HERANTIS PHARMA

Annual Report 2018

Herantis in brief

Herantis Pharma Plc (“Herantis”) is a drug development company with focus on novel treatments in unmet clinical needs

The company has **two** ongoing randomized, placebo-controlled **clinical studies**

Lymfactin® is intended as the first approved drug for the treatment of lymphedema

CDNF is intended as the first disease-modifying treatment of Parkinson’s disease and other neurodegenerative diseases

The company’s drug candidates are based on globally leading scientific research in Finland

Aging population and growing health care costs increase the need for more efficacious treatments that also ease the economic burden of diseases. We believe that Herantis’ drug candidates meet these criteria.

Progress in 2018

- Lymfactin® Phase 1 clinical study completed patient recruitment **8.2.2018**
- CDNF Phase 1–2 study expanded in two new centers (Helsinki, Lund) thanks to positive safety assessment **14.2.2018**
- Herantis was awarded Innovation prize of the Chemical Industry Federation of Finland **19.4.2018**
- Lymfactin® Phase 2 study was initiated **13.6.2018**
- Non-invasive CDNF was licensed from the University of Helsinki and its development was launched **6.7.2018**
- Two randomized clinical studies actively recruiting patients

Content

CDNF is targeted as the world’s first drug to stop progression of Parkinson’s disease

Jani Koskinen is responsible for the manufacturing of Herantis’ investigational products for clinical studies

Herantis aims at significantly increasing the value of its drug candidates

by advancing them through early clinical development

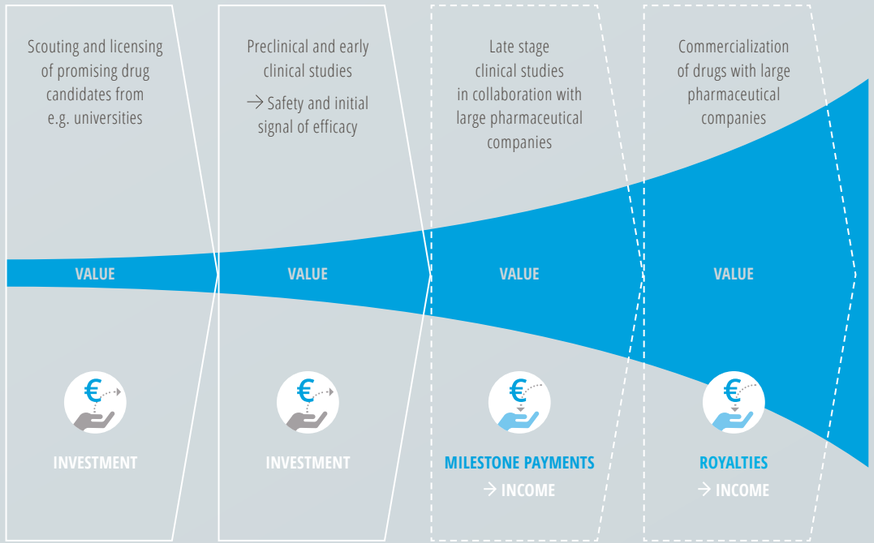
Drug development is a long-term undertaking strictly regulated by authorities. It progresses in stages including the selection and optimization of a new drug candidate (molecule), the development of its manufacturing process, production, preclinical studies, several phases of clinical studies, and eventually, commercialization. A typical development program may take 10-15 years. However, the time required varies and depends for instance on the prevalence of the target disease, the benefits of the drug candidate compared with known treatments, and the available resources. The needed investments also vary and can total hundreds of millions of euros.

Drug development is always associated with significant risks. The program can fail at any stage. Only a fraction of all drug candidates reaches clinical studies. Drug candidates that aim at significant breakthroughs in the treatment of a disease are often based on cutting edge science. This implies evolving scientific research during the development program, which requires agility. Large pharmaceutical companies are often less agile than smaller ones, so they frequently collaborate to add interesting novel compounds in the large company's portfolio.

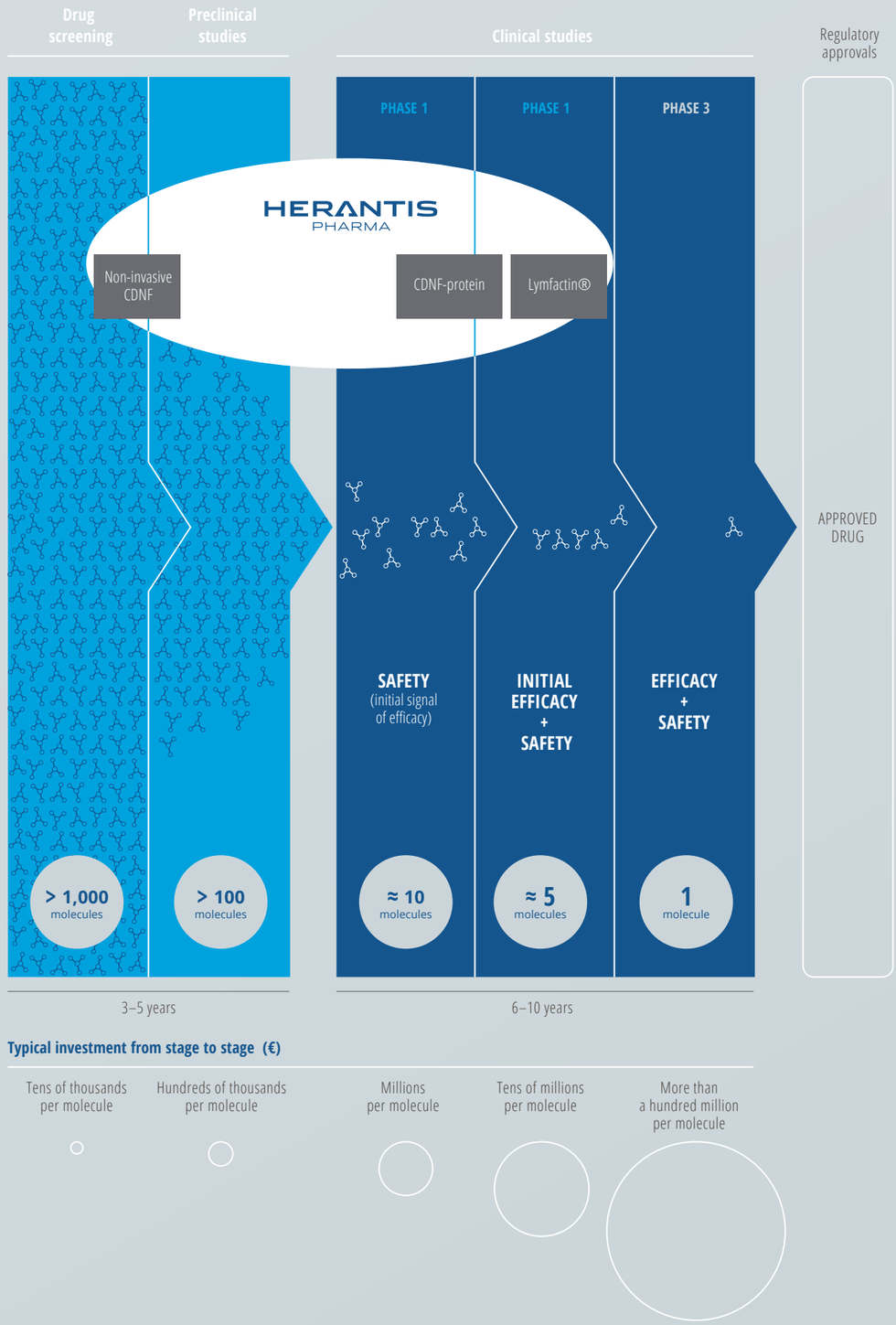
This is also the basis for the strategy of Herantis. Our small and agile company licenses promising drug candidates based on leading science. We aim at developing them through first clinical studies. If the development progresses well the value of our drug candidates increases significantly as the development risks are gradually reduced. We then intend to sign collaboration agreements with large pharmaceutical companies to ensure strong resourcing for the late stage development and commercialization.

We estimate that the annual sales of our drug candidate CDNF could reach approximately 1.6 billion euros in the treatment of Parkinson's disease; and our Lymfactin® approximately 600 million euros in the treatment of breast cancer associated secondary lymphedema when combined with lymph node transplantation surgery. We also believe that both compounds have significant potential in further indications.

Business model of Herantis



Drug development is a long-term undertaking that requires significant resources
– only few of thousands of screened molecules eventually become approved drugs



CEO's review

2018 was the best year so far in the history of Herantis. Our Lymfactin® advanced to a Phase 2 clinical study. CDNF, which aims at a breakthrough in Parkinson's disease, was for the first time administered to patients. The CDNF Phase 1–2 clinical study has progressed according to plan. In addition, we launched the development of the next generation CDNF, which we believe will be feasible for administration without surgery and will thus significantly increase the commercial potential of CDNF.

We announced in July 2018 having licensed the next generation CDNF, ngCDNF from our close partner, the University of Helsinki. CDNF aims at a breakthrough in Parkinson's when infused directly in the brain. ngCDNF, on the other hand, is believed to work as efficaciously with more conventional systemic administration. In addition to Parkinson's, CDNF has potential for the treatment of other neurodegenerative diseases such as ALS or Alzheimer's if it can be dosed with a sufficiently broad distribution. ngCDNF may be just the solution to these challenges. Neurodegenerative diseases cause an enormous economic burden and human suffering to our aging population. The development of CDNF and ngCDNF opens new possible solutions based on leading science.

2018 was justifiably the best year in our company's history. I firmly believe that 2019 will be even better.

Pekka Simula
CEO

" 2018 was justifiably the best year in our company's history. I firmly believe that 2019 will be even better"

Drug candidate CDNF and Parkinson's disease

CDNF aims at stopping the progression of Parkinson's disease. Known therapies only alleviate the symptoms of this incurable progressive disease.

What is Parkinson's disease?

Parkinson's disease is an incurable, progressive brain disorder estimated to affect over seven million patients worldwide. The typical first symptoms of Parkinson's disease include tremors, slowness of movement, muscle stiffness, and impaired balance. Other possible symptoms as the disease progresses are for instance sleep problems, depression, speech changes, and severe constipation.

Parkinson's disease is caused by the degeneration of dopamine-producing neurons in the brain. The actual mechanism behind the degeneration is not known; the symptoms result from the lack of a neurotransmitter, dopamine, in the brain.

Parkinson's is usually diagnosed at the age of 50–70. While the disease itself doesn't lead to death it can cause life threatening complications. There is a great variability in the progression and symptoms of the disease between individual patients.

How is Parkinson's disease treated?

Available treatments to Parkinson's disease include a drug called L-dopa, which artificially maintains the dopamine levels in the brain. The efficacy of the available drugs is typically lost with disease progression as an increasing amount of the dopamine-producing neurons have degenerated. Known drugs do not cure the disease or even slow its progression because they don't protect the degenerating and dying neurons. Treatments of an advanced Parkinson's disease include Deep Brain Stimulation, which together with the required neurosurgery can cost over 75,000 euros.

Societal impact

Common to many brain disorders, Parkinson's disease is associated with a significant societal economic burden in addition to the human suffering. The majority of these costs is not linked to treatments but for instance lost productive years and supported living arrangements for the disabled patients. In 2010 the societal costs of Parkinson's disease in Europe alone totaled approximately 14 billion euros. A study in the USA suggested in 2017 that a treatment, which could stop the progression of Parkinson's disease would save the society about 400,000 euros per patient. This is the goal of Herantis with CDNF.

Drug candidate CDNF and its commercial potential

CDNF is a protein naturally present in humans. It was discovered by Professor **Mart Saarma** and his group at the University of Helsinki and published in the high impact scientific journal Nature in 2007. Herantis patented CDNF worldwide and launched a drug development program based on this discovery. The research and development efforts have confirmed that CDNF is a promising neuroprotective drug candidate, which functions via several mechanisms relevant to Parkinson's disease. It can protect neurons from degeneration and restore the function of already degenerating neurons. This suggests potential to stop progression of Parkinson's disease, which would be a significant therapeutic breakthrough. From the patients' viewpoint it would mean that the only essential impact of the disease on the rest of their lives would be the need for frequent medication.

Our development has advanced to a Phase 1–2 clinical study funded by the European Union and conducted at three university hospitals in Finland and Sweden. In this study, CDNF is compared to placebo in 18 patients with Parkinson's disease. The study is blinded, which means that even the patients or their treating physicians don't know who receives CDNF and who receives placebo. The study is intended to be unblinded by the end of 2019 at which time topline data are also expected. Depending on the results the development program would then be expected to continue with one or more larger clinical studies aiming at international marketing authorizations.

We estimate that the annual sales of CDNF could reach about 1.6 billion euros based on the assumption of a 5% market share in the treatment of advanced Parkinson's disease in the three main markets: USA, Europe, and Japan.

"The annual sales of CDNF in the treatment of Parkinson's disease may reach 1.6 billion euros."

CDNF is in forefront of research in Parkinson's disease

Dr. Per Svenningsson, professor of neurology at Karolinska University Hospital in Stockholm, Sweden. Per is the Principal Investigator of the Phase 1–2 clinical study of CDNF.

Parkinson's disease – what makes it a challenging indication?

There are several different subtypes of Parkinson's disease (PD). Some persons with PD progress fast, some develop involuntary movements (dyskinesias), dementia, temporary decrease in blood pressure (orthostatic hypotension) etc. This means that you need to personalize the treatment to a large extent, which is challenging, but also rewarding when you find a good combination of therapies to control the symptoms of PD.

However, in all cases of PD, the overwhelming challenge in the longer run is the lack of a therapy that would significantly slow down disease progression. It is difficult to follow active persons and brilliant minds deteriorate.

What do you consider the main advances in the treatment of PD during the past 10 years?

Since the introduction of deep brain stimulation (DBS), there have not been any major breakthroughs. The introduction of medicine pump-delivered therapies, and their wider use over the past years, has led to a significant improvement in the quality of life for many persons with PD.

Most promising new care for PD foreseen in the near future? What expectations do you have for a new treatment?

We are eagerly waiting to see the results from ongoing clinical studies interfering with alpha-synuclein protein aggregation and/or spreading. It will also be interesting to see the outcome of precision medicine studies targeting persons with PD with GBA or LRRK2 gene mutations and whether they modify disease progression.

We are also lacking proper therapies against non-motor symptoms in PD, such as dementia, but several studies are currently addressing this issue.

There have also been major advances in the understanding of disease mechanisms underlying PD, such as inflammation, degradation of mitochondria, diabetes-related pathways, and cellular ER (endoplasmic reticulum) stress. Therapies intervening with these mechanisms are now being developed and entering clinical trials.

> **"The hope is that CDNF would slow down disease progression. It would represent a major breakthrough in the therapy of PD."**

What made you interested in being an investigator in the CDNF clinical study?

The fundamental science underlying the discovery of CDNF as a neuroprotective factor in experimental parkinsonism is groundbreaking. From a mechanistic standpoint CDNF targets ER stress dysfunction, which is becoming increasingly recognized as critical in the pathogenesis of PD.

It is a great honor to participate in the introduction of this conceptually novel therapy to persons with PD.

What motivates the patients to take part in clinical studies, specifically in the CDNF clinical study?

Many persons with PD are desperately seeking therapies that can slow down their disease progression. Despite a demanding protocol, many persons with PD are therefore interested in participating in studies aiming to regenerate lost functions. The CDNF study holds a lot of potential and has therefore attracted a lot of attention among persons with PD.

How do you see CDNF's role in the future treatment of PD?

The hope is that CDNF would slow down disease progression. It would represent a major breakthrough in the therapy of PD and be first in class. It would be justified to use CDNF for the treatment of many persons with PD despite the somewhat complicated delivery mechanism.

Another advantage is that it is also possible to combine CDNF with existing therapies to optimize the everyday life of the persons with PD.

How has your collaboration with Herantis been so far?

Herantis has been very professional and supportive in the ongoing clinical trial. All investigators praise their dedication and collaborative spirits. The managing of the clinical trial and the associated TreatER EU grant is excellent.

Next generation CDNF

The drug candidate CDNF, which has advanced to clinical development, is a protein that does not pass the blood-brain barrier (BBB). The BBB is a border that separates our brain from circulating blood. Therefore, CDNF cannot be administered to patients for instance as a pill or intravenously, because the BBB would prevent it from reaching the brain and thus from protecting the neurons. Instead, CDNF is administered directly in the brain using a drug delivery device, which requires a neurosurgical procedure comparable to the placement of a Deep Brain Stimulation device. While this is an acceptable approach in the treatment of Parkinson's disease, we have also studied alternative methods for a simpler dosing of the drug.

In 2017, it was discovered that a certain part of the CDNF protein maintains its biological activity and also passes the BBB. Based on this discovery Herantis has launched the development of the next generation CDNF, or ngCDNF. We believe that the biological activity of ngCDNF is comparable to CDNF and that it could be administered for instance by a subcutaneous injection (similar to e.g. insulin injections). While ngCDNF is a novel drug candidate, and as such will require a complete preclinical development program, its development will benefit from the methods and know-how cumulated in the development of CDNF. This suggests that the early stage development of ngCDNF may be clearly faster than it was for CDNF. We do not yet provide estimates on the possible development schedule or market potential for ngCDNF.

Drug candidate Lymfactin® and lymphedema

Lymfactin® is targeted as the first drug in the world to cure secondary lymphedema, a disease that significantly impacts the quality of life of patients and is associated with a large economic burden.

What is lymphedema?

Lymphedema (also known as lymphoedema, lymphatic edema, or LE) is a chronic disease caused by injuries or insufficient function of the lymphatic system. It can be either hereditary, in which case it is called primary lymphedema; or a consequence of surgery, radiotherapy, trauma, or other disease, in which case it is called secondary lymphedema. The term elephantiasis is sometimes used for severe cases leading to a significant deformation of a limb. LE causes the accumulation of lymph in tissue, for instance in a hand or leg, which results in a chronic, progressive swelling.

Lymphedema is a painful, deforming disease that increases susceptibility for infections and often has a significant impact on the patient's quality of life. According to the international patient advocacy group LE&RN there are about 140 million people in the world suffering from LE of varying severity. The disease is believed to be under-diagnosed for instance due to the lack of efficacious therapies and awareness. Many patients are ashamed of their deformed appearance and fail to seek appropriate treatment. Unfortunately, it is also common that patients don't even know they are suffering from a disease, not to mention knowing its name.

One common cause of lymphedema are cancer treatments. Over 30,000 cases of breast cancer associated LE are diagnosed annually in Europe and the USA. The disease also causes a large economic burden for societies in addition to the human suffering. In the USA it is estimated that the LE of a breast cancer survivor costs the society over 10,000 dollars a year.

How is lymphedema treated?

A curative treatment for lymphedema is not known. Depending on the case, the symptoms of LE can be alleviated for instance by physiotherapy or massage. Many patients who have lymphedema of the arm wear a compression garment. These kinds of treatments do not repair injuries of the lymphatic system, which cause the disease.

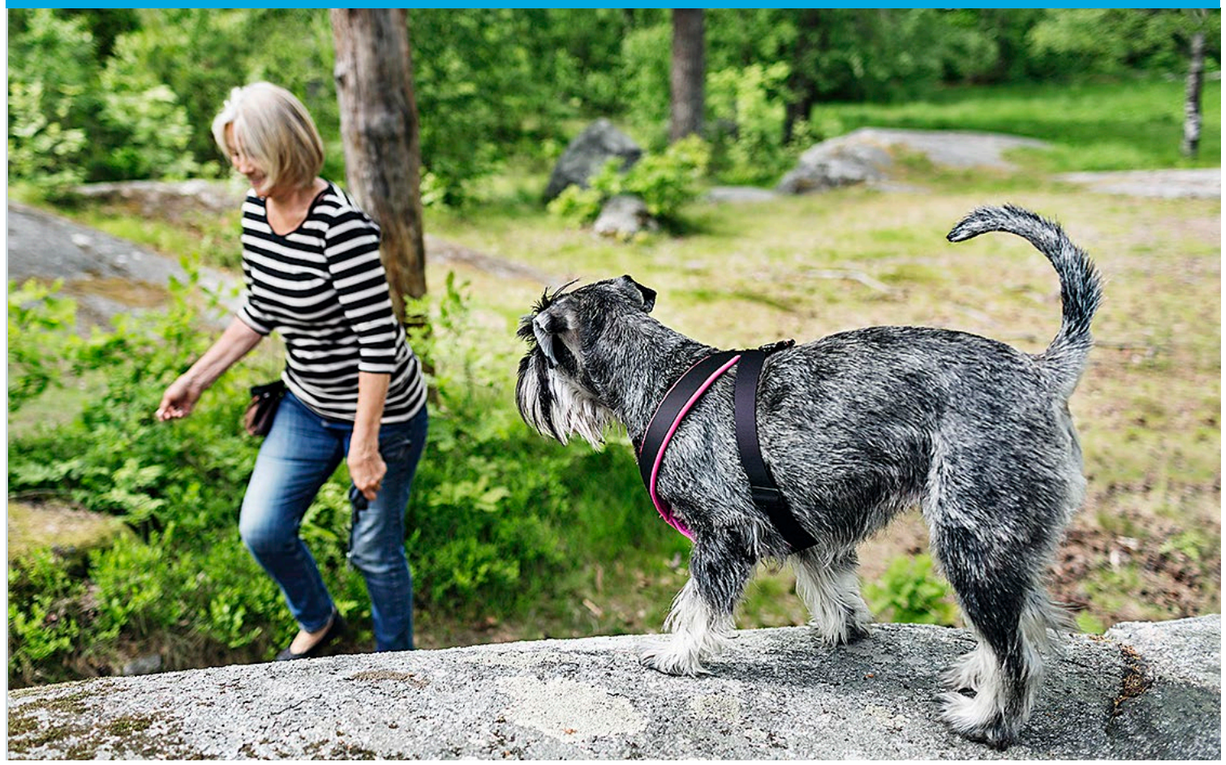
Drug candidate Lymfactin® and its commercial potential

Herantis' Lymfactin® is based on a natural human growth factor, VEGF-C, discovered by Professor **Kari Alitalo** and his research group at the University of Helsinki. Lymfactin® is a relatively simple gene therapy, which contains the human gene coding for VEGF-C. Lymfactin® is administered locally at the site with injuries in the lymphatic system. There, it will start to express the natural human growth factor VEGF-C, which is necessary for the growth of new lymphatic vessels. In disease models, this local expression of VEGF-C that lasts for about two weeks has been shown to result in the formation of new lymphatic vessels. This may eventually normalize the lymphatic flow and thereby stop the accumulation of the lymph in tissue. If Lymfactin® works in human patients as well as it has worked in disease models it can lead to a significant breakthrough in the treatment of LE.

In February 2018, patient recruitment was completed in the world's first clinical study with Lymfactin®. 15 patients with breast cancer associated LE, who were independently undergoing lymph node transplantation surgery, participated in this clinical study. Each patient received a single dose of Lymfactin® as an adjunct to their surgery. Based on the clinical study Lymfactin® is safe and well tolerated, and after a six-month follow up the swelling associated with lymphedema had on the average clearly reduced in the study patients. The results will be published in a peer-reviewed scientific journal. Based on this Phase 1 study it cannot be assessed whether the potential benefits are associated with Lymfactin® or the surgery. This is currently being investigated in a Phase 2 study.

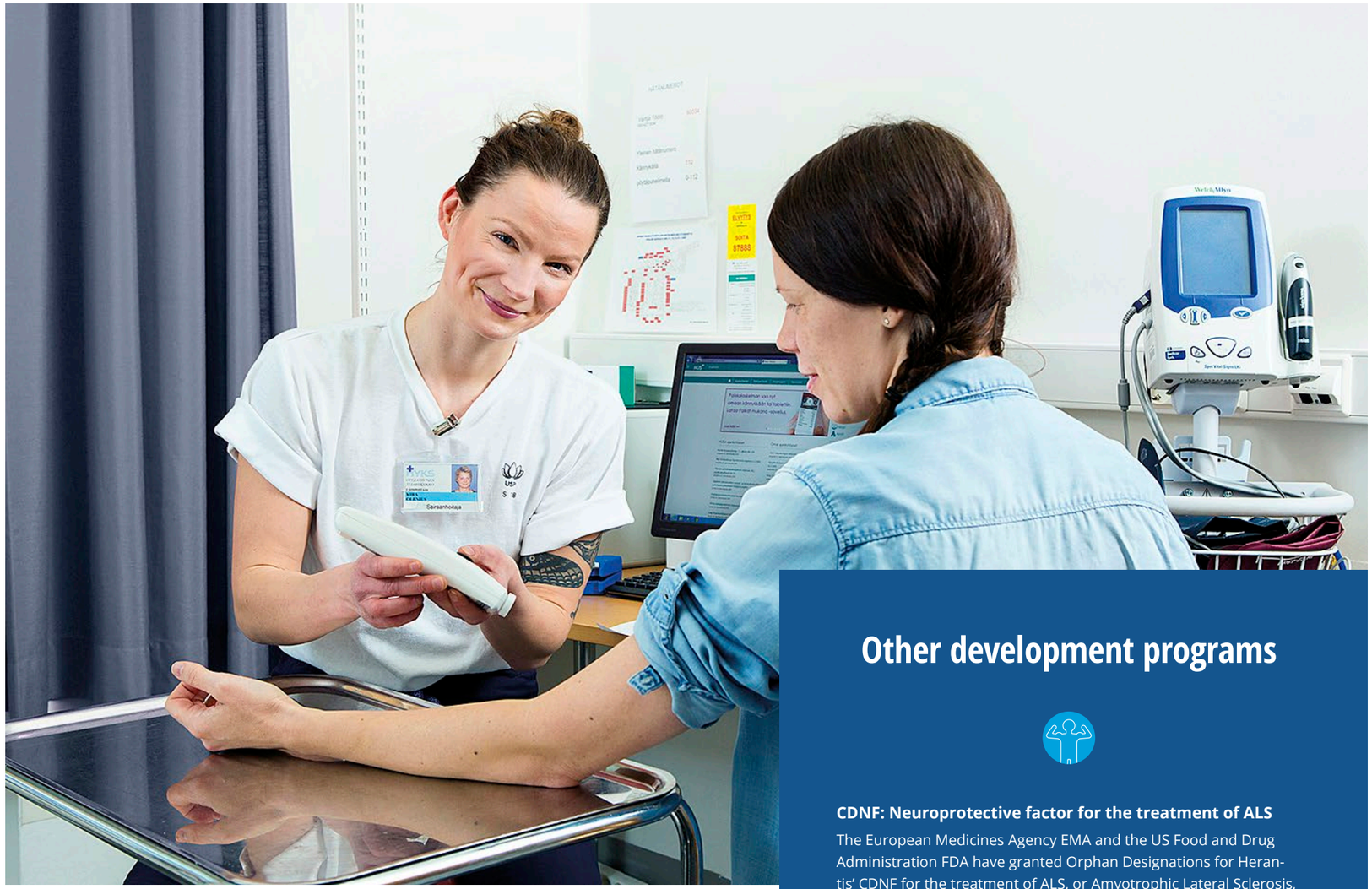
We intend to recruit a total of 40 patients in the Phase 2 study. Similar to the Phase 1 study the patients will undergo a lymph node transplantation surgery. The patients will receive either a single dose of Lymfactin® or placebo, in a blinded fashion, as an adjunct to the surgery. The study will be unblinded after a follow-up period of 12 months after the last patient's treatment. Top-line results of the study are also expected at that time.

Assuming that the market for Lymfactin® is limited in patients with breast cancer associated LE, and within this patient group only such patients who undergo lymph node transplantation surgery and receive a single Lymfactin® dose as an adjunct to the surgery, we estimate that the annual sales for Lymfactin® may reach approximately 600 million euros in the USA and Europe. We intend to expand the use of Lymfactin® in also other types of LE, which we believe can significantly increase its commercial potential.



How does lymphedema impact the lives of patients?

Registered nurse **Kira Olenius**, department for plastic surgery at Töölö Hospital, a part of the Helsinki University Hospital. Kira is a research nurse in the Phase 2 clinical study of Lymfactin®.



Tell us about your job?

I have worked at the department for plastic surgery at Töölö Hospital for over eight years. Among other treatments we provide surgical care for lymphedema patients. Since 2016 I have been a research nurse in clinical studies related to lymphedema drug development. During this period, I have also learned much about the causes, consequences, and the treatment of lymphedema.

Can you describe a typical lymphedema patient?

One typical case is a breast cancer survivor whose breast cancer surgery involved lymph node dissection, for instance due to metastases. The removal of lymph nodes and other cancer treatments have injured the lymphatic system locally and compromised its functionality, which has led to the swelling of an upper extremity. The patients represent different age groups but are usually around 50–60. Lymphedema can also occur as a consequence of other types of cancers including melanoma and cancers of the genital area.

How does lymphedema progress?

Lymphedema can appear soon after cancer treatments. However, this is not always the case. The risk of developing lymphedema will remain for the rest of the patient's life. The swelling caused by LE is chronic and progressive, and it develops in stages. In stage 0, the lymphatic system is injured but its capacity remains sufficient. In stage 1, the swelling is minor and can be detected by pressing with a finger, which leaves the swollen skin indented. At this stage the swelling can be alleviated by keeping the affected limb raised and with a compression treatment. In stage 2, the swelling as well as the amount of connective tissue and fatty tissue increase. The capacity of the lymphatic system has decreased, and the skin becomes harder and more rigid. The volume difference to the healthy limb is visible and will persist despite treatments. In stage 3, there is a significant difference between the healthy and the affected limb. The affected limb is severely and permanently swollen. The functionality of the lymphatic system is substantially compromised.

What other symptoms are associated with lymphedema?

In addition to those already mentioned, common symptoms include various feelings in the upper extremities: Feeling of weight, clumsiness, different kinds of feelings in the skin. As LE advances the immunity of the skin deteriorates and it becomes vulnerable to infections such as bacterial erysipelas, which may further weaken the lymphatic system and worsen the swelling.

How do the symptoms of lymphedema impact the life of a patient?

That varies a lot. In the worst case the disease has a holistic impact on the patient's quality of life and everyday living. The physical symptoms of LE may reduce the ability to exercise or manage routine activities at home. They can also force patients to change their professional duties or even their entire career. Some patients carry a social stigma due to lymphedema. However, there isn't always a direct link between the amount of the swelling and the perceived handicap. Some patients have accepted the limitations associated with LE.

How is lymphedema treated?

Important therapeutic approaches include compression garments, skin care, exercise, and weight management. Lymphatherapy can be used as short intensive courses when the swelling is increasing or before acquiring new compression garments. In addition to these conservative therapies there are surgical procedures than can be considered case by case to alleviate the swelling. Such procedures are for instance liposuction, lymphaticovenous anastomosis, and lymph node transfer. There is no curative treatment of LE. The surgical procedures are still considered experimental treatments because there are no published results of long-term follow-up after these procedures.

Other development programs

CDNF: Neuroprotective factor for the treatment of ALS

The European Medicines Agency EMA and the US Food and Drug Administration FDA have granted Orphan Designations for Herantis' CDNF for the treatment of ALS, or Amyotrophic Lateral Sclerosis, based on the preliminary preclinical results on its possible efficacy. The company is exploring possibilities to launch a clinical development program in ALS. Decisions on starting such a program have not been made and no funding has been allocated presently.

MANF: Neuroprotective factor

MANF is the only known neuroprotective factor similar to Herantis' patented CDNF. CDNF and MANF for instance protect cells from endoplasmic reticulum stress (ER stress), a condition associated with several neurodegenerative and other chronic diseases. Herantis has been granted a patent in the USA for the use of MANF for the treatment of neurological diseases including Parkinson's disease, epilepsy, and ischemic brain injury. Herantis will inform separately if it launches a formal drug development program with MANF.

“ It is extremely rewarding when a novel investigational medicinal product is administered to patients for the first time.”

The manufacturing of an investigational medicinal product for clinical studies requires broad expertise

Jani Koskinen (M.Sc. in Tech) is responsible for the manufacturing of drug compounds, production process development, and quality system at Herantis.

“I studied bioprocess engineering at the Helsinki University of Technology (now Aalto University) at a time when the field of biological drugs was growing fast in Finland. I was impressed by the potential of this industry and have worked on process development and manufacturing of biological drug compounds since the start of this millennium. I joined Herantis in 2014 and have worked previously for Biotie Therapies, the University of Helsinki, and Fit Biotech.

At Herantis I am responsible for our quality system as well as for the manufacturing of our investigational medicinal products and their production process development for clinical studies. Our drug compounds are first in their class, which means that processes for their production do not exist. All those processes must be developed individually for each investigational product. The goal in such process development is a scalable, cost-efficient manufacturing process, which produces a safe investigational product in compliance with regulatory requirements and will satisfy the needs of later stage clinical development and commercialization. This kind of process development must pay careful attention to the reliability of all unit operations, devices, and methods; to their scalability in a commercial drug manufacturing plant; and to compliance with Good Manufacturing Practice (GMP) of the pharmaceutical industry.

Before an investigational medicinal product is manufactured for clinical use both the process and the product are tested in pilot batches. This ensures that the process yields a product that is of sufficiently high quality. The process development and the manufacturing of clinical materials is documented carefully including very detailed batch records and descriptions on quality controls. Such documentation must be approved by the regulatory authorities before clinical testing can commence.

It is extremely interesting to work in an environment where innovative solutions are needed, and where their development requires a combination of personal experience and available novel information from a variety of sources. One has to balance the needs of a clinical study (such as the required amount of the substance, right formulation, stability, and other parameters) with the special characteristics of a biological compound. Our biological drug candidates are produced in living organisms, which requires strong know-how also in the selection of the optimal organism and their production, related conditions, and in the development of everything involved.

The use of a novel drug compound in its first clinical study is preceded by intensive process development. It is extremely rewarding when a novel investigational medicinal product is administered to patients for the first time. And it is great to have a role in an important program that may significantly improve the quality of life of patients if it succeeds.”

Board of Directors

Pharmaceutical development is always an international endeavor. Drugs are developed for a global market; the development takes place across multiple countries; discussions with potential partners and collaborators are held worldwide. A drug development company needs an international, experienced, and well-connected Board of Directors.

Pekka Mattila, MSc

Chairman of the Board since 2013, Mattila was one of the founders of Finnzymes Group, and its CEO for 25 years until its acquisition by Thermo Fisher Scientific. Currently Mattila is the CEO of allergy drug developer Desentum Ltd and board member in e.g. Fimmic Ltd, Oy Medix Biochemica Ab, and FIMM.

Jim Phillips, MD, MBA

Herantis' Board member since 2014 and Laurantis' board member in 2012–2014, Phillips is the former CEO for Midatech Pharma Plc and previously for instance a member of the board in Insense Ltd, CEO for EUSA Pharma in Europe, and founding CEO for Talisker Pharma.

Frans Wuite, MD, MBA

Herantis' Board member since 2014 and Laurantis' board member in 2010–2014. Wuite is the CEO of Acesion Pharma and previously e.g. CEO for Oncos Therapeutics Ltd, board member in Faron Pharmaceuticals Ltd, COO for Araim Pharmaceuticals Inc and Warren Pharmaceuticals Inc, and a management team member in Amgen Europe.

Timo Veromaa, MD, PhD

Herantis' Board member since 2012, Veromaa is the Chairman of FinBB and previously e.g. Executive Chairman of Domainex Ltd, CEO of Biotie Therapies in 2005–2016 until is acquisition by Acorda Therapeutics, Chief Medical Officer of Schering in Finland, and Postdoctoral Fellow at the University of Stanford.

Aki Prihti, MSc

Herantis' Board member since 2014, Laurantis' Chairman in 2010–2014 and Board member 2008–2010. Prihti is a founding partner in the life sciences investment fund Inveni Capital and has served as board member in several growth companies in the life sciences field. He is currently the CEO of Aplagon Ltd.

Board of Directors' Report and Financial Statements 1.1.–31.12.2018

Content

1 Review of operations January 1 – December 31, 2018

Herantis' drug development

Herantis develops drugs based on leading scientific research, aiming at breakthrough in the treatment of severe diseases. The company's strategy is to obtain rights to early stage drug candidates, develop them into clinical stage, and negotiate commercial agreements with larger pharmaceutical companies on their continued development and marketing.

In 2018 the drug development of Herantis proceeded according to plan with the first placebo-controlled clinical study of CDNF advancing at three study centers, and the launch of a Phase 2 study of Lymfactin® based on the good initial results in its first clinical study.

CDNF for the treatment of Parkinson's disease

Herantis develops its drug candidate CDNF for the treatment of Parkinson's disease. Parkinson's disease is a slowly progressing neurodegenerative disease that cannot be cured. An estimated 7 million people worldwide have Parkinson's disease. Currently available treatments only alleviate the motor symptoms of the disease and their efficacy is typically reduced with disease progression. Herantis aims at significant improvement over current treatments.

Scientific research has shown that CDNF, a naturally present protein in humans discovered by Professor Mart Saarma's group at the University of Helsinki, is a promising neuroprotective drug candidate. It has efficiently protected dopaminergic neurons, restored the function of already degenerated neurons, and alleviated both motor and non-motor symptoms in Parkinson's disease models. Based on preclinical data CDNF may even stop disease progression. Herantis has patented CDNF internationally.

Herantis' development has advanced to the first clinical study with CDNF. In this Phase 1–2, randomized, placebo-controlled clinical study the safety and initial efficacy of CDNF is compared to placebo in 18 patients with Parkinson's disease. The study is conducted at three university hospitals in Finland and Sweden and its topline results are expected to be announced in 2019.

Herantis initiated in 2018 the development of a next generation CDNF, the non-invasive ngCDNF. The development of ngCDNF is in early preclinical stage.

Lymfactin® for the treatment of secondary lymphedema

Injuries of the lymphatic system caused e.g. by an accident, surgery, or illness can lead to secondary lymphedema. Its common symptoms are permanent swelling of the affected limb, thickening and hardening of skin, limited limb mobility, pain, and increased sensitivity to infections. Secondary lymphedema is a chronic, progressive disease that often severely decreases the patient's quality of life. Known therapies such as compression garments, special massage, and exercise may relieve the symptoms in some patients, but they do not address the cause the disease.

Professor Kari Alitalo's group at the University of Helsinki discovered the human growth factor VEGF-C, which is necessary for the development of lymphatic vessels. Herantis' drug candidate Lymfactin® is based on this scientific breakthrough. It is the first clinical stage gene therapy that aims to repair the lymphatic system.

The development of Lymfactin® is currently in Phase 2 clinical study in which its safety and efficacy are compared to placebo in patients with breast cancer associated lymphedema. Altogether 40 patients are planned to be recruited in the study and results are expected by the end of 2020.

If the safety and efficacy of Lymfactin® are established in the treatment of breast cancer associated lymphedema it is expected to be applicable also for the treatment of other secondary lymphedemas

2 Financial review January 1 – December 31, 2018

Income from business operations, R&D expenses

Herantis Group did not have material revenues in 2018 or in the corresponding period in the previous year.

The R&D expenses for the review period were 2.1 million euros, recorded in the income statement as an expense for the period. The R&D expenses for the review period mainly comprised of the clinical trials of CDNF for the treatment of Parkinson's disease and Lymfactin® for the treatment of breast cancer associated lymphedema, and the early preclinical development of ngCDNF.

The Group's R&D expenses for the corresponding period in the previous year, 1.4 million euros, were recorded as the review period's expenses in the income statement.

The profit for the review period was -4.2 million euros. The consolidated profit for the comparison period was -2.2 million euros.

Financing and capital expenditure

The company's cash and cash equivalents on December 31, 2018 amounted to 2.2 (at the end of the previous reporting period on December 31, 2017: 5.4) million euros.

In addition, the company has R&D loans previously granted by Business Finland to be drawn in the amount of 0.8 million euros. During the review period Herantis drew about 0.5 (0.5) million euros of these loans.

In addition, the European Union has awarded a grant of about 6.0 million euros for the project TreatER. The TreatER project is essentially the Phase 1–2 clinical study of Herantis with CDNF for the treatment of Parkinson's disease.

The consolidated cash flow from operating activities in the review period was -3.7 (-2.6) million euros.

Acquisitions and directed share issues

There were no acquisitions or directed share issues during the review period.

Going concern

The financial statements for financial year 2018 have been prepared on the going concern basis. It is assumed that the Company can in the foreseeable future finance its operations for instance by share issues or partnering agreements. In assessing the ability to continue as a going concern, the management has assessed the ongoing financing and partnering discussions and the associated risks and uncertainties. The Company intends to secure the sufficiency of working capital for the needs of the coming 12 months with an issue of shares, which the Company has announced on February 15, 2019 and which is subject to, among other things, the approval of the share issue authorization by the Company's General Meeting. The approval will be requested from the Extraordinary General Meeting convening on March 12, 2019. The Management considers 2.0 million euros as sufficient funding for the Company's working capital needs for the coming 12 months including working capital needs of the Company's subsidiary Laurantis Pharma Ltd.

From a Going concern viewpoint, the management's and Company's essential estimates and assumptions as well as uncertainties are as follows:

- The management of the Company has analyzed the cash flow estimates for the coming 12 months and the needs for working capital
- The management of the Company has had discussions with existing and potential new shareholders and based on those discussions estimated the probabilities of success and the possible size of a share issue
- The management of the Company has estimated the financial market situation and risks thereof.

These estimates are subject to significant estimates and assumptions of the management as well as uncertainty. Therefore, to minimize the risks associated with the estimates, assumptions and uncertainty, the Company intends to complete the share issue without delay in March 2019. In case the planned share issue was not successfully actualized, or the funds raised in the planned share issue were not sufficient for the planned needs for working capital, the company's going concern would involve essential uncertainty.

Balance sheet

The consolidated balance sheet total on December 31, 2018 stood at 7.1 (11.6) million euros.

At the end of the review period on December 31, 2018, the consolidated balance sheet included short-term debt in the amount of 1.4 (1.5) million euros, long-term loans in the amount of 5.9 (6.0) million euros, and capital loans in the amount of 0.0 (0.0) million euros. Financing earnings and expenses totaled 0.7 (-0.2) million euros.

No R&D expenses were capitalized during the review period.

Equity

Consolidated equity on December 31, 2018 was -0.1 (4.1) million euros. The change is the result of the loss of the review period.

Personnel, management, and administration

The number of personnel at the end of the review period on December 31, 2018 was 10 (7) persons.

During the review period, the company's Board of Directors comprised of Pekka Mattila (Chairman), Jim Phillips, Aki Prihti, Timo Veromaa, and Frans Wuite. The CEO for the company was Pekka Simula.

Ordinary Annual General Meeting 2018

Herantis' ordinary Annual General Meeting (AGM) was held in Helsinki, Finland on Tuesday, April 11, 2018.

The AGM adopted the consolidated and parent company financial statements for the financial year 2017 and resolved to discharge the members of the Board of Directors and the Managing Director from liability. In accordance with the proposal by the Board of Directors, the AGM resolved that no dividend shall be paid for the financial period January 1 – December 31, 2017, and that the loss for the period shall be recorded on the profit and loss account.

The AGM resolved that the remuneration for the members of the Board of Directors shall be €1,500 per month, with the exception of its Chairman, whose remuneration shall be €2,500 per month. Board members are also reimbursed reasonable travel expenses related to Board of Director's duties.

The AGM decided that the Auditor will be paid reasonable remuneration in accordance with its invoice approved by the company.

Five members were elected in the Board of Directors: Pekka Mattila, James (Jim) Phillips, Aki Prihti, Timo Veromaa, and Frans Wuite.

The firm of authorized public accountants PricewaterhouseCoopers Oy was appointed Herantis Pharma Plc's Auditor for the term ending at the closing of the next Annual General Meeting of shareholders, with Mr. Martin Grandell, APA, as the responsible auditor.

The AGM decided that paragraph 4 of the Articles of Association regarding the Board of Directors was amended as follows:

"4 § The Board of Directors of the company shall consist of four (4) to eight (8) ordinary members. The term of the Board member shall begin from the General Meeting where he or she has been elected and last until the closing of the following Annual General Meeting. The Board of Directors shall elect a Chairperson and, if it finds it warranted, a Vice-Chairperson from among its members for one term at a time. A deputy member may be elected for each member of the Board of Directors personally."

Following the AGM, the Board of Directors held a constitutive meeting and elected Pekka Mattila as Chairman of the Board of Directors.

Share based incentive program

Herantis has four stock option programs: Stock option program 2010, Stock option program 2014 I, Stock option program 2016 I, and Stock option program 2018 I, whereby stock options have been offered to key employees of the company to increase their commitment toward long-term contribution to growing shareholder value. The main details of the stock option programs are listed in the table below. More detailed information is provided on the company's web site at www.herantis.com.

Stock option program	Maximum number of shares[1]	Per share subscription price (€)	Decision on the stock option program made by
2010	37,600,	0.00005	General Meeting 26.8.2010
2014 I	50,800,	0.00005	General Meeting 20.3.2014
2016 I	70,000,	2.92	General Meeting 9.4.2015, Board Meeting 19.5.2016
2018 I	100,000	5.85	General Meeting 9.4.2015, Board Meeting 28.8.2018
TOTAL	**258,400**	**-**	**-**

[1] The maximum number of shares to be subscribed by stock options.

Risks and uncertainties

Herantis is a drug development company and the general risks and uncertainties present in drug development also apply to its operations. For instance, the production, stability, safety, efficacy, and regulatory aspects of drug candidates involve risks, the realization of which can render the commercialization of the drug candidate impossible or significantly delayed. One common challenge in drug development is that preclinical disease models may not accurately simulate the real disease. Promising preclinical results do therefore not guarantee that the drug candidate is efficacious in real patients.

Since Herantis develops biological drugs based on novel scientific research and their mechanisms differ from known drugs, the risks and uncertainties can be considered greater than in the development of conventional drugs. Further, the company has not commercialized any drug candidates, it does not have any history of profitable operations, and it has not so far closed any commercialization agreements pursuant to its strategy.

Drug development requires significant investments. Since Herantis is a pre-revenue company it must finance its drug development programs from external sources such as grants, R&D loans, or equity investments. Factors such as delays in the company's development programs or a weak financial market can impact the company's ability to raise funding and continue its operations.

Even if the safety and efficacy of a drug candidate was established in clinical studies its commercialization involves risks such as pricing or reimbursement, organizing a sales network, competition from other emerging treatments, unexpected adverse events in long-term use, strength of the company's patents, patent infringement claims raised against the company and other factors.

Usual business risks and uncertainties are also relevant to the operations of Herantis, such as data protection risks, dependencies on subcontractors and other third parties, and the ability to recruit and keep the necessary senior team and other employees.

Herantis has protected its operations against risks to its best ability and is not aware of any such risks or uncertainties, which would essentially differ from the usual risks and uncertainties in its business.

External factors

The need for new and better treatments for many diseases, such as Parkinson's disease and lymphedema, increases with aging population. This trend also increases the importance of the business of Herantis.

Challenges in the global economy may cause difficulties in financing the capital-intensive development of Herantis in the future.

Shares and shareholders

The market capitalization of Herantis Pharma Plc at the end of the review period on December 31, 2018 was approximately 27.1 million euros. The closing price of the company's share on December 31, 2018 was 5.50 euros. The highest share price during the review period was 7.55 euros, lowest 4.50 euros, and average 6.09 euros.

The trading volume of the company's share in 2018 was 177.803 shares, corresponding to approximately 3.6% of all shares in the company. According to Herantis' shareholder register dated on December 31, 2018, the company had 905 registered shareholders.

On December 31, 2018 the members of Herantis' Board of Directors and the CEO held in aggregate 70,992 (68,366) shares including shares held through their controlled companies, or 1.4 (1.4) percent of the company's shares. Information on insider trading with the company's shares is published on the company's website.

3 Events after the review period

The Company announced on February 15, 2019 its plan on a directed share issue to a limited number of investors and the company's directors, and on preparing for a contemplated secondary listing on the Nasdaq First North Sweden marketplace. The Company invited an Extraordinary General Meeting of shareholders to convene on March 12, 2019 to decide on an authorization for an issue of shares as well as on appointing a new member, Ingrid Atteryd Heiman, in the Board of Directors of the Company.

4 Outlook for 2019

Herantis' long-term goal is to significantly increase its business through commercialization agreements for its drug candidates. The company continues discussing collaboration possibilities with potential partners for its drug development programs.

The main objectives for 2019 are to present topline results of the Phase 1–2 clinical study of CDNF, advance patient recruitment in the Phase 2 clinical study with Lymfactin®, select a lead molecule for the formal development of the next generation CDNF, and secure financing for the company's planned operations through end of 2020.

5 Guidance for 2019

Herantis does not expect meaningful revenues in 2019. The company continues to invest in its ongoing drug development programs in the treatment of Parkinson's disease and secondary lymphedema as well as in the development of the next generation, non-invasive CDNF. The company will explore options to strengthen its financial position for the resourcing of the development programs.

6 The Board's proposal for the use of distributable funds

The parent company of Herantis Pharma group is Herantis Pharma Plc whose distributable equity was 7.2 million euros according to the balance sheet December 31, 2018. Herantis Pharma Plc had no essential revenue in 2018. The financial result of the parent company for 2018 was -2.2 million euros.

The Board of Directors proposes to the Annual General Meeting convening on April 11, 2019 that no dividend shall be paid for the financial period January 1-December 31, 2018.

7 Key figures

7.1 Consolidated

€ thousands	1–12/2018	1–12/2017	1–12/2016
Revenue	0.0	0.0	25.3
Profit for the period	-4,179.7	-2,164.5	-4,424.5
Operating profit	-4,870.5	-3,944.7	-4,420.2
Operating margin	N/A	N/A	N/A
Cash flow from operations	-3,732.2	-2,599.0	-3,035.7

	1–12/2018	1–12/2017	1–12/2016
Return on equity %	-52.2	-19.1	-29.2
Equity ratio %	-1.2	35.3	15.4

7.2 Parent company

€ thousands	1–12/2018	1–12/2017	1–12/2016
Revenue	0.0	0.0	25.3
Profit for the period	-2,162.2	-2,546.5	-2,728.8
Operating profit	-3,021.8	-2,396.4	-2,782.9
Operating margin	N/A	N/A	N/A
Cash flow from operations	-2,674.1	-1,690.6	-2,481.0

	1–12/2018	1–12/2017	1–12/2016
Return on equity %	-24.1	-28.3	-29.4
Equity ratio %	62.6	67.0	67.2
Earnings per share €	-0.44	-0.60	-0.66
Number of shares at end of period	4,918,305	4,918,305	4,118,305
Average number of shares	4,918,305	4,221,319	4,117,331

7.3 Formulas used in calculating key figures

$$\text{Equity ratio} = \frac{\text{Equity}}{\text{balance sheet total}}$$

$$\text{Return on equity \%} = \frac{100 \cdot \text{profit for the period}}{\text{(average of shareholder's equity at the beginning and the end of the period)}}$$

$$\text{Earnings per share} = \frac{\text{Profit for period}}{\text{average number of shares}}$$

Average number of shares = Weighted average number of shares. The number of shares is weighted by the number of days each share has been outstanding during the review period.

8 Accounting policies

These financial statements have been prepared according to generally accepted accounting practices, local legislation, and the rules of the First North market. The figures in the financial statements are audited. The figures are individually rounded from exact figures.

9 Governance

Herantis Pharma Plc. is a public Finnish limited liability company, which complies with the Finnish Companies Act, Securities Market Act, Accounting Act, the rules of Nasdaq Helsinki Ltd's First North marketplace, and the Company's Articles of Association.

Annual General Meeting

The Annual General Meeting is Herantis Pharma's highest decision-making body. The Company's Board of Directors invites the Annual General Meeting within six months after the end of the financial year. The Annual General Meeting decides on the financial statements and on distribution of the result shown in the balance sheet, grants the discharge of the Board of Directors and the Managing Director from liability, and decides the remuneration of the Board of Directors and the auditors. The Annual General Meeting also elects auditors as well as deals with any other matters on the agenda.

Board of Directors

The Board of Directors is responsible for the administration of the company and the appropriate organization of its operations. According to the Articles of Association the Board of Directors consists of four to eight ordinary members. The term of a member of the Board will continue until further notice. The Board elects a chairperson from among its members.

CEO

CEO manages the day-to-day operations in accordance with guidelines and rules set out by the Board of Directors and actively looks after the interests of the company. CEO is appointed and removed from office by the Board of Directors, to whom he reports e.g. on the company's financial position, business environment, and other significant issues. CEO guides and supervises the company and its businesses, is responsible for the daily operational management of the company as well as strategy implementation. CEO also prepares any items for the agenda of the Board of Directors and is responsible for their implementation.

Internal Controls and Risk Management

The risks of Herantis Pharma are mainly drug development related, such as clinical, technical, biological, regulatory, and strategic decision making risks, and financial, such as budgeting, accounting, and other financial control risks.

With its internal control policies and practices Herantis Pharma aims to ensure that appropriate financial information is available timely and accurately for any decision making and other needs, and that its financial reports are reliable, complete, and timely. Further, they aim to ensure that the company's operations are efficient and implement the strategy of the company. Also, they aim to ensure that the company is in compliance with all applicable laws and regulations.

The management team of Herantis is responsible for the organization and planning, implementing and monitoring of risk management and reporting of this to the board of directors.

Certified Advisor

The shares of Herantis Pharma Plc are listed for trading on Nasdaq Helsinki Ltd's First North Finland marketplace, which requires the nominating of a Certified Advisor. The Certified Advisor is responsible for ensuring that the company complies with the rules and regulations of First North. UB Securities Ltd is the Certified Advisor to Herantis Pharma Plc.

Remuneration

Remuneration of the directors

The shareholders of the company decide the remuneration of the Board of Directors at the Annual General Meeting in compliance with the Finnish Companies Act.

Herantis Board members were paid in total EUR 92,000 as remuneration for participation in board meetings during fiscal year 1 Jan 2018 – 31 Dec 2018. No remuneration was paid to the board members of the subsidiaries of Herantis.

On 11 April 2018 the Annual General Meeting of Herantis resolved that the remuneration payable to the members of the Board of Directors shall be EUR 1,500 per month except for the Chairman of the Board who shall be paid EUR 2,500 monthly. Board members are also reimbursed reasonable travel expenses related to Board of Director's duties.

None of the members of the Board of Directors are in an employment relationship or have service contracts with the Company or have voluntary pension policies from the Company.

Remuneration of the management team members

The Board of Directors is responsible for appointing the CEO, and for preparing and approving the remuneration of the CEO and other management team members. The remuneration of the CEO and other management team members comprises fixed basic salary, fringe benefits (such as company phone), a performance based bonus, and a stock option plan. The bonus payments are assessed and decided upon annually by the Board of Directors. The maximum bonus for the CEO is 35% of fixed annual compensation.

The CEO contract may be terminated by the Company or by the CEO with a three-month notice period without specified reasons. If terminated by the Company the CEO is not entitled to any additional compensation.

For 2017, the current CEO of Herantis Pharma was paid a performance based bonus of EUR 23,291.00. Possible performance based bonuses for 2018 will be paid in June 2019.

The CEO does not have any voluntary pension or other insurance policy from the company.

Insiders

The company has implemented the Market Abuse Regulation of European Union (596/2014/EU) in its own insider policies as of 3 July 2016. The company has also decided to continue maintaining a voluntary public list of its top managers, as well as a list showing changes that have occurred in their security holdings as well as in the holdings of their family relationships and influence-over organizations. These lists are available on the company's web site.

The Board of the Directors of the company has approved an Insider Policy, which ensures compliance with Finnish law, EU regulations and directives, and the rules and guidelines of Nasdaq Helsinki Ltd.

Insider holdings

Insider trading on the company's securities has been compliant with the Insider Policy of the company. Insider holdings in the company as of 31 December 2018 are:

Chairman of the Board	Number of shares
Pekka Mattila, Chairman of the Board, 20,150 shares controlled through company Musta Aukko Oy	22,650
James Phillips	2,906
Timo Veromaa	4,500
Frans Wuite	3,080
Pekka Simula, CEO, 7,030 shares controlled through company Meles Consulting Oy	37,856
Sigrid Booms, Director of clinical development	2,400
Henri Huttunen, Chief scientific officer	74,050
Antti Vuolanto, Chief operating officer	1,100

Auditing

The external audit is to verify that the financial statements give a true and fair view of the company's financial performance and financial position for the fiscal year. The company's auditor gives the company's shareholders the statutory auditor's report on the annual financial statements. The audit performed during the financial period is reported to the Board of Directors. The auditor and the Board of Directors will meet at least once a year.

The Annual General Meeting elects the auditor. The auditor's term of office includes the current financial year and ends at the end of the following Annual General Meeting.

Herantis Pharma's auditor is public accountants Pricewaterhouse-Coopers Oy (Business ID 0486406-8); the principal auditor is Martin Grandell, APA.

Public disclosure

Herantis complies with the disclosure obligations as defined in the Finnish Securities Market Act (746/2012) and in the First North Nordic Rulebook. Herantis discloses information to the public in a timely and consistent manner.

Herantis releases its public disclosures both in Finnish, which is the official reporting language, and in English. Amendments to previously published information are made in the same manner as has been used to publish the original information.

More information related to public disclosure and disclosure channels is available on the company's web site www.herantis.com.

10 Information for the shareholders

Annual General Meeting 2019

Shareholders of Herantis Pharma Plc are invited to attend the Annual General Meeting of the Company on Wednesday, April 11, 2019, commencing at 13.00 pm. (EET). The meeting venue will be informed in the formal notice to convene the Annual General Meeting. The reception of participants and the distribution of voting tickets will commence at 12.30 pm.

The Annual Report is available on the company's web site www.herantis.com no later than March 20, 2019.

Shareholder register

Shareholders are kindly requested to inform their book account keeper of any changes in their contact information.

Financial statement releases

Financial results of the first half of 2019 shall be released on Wednesday, 28 August 2019. The Annual General Meeting is planned to convene on Thursday, 11 April 2019.

Where discrepancies exist between the language versions of this Report by the Board of Directors, the Finnish-language text shall prevail.

11 Financial Statement

Consolidated Income Statement

Currency EUR	1.1.–31.12.18	1.1.–31.12.17
NET TURNOVER	**0.00**	0.00
Other operating income	230,100.24	225,130.91
Staff expenses		
Wages and salaries	-1,033,104.09	-853,812.46
Social security expenses		
Pension expenses	-172,736.23	-132,343.74
Other social security expenses	-38,029.09	-37,903.51
	-1,243,869.41	**-1,024,059.71**
Depreciation, amortization and impairments		
Depreciation and amortization according to plan and impairments	-969,345.49	-984,495.78
Amortization of goodwill	-233,147.98	-233,147.98
	-1,202,493.47	**-1,217,643.76**
Other operating expenses	-2,654,272.99	-1,928,138.42
OPERATING PROFIT (LOSS)	**-4,870,535.63**	**-3,944,710.98**
Income from other investments held as non-current assets	3,036.87	2,024,306.27
Financial income and expenses		
Other interest and financial income		
From others	767,645.57	65,133.61
Impairment of securities in current assets	-19,178.29	0.00
Interest and other financial expenses		
For others	-60,635.31	-309,244.89
	687,831.97	**-244,111.28**
PROFIT (LOSS) BEFORE APPROPRIATIONS AND TAXES	-4,179,666.79	-2,164,515.99
PROFIT (LOSS) FOR THE FINANCIAL YEAR	-4,179,666.79	-2,164,515.99
CONSOLIDATED PROFIT (LOSS)	**-4,179,666.79**	**-2,164,515.99**

Consolidated Balance Sheet

Currency EUR	31.12.18	31.12.17
ASSETS		
NON-CURRENTASSETS		
intangible assets		
Development expenses	4,734,820.15	5,662,525.15
Intangible rights	40,000.00	80,000.00
Goodwill	77,715.29	310,863.27
	4,852,535.44	**6,053,388.42**
Tangible assets		
Machinery and equipment	4,921.54	6,562.03
	4,921.54	**6,562.03**
Investments		
Participating interests	0.00	1,162.50
	0.00	**1,162.50**
	4,857,456.98	6,061,112.95
CURRENT ASSETS		
Debtors		
Short-term		
Other debtors	93,704.42	90,510.37
Prepayments and accrued income	10,839.55	18,953.14
	104,543.97	**109,463.51**
Securities	1,466,421.29	5,311,395.32
Cash in hand and at banks	719,105.72	90,596.48
	2,290,070.98	5,511,455.31
ASSETS TOTAL	7,147,527.96	11,572,568.26
LIABILITIES		
CAPITAL AND RESERVES		
Share capital	80,000.00	80,000.00
Share capital	80,000.00	80,000.00
Other reserves	37,656,176.82	37,656,176.82
Retained earnings (loss)	-33,645,796.83	-31,481,280.84
Profit (loss) for the financial year	-4,179,666.79	-2,164,515.99
	-89,286.80	4,090,379.99
CREDITORS		
Long-term		
Loans from credit institutions	5,878,418.65	6,022,471.65
	5,878,418.65	**6,022,471.65**
Short-term		
Loans from credit institutions	507,461.00	547,250.00
Trade creditors	199,608.19	278,278.29
Other creditors	27,556.54	29,666.72
Accruals and deferred income	623,770.37	604,521.60
	1,358,396.10	**1,459,716.61**
	7,236,814.75	7,482,188.26
LIABILITIES TOTAL	**7,147,527.96**	**11,572,568.26**

Cash flow statement

Currency EUR	1.1.–31.12.18	1.1.–31.12.17
Cash flow from operating activities		
Profit (loss) before appropriatiosn and taxes	-4,179,666.79	-2,164,515.99
Corrections:		
Depreciation and amortization according to plan and impairments	969,345.49	984,495.78
Amortization of goodwill	233,147.98	233,147.98
Unrealized exchange rate gains and losses	0.00	3,705.00
Bankruptcy/dissolution of a subsidiary	-3,036.87	-2,024,306.27
Other financial income and expenses	-687,831.97	240,406.28
Cash flow before change in working capital	-3,668,042.16	-2,727,067.22
Change in working capital:		
Increase(-)/decr.(+) in short-term interest-free receivables	-17,225.16	-44,277.78
Increase(+)/decr.(-) in short-term interest-free liabilities	-61,531.51	416,459.07
Cash flow from operations before financial items and taxes	-3,746,798.83	-2,354,885.93
Interest paid and pmts for other financ. exp. from operat.	-60,635.31	-309,244.89
Financial income received from operations	75,187.57	65,133.61
Cash flow from operations before appropriations and taxes	-3,732,246.57	-2,598,997.21
Cash flow from operating activities (A)	-3,732,246.57	-2,598,997.21
Cash flow from investments:		
Investments in tangible and intangible assets	0.00	0.00
Financial resources lost in bankruptcy of a subsidiary	0.00	-32.96
Acquisition of subsidiary's shares	7,165.78	0.00
Cash flow from investments (B)	7,165.78	-32.96
Cash flow from financing:		
Share issue	0.00	4,680,000.00
Changes in long-term loans	508,616.00	516,547.00
Changes in short-term loans	0.00	-25,000.00
Cash flow from financing (C)	508,616.00	5,171,547.00
Change in cash and cash equivalents(A+B+C) incr.(+)/decr.(-)	-3,216,464.79	2,572,516.83
Cash and cash equivalents at beginning of period	5,401,991.80	2,829,474.97
Cash and cash equivalents at end of period	**2,185,527.01**	**5,401,991.80**

NOTES TO THE FINANCIAL STATEMENTS

Domicile: Helsinki

Note information concerning the preparation of the financial statement

Evaluation principles and methods

Valuation of non-current assets

The balance value of tangible and intangible assets is their original acquisition cost, less the depreciation and amortization, according to the plan discussed below.

The book sheet value of investments is their original acquisition cost except for subsidiary shares held by Herantis Pharma Plc whose original acquisition cost was written down in the financial year 2015 by a total of 7,349,333.33 euro due to a weaker than expected result in a dry eye study.

Valuation of current assets

Loans and other receivables marked as financial assets are valued at their nominal value, or a lower expected value.

Financial assets securities are valued at their acquisition cost or a lower expected net realisable value.

Allocation principles and methods

Depreciations

The acquisition cost of non-current intangible and tangible assets is depreciated or amortized, in accordance with the pre-prepared plan. Depreciation and amortization for the financial year is recorded as an expense in taxation, depending on the method of depreciation, to the corresponding amount of the maximum straight line or reducing balance method of depreciation.

Assets with the probable economic life of less than three years, as well as small acquisitions, are recorded in full as expenses for the acquisition accounting period.

Depreciation plan	
Intangible assets	
• Development expenses	straight line amortization 10 yr.
• Intangible rights	straight line amortization 10 yr.
• Consolidated goodwill	straight line amortization 5 yr.
Tangible assets	
• Machinery and equipment	25% reducing balance method of depreciation

The depreciation plan for development costs remain at an appropriate level depreciation of 10 years for drug development projects, as the typical duration of a drug development project is 10-15 years, from the start of the development work to when the drug product is ready for the markets.

Comparability of the reported financial year and the previous year

The subsidiary of the Herantis Group, BioCis Pharma Oy, has been decleared bankcrupt on December 1, 2017. The group figures include the income statement of Biocis Pharma Oy covering the period 1.1.2017 - 30.11.2017. This has to be taken into account when comparing the reported financial year and the previous year.

Due to the bankcrupty, a total of 2,024,306.27 euro was recognized as revenue in the group. The revenue recognition has been presented in the consolidated income statement as income from other investments held as non-current assets.

Laurantis Pharma GmbH, a member of the Herantis group, was liquidated in the reported financial year. As a result of the liquidation 3,036.87 euro has been presented in the group income statement as income from other investments held as non-current assets.

Business Finland has decided to waive a total of 692,458.00 euro of loan principal. This has been presented in the income statement as other financial income.

Transactions in foreign currency

Differences in exchange rates are differences in funding transactions. A positive cumulated difference is recorded in income statement in Other interest and financial income from others, and a negative cumulated difference is recorded in Interest and other financial expenses for others. Exchange rate gains and losses arising from foreign-currency sales or purchases are recorded as adjustements to income and expenses.

Foreign currency translation

Assets denominated in foreign currency are translated into euros using the exchange rates of European Central Bank in effect on the balance sheet date.

Going concern

The s for financial year 2018 have been prepared on the going concern basis. It is assumed that the Company can in the foreseeable future finance its operations for instance by share issues or partnering agreements. In assessing the ability to continue as a going concern, the management has assessed the ongoing financing and partnering discussions and the associated risks and uncertainties. The Company intends to secure the sufficiency of working capital for the needs of the coming 12 months with an issue of shares, which the Company has announced on February 15, 2019 and which is subject to, among other things, the approval of the share issue authorization by the Company's General Meeting. The approval will be requested from the Extraordinary General Meeting convening on March 12, 2019. The Management considers 2.0 million euros as sufficient funding for the Company's working capital needs for the coming 12 months including working capital needs of the Company's subsidiary Laurantis Pharma Ltd.

From a Going concern viewpoint, the management's and Company's essential estimates and assumptions as well as uncertainties are as follows: 1)The management of the Company has analyzed the cash flow estimates for the coming 12 months and the needs for working capital. 2) The management of the Company has had discussions with existing and potential new shareholders and based on those discussions estimated the probabilities of success and the possible size of a share issue. 3) The management of the Company has estimated the financial market situation and risks thereof. These estimates are subject to significant estimates and assumptions of the management as well as uncertainty. Therefore, to minimize the risks associated with the estimates, assumptions and uncertainty, the Company intends to complete the share issue without delay in March 2019. In case the planned share issue was not successfully actualized, or the funds raised in the planned share issue were not sufficient for the planned needs for working capital, the company's going concern would involve material uncertainty.

Note information concerning the preparation of consolidated financial statements

Principles for preparation of consolidated financial statement

Mutual shareholdings

The ownership of the subsidiary shares within the group has been eliminated, using the acquisition cost method. The amount paid of the subsidiary shares exceeding the share of equity of the acquired shares has been activated in the consolidated balance sheet as goodwill. In the consolidated balance sheet 31.12.2018, of the remaining 4,173,715.29 euros of denominated goodwill, 77,715.29 euros relate to a subsidiary goodwill and 4,096,000.00 euros to development costs.

Inter-company transactions and margins

The group's inter-company transactions, receivables and liabilities, internal distribution of profits, as well as the group's internal margins are eliminated.

Note information concerning subsidiary and associated companies

Consolidated companies

Name	Domicile	Combined shareholding
Laurantis Pharma Oy	Helsinki	100%

Non-consolidated associated shareholding companies

Name	Domicile	Combined shareholding
Opia Games Oy	Helsinki	46.5%

The company has been liquidated during the financial period.

Note information concerning income statement

Dividend incomes, interest incomes and interest expenses, total amounts

Currency EUR	Parent		Consolidated	
	1.1.–31.12.2018	1.1.–31.12.2017	1.1.–31.12.2018	1.1.–31.12.2017
Interest income	146,847.42	158,215.50	0.00	0.00
Interest expenses	-34,693.94	-38,049.06	-59,783.94	-63,139.06
	112,153.48	**120,166.44**	**-59,783.94**	**-63,139.06**

Note information concerning the balance sheet assets

Non-current assets

Intangible assets

Goodwill

Consolidated goodwill resulting from the acquisition of the shares of Laurantis Pharma Oy was 17,043,819.91 of which 16,000,000.00 has been allocated towards development costs and 1,043,819.91 to goodwill.

During the financial period January 1, 2016-December 31, 2016 Herantis acquired the minority interest of Laurantis Pharma Oy (1%). The consolidated goodwill resulting from the acquisition amounting to 60,960.00€ was allocated to goodwill and it will be amortized according to the same plan as the initially acquired subsidiary shares..

Consolidated	1.1.–31.12.2018	1.1.–31.12.2017
Consolidated goodwill acquisition costs	1,104,779.91	1,104,779.91
Additions	0.00	0.00
Accumulated amortization	-793,916.64	-560,768.66
Amortization during financial period	-233,147.98	-233,147.98
Goodwill 31.12.2018	77 715,29	310 863,27

Development costs

Parent company

Development expenses that were not amortized and included in long-term expenses, a total of 638,820.15 euros consist of the development costs of the CDNF project. The development costs associated with the Amblyopia project were amortized in the financial period 1 January 2015-31 December 2015.

Consolidated

16,000,000.00 euro of the consolidated goodwill resulting from the acquisition of the shares of Laurantis Pharma Oy has previously been allocated toward development costs. The amount of 7,349,333.33 euro was additionally written down during the financial year 2015 due to weaker than expected results in the development of cis-UCA Eye Drops.

Currency EUR	Parent		Consolidated	
	1.1.–31.12.2018	1.1.–31.12.2017	1.1.–31.12.2018	1.1.–31.12.2017
Development costs CDNF, January 1st	798,525.15	958,230.15	5,662,525.15	6,590,230.15
Development costs Amblyopia, January 1st	0.00	0.00	0.00	0.00
Development costs total, January 1st	798,525.15	958,230.15	5,662,525.15	6,590,230.15
Development costs consolidated, January 1st			0.00	0.00
Total			**5,662,525.15**	**6,590,230.15**
Additions CDNF				
Additions Amblyopia				
Additions consolidated				
Additions total				
Amortization for the accounting period CDNF	-159,705.00	-159,705.00	-159,705.00	-159,705.00
Amortization for the accounting period Amblyopia	0.00	0.00	0.00	0.00
Amortization for the accounting period, consolidated			-768,000.00	-768,000.00
Amortization for the accounting period, total	-159,705.00	-159,705.00	-927,705.00	-927,705.00
Development costs December 31st	**638,820.15**	**798,525.15**	**4,734,820.15**	**5,662,525.15**

Patents

Currency EUR	Parent		Consolidated	
	1.1.–31.12.2018	1.1.–31.12.2017	1.1.–31.12.2018	1.1.–31.12.2017
At the beginning of the accounting period	80,000.00	120,000.00	80,000.00	166,655.52
Additions during the accounting period	0.00	0.00	0.00	-46,655.52
Accounting period amortization	-40,000.00	-40,000.00	-40,000.00	-40,000.00
At the end of the accounting period	40,000.00	80,000.00	40,000.00	80,000.00
Book value in the financial statement	**40,000.00**	**80,000.00**	**40,000.00**	**80,000.00**

Current assets

Receivables from group companies

Currency EUR	31.12.2018	31.12.2017
Other receivables	3,088,403.93	1,948,996.88
Total	**3,088,403.93**	**1,948,996.88**

Difference between activated acquisition costs and market value of securities other than current assets

Securities

Currency EUR	31.12.2018	31.12.2017
Other shares and similar rights of ownership		
Market value	1,466,421.29	5,390,671.72
Estimated acquisition cost	1,466,421.29	5,311,395.32
Difference	**0.00**	**79,276.40**

Note information concerning balance sheet liabilities

Equity

Changes in equity assets

Currency EUR	Parent		Consolidated	
	1.1.–31.12.2018	1.1.–31.12.2017	1.1.–31.12.2018	1.1.–31.12.2017
Restricted equity				
Share equity at the start of the acc. period	80,000.00	80,000.00	80,000.00	80,000.00
Share equity at the end of the acc. period	80,000.00	80,000.00	80,000.00	80,000.00
Restricted equity, total	**80,000.00**	**80,000.00**	**80,000.00**	**80,000.00**
Unrestricted equity				
Invested unrestricted equity reserve at beginning of acc. period	37,656,176.82	32,976,176.82	37,656,176.82	32,979,176.82
The amount of the subscription price of the shares marked to the reserve	0.00	4,680,000.00	0.00	4,680,000.00
Invested unrestricted equity reserve at the end of the acc. period	37,656,176.82	37,656,176.82	37,656,176.82	37,656,176.82
Loss from previous acc, period, at the beginning of acc. period	-27,672,378.89	-25,125,873.92	-33,645,796.83	-31,481,280.83
Loss at the end of the previous acc. period	-27,672,378.89	-25,125,873.92	-33,645,796.83	-31,481,280.83
Loss for the accounting period	-2,162,234.09	-2,546,504.97	-4,179,666.79	-2,164,515.99
Unrestricted equity, total	7,821,563.84	9,983,797.93	-169,286.80	4,010,380.00
Equity, total	**7,901,563.84**	**10,063,797.93**	**-89,286.80**	**4,090,380.00**

Calculation of distributable unrestricted equity

Currency EUR	31.12.2018
Invested unrestricted equity reserve	37,656,176.82
Retained earnings (loss)	-27,672,378.89
Loss for the financial year	-2,162,234.09
Development expenses in balance sheet	-638,820.15
Distributable unrestricted equity total	**7,182,743.69**

Liabilities

Long-term liabilities maturing after more than five years

Currency EUR	Parent		Consolidated	
	31.12.2018	31.12.2017	31.12.2018	31.12.2017
Total	1,024,850.00	1,024,850.00	4,113,253.93	2,512,548.53

Collaterals, commitments and off-balance sheet arrangements

The rental nominal amounts according to leasing rental agreements, broken down by amounts to be paid during the current and the subsequent periods, as well as the essential termination and redemption terms and conditions for those agreements

Currency EUR	Parent		Consolidated	
	31.12.2018	31.12.2017	31.12.2018	31.12.2017
For payment during the next acc. period	0.00	322.28	0.00	322.28
For payment later	0.00	0.00	0.00	0.00
Total	**0.00**	**322.28**	**0.00**	**322.28**

The company's leasing agreement is a standard IT leasing agreement.

Other financial commitments, which are not entered in the balance sheet

Currency EUR	Parent	Consolidated
Rental commitments		
Rental commitments due in 2019	84,915.89	84,915.89
Rental commitments due later than 2019	58,613.94	58,613.94
Rental commitments, total	**143,529.83**	**143,529.83**

Note information on the remuneration of the auditor

Currency EUR	Parent		Consolidated	
	1.1.–31.12.2018	1.1.–31.12.2017	1.1.–31.12.2018	1.1.–31.12.2017
PricewaterhouseCoopers Oy				
Audit fees	19,604.52	31,904.57	19,604.52	34,065.79

Note information on the personnel and members of corporate bodies

Average number of staff during the financial year, broken down by category

Currency EUR	Parent		Consolidated	
	1.1.–31.12.2018	1.1.–31.12.2017	1.1.–31.12.2018	1.1.–31.12.2017
Average number for the financial year	9	7	7	7
of which employees	9	7	7	7

Remuneration of directors and management

Currency EUR	1.1.–31.12.2018	1.1.–31.12.2017
CEO and deputy CEO	213,301.10	197,779.50
Directors of the Board and deputies	92,000.00	72,000.00
	305,301.10	269,779.50

Signatures

In Helsinki, 27th of February 2019

Pekka Mattila
Chairman of the Board

Timo Veromaa
Board Member

Aki Prihti
Board Member

Frans Wuite
Board Member

James Phillips
Board Member

Pekka Simula
CEO

The Auditor's Note
A report on the audit performed has been issued today
In Helsinki, 27th of February 2019
PricewaterhouseCoopers Oy
Authorised Public Accountants

Martin Grandell
Authorised Public Accountant (KHT)

12 Auditor's Report

To the Annual General Meeting of Herantis Pharma Oyj (Translation of the Finnish Original)

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

Opinion

In our opinion, the financial statements give a true and fair view of the group's and the company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

What we have audited

We have audited the financial statements of Herantis Pharma Oyj (business identity code 2198665-7) for the year ended 31 December 2018. The financial statements comprise the balance sheets, the income statements, cash flow statements and notes for the group as well as for the parent company.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Material uncertainty related to going concern

We draw attention to the accounting principles of the consolidated financial statements which describe the Company's ability to continue as a going concern. The Board of Directors and Management have assessed that the essential estimates made related to going concern assumption are subject to material uncertainty. The Company intends to secure the sufficiency of working capital for the needs of the coming 12 months with an issue of shares, which the Company has announced on February 15, 2019 and which is subject to, among other things, the approval of the share issue authorization by the Company's General Meeting. In case the planned share issue is not successfully actualized, or the funds raised in the planned share issue are not sufficient for the planned needs for working capital, the company's going concern would involve material uncertainty

Our opinion is not qualified in respect of this matter.

Responsibilities of the Board of Directors and the Managing Director for the Financial Statements

The Board of Directors and the Managing Director are responsible for the preparation of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing the parent company's and the group's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or to cease operations, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. 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.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the parent company or the group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Other Reporting Requirements

Other Information

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises the report of the Board of Directors and the information included in the Annual Report, but does not include the financial statements and our auditor's report thereon. We have obtained the report of the Board of Directors prior to the date of this auditor's report and the Annual Report is expected to be made available to us after that date.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to the report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Helsinki 27 February 2019

PricewaterhouseCoopers Oy
Authorised Public Accountants

Martin Grandell
Authorised Public Accountant (KHT)

HERANTIS
PHARMA

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