audit matter included:

- We obtained an understanding of Management’s accounting policy choices and assessed the appropriateness under IFRS 15 ‘Revenues from Contracts with Customers’;
- We inspected the licensing agreement to gain an understanding of the contract terms to assess the accounting implications and verify proper accounting treatment and completeness of key terms utilized in the revenue recognition model in Management’s revenue recognition under IFRS 15;
- We obtained understanding of Management’s process to develop the estimate and judgements used to determine the amount of variable consideration for development milestones;
- We evaluated the reasonableness of management’s key judgments and estimates made in applying IFRS 15 ‘Revenues from Contracts with Customers’, including a selection of assumptions and data sources;
- We obtained direct accounts receivables balance confirmation from Simcere Pharmaceutical Group Ltd.;
- We evaluated the adequacy of revenue-related disclosures including the accounts impacted by this transaction.

Our observation

The results of our procedures performed were satisfactory and we consider the disclosure to be adequate.

Report on the other information included in the annual report

In addition to the financial statements and our auditor’s report thereon, the annual report contains other information.

Based on the following procedures performed, we conclude that the other information:

- is consistent with the financial statements and does not contain material misstatements; and
- contains the information as required by Part 9 of Book 2 of the Dutch Civil Code for the management report and other information.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is less than the scope of those performed in our audit of the financial statements.

Management of the Vivoryon Therapeutics N.V. is responsible for the preparation of the other information, including the information as required by Part 9 of Book 2 of the Dutch Civil Code.



Report on other legal and regulatory requirements and ESEF

Engagement

We were engaged by the resolution of the board of directors as auditor of Vivoryon Therapeutics N.V. on January 25, 2022, as of the audit for the year 2021 and have operated as statutory auditor ever since that financial year.

No prohibited non-audit services

We have not provided prohibited non-audit services as referred to in Article 5(1) of the EU Regulation on specific requirements regarding statutory audits of public-interest entities.

Services rendered

For the period to which our statutory audit relates, in addition to this audit, we have provided the following services to the Vivoryon Therapeutics N.V.:

- Review of the quarterly financial statements;
- Review of F-1 form filings with the U.S. Securities and Exchange Commission

European Single Electronic Format (ESEF)

Vivoryon Therapeutics N.V. has prepared its annual report in ESEF. The requirements for this format are set out in the Commission Delegated Regulation (EU) 2019/815 with regard to regulatory technical standards on the specification of a single electronic reporting format (these requirements are hereinafter referred to as: the RTS on ESEF).

In our opinion, the annual report prepared in the XHTML format, including the financial statements of Vivoryon Therapeutics N.V., has been prepared in all material respects in accordance with the RTS on ESEF.

Management is responsible for preparing the annual report including the financial statements, in accordance with the RTS on ESEF. Our responsibility is to obtain reasonable assurance for our opinion whether the annual report is in accordance with the RTS on ESEF.

Our procedures taking into consideration Alert 43 of NBA (the Netherlands Institute of Chartered Accountants), included amongst others:

- obtaining an understanding of the entity's financial reporting process, including the preparation of the annual financial report in the XHTML- format;
- examining whether the annual report in the XHTML-format is in accordance with the RTS on ESEF.

Description of responsibilities regarding the financial statements

Responsibilities of Management of the Vivoryon Therapeutics N.V. or the financial statements

Management of the Vivoryon Therapeutics N.V. is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code.

Furthermore, Management of the Vivoryon Therapeutics N.V. is responsible for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error. In that respect Management of the Vivoryon Therapeutics N.V., under supervision of the Board of directors, is responsible for the prevention and detection of fraud and non-compliance with laws and regulations, including determining measures to resolve the consequences of it and to prevent recurrence.

As part of the preparation of the financial statements, Management of the Vivoryon Therapeutics N.V. is responsible for assessing the Vivoryon Therapeutics N.V.'s ability to continue as a going concern. Based on the financial reporting frameworks mentioned, Management of the Vivoryon Therapeutics N.V. should prepare the financial statements using the going concern basis of accounting unless Management of the Vivoryon Therapeutics N.V. either intends to liquidate the Vivoryon Therapeutics N.V. or to cease operations, or has no realistic alternative but to do so. Management of the Vivoryon Therapeutics N.V. should disclose events and circumstances that may cast significant doubt on the company's ability to continue as a going concern in the financial statements.

The Non-Executive directors are responsible for overseeing the Vivoryon Therapeutics N.V.'s financial reporting process.

Our responsibilities for the audit of the financial statements

Our objective is to plan and perform the audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not detect all material errors and fraud during our audit.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

A further description of our responsibilities for the audit of the financial statements is located at the website of de 'Koninklijke Nederlandse Beroepsorganisatie van Accountants' (NBA, Royal Netherlands Institute of Chartered Accountants) at [eng_oob_01.pdf \(nba.nl\)](#) / [eng_beursgenoteerd_01.pdf \(nba.nl\)](#). This description forms part of our auditor's report.

Amstelveen, April 27, 2022

KPMG Accountants N.V.



H.A.P.M. van Meel RA