

# ANNUA REPORT 2016

Acting in the interest of patients

### FINDING TREATMENTS FOR RARE GENETIC DISEASES TO

# CHANGE THE LIVES OF PATIENTS

ProQR develops drugs to improve the lives of patients around the world. Our scientific staff pioneer in the development of RNA medicines that fight rare genetic diseases. Almost five years after we founded ProQR, it has moved far beyond the status of being a very promising start-up company. And with the positive outcome of our proof-of-concept clinical trial in CF patients we see the first results of our efforts, which encourage and inspire us to keep pushing the envelope.

This is a company in which **NEW IDEAS** emerge on a daily base

At ProQR, we are in the business of developing RNA medicines for patients that suffer from severe genetic rare diseases. The business itself is not what makes us try harder every day. What is?

It is the belief that our company can truly make a difference in the lives of patients. We are convinced that, when we target all our knowledge, creative thinking and perseverance to the same goal, we can truly make a meaningful impact on the lives of patients and their loved ones.

### **Programs and ideas**

To this end, we started our lead program in CF that entered the clinical trial phase in 2015. But from the start, we have strived to go beyond that. We now have two other programs in development for inherited blindness and a debilitating skin disease. And we won't stop there; we have numerous programs in various stages of early development. This is a company in which new ideas emerge on a daily basis. Ideas get challenged, some rejected, some selected for further investigation. Some make it to projects that one day may become programs and – who knows – real medicines that can help patients.

### New solutions, real medicines

It is this constant thinking of the need of patients that keeps us at ProQR on our toes. Our approach leads to results, thanks to the application of highly specific and elegant RNA approaches that have been developed building on the science that was done over the last 20 years. Our in-house research team in what we call 'the innovation unit', has discovered many new molecules that we aim to develop to become real medicines.

The RNA technologies have helped us build an extensive and what we believe is a valuable pipeline. Over time it will give us the opportunity to help patients that are in need of new therapies and build a sustainable independent business.

### Progress in 2016

During 2016 we made true progress.

First of all, we announced the encouraging results from our proof-of-concept clinical trial in CF patients. Furthermore, we established a new group that focuses on inherited blindness; the group now works on the development of several products, the most advanced one is for LCA 10 (Leber's congenital amaurosis Type 10).

# A bright future beckons in which DNA errors can be targeted at the **RNA LEVEL**

Also, we brought our first program for debilitating skin diseases from the idea phase into development.

As said, we won't stop there. We are moving on, beyond the phase of 'promising'. We have grown into a team that can bring ProQR to real



milestones and significant successes in the next few years. To help our company grow stronger in this area in 2016, James Shannon, former Chief Medical Officer at GSK, joined the supervisory board. We already had a very strong team including people like Henri Termeer, longterm CEO at Genzyme and Dinko

Valerio, the founding CEO of the very successful Dutch biotech Crucell.

Where will our quest bring ProQR? A bright future beckons in which DNA defects can be targeted at the RNA level. We will put the latest advancements to use, to changes the lives of patients and their loved ones.

**RESEARCH AND DEVELOPMENT PIPELINE** 



Average age

56%

**Nationalities** 

# ProQRians

**37**yrs

Gender





PAGE V Magazine ANNUAL REPORT 2016

### ProQR - WHO WE ARE, WHAT WE DO

# **ISSINGERED**

ProQR is building. Initially, the company was founded to beat cystic fibrosis in just one child. Today, ProQR's quest leads far beyond, as its mission is to develop treatments for all patients with rare genetic diseases. With a pipeline across 5 different therapeutics area's progressing well, the company's activities gain momentum. ProQR is proud to have expanded its one-vessel enterprise into a fleet.

ProQR's strong development in 2016 underlines the company's remarkable execution power, based on the firm belief that there is a future in targeting DNA defects at the RNA level. Since ProQRs inception, the foundation of the company has been built methodically. The founding team put together a strong management team as well as a supervisory board with exceptional biotech experts and a team of motivated RNA and CF experts. Collaborations with top-notch academic collaborators were set up to drive the most promising science to patients in need.

The execution power was also extended to the scientific level of ProQR. An aggressive and innovative development plan was executed for

### Yes, we aim high, as we are not afraid to **THINK BIG**

the CF program that led to the generation of strong biomarker data in patients with CF early in the development process.

### **Pipeline built on RNA**

Based on the company's strong foundation a diversified pipeline has been constructed with programs that target diseases in which a significant impact can be made to individual patient's lives. All of ProQR's programs are based on innovative and promising RNA technologies including one licensed from Massachusetts General Hospital in Boston, USA. An obvious choice since an RNA molecule can be designed specifically for a certain defect that causes the disease.

ProQR is building on the over 20 years of experience in the RNA field. With the different technologies developed a wide range of genetic disease can now be targeted at the underlying cause, the mutated mRNA that leads to a defective protein and disease symptoms. With several approved products, RNA is becoming an established approach. Our programs take this to the next level and aim to restore the function of these defective proteins without changing the DNA of the cells. This has advantages over for example a small molecule,

and gene therapy approaches. This is a truly powerful technology, as it offers ProQR's scientists – and, in a later stage: doctors – the potential to treat severe genetic diseases, including Leber's congenital amaurosis, Usher syndrome, Fuchs endothelial corneal dystrophy, dystrophic epidermolysis bullosa and Amyloid beta related disorders.

### Aim high, think big

At ProQR, we aim to play a decisive role in all of these rare genetic diseases. Yes, we aim high, as we are not afraid to think big. It is in our RNA! Our founder and CEO Daniel de Boer has a track record in the IT industry with its ever-ambitious timelines; he is therefore not afraid to challenge the pharma & drug development paradigm to keep a high pace of development.

ProQR's deep-rooted urge to generate tangible and meaningful progress has led to some unconventional steps, like listing the company on Nasdaq only two years after its foundation. The same motto applies to starting a proof-of-concept study, showing us very early in the development process the drug activity of our lead molecule for CF. The decision to invest in the discovery of new programs and technologies also shows this typical quality of ProQR



- we are moving fast in building a sustainable future for the company.

### Infrastructure for growth

As it all starts with people, ProQR builds its infrastructure and its development power with a strong focus on finding the ProQRians with the professionalism and spirit. With our 140 strong staff we are proud of our team culture, based on the shared belief that, together, we can make a difference.

Also, ProQR has built its facilities to make this happen. In 2016 the new company headquarters were opened, according to the 'scienceat-our-core' model. At the new ProQR location, the labs are the core of the building.

And, last but not least, ProQR further builds its relationship with both patients and medical professionals. As the company strongly believes in patient-centric development, a patient and medical community engagement (PMCE) team has been installed in 2016. It shows ProQR's dedication to maintaining close relationships with the communities we serve. The support ProQR received from them is crucial in reaching our goals – in 2016, in 2017 and in the years to come – finding treatments for severe rare genetic diseases.



This is the story of twin sisters Myrthe and Rosanne, 29, living in Amsterdam. Not long ago, Myrthe has successfully finished a 150-kilometre skating race. Rosanne, currently working on a three-month project in South Africa as part of a job that involves lots of international travel, ran the half marathon of Amsterdam. Twin sisters, in great shape? Certainly, but there is one minor detail: both Myrthe and Rosanne suffer from cystic fibrosis, also known as CF.

"We desperately hope for **A REAL TREATMENT**, one that changes lives"

Two women, almost in their thirties. After studying Business Administration, Rosanne found employment with an international consulting firm. Her sister Myrthe studied Economics and currently works as a business controller for a large retail organisation.

So far, nothing out of the ordinary. However, both start their working day on similar routines, familiar to anyone with CF. "I switch on the nebulizer", Rosanne explains, "to get my daily shots of medication in about 40 minutes, including antibiotics. It takes about 30 minutes to get ready for a new working day, eating and applying make-up not included." Her sister adds that the evening routine is slightly shorter. "We both have to take pills with pancreatic enzymes whenever we eat any fatty foods to support digestion. It requires quite a number of pills to get us through the day, especially since our doctors insist we consume at least 3,000 to 3,500 calories per day." Rosanne, giggling: "Fortunately, we both like fastfood, haha!"

### Health setbacks

Three months after they were born Rosanne was hospitalized with severe lung infections. Despite the diagnosis of CF, they had a fairly normal childhood. Both became familiar with occasional health setbacks, leading to a decline in pulmonary function.

Myrthe and Rosanne both found jobs with an employer that is very sympathetic to their situation. Rosanne: "I did not beat around the bush during the job interview, stating that CF is a serious disease. I know how to control it, I said, and how to stay healthy. My boss is very understanding. After I was in hospital for two months following an infection, we decided that a fourday contract would better suit me. I work on Monday, Tuesday, Thursday and Friday. On Wednesday, I rest and recharge. I think I have found my ideal work-life balance."

### **Ticking clock**

Meanwhile, there is this nasty disease, CF. Myrthe: "From a young age I knew that my health would deteriorate over time. For many years, I thought I was to lose this battle eventually. My lung function declined and I even got lung haemorrhages." To make things worse, both Rosanne and Myrthe were diagnosed with Cystic Fibrosis Related Diabetes. Myrthe: "We accept it as it is; we take the insulin and go on with our lives." PAGE IX Magazine ANNUAL REPORT 2016





65,000 **CF** patients with **F508del mutation** worldwide



Fortunately, the big picture of CF has changed for the better. Over the years, scientific advancements and new treatments have resulted in a much higher life expectancy for CF patients. Myrthe and Rosanne have also benefitted from the trend - their long function is now stable at around 70 percent. Rosanne: "Without successful research, the clock would be ticking louder every day for us, counting back from 70, 60 and 50 to, eventually, zero. Today, I am happy with my lung function as it is. I will try to do everything in my power to stay at this level."

Myrthe: "Any advancement in science may help stop the clock from ticking for a longer period - or even indefinitely. When we were born, life expectancy was low at about 20. During our lives, scientific developments raised life expectancy, but we hope for more. All we can do it lead a sensible life, with as much sports as possible."

### Living like athletes

Hence, both Rosanne and Myrthe live like athletes to stay in shape. in 2014, Myrthe skated a 100kilometer race on the Weissensee in Austria, as a participant (and

since this year also as treasurer) of the Skate4AIR project. "This year, my aim was to skate the 150-kilometer race. Not only did I finish well with 167 kilometres, I also reached my goal of collecting €10,000 to support CF research! In fact, I raised over €16,000!" Rosanne has adopted a similarly sport-minded lifestyle. She ran the half marathon of Amsterdam 1 hour and 59 minutes. A formidable achievement.

Pushing boundaries is what the twins keeps doing, in different ways. One day after our conversation,

# "By staying in shape, we try to BUY TIME"

### Rosanne

Rosanne left for Johannesburg to work in a three-month project for one of her employer's clients. "Though I am a CF patient, I am confident about my current health

situation. Fortunately, medical care for CF patients in Johannesburg is guite advanced, and there is no need to worry."

### The future

What about the future? How do these CF patients deal with relationships, possibly even with the idea of one day becoming a mother? Rosanne: "We both have been in relationships, in which we chose to be honest and open about our situation. Our doctors told us that childbirth is possible for CF patients with a lung function of over 50 percent. Since we both do well in



Other mutatio





that area, having a child one day definitely is an option."

Median age of death is

30 years or less

The twins come across as optimistic, smiling, confident women. "We're not there yet", Rosanne insists. "We are still waiting for the real breakthrough. Current drugs do not work for every patient. There is still much research needed to provide a better future for CF patients. We don't know how our disease will develop later on. By staying in shape, we try to buy time." Myrthe: "We desperately hope for a real treatment, one that changes lives."

AGE XI NNUAL REPORT 20

# WO C POTENT **TO CHANG** THELIEE OF CF-PATIENTS"

Nicolas Lamontagne, QR-010 captain at ProQR, about clinical trials

In just four years, ProQR has advanced QR-010 - an innovative inhaled therapy for cystic fibrosis based on RNA - from an idea to two clinical trials. To Nicolas Lamontagne, QR-010 captain at ProQR, the clinical trial results are a clear step forward. "Most companies that develop drugs have to go from multiple failures to a positive clinical trial result. We obtained a positive first trial very quickly. In the industry, that is an amazing result."

> From ProQR's founding in 2012, the company has embraced the RNA technology that was discovered by a scientist from Massachusetts General Hospital. The technology that was specifically designed for CF is based on the finding that the function of a defective protein can be restored through an intervention at the RNA level. The big question is then: can the effects that were shown in the laboratory be

translated to actual cystic fibrosis (CF) patients? The first clinical tests of ProOR's molecule OR-010 seem to indicate it does.

### The trials: safety and efficacy

In 2015, ProQR's QR-010 molecule, based on RNA technology, has been put to the test in humans for the first time. The first clinical (phase 1b) trial of QR-010 is assessing the safety and tolerability

### ABOUT QR-010 & CF

Cystic fibrosis (CF) is one of the genetic diseases that ProQR is hoping to find a treatment for. QR-010, the molecule that ProQR has discovered and is developing, specifically targets the most common mutation in cystic fibrosis, called the F508del mutation. affecting ~65,000 CF patients in the western world.

QR-010 targets the disease at the RNA level with the aim to restore the function of the defective CFTR protein that causes CF. The goal of ProQR's QR-010 is to address the underlying defect and stop the progression of cystic fibrosis.

of QR-010 in approximately 64 CF patients, by inhalation in the lung. Nicolas Lamontagne: "The study is on-going, we expect to see final results in mid-2017. So far, the data seem to indicate that QR-010 is safe and well tolerated."

The second trial, performed with the nasal potential difference method, better known as NPD, aimed to find evidence of efficacy. NPD is a well-accepted diagnostic test that has been used before to confirm the diagnosis of cystic fibrosis and more recently to assess the therapeutic benefit of investigational agents in clinical trials. In laboratory models of CF, QR-010 has shown the ability to restore NPD toward normal levels. In this clinical study the effect has been repeated in humans, to find similar signs of efficacy.

### NPD - an important signal

"This NPD test", Nicolas Lamontagne says with a smile, "was developed more than thirty years ago as a diagnostics tool. It was a quick way to show that an important protein is not working, indicating the patient may have CF. We used the tool the other way around, to show that a treatment has a positive effect on this protein function. Hence, the NPD test provided an important signal of the therapeutic potential of QR-010 in people with cystic fibrosis. It is a first but promising signal of drug activity. As we all know, drug development is a long process. The NPD trial is a clear 'go ahead' signal."

Nicolas adds that 'quick' does not necessarily mean 'easy'. "The test is viable, but difficult to perform. We took no chances – we wanted a top-quality trial. To get it right -'fit to purpose' - we decided to partner with the lead five doctors in this area."

### **Reassuring outcomes**

What does the good news really mean? The outcomes are, in Lamontagne's words, "reassuring". "It helps to reassure people that we are working on something that has a potential to change the life of CF patients. The sooner we know that, the better it is for all people involved in this huge effort. It builds confidence that QR-010 is actually going to work."

Nicolas Lamontagne is eager to put the results in perspective. "Does the drug reach the target? Yes. Does it engage the target? Yes. Does it produce the effect you want to see? Yes. Those three answers made the results positive – it proves that the fundamentals are there." Possibly, QR-010 works? "The tests clearly

show activity. In the cells of CF patients, it does what it should be doing. This is the best result we could have hoped for, as failure in phase 1 is very common in the industry." Nicolas adds that the results for the safety and tolerability study are expected to become available later in 2017. "We are excited. I can't wait to see the results."

### More and bigger studies

Next on the menu will be more and bigger – phase 2 – studies in 2018, with more patients, focusing on the safety and efficacy of the molecule, over longer periods. "We plan for success!", Nicolas smiles. Thinking this over, he adds: "This company has a way of operating that I have not seen before. We don't lose time in lengthy discussions, but focus on key actions leading to results. I tell my team all the time – 'there is no time to waste'. There are patients waiting for treatment. There is a sense of urgency at ProQR - we are always seeking opportunities to move faster and to bring this drug to patients in less time!"

There is still a lot more to know about how the drug works., Nicolas insists. "We know the clinical mode of action very well - people are sick because their CFTR protein does not work. We are looking further into the molecular mode of action, e.g. what QR-010 does in the cell to make CFTR work better. The NPD study tells us that QR-010 does what patients need. It improves their CFTR function."

The ProQR's QR-010 captain is convinced that ProQR is betting on the RNA technology for the right reasons. "The results strengthen my belief in an RNA approach.

# "The results strengthen **MY BELIEF** in the RNA approach"

Other companies have decided to follow our track in developing RNA technologies to treat CF and other diseases. But we are definitely operating in the forefront."

Nicolas is convinced that, with ProQR maturing, the company has definitely passed the age of a startup company. "Testing our drug on patients involves new responsibilities and a different way of thinking. This is the time to prove that ProQR is patient-centric, and that we care about their future and well-being."

### Bringing QR-010 to the finish line

With all the knowledge and experience – and creativity – that was involved in finding the molecule, other qualities are essential to get this therapy to patients. "Determination is what it takes", says Nicolas. "There are dozens of challenges ahead. Fortunately, we have many different qualities – like scientific excellence – and a diverse team at ProQR. We aim to do things right, fast and well from the beginning.. Bringing QR-010 to the finish line is what we will do."

### ABOUT NASAL POTENTIAL DIFFERENCE

The CFTR protein functions as a salt channel in – for example – the cells in lungs and the nose. When someone has CF, this CFTR protein isn't there or doesn't function properly. Therefore, salts cannot move in and out of the cells the way they normally do. Doctors can measure how well the channels work as the movement of salts creates an electric current that can be picked up with certain equipment (electrodes) in the nose. This measurement procedure is called the nasal potential difference (NPD) test.

In ProQR's clinical trial, investigators used the NPD test to study whether QR-010 can improve the function of the CFTR channels in CF patients with the F508del mutation. They measured NPD before and after treating the insides of CF patient's noses with QR-010. After treatment, the electric current was more normal in the noses of patients that have two copies of the F508del mutation (homozygous). This indicates that the CFTR channels where more active after treatment with QR-010. This effect was not observed in patients with only one copy of the F508del mutation (compound heterozygous).

Determining the fact that QR-010 restored the function of CFTR is important because CF patients feel better when the CFTR channels in their lungs are more active. That is what QR-010 needs to do! It was shown that QR-010 does this in the noses of F508del homozygous patients and this is important because it's known that the lung cells respond very similar to cells in the nose.

Nicolas Lamontagne, QR-010 captain at ProQR adds: "We are doing another study where we administered the drug in the lungs of 64 F508del homozygous CF patients with QR-010 to prove that this is safe. Secondly, we will look at whether patients have any benefit from inhaling QR-010 into their lungs. Results from this study are expected this year."



PAGE **XV** Magazine ANNUAL REPORT 2016

# **ATOP-NOTCH SCIENCE THAT LEADS TO A TREATMENT**

Patricia Biasutto, QR-110 captain at ProQR

2017 may become a very exciting year for Patricia Biasutto, QR-110 captain. The work of her department, aimed at developing a novel drug for Leber's congenital amaurosis Type 10 (LCA 10) patients, has progressed steadily. The team is expecting to start a first clinical trial in patients this year.

> Patricia Biasutto, born and raised in Venezuela and now heading ProQR's QR-110 research and development team in Leiden (The Netherlands), has multiple reasons for being optimistic. Obviously, as a biotech scientist looking for a treatment for LCA 10, she cannot confirm that there is a breakthrough. Not yet.

> "We have definitely found something. ProQR's team has developed a molecule that shows promising results in laboratory tests. In collaboration with various academic

centres we have made tremendous progress and in 2017 we will take development to the next phase: clinical trials."

### Change the lives of patients

In search for the one molecule that may change the lives of the 2,000 patients (see text box) that suffer from LCA 10, Biasutto and her colleagues applied what she describes as "the amazing innovative model of 'optic cups'." She explains, in a short lecture: "Before we can test our molecule in patients we first need to find out whether it works.

## "A clinical trial **SAVED MY LIFE**. That event strengthens my personal motivation"

For LCA 10 we had no good models to test this in and you cannot just take an eye from a patient! We worked together with the University College London (UCL) that recently developed this amazing technique where you can take a bit of skin from an LCA 10 patient and turn the cells into stem cells and basically grow retinas in the laboratory. We were one of the first companies to use this 3D organoid model and with it show that QR-110 does exactly what we hoped it does in the closest representation of a patient's retina."

### The key to patient benefit

In the laboratory, the team found confirmation that the QR-110 molecule restores the RNA sequence of the CEP290 protein that has a very important role in keeping photoreceptor cells (rods and cones) alive in the retina. In LCA 10 patients, this protein is not formed. Hence, the photoreceptor cells in the retina die and – with that – the ability to see. "Restoring production of this protein may be the key to keep the retinas intact and prevent blindness. The next, exciting step will be clinical testing in patients." Until now, every one of these steps, every new test produces another 'green light'. "Seeing the molecule perform well in the 'optic cup' model is truly exciting. It is the sensation that scientists, like me, flourish on".

Patricia calls the process of becoming aware of the molecule's potential "a very fulfilling experience" and "an amazing feeling". "But as much as I celebrate it, the life-changing moment has yet to come. That will have to come when the molecule actually proves to be effective in a patient. We took the first step – or hurdle. There is a green light, but we need more of them."

### A personal angle

In Patricia Biasutto's mind, there is no doubt that the molecule will reach the all-important phase of clinical trials. Her optimism is purely scientifically-based, but there is also a more personal angle to this. "In short, a clinical trial saved my life. That life event strengthens my personal motivation to get QR-110 to the clinical trial phase ASAP."

She explains: "When I was a child, I suffered from cancer. It was a severe, life-threatening type of cancer. My future was very uncertain, the doctors had very limited options to treat the cancer which unfortunately did not work to stop the disease. At that time, a new combination of drugs just reached the clinical trial phase. My very caring and committed doctors with my parent's support managed to get me on the program. That is the reason why I am here today."

### A scientific connection

It was this event that eventually brought Patricia to ProQR. When

ProOR was founded, Patricia was among the first to join. "There were only five people working here. At the time, I was working in Paris. Taking the job interview by Skype did not feel right, so I volunteered to pay for my roundtrip to come over to Leiden to have it in person. Looking back at it, it was the right decision. It was like love at first sight with the team. There was this immediate connection with the founder and CEO, Daniel de Boer, who's initial motivation to start this business was to find a cure for his son's disease, CF. In my four years at ProQR, I never once doubted my decision."

What defines this connection, this common goal? "It is the shared awareness that, in this profession and at this company, we truly have the potential to change patients' lives. This is not just a job. I am thrilled that soon, we may be able to offer patients the opportunity that saved and shaped me. To anyone else, clinical testing is just a technical term. To me, it is much more than that. It is hope."

### "It is all about people"

ProQR may not be the largest biotech company in the world today, not by far. To Patricia, the size is irrelevant, as even the smallest of biotech firms can achieve great results. "It is all about people, their knowledge and their experience. It is about putting the right teams together, to find the right entrepreneurial and scientific chemistry".

Patricia insists that innovation can only be born in environments without boundaries, where scientists feel they can unleash their creativity. "It can only happen when you

### **OPTIC CUP**

Human retina is a highly complex tissue that helps us to see things. In order to properly test QR-110 we have recreated this special tissue in the laboratory. In order to do this we took skin cells from a LCA 10 patient and reprogrammed them into stem cells by expressing some key genes.

These stem cells were then grown in presence of special chemicals that trick them into developing retina like structure called optic cup.



feel free to challenge your co-workers in a professional way and when you know your efforts are valued. I think ProQR does perform exceptionally well in this area – it is a particularly nourishing environment, especially when you need to work long hours and weekends to find solutions to tough problems."

#### **Creativity and perseverance**

To Patricia Biasutto, success in biotech research comes from mixing creativity and perseverance – and a little bit of luck. "You need to have a vision of what you want to achieve, as you need some sense of direction. You need to be curious to find new ways of apply-

ing RNA technologies – tested or not - to genetic diseases. You need strong partnerships with the best academic centres, their research and their tools. I guess that when a company has all that – and this applies to ProQR – there is a great chance of success."

#### Next steps

What are the next steps to bring QR-110 to patients? "In our upcoming trial we aim to make sure our molecule is safe, but the trial will also tell us much about the efficacy."

Patricia stresses the importance of involving patients, as part ProQR's

patient-centric approach. "We want QR-110 to be administered in the most comfortable and effective way. To ensure this we are always looking to communicate with patient groups to tap into their expertise. There is also a practical aspect in designing a trial and providing information that is accessible for people who are visually impaired."

For LCA 10 patients, 2017 could be a year of promise. "And of hope", Patricia adds. What is the ultimate dream? "Repairing sight for all patients with inherited blindness. Or at least to stop the progression of these diseases in young patients."



in Western world



There are over 300 genetic diseases that can cause blindness and we have chosen to make these important targets for our quest for treatments. Our lead program is for Leber's congenital amaurosis (LCA), a rare genetic eye disease characterized by progressive loss of vision. Depending on the genetic mutation patients usually become completely blind during the time between birth and the age of 8. As such, LCA is the leading cause of genetic blindness in children. We also develop programs for other inherited blindness called Usher syndrome and Fuchs endothelial corneal dystrophy.

The key player in LCA 10 - the most severe form of LCA, affecting approximately 2,000 patients in the Western world - is the CEP290 protein. This protein helps the development of cilia in the photoreceptor cells (rods and cones) in the retina. A non-functioning CEP290 protein causes subsequent retinal degeneration in LCA 10 patients.

PAGE XVIII

Other mutatio

LCA 2 due to RPE65 mutation

atients witl p.Cys998X in CEP290





In a healthy eye, the outer segment of light detecting cells (rods and cones) in the retina are constantly renewed, a process in which the CEP290 protein plays a major part. It facilitates the transport of new 'building materials' to the outer segments to keep them alive. Due to a defect in the DNA of LCA 10 patients, this crucial protein is not produced. As a result, the light detecting cells are not maintained and the cells die, leading to poor vision and - eventually - blindness.

ProQR is developing a novel RNA therapy for LCA 10 patients, called QR-110. The molecule is specifically designed to exclude the p.Cys998X mutation that is present in the CEP290 mRNA of some LCA 10 patients. This mRNA is the 'blueprint' of the CEP290 protein. By fixing this blueprint a normal healthy CEP290 protein will be formed that is expected to have normal function. The goal of QR-110 is to stop the progression of or potentially even reverse some of the effects of LCA 10 caused by the p.Cys998X mutation. ■

### DYSTROPHIC EPIDERMOLYSIS BULLOSA

Skin diseases are one of ProQR's key therapeutic areas for RNA-based therapies. The lead program for dystrophic epidermolysis bullosa (DEB) focuses on a rare genetic disease that causes blisters, itching and severe pains. "Patients lead a life of pain and itch", says Prof. dr. Marcel F. Jonkman, one of the top EB experts in The Netherlands. "The disease's serious complications often result in skin cancer and, eventually, death."

"I am often amazed by the **POSITIVE ENERGY** and **MENTAL RESILIENCE** that RDEB patients show"

Prof. dr. Jonkman

Prof. dr. Jonkman is the leading dermatologist at the UMCG University Medical Center Groningen in The Netherlands. His department runs The Netherlands' Center for Blistering Diseases. Of the 500 patients that visit the center regularly, recessive dystrophic EB (RDEB) patients suffer the most severe symptoms. Many of them don't reach the age of 40. Although the disease itself is not life threatening, the damages caused often are. Prof. dr. Jonkman: "Most RDEB patients die of squamous cell carcinoma, a form of skin cancer. Other patients may die of heart and kidney problems."

### Missing adhesion molecule

Technically, the problem is the absence of an adhesion molecule – type VII collagen – that functions as a velcro in the skin, sticking the skin layers together. Healthy people have this molecule that grows adherence structures, but in RDEB, this molecule is missing. This absence causes a wide range of effects. "Patients have a skin so fragile that even minor trauma like rubbing may cause blistering. The skin disadheres in its lower layers", Prof. dr. Jonkman explains.

### **Blisters and scars**

"What we see among RDEB patients", says Nurse practitioner drs. J. Duipmans, "is blisters over

Prof. dr. Jonkman, Dermatologist Universitair Medisch Centrum Groningen (UMCG) large body surfaces, as well as inside the body amongst many other symptoms."

In daily life, any bump or rubbing against the skin causes blisters filled with fluid. Drs. J. Duipmans: "The blisters heal slowly and cause scars in weeks and months. We help RDEB patients deal with the pain and the itching; these symptomatic treatments are aimed at reducing the pain and itch and help the wounds heal. We teach patients and their families how to deal with infection."

### **Recurring problem**

"Caregivers know the drill. The recurring everyday problem of the RDEB patient is the wound dressing changes that can take many hours, sometimes using a disinfecting chloride bath. To most patients, this procedure comes with excruciating pain, as dressings tend to stick to the wounds. The patients live a life of pain and of itch that disturbs their rest at night, leading to more blisters and more pain and itch."

### Beyond the skin

But RDEB reaches far beyond problems of the skin. The damaging effects of RDEB like the fusing of fingers and toes eventually lead to loss of mobility. Prof. dr. Jonkman: "To treat range of symptoms

# "It is a **LIFE-LONG NIGHTMARE** for patients and their caretakers"

Nurse practitioner drs. J. Duipmans



in RDEB, we work closely together with many specialists in the UMCG. Under the coordination of myself and the nurse, we work together in a team of 20 scientific disciplines, from pediatricians, surgeons, orthopedists, gastroenterologists, dieticians and plastic surgeons to rehabilitation doctors, physiotherapists and others. To make the periodical checkups as comfortable as possible, RDEB patients can be seen by these specialists in one single visit. For any issue that cannot wait until the next visit to Groningen, we offer consulting via video-conferencing and other means of communication."

Prof. dr. Jonkman expresses a strong hope for a treatment for RDEB. "RDEB is a very rare disease but probably the most severe disease in dermatology. The multi-organ involvement makes it, as they say, 'the worst disease you never heard of'. I am keeping my fingers crossed for a treatment that reduces the blister formation and the itching, being the primary problems of RDEB patients."

### Major effect on lives

Drs. J. Duipmans: "I must admit that novice - and even professional – nurses sometimes find it hard to witness the pain and anxiety that comes with RDEB, specifically among young children. No matter how well we take care of the wounds and blisters, there will always be new ones. This skin disease has a major effect on the lives of patients as well as of their families. Witnessing your child grow up in pain, with limited opportunities in school and work and in developing relationships is tough for a parent – and to the people that love and care about him or her. It is a lifelong nightmare for patients and their caretakers."

"Having said that, I am often amazed and touched by the positive energy and mental resilience that RDEB patients show. These patients deserve a cure or a treatment that improves their quality of life or at least makes their lives bearable. Ask any patient and he or she will say that reducing the formation of blister by half would immensely change their lives."





DEB patients miss functional structures in their skin called anchoring fibrils (see illustration) that are important for binding the different

Genetic





**Healthy skin** 

**DEB** skin

PAGE XXII Magazine ANNUAL REPORT 2016



Other mutatio



**DEB** patients with exon 73 mutation (in COL7A1) in Western world



skin layers together. Absence of anchoring fibrils make the skin very fragile. It blisters with the slightest friction, for example from wearing clothes, resulting in wounds that do not easily heal. With QR-313 we

aim to restore the anchoring fibrils in patients that have a mutation in exon 73 of the COL7A1 gene. The goal is to increase the quality of life for patients by normalizing wound healing and reducing blistering.



DEB skin + QR-313

PAGE XXIII Magazine ANNUAL REPORT 2016

# "CREATIVITY, PERSISTENCE AND DR IT ALL COMES TOGETHER IN ProQR"

Smital Shah, CFO ProQR

Smital Shah, Chief Financial Officer at ProQR, is excited about how the company has progressed. With three programs in full development and one with clinical data, ProQR has moved into the next phase of its existence. "In under five years, ProQR has evolved into a strong, emerging biotech company with great potential."

> Smital Shah has a 13-year track record of management and leadership in biopharma companies and investment banking, with particular experience in financial strategy and capital markets. Looking back on her first two and a half years with ProQR, she says: "This is a company that has moved from exploring one 'promising' idea to executing on a global clinical program from that idea and then advancing other programs in the pipeline in just 4 short years. With three programs in development we are heading in the right direction, with more to come."

#### **Clear progress in programs**

After ProQR embarked on its journey less than five years ago with its QR-010 program for cystic fibrosis, the contours of our final goal are beginning to show. Two more programs have entered the development stage. QR-110 for Leber's congenital amaurosis Type 10 and QR-313 for dystrophic epidermolysis bullosa.

With the CF program as its shining example of what you can do with a strong focus, ProQR wants to create the same dynamics for the other programs. "We wanted to create an

# "We will soon have a **SECOND** PROGRAM in clinical trials"

environment of knowledge sharing but maintain the laser focus that comes with small dedicated teams."

### Three promising tracks more concepts developing

ProQR is financially in good shape and is making great progress in its programs. Shah: "What distinguishes ProQR from most other biotech companies is that in its very short history, it has not just one but three promising tracks and more concepts in early stage of development, along with the strong drive to make a difference for patients with severe genetic rare diseases. That is pretty unique."

According to ProQR's CFO, knowing that after QR-010, the QR-110 & QR-313 programs came from the company's in-house innovation unit is an important trust-builder among ProQR's several stakeholders - importantly, the patients, the scientific community, our employees as well as others like investors and business partners. "This shows we are serious about targeting unmet medical needs in rare genetic diseases."

### Strong data, promising pipeline

Being the CFO of ProQR, Smital Shah meets investors and industry

analysts on a regular basis. "They understand and acknowledge we are making good progress. However, I don't think that what we believe is phenomenal data on OR-010 – presented in October 2016 – is reflected in the ProQR stock price yet. With the strong clinical data along with our promising pipeline, in my mind, this company is undervalued; but biotech is an industry where intrinsic value is not always reflected at all times, so we believe that this may change over time.

Shah insists that ProQR has shed off its initial label of 'start-up company' with a single idea. "Biotech happens in a series of jumps. Most companies are born out of a good idea, and then it's about executing and achieving proof-of-concept on that idea. We have matured and accomplished this for QR-010 in patients and are now evolving to the next stage. We will soon have a second program in clinical trials and possibly a third next year. Ultimately we are looking forward and building towards developing ProQR as a commercial company in the future and truly have an impact on patient lives."

### Building on the success of RNA

To investors, Shah pitches ProQR as a strong, patient-focused company that is successful in applying RNA therapeutics. "Interfering in a disease at the RNA level has come a long way with 5 approved RNA products that have come before us. We have built on this success and believe that ProQR is a front runner in the next wave of advancement in RNA therapeutics. We are grateful that so much work has been done by others before us. We are building on their evidence and results, to achieve our own goals in our patient-focused strategy."

Before Smital Shah joined ProQR in 2014, she was in awe when the facts about ProOR were presented to her. "ProQR wanted to make a difference, but I was impressed by how they executed this. Two years before that, the founder – with no biotech background - had 'an idea'. In such a short time, ProQR had advanced this idea into something viable, with the help of visionary scientists and proven biotech entrepreneurs like Dinko Valerio and Henri Termeer. I was impressed and saw that determination, in combination with professionalism and knowledge, can lead to great things.

### **Innovation incentives**

Smital Shah smiles at the idea of ProQR being a Dutch company. "From a fiscal point of view, having The Netherlands as a base makes good sense, as this country offers many tax advantages and innovation incentives for a company like ours. Also, the low cost of operating a business makes The Netherlands very attractive, as compared to the U.S. Every time I fly over to Amsterdam from Palo Alto, I notice how tall people are, haha, but also their easy, up front and refreshing way of expressing opinions and ideas. That, in combination with the access to biotech talents that ProQR has in this market, is an important advantage."

"It is part of ProQR's DNA, just like qualities such as creativity, persistence and drive. They all come together in ProQR, in this unique way of looking at the world and at the job at hand – being prepared to give everything you have to get to this one goal."

# ANNUAL REPORT 2016

# **Table of Contents**

Message from the CEO	2
Key Figures	3
Management Board	4
Supervisory Board	5
Management Board Report	5
Supervisory Board Report	32
Corporate Governance	35
Risk Management	45
Financial Statements 2016	47

# Message from the CEO

2016 was an important year for ProQR in which we made significant progress on our mission to bring life changing therapies to patients in need. We advanced our pipeline of RNA therapies targeting severe genetic rare diseases and further enforced our strong team of dedicated ProQRians to bring our company past exciting milestones in the upcoming years. First of all we completed the first clinical trial of OR-010 in patients with cystic fibrosis, a major achievement for a young company like ProQR. The results from this early trial told us that QR-010 has potential to become a meaningful therapy for patients. A second clinical trial is ongoing. The first part of the study was completed and showed that QR-010 was safe and well tolerated. During 2016 the FDA granted the QR-010 program Fast Track designation. These important events have encouraged us and the medical community in the further development of QR-010 and our quest to help CF patients.

The second leg of our company is developing therapies for genetic blindness. The first program in this is called QR-110 and targets subtype 10 of the most common genetic blindness in children, Leber's congenital amaurosis (LCA). We are currently doing all the preparations to start a clinical trial of QR-110 in the first half of 2017. During several scientific conferences in 2016 we have published very promising pre-clinical results showing this second molecule can target and restore the underlying defect causing LCA 10. In the same year both the FDA and the EMA have granted QR-110 Orphan Drug designation.

During 2016 we initiated a first development program for a debilitating skin disease, an area with a high unmet medical need. Our first investigational product in this area is QR-313, and is targeting a disorder called dystrophic epidermolysis bullosa. We are planning to rapidly move the program through the first stages of development in 2017 to start and complete a clinical trial in 2018.

The advancement of this third development program shows the exceptional productivity of the innovation unit since its inception in 2014. The goal of the innovation unit is to expand our pipeline by discovering promising new therapeutics and RNA technologies. During our first Research & Development day in 2016 we revealed some of the other programs that are being pursued in the innovation unit including additional programs for inherited blindness, Usher syndrome and Fuchs endothelial corneal dystrophy (FECD), and a program for beta-amyloid related disorders.

We could not have achieved any of these results without the support from the patients and medical research teams that participated in our clinical trials, our academic partners, our shareholders, and of course the tireless efforts of all ProQRians. Thank you for making this another meaningful year.

Daniel de Boer

# **Key Figures**

	2016	2015
Result from continued operations (in € 1,000)		
Net revenue		
Other income	1,828	3,235
Research and development costs	(31,923)	(23,401)
General and administrative costs	(9,478)	(6,837)
Operating result	(39,573)	(27,003)
Net result	(39,103)	(20,832)
Balance sheet information (in € 1,000)		
Non-current assets	3,528	2,340
Current assets	62,015	97,769
Total assets	65,543	100,109
Shareholders' equity	53,136	89,799
Non-current liabilities	5,697	4,824
Current liabilities	6,710	5,486
Cash flows (in € 1,000)		
Net cash used in operating activities	(34,221)	(24,232)
Net cash used in investing activities	(2,539)	(1,324)
Net cash generated by financing activities	357	1,620
Ratio's (in %)		
Current ratio	9.2	17.8
Solvency	81.1	89.7
Figures per share		
Weighted average number of shares outstanding	23,346,507	23,343,262
Basic and diluted earnings per share (in €)	(1.68)	(0.89)
Cash flow per share (in €)	(1.56)	(1.03)
Employees		
Average number of staff for the period	133.4	86.1

### Management Board

We have a two-tier board structure consisting of our Management Board (raad van bestuur) and a separate Supervisory Board (raad van commissarissen). The Management Board operates under the chairmanship of the Chief Executive Officer and shares responsibility for the deployment of ProQR's strategy and policies, and the achievement of its objectives and results.

Under Dutch Law, the Management Board has ultimate responsibility for the management and external reporting of the Company and is answerable to shareholders at the General Meeting of Shareholders. Pursuant to the two-tier corporate structure, the Management Board is accountable for its performance to a separate and independent Supervisory Board.

The following table sets out information with respect to each of our Management Board members, their respective ages and their positions at the Company as of the date of this annual report.

Name	Gender	Date of Birth	Position	Date of Appointment	Term expires
Daniel de Boer	Male	April 12, 1983	Chief Executive Officer	February 21, 2012	2018
René Beukema	Male	March 26, 1964	Chief Corporate Development Officer and General Counsel	April 17, 2014	2018

The following sets forth biographical information regarding our management board members.

*Daniel de Boer* is our founding Chief Executive Officer and has served as such since our incorporation in February 2012. Mr. de Boer is a passionate and driven entrepreneur and advocate for CF patients, and has assembled an experienced team of successful biotech executives as co-founders and early investors. As a serial entrepreneur in IT, he founded and led a number of tech companies through phases of growth, initiating development and launch of several IT related products in several European countries. Prior to founding ProQR, Mr. de Boer served as a founder and Chief Executive Officer of RNA Systems, founder and Chief Executive Officer of PC Basic, and founder and Chief Executive Officer of Running IT. Mr. de Boer is responsible for the overall strategy and general business in the company.

*René Beukema* has served as our Chief Corporate Development Officer and General Counsel since April 2014. Mr. Beukema joined us in September 2013 and is a seasoned in-house corporate lawyer in the Dutch biotechnology arena. Prior to joining us, Mr. Beukema served as general counsel and corporate secretary of Crucell N.V. for twelve years, following his experience as a senior legal counsel at GE Capital / TIP Europe and legal counsel at TNT Express Worldwide. Mr. Beukema was also a venture partner of Aescap Venture, a life sciences venture capital firm. Mr. Beukema is the co-founder and advisor of Mytomorrows, a Dutch life sciences company, and a member of the VU Medical Cancer Center children in Amsterdam. He holds a postdoctoral degree in corporate law from the University of Nijmegen in co-operation with the Dutch Association of In-house Counsel (Nederlands Genootschap van Bedrijfsjuristen) and a Master's degree in Dutch law from the University of Amsterdam.

### Supervisory Board

The Supervisory Board supervises the policies of the Management Board and the general course of affairs of ProQR and advises the Management Board thereon. The Supervisory Board, in the two-tier corporate structure under Dutch law, is a separate and independent corporate body.

The following table sets forth information with respect to each of our supervisory board members and their respective ages as of the date of this annual report. The terms of office of all our supervisory board members expire according to a rotation schedule drawn up by our supervisory board.

Our supervisory board is currently composed of the following members, all of whom are independent under applicable NASDAQ standards and all of whom, with the exception of Mr. Antoine Papiernik are independent under the Dutch Corporate Governance Code (DCGC):

Name	Gender	Nationality	Date of Birth	Position	Date of Appointment	Term expires
Dinko Valerio	Male	NL	August 3, 1956	Chairman	January 1, 2014	2020
Alison Lawton	Female	US	September 26, 1961	Member	September 17, 2014	2018
Antoine Papiernik	Male	FR	July 21, 1966	Member	January 1, 2014	2017
Henri Termeer	Male	NL	February 28, 1946	Member	January 1, 2014	2020
James Shannon	Male	GB	June 5, 1956	Member	June 21, 2016	2020
Paul Baart	Male	NL	November 9, 1950	Member	June 10, 2015	2019

The following sets forth biographical information regarding our supervisory board members.

*Dinko Valerio* is one of our founders and currently serves as the chairman of our supervisory board. Mr. Valerio has served on our supervisory board since January 2014. Mr. Valerio is a scientist and an experienced biotech entrepreneur with experience in both public and private companies as CEO and board member. Mr. Valerio is founder and former CEO of Crucell N.V., a Dutch biotech company, and founder and general partner of Aescap Venture, a life sciences venture capital firm. In 1999, Mr. Valerio was one of the founders of Galapagos Genomics N.V., a spinout from Crucell N.V. which develops novel mode of action medicines. Adding to his corporate experience, Mr. Valerio is a professor in the field of gene therapy of the hematopoietic system at the University of Leiden. He received his Master of Science degree in Biology from the University of Amsterdam in 1982 and completed his Ph.D. in Molecular Genetics with Honors at the University of Leiden in 1986. Mr. Valerio also was a visiting scientific specialist at Genentech Inc., San Francisco in 1985 and a postdoctoral fellow at the Salk Institute, San Diego from 1986 to 1987. He is an author on more than 100 articles in peer-reviewed journals and an inventor on 11 patent-families.

*Alison Lawton* has served on our supervisory board since September 2014. Ms. Lawton is currently the Chief Operating officer of Aura Biosciences Inc. From January 2013 to January 2014, Ms. Lawton served as Chief Operating Officer of OvaScience, Inc., a public life sciences company. From 1991 to 2013, Ms. Lawton worked at various positions of increasing responsibility at Genzyme Corporation, or Genzyme, and subsequently at Sanofi-Aventis, following its 2011 acquisition of Genzyme, each a global biopharmaceutical company. Ms. Lawton served as head of Genzyme Biosurgery, where she was responsible for Genzyme's global orthopedics, surgical and cell therapy and regenerative medicine businesses. Prior to that, Ms. Lawton oversaw Global Market Access at Genzyme, which included Regulatory Affairs, Global Health Outcomes and Strategic Pricing, Global Public Policy, and Global Product Safety & Risk Management. Before joining Genzyme, Ms. Lawton worked for seven years in the United Kingdom at Parke-Davis, a pharmaceutical company. Ms. Lawton serves on the board of directors of Verastem, Inc., a public biopharmaceutical company. In 2016 she joined the board of directors of CoLucid Pharmaceuticals. She also served on the board of directors of Cubist Pharmaceuticals for three years until its acquisition by Merck &Co., Inc. in 2015. She is member of the Corporate Advisory Board of X4 Pharmaceuticals. She is past President and Chair of the Board of Regulatory Affairs Professional Society and past FDA Advisory Committee member for Cell and Gene Therapy Committee. She earned her BSc in Pharmacology, with honors, from King's College London.

*Antoine Papiernik* has served on our supervisory board since January 2014. Mr. Papiernik is managing partner at Sofinnova Partners, which he joined in 1997. Mr. Papiernik has been an initial investor and active board member in public companies like Actelion, Addex, Auris Medical, Orexo, NovusPharma (then sold to CTI), Movetis (then sold to Shire), Mainstay, Pixium and Stentys, which went public respectively on the Zurich Stock Exchange, the NASDAQ Global Market, the Stockholm Stock Exchange, the Milan Nuovo Mercato, the Belgium Stock Exchange, the Dublin Stock Exchange and EuroNext Paris, in Cotherix (initially NASDAQ listed, then sold to Actelion), Core Valve (sold to Medtronic), Fovea (sold to Sanofi Aventis) and Ethical Oncology Science (EOS, sold to ClovisOncology). Mr. Papiernik has also invested in and is a board member of private companies MD Start, ReCor, Shockwave Medical and Reflexion Medical, Gecko Biomedical and Rgenix. Mr. Papiernik has an MBA degree from the Wharton School of Business, University of Pennsylvania.

Henri Termeer is vice chairman and has served on our supervisory board since January 2014. From October 1983 to June 2011, Mr. Termeer served as chairman, president and chief executive officer of Genzyme Corporation. For ten years prior to joining Genzyme, Mr. Termeer worked for Baxter International Laboratories, Inc., a manufacturer of human health care products. Mr. Termeer resigned from Genzyme in June 2011 following the acquisition of Genzyme by Sanofi. Widely acknowledged for his contributions to the biotechnology industry and health care field, Mr. Termeer is active in the areas of humanitarian assistance, policy issues, and innovation in providing access to health care. He is a member of the board of each of Massachusetts General Hospital and Partners HealthCare and a member of the board of fellows of Harvard Medical School. Mr. Termeer is also a member of the board of the Massachusetts Institute of Technology and serves on its Executive Committee and a board member of the Biotechnology Industry Organization (BIO). He is a board member of the New England Healthcare Institute, a nonprofit, applied research health policy organization he was instrumental in founding and on the boards of Boston Ballet, Museum of Science, WGBH and Project Hope. Mr. Termeer is also currently a board member of Abiomed Inc., Aveo Pharmaceuticals, Moderna Therapeutics and was a board member of Allergan, Inc. from 2014 through its acquisition by Actavis in March 2015. Mr. Termeer was chairman of the Federal Reserve Bank of Boston's board of directors from 2010-2011. Mr. Termeer studied economics at the Economische Hogeschool (Erasmus University, the Netherlands) and earned an MBA from the Darden School at the University of Virginia.

*James Shannon, MD* has served on our Supervisory Board since June 2016. Mr. Shannon has had an extensive career in drug development and pharma. From 2012 until his retirement in 2015, Mr. Shannon was Chief Medical Officer at GlaxoSmithKline. Prior to that he was Global Head of Pharma Development at Novartis and Senior Vice-President, Clinical Development at Sterling Winthrop Pharmaceuticals. He held board positions at companies including Biotie, Circassia, Crucell, Endocyte, MannKind and Cerimon Pharmaceuticals. He received his undergraduate and postgraduate degrees at Queen's University of Belfast and is a Member of the Royal College of Physicians (UK). Mr. Shannon currently holds board positions at Mannkind Corp (USA), myTomonows (NL) and Immodulon (UK).

*Paul Baart* has served on our supervisory board since June 2015. Mr. Baart made his career in public accounting in both the Netherlands and the USA. At PwC the Netherlands he served on the management board and the supervisory board. He was also a member of the global board of PwC International. He has served many large (listed) and international clients in various industries. He held professional qualifications both in the Netherlands and in the USA. He was chairman of Royal NIVRA, the Dutch Institute of Registered Accountants (now NBA), member of the Dutch Council on Annual Reporting (RJ) and supervisory board member of Nyenrode Business University. Present roles include outside member Enterprise Chamber Amsterdam Court of Appeal (Ondernemingskamer) and chairman Supervisory Board Grant Thornton the Netherlands. He studied business economics at the Vrije Universiteit in Amsterdam, where he also passed the Registeraccountantsexam.

### Management Board Report

### The Company

ProQR Therapeutics N.V., or "ProQR" or the "Company", is dedicated to changing lives through the creation of transformative RNA medicines for the treatment of severe genetic rare diseases (sometimes called orphan diseases) such as cystic fibrosis, Leber's congenital amaurosis Type 10 and dystrophic epidermolysis bullosa. Based on our unique proprietary RNA platform technologies we are growing our pipeline with patients and loved ones in mind.

We were incorporated in the Netherlands, on February 21, 2012 and reorganized from a private company with limited liability to a public company with limited liability on September 23, 2014. Legal demerger of our Company was effectuated as per June 30, 2015. Our Company has its statutory seat in Leiden, the Netherlands. The address of its headquarters and registered office is Zernikedreef 9, 2333 CK Leiden, the Netherlands.

Since September 18, 2014, our ordinary shares have been listed on the NASDAQ Global Market under the ticker symbol PRQR.

### Operations

We are an innovative biopharmaceutical company that discovers and develops RNA therapeutics for a better future for patients with severe genetic rare diseases. Our team of dedicated ProQRians works closely with patient groups and our academic partners and this has led to many successes in the short life-span of the company. Our lead program targets the most common mutation in CF and because of an aggressive and innovative development strategy positive data from a biomarker study in CF patients was presented in 2016. A second clinical trial in CF patients is ongoing and is expected to read out in mid-2017. Our first program targeting an inherited blindness is expected to enter clinical trials during the first half of 2017 and more programs in this therapeutic area are being advanced. The third area that we focus on are debilitating skin diseases, for which we are developing several programs. The first of these is expected to enter clinical trials in 2018. Our diversified pipeline that we presented during a Research & Development Day in 2016 is the result of our in-house discovery engine that we call the innovation unit. This group has been very productive in discovering new programs based upon our toolbox of RNA technologies that we have in-licensed or developed in-house. We currently have discovery programs including programs in Usher syndrome, Fuchs endothelial corneal dystrophy (FECD), Huntington's disease, amyloid beta related disorders and Friedreich's ataxia. We believe our strong team, excellent partners and our extensive pipeline will lead to a sustainable future for our company and to accomplish our quest to make a meaningful impact on the lives of patients in need.

### QR-010 and Cystic Fibrosis (CF)

CF is a genetic disease that causes early morbidity and mortality. CF currently has no cure. The median age of death for CF patients is 30 years or less, and more than 90% of CF patients die from respiratory failure. To date, all but two of the therapies approved to treat CF patients are designed to treat the symptoms of CF rather than address the underlying cause. CF is caused by mutations in the gene that encodes for a protein called cystic fibrosis transmembrane conductance regulator, or CFTR. Although there are more than 1,900 different genetic mutations that cause CF, the F508del mutation that we are targeting is the most prevalent and is present in approximately 85% of all CF patients in the Western world and approximately 65,000 patients worldwide. In CF patients, this mutated gene and the resulting defective protein lead to the dysfunction of multiple organ systems, including the lungs, pancreas and gastrointestinal tract. In the lung

airways, absence of functional CFTR protein leads to unusually thick, sticky mucus that clogs the lungs and increases vulnerability to chronic, lung-damaging infections.

Our lead product candidate in the CF space, QR-010, a first-in-class RNA-based oligonucleotide, is designed to address the underlying cause of the disease by targeting the mRNA defect encoded by the F508del mutation in the CFTR gene of CF patients and restoring CFTR function. QR-010 is designed to be self-administered through a small, handheld aerosol delivery device, or nebulizer, in the form of a mist inhaled into the lungs. In pre-clinical studies we have shown this method could allow maximum exposure of QR-010 to the primary target organ, the lung, as well as significant exposure to other affected organs through systemic absorption into the blood. Based on our extensive pre-clinical studies on safety, delivery and efficacy in relevant cell and animal models we started two global clinical studies of QR-010 in 2015. During the North American Cystic Fibrosis conference (NACFC) from October 26 – 29, 2016 we presented positive results from PQ-010-002, a proof-of-concept trial demonstrating that QR-010 restores CFTR function in the nasal linings of patients that are homozygous (who carry two allelic copies) of the F508del mutation. CFTR is the protein channel that is defective in patients with CF, and presence or absence of function of CFTR can be measured by an important biomarker called the nasal potential difference, or NPD, assay. Following four weeks of topical therapy, QR-010 improved the CFTR-mediated total chloride response, a direct measure of CFTR function. This was confirmed by the restoration of other indicators of CFTR function, such as the sodium channel activity. In subjects that were compound heterozygous (who carry one copy of the F508del mutation and one other disease causing mutation), no meaningful difference was measured. QR-010 was observed to be welltolerated in all subjects.

Besides the completed NPD trial, we are running a second clinical trial. This Phase 1b clinical trial, which we refer to as PQ-010-001, is a randomized, double-blind, placebo-controlled, 28-day dose-escalation trial that is being conducted in 27 sites in North America and Europe. The primary endpoint of the trial is to evaluate the safety, tolerability and pharmacokinetics, of single and multiple ascending doses of inhaled QR-010 in approximately 64 CF patients carrying two copies (homozygotes) of the F508del mutation. This trial will also assess a number of exploratory efficacy endpoints, although the trial is not powered for statistical significance on these endpoints. The single dose portion of the trial has been completed. No dose-limiting toxicity was observed up to the highest dose tested. We expect to report top-line data from the full trial in mid-2017.

In July 2016, QR-010 received Fast Track designation from the FDA for the treatment of patients with CF due to the F508del mutation. Fast Track designation is granted by the FDA to drugs that are under development for serious conditions and have the potential to fulfill an unmet medical need. It was established with the intention to bring promising drugs to patients sooner by facilitating the development with more frequent FDA interactions and expediting the review process.

QR-010 has been granted orphan drug designation in the United States and the European Union for CF. Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of market exclusivity. This exclusivity precludes the U.S. Food and Drug Administration, or FDA, or the European Medicines Agency, or EMA, as applicable, from approving another marketing application for the same or, in the European Union, a similar drug for the same indication for that time period, unless the later product is clinically superior. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

### QR-110 and Leber's Congenital Amaurosis Type 10 (LCA 10)

LCA is the most common genetic cause of blindness in childhood. LCA is caused by a genetic defect in 19 or more associated genes. Classification of LCA is based on the disease causing gene. The most frequently

mutated LCA gene in LCA patients in North America and Europe is CEP290 that is associated with LCA Type 10 (LCA 10). The most common mutation is the p.Cys998X (also known as c.2991+1655A>G) in the CEP290 (Centrosomal protein of 290 kDa) gene. Although diagnosis rates vary, based on our estimations we believe this mutation occurs in approximately 2,000 patients in the Western world. Most patients affected by this mutation lose sight in the first few years of life. There is currently no disease modifying therapy available on the market or being tested in clinical development for this specific subtype of the disease. In LCA 10 patients, this mutation leads to significant decrease of active CEP290 protein in the photoreceptor cells in the retina in the eye. The absence of this essential protein causes blindness.

Our lead product candidate in the LCA 10 space, QR-110, a first-in-class oligonucleotide, is designed to treat the disease by repairing the underlying cause in the mRNA, which results in the production of wild-type CEP290 protein. The p.Cys998X mutation is a substitution of one nucleotide in the pre-mRNA that leads to a defective mRNA and non-functional CEP290 protein. QR-110 is designed to bind to the mutated location in the pre-mRNA, thereby leading to normally spliced or wild-type mRNA, which could produce wild-type or normal protein. QR-110 is designed to be administered through intravitreal injections in the eye. We believe the activity in pre-clinical models of LCA 10 provides support for the clinical development and therapeutic potential of QR-110. In studies conducted with QR-110 using relevant pre-clinical LCA 10 models, QR-110 was observed to restore CEP290 wild-type mRNA and protein levels. It was observed that QR-110 restored CEP290 mRNA and protein levels in primary LCA 10 fibroblasts from patients that are homozygous for the p.Cys998X mutation to approximately 100% of wild-type and to approximately 50% of wild-type in cells from compound heterozygous patients. It was also observed that QR-110 reaches the correct layer of the retina (the outer nuclear layer) after administration by intravitreal injections. In a 3D optic cup organoid model QR-110 showed restoration of CEP290 wild-type mRNA in a dose dependent manner. In the first half of 2017 we intend to start our first clinical trial directly in LCA 10 patients. There is recent precedent for an accelerated development path in another LCA mutation, and we believe this accelerated development pathway can also be applied to QR-110.

QR-110 has been granted orphan drug designation in the United States and the European Union for LCA.

### QR-313 and Dystrophic Epidermolysis Bullosa (DEB)

Dystrophic epidermolysis bullosa (DEB) is a genetic orphan disease of the skin and other mucosal membranes. The hallmark of the disease is severe blistering and poorly healing wounds that result from minimal pressure. Patients with the recessive form of DEB (RDEB) have a limited life expectancy and low quality of life. Patients with the dominant form (DDEB) have variable expression of the disease but is also associated with significant morbidity. There is currently no treatment for DEB. Aggressive and costly palliative care provided to these patients does not address the underlying cause of the disease. DEB is caused by mutations in the COL7A1 gene which leads to an absence of functional collagen type VII (C7) protein which is essential for formation of anchoring fibrils that link the epidermis to the dermis.

We are developing a single-stranded oligonucleotide, QR-313, for patients with DEB caused by mutations in a specific part of the COL7A1 gene called exon 73. QR-313 is designed to exclude exon 73 from the COL7A1 mRNA. Skipping of exon 73 leads to an mRNA that is translated into a truncated, but functional COL7A1 protein that is able to form anchoring fibrils that should improve the stability of the skin. There are multiple mutations associated with DEB, several of which lie within exon 73.

QR-313 is being formulated in a hydrogel that will be applied topically to existing wounds in patients with DEB. QR-313 is designed to restore functional COL7A1 protein with the aim to facilitate wound healing and protect against future blistering. In pre-clinical models skipping of exon 73 by QR-313 has been observed in a 3D human full thickness skin model. If this exon skipping approach is proven to be of benefit for DEB patients, there may be other COL7A1 mutations that can be targeted with an approach similar to QR-313.

### Innovation pipeline

The innovation unit is our internal discovery engine, which we use to discover additional molecules through internal research and external collaborators. These pipeline programs are based on our multiple RNA technologies that were discovered internally or in-licensed. We have a rigorous evaluation process in identifying programs that are ready to leave the innovation unit and move into development. The criteria include established genetic causality, ability to deliver to the target organ, intellectual property protection, strong pre-clinical proof of concept, and a high unmet need. Our early stage programs are in various stages of discovery and target different severe genetic disorders where we believe our technologies have the potential to make a life altering impact for affected patients. These include programs for Usher syndrome and Fuchs endothelial corneal dystrophy (FECD) both areas of ophthalmology with high unmet medical need. We further have programs in our central nervous system, or CNS, franchise for Huntington's disease and amyloid beta related disorders. In our neuromuscular franchise we have a program for Friedreich's ataxia.

### **Our Strategy**

We are dedicated to improving the lives of patients and their loved ones through the development of RNAtherapies for severe genetic orphan diseases. We have an initial focus on patients with CF, LCA 10 and DEB. Key elements of our strategy include:

- **Develop drugs for patients in need.** Through our patient-centric approach we work to develop best-inclass therapies and to advance the understanding of conditions that we target. As RNA Therapies have become an established modality we are translating new applications in a pipeline of products for patients suffering from rare diseases. We believe this strategy enables us to build a sustainable independent business.
- Independently develop and commercialize QR-010 for the treatment of CF. Our lead product candidate in the CF space, QR-010, has generated compelling data in pre-clinical studies and a first clinical trial in CF patients. We believe these data support the potential of QR-010 as a disease-modifying therapy for CF patients. We are currently running a second global clinical trial of QR-010 that will enroll approximately 64 CF patients with two copies of the F508del mutation. Top-line data is expected in mid-2017. We are studying applications of RNA technologies for CF mutations other than F508del. We intend to commercialize QR-010 ourselves, if approved, and retain all commercial rights in major markets.
- **Rapidly advance our ophthalmology franchise, including QR-110 for the treatment of LCA 10.** We recognize the great opportunity for oligonucleotides in the ophthalmology space and therefore have established an ophthalmology franchise that now has one program in development and several in the discovery pipeline. These include LCA 10, Usher syndrome and Fuchs endothelial corneal dystrophy (FECD). We are developing QR-110 to treat patients with the most common mutation causing LCA, the leading genetic cause of blindness in childhood. We conducted further pre-clinical studies during 2016 and expect to start our first clinical trial in LCA 10 patients in the first half of 2017.
- Utilize our proprietary RNA technologies and know-how to develop additional product candidates targeting genetic diseases with high unmet medical need. We are developing a product pipeline targeting severe genetic diseases that have significant unmet need and are caused by mutations that we believe can be treated with our RNA technologies. We are currently working on approximately 100 potential target indications in several therapeutic areas and have organized our discovery effort in franchises such as respiratory, ophthalmology, dermatology, CNS and neuromuscular disorders.
- Leverage our pipeline through considering out-licensing, spinouts or collaborative partnerships. We plan to continue to advance the programs and technologies in our discovery pipeline and ensure that these programs have the potential to make an impact for patients in these areas of unmet need, we will consider strategic alternatives that include spinouts, out-licensing or collaborative partnerships with pharmaceutical companies. These partnerships may provide us with further validation of our approach, funding to advance our product candidates and access to development, manufacturing and commercial expertise and capabilities.

### **Our RNA Technologies**

Genes are the specific sequences of DNA that provide the blueprint used by the human body's cells to make proteins, which are enzymes or other molecules in cells that serve a functional purpose. Each gene consists of a specific sequence of nucleotides that leads to the production of a specific protein. The gene's coding DNA sequence is transcribed into mRNA, which is subsequently translated into the specific protein. A mutation, or defect, in a specific gene can result in the transcription of abnormal mRNA, which then can produce a defective, misfolded or truncated protein that is unable to carry out its normal function.

In the maturing RNA therapeutics space and the developments in understanding their potential, we have gathered a toolbox of different novel RNA technologies with which we believe we target defective mRNA in order to restore protein functionality. Our goal to restore translation of functional proteins is unlike other approaches in the RNA therapeutics field, such as RNAi and antisense that use RNA molecules to downregulate genes. Our molecules are single-stranded RNA-based oligonucleotides that are chemically modified (phosphorothioate backbone and 2' O-methyl modifications) so that no vector or envelope is needed for delivery. We believe these RNA approaches will allow us to develop novel therapies for genetic disorders that are currently untreatable or have limited effective treatment options.

### **Our product candidates**

In selection of discovery programs to bring into our development pipeline we apply a rigorous process of review by a committee of internal and external scientific experts and thought leaders to all key aspects of a program. Among others we look at the following criteria:

- High unmet medical need
- A pre-clinical proof-of-concept that shows strong promise for translation to the clinic
- Well understood relationship between the genetic defect and the disease manifestations
- Feasibility of delivery to target organ(s)
- Strong IP position and initial freedom to operate established

We believe our current pipeline represents a mix of high-value indications where we can make a big impact to the lives of patients.



### Patient Centric Approach

ProQR aims to develop best-in-class therapies as well as to improve patient care through awareness, education, and advancing the understanding of conditions that we target. In order to achieve this goal, ProQR strives to integrate the patient voice into our decision-making throughout the drug development process. Because we believe that a patient-centric strategy is crucial to our success, we have established the Patient and Medical Community Engagement (PMCE) team. This dedicated team's purpose is to listen to and represent the patient voice internally as well as to collaborate externally with the communities we serve.

### **Cystic Fibrosis**

### Cystic Fibrosis Background

CF is the most common fatal inherited disease in the Western world and affects an approximately 65,000 patients worldwide. There is no cure for CF. CF patients require lifelong treatment with multiple daily medications, frequent hospitalizations and ultimately lung transplants, which can extend life for five years on average. The quality of life for CF patients is compromised by approximately four hours of self-care per day and frequent outpatient doctor visits and hospitalizations.

CF is caused by mutations in a gene that encodes the CFTR protein. The CFTR protein channel regulates the movement, or efflux, of specific ions in and out of the cells of organs like the lungs, pancreas and gastrointestinal tract. Through regulation of these ions, the amount of salts in the fluid both inside and outside the cell remains balanced. In CF patients, however, the CFTR protein is defective and cannot perform its normal function of transporting ions across the cell membrane, and this results in an environment characterized by thick mucus in vital organs such as the lung, the pancreas and the gastrointestinal tract. The figure below illustrates a defective CFTR protein hampering the efflux of chloride in lung epithelial cells.



The lack of functional CFTR in CF patients is particularly problematic in the lungs, where the build-up of thick mucus obstructs parts of the lung, allows bacteria to grow unfettered and impairs the functionality of the local immune system. Of all the manifestations of CF, lung disease is the most critical and is characterized by a combination of airway obstruction, infection and inflammation such that more than 90% of all CF patients die of respiratory failure. In the pancreas, the buildup of mucus prevents the release of digestive

enzymes that help the body break down food and absorb important nutrients. In the GI tract, the thick mucus leads to impaired ability to absorb nutrients. The median age of death for all CF patients is 30 years or less.

According to the medical literature, restoration of as little as approximately 15% of wild-type CFTR function in CF patients should result in a therapeutic benefit.

### **Cystic Fibrosis Genetics**

CF is an autosomal recessive disease. A normal, healthy gene has two alleles that encode for a given protein. In an autosomal recessive disease such as CF, a patient has a mutation in both alleles. Non-affected carriers have a mutation in only one of the alleles. CF patients have a defect in the gene encoding for the CFTR protein, and they either have two copies of the same mutation, referred to as homozygotes, or one copy of two different mutations, referred to as compound heterozygotes. Although over 1,900 CF-causing gene mutations have been identified, approximately 85% of CF patients in the Western world are affected by the F508del mutation. Of which approximately 45% are homozygous for the F508del mutation and approximately 40% are compound heterozygous for the F508del mutation.

In the F508del mutation, the genetic defect is a deletion of three of the coding base pairs, or nucleotides, in the CFTR gene that results in the transcription of defective mRNA, which results in the production of CFTR protein that is misfolded and can neither migrate to its normal location on the surface of epithelial cells nor perform its normal function.

### Cystic Fibrosis Incidence and Diagnosis

CF affects one out of 3,500 live births in the United States and one out of 2,500 live births in Western Europe. Many individuals are also non-affected carriers of a mutated CFTR gene. Carrier results across ethnic groups in the United States are well established, and reports from the American College of Obstetricians and Gynecologists indicate rates of one out of 25 in non-Hispanic Caucasians, one out of 58 in Hispanic Caucasians, one out of 61 in African Americans, and one out of 94 in Asian Americans. While the life expectancy of CF patients has improved over the last three decades, the median age of death is still only 30 years or less in the U.S.

Most CF patients in the United States, the European Union, Canada and Australia are now diagnosed at birth through newborn screening, and more than 75% of CF patients are diagnosed by the age of two. CF can be diagnosed by conducting a Nasal Potential Difference, or NPD, test that measures CFTR activity in the nose, or a pilocarpine iontophoretic sweat chloride test, which measures the amount of salt in a person's sweat. A genetic test is also often used to confirm a CF diagnosis and/or identify the disease-causing mutations. In a genetic test, a blood sample or cells from the inside of the cheek are taken and sent to a laboratory that specializes in genetic testing.

### Approaches to the Treatment of Cystic Fibrosis

### Treatment overview

There is no cure for CF, and to date, all but one of the therapies approved to treat CF patients have been designed to treat the symptoms rather than address the underlying cause. CF patients require lifelong treatment with multiple daily medications, frequent hospitalizations and ultimately lung transplant, which is life-extending but not curative. In the United States, the average CF patient incurs approximately \$50,000 per year in expenses for outpatient medications and services and substantial additional costs for frequent hospitalizations. As the median age of death for CF patients is 30 years or less, this results in an average lifetime cost per CF patient in the U.S. of \$1,350,000 in outpatient expenses alone. CF patients who can be treated with Vertex's Kalydeco or Orkambi have additional annual costs of approximately \$300,000. Standards of care are generally similar across Western European nations.

### Palliative treatments

The current standard of care for CF patients includes palliative treatment to manage the symptoms of the disease. In CF patients, the thick mucus that builds up in the lungs and other vital organs such as the pancreas and gastrointestinal tract hampers mucus clearance and leads to airway obstruction and difficulty absorbing nutrients, leading to poor growth and development. Primary treatment options include inhaled therapies such as rhDNase, marketed as Pulmozyme, which thins the mucus in the lungs, as well as pancreatic enzyme replacement therapy, which improves absorption of nutrients. Due to the proliferation of bacteria on the mucus build-up, CF patients often develop chronic lung infections that require inhaled antibiotics treatments, such as TOBI or Cayston, to suppress the infections. CF patients also take a number of other prescribed and over-the-counter medications to alleviate the symptoms of CF and reduce

complications, including bronchodilators, inhaled corticosteroids, and ursodeoxycholic acid for biliary tree dysfunction.

### Potentiators for certain non-F508del mutations

For a subset of patients who suffer from the G551D and other gating mutations of the CFTR gene, Vertex Pharmaceuticals has developed a so-called "potentiator" molecule marketed under the trade name Kalydeco (ivacaftor). This product was approved by the FDA in 2012 to treat patients with the G551D CFTR mutation and, in 2014, the label was expanded to include eight additional gating mutations. In 2015, the label was further expanded to include a total of ten gating mutations and children as young as two years old. Vertex has estimated that approximately 2,400 CF patients in the U.S., Europe and Australia have a G551D or a non-G551D gating mutation. Gating mutations are characterized by the presence of CFTR at the cell surface that does not open and close the ion channels properly. Kalydeco is believed to keep the ion channels open for longer. For this population of CF patients, medication costs are approximately \$300,000 per year for Kalydeco prescriptions. Kalydeco is an exciting development as it provides a proof of concept that it is possible to target the defective CFTR protein that causes CF and improve key symptoms of the disease.

The F508del mutation affects approximately 85% of CF patients in the Western world. Unlike the "gating" mutations, F508del is a "processing" mutation, and as such, CFTR with the F508del mutation is not expressed at the cell surface and cannot be potentiated by small potentiating molecules like Kalydeco.

### Potentiator/corrector combination for F508del mutations

For patients aged 6 years and above and homozygous for the F508del mutation, Vertex Pharmaceuticals has received regulatory approval for Orkambi. Orkambi is a fixed-dose combination of lumacaftor and ivacaftor (Kalydeco). Lumacaftor is a new molecular entity also referred to as a CFTR "corrector" that is purported to work by stabilizing and promoting the folding of the defective F508del CFTR and thereby increasing the likelihood that the CFTR channel will be found at the cell membrane. Kalydeco purportedly potentiates the activity of CFTR channel at the cell surface. We believe the clinical benefit of Orkambi for many homozygous F508del patients is not commensurate with the benefit demonstrated by Kalydeco in the G551D population, but is comparable to some of the symptom relief medications approved for use with CF. Approximately 12,000 US patients could be treated with Orkambi at an estimated annual cost of approximately \$260,000 in addition to the cost of standard of care. We believe these studies validate that F508del CFTR is a treatable target and indicate there is need for more efficacious therapies.

### Gene therapy

Gene therapy is a process in which a functional gene is introduced into a cell to override the effects of a defective gene. The CFTR gene was first identified in 1989. Since that time, several academic consortia and drug-development companies have attempted to develop gene therapies targeting mutations in the CFTR gene. These companies aimed to permanently correct the CFTR gene at the DNA level by delivering full-length CFTR genes to lung epithelial cells to express wild-type CFTR protein. However, these programs encountered limitations faced by gene therapy in general as well as limitations specific to the CFTR gene. These barriers included safety concerns, challenges in delivery of the gene therapy constructs to target cells in the lungs, challenges of both delivery and incorporation into the genome given the size and complexity of the CFTR gene, and immunologic responses to the gene therapy vectors. The most advanced effort in gene therapy for CF is with an academic consortium in the U.K. In 2015, the Gene Therapy Consortium presented results of a 136-patient trial using a CFTR gene delivered in a liposome envelope. While the trial showed no overall efficacy, specific subgroups did show a modest benefit in lung function compared to the placebo group. The Gene Therapy Consortium has announced that they will conduct a follow-up trial of gene therapy in the future but that a different vector will be needed for delivery of the gene.

### Our RNA Approach

QR-010 is a first-in-class RNA oligonucleotide designed to address the underlying cause of the disease by targeting the mRNA in CF patients that have the F508del mutation. QR-010 is designed to bind to the defective CFTR mRNA and restore CFTR function. We believe we are currently the only company pursuing this novel approach for CF patients.

### QR-010 for Treatment of CF

We are developing QR-010 as an inhaled treatment for CF patients. QR-010 is a single stranded RNA oligonucleotide designed to restore CFTR function in CF patients with the F508del gene mutation. QR-010 is 33 nucleotides long and is designed to bind to the CFTR mRNA sequences that are adjacent to the deleted F508del region of the mRNA.

The figure represents an F508del mutated cell treated with QR-010, which would be expected to result in restoration of chloride efflux.



### Clinical Development for QR-010

We conducted two clinical trials of QR-010 in parallel. Study PQ-010-002 is a proof-of-concept trial evaluating topical administration of QR-010 and its effect on the nasal potential difference (NPD), a biomarker of CFTR function. This trial opened for enrollment in September 2015 and was completed in September 2016. Study PQ-010-001 is a Phase 1b safety and tolerability trial. This trial opened for enrollment in June 2015 and is currently enrolling.

### PQ-010-002 Proof-of Concept NPD study

The NPD assay is a standard test for detection and quantification of CFTR function in the airways in CF patients. The NPD test is a well-accepted diagnostic tool and has been used in multiple therapeutic intervention trials to demonstrate the restoration of CFTR mediated ion transport in pre-clinical animal models and in CF patients. Our trial was designed to investigate the ability of QR-010 to restore CFTR function in patients. Restoration of CFTR function has been observed in

pre-clinical NPD studies using mouse models. The primary outcome measure was to determine the effect of topical administration of QR-010 to the nasal mucosa on the restoration of CFTR-mediated chloride transport as measured by NPD in CF patients with the F508del CFTR mutation. Secondary endpoints included maximal basal potential difference reflecting sodium channel activity. Nasal administration is not the intended route of administration for QR-010. However, the nasal epithelium is the most accessible site for measuring CFTR function in humans and provides a human model of epithelial cell uptake and restoration of CFTR function. All subjects were adults over 18 years old with CF either homozygous for the F508del mutation or compound heterozygotes with one copy of the F508del mutation and one copy of another disease causing mutation. The trial was conducted in five sites in the U.S., France and Belgium. QR-010 was administered intranasal 5 mg in each nostril 3 times weekly for 4 weeks (12 doses). The NPD measurements were done at baseline, after 6 doses (Day 15), after 11 doses (Day 26) and 21 days after the last dose (Day 47).

Topline results were reported at the North American CF Conference (Sermet-Gaudulus, Pediatr Pulmonol 2016 Suppl 45:485) in October 2016. In the per-protocol population of subjects homozygous for the F508del mutation meeting the pre-specified inclusion criteria (n=7), the average change from baseline in NPD at day 26 was statistically significant, -4.1 mV (p=0.0389). This finding was supported by a change in sodium channel

activity (specifically, a measure called max basal potential difference, or PD) and other sensitivity analyses of the NPD measurements, all pointing to strong evidence of restoration of CFTR activity. In subjects compound heterozygous for the F508del mutation, the average change from baseline in NPD was not significantly different at day 26. A responder analysis of individual subjects assessing the impact of the second mutation is currently ongoing. QR-010 administered via the intranasal route was observed to be well tolerated.



*N*= 7 (per protocol population). Parameter = within subject change from baseline in Cl-free+iso. Average both nostrils. Baseline = average of 2 most recent pre-dose assessments. *P* = one-sided 5% paired t-test.

We observed from the results of this trial that QR-010 improved CFTR function in homozygous F508del patients as evidenced by both the increase in CFTR activity measured in the CFTR-mediated total chloride response and the decrease in sodium channel activity as measured by the max basal potential difference. The magnitude of the change observed in this trial is similar to that published for other commercially available treatment in CF patients with the G551D mutation and superior to data published for lumacaftor in patients with the F508del mutation.



### PQ-010-001 Phase 1b Safety and Tolerability Trial

This clinical trial with QR-010 is a Phase 1b, randomized, double-blind, placebo-controlled, 28-day doseescalation trial to evaluate the safety, tolerability and pharmacokinetics of QR-010. The trial includes CF patients that are homozygous for F508del and age 18 years and above. The trial is being conducted at 27 sites in North America and select EU countries and will enroll approximately 64 patients. The trial consists of 4 cohorts of ascending single dosed and 4 cohorts of ascending multiples doses (12 doses over 4 weeks). In each cohort, randomization is 3:1, meaning that 6 patients will receive QR-010 and 2 patients will receive placebo.

QR-010 is given as a nebulized solution to the lower airways after chest physiotherapy, which is a standard procedure used with other currently administered inhaled medications. This method of drug administration is common in CF patients. The primary outcome measures are to characterize safety, tolerability and pharmacokinetics of QR-010 in CF patients. Pharmacokinetics will be assessed in serum, urine and sputum. These measurements will allow us to establish the safety for QR-010 as well as give indications of uptake into the lung and systemic circulation in order to provide PK/PD information to design our future trials. We are also assessing exploratory efficacy outcome measures, including lung functionality, chloride levels in sweat, weight gain and other quality-of-life measures specific to CF. In October 2016, we reported that the single dose portion of the trial consisting of 4 cohorts has been completed. No dose-limiting toxicity was observed up to the highest dose tested. The dose escalating multiple-dose trial (12 doses administered over 4 weeks) is currently enrolling cohort 7 and topline results are expected to be available in mid-2017. Further update on enrollment will be provided at the European Cystic Fibrosis Conference (ECFS).

### PQ-010-003 Phase 2 Trial

PQ-001-003 is currently planned as a Phase 2 multicenter, randomized, double-blind, placebo-controlled 12week trial to evaluate the safety, efficacy, and pharmacokinetics of QR-010 in cystic fibrosis subjects with the F508del mutation. The trial will be conducted at clinical centers in North America, EU and possibly other countries. We anticipate to begin recruitment for this trial in 2018.

### Inhaled administration of QR-010

To achieve broad distribution to CF-affected organs, we deliver QR-010 through inhalation by means of a small handheld nebulizer, a method of drug delivery used to administer medication in the form of a mist inhaled into the lungs. On October 8, 2014 we entered into an agreement with PARI Pharma GmbH, pursuant to which the Company is granted an exclusive license to the use of PARI's eFlow technology for the administration of oligonucleotide-based drugs in the F508del mutation in cystic fibrosis. The nebulizer device rapidly and efficiently processes a therapeutic agent through the microscopic holes of a mesh and creates a mist to provide rapid and consistent delivery to the lungs. Commercially-available nebulizers are currently used for other CF therapies and in other clinical studies involving inhaled oligonucleotides.

### Pre-clinical evidence for QR-010

As shown in the figure, after orotracheal delivery of QR-010 to the lungs of wild-type mice and mice specifically engineered to have a CFlike lung phenotype, called the betaENaC overexpressing mouse, we observed significant exposure of QR-010 to the lungs as well as to other CFaffected organs with no significant difference between wild-type and betaENaC overexpressing mice. We believe this beneficial bio-distribution



pattern may potentially allow us to treat not just the lung but also other organs affected by CF and shows that the thick mucus layer that is present in the lungs of CF patients is unlikely to be a barrier for uptake of QR-010. We believe this method will allow maximum exposure of QR-010 to the primary target organ, the lung, as well as significant exposure to other affected organs through systemic absorption into the blood.

We have conducted extensive in vitro and in vivo pre-clinical studies that support the development and therapeutic potential of QR-010. QR-010 has been shown to increase the function of CFTR as demonstrated by enhancing chloride efflux in vitro and in vivo models that carry the same mutation as F508del patients. In vitro QR-010 demonstrated improved chloride ion efflux in a fluorescent chloride ion indicator, or MQAE, assay and in a well-accepted model, the Ussing Chamber assay using human bronchial epithelial cells with the F508del mutation. Most notably, and distinct from other molecules in development for CFTR mutation specific molecules, in two independent in vivo activity assays in F508del-CFTR mice that are similar to human diagnostic tests, QR-010 restored CFTR function up to wild-type levels. The first was a study of Nasal Potential Difference, or NPD, in F508del-CFTR mice in which QR-010 restored NPD in response to specific stimuli to normal levels. The second was a saliva secretion assay, a mouse equivalent of the sweat chloride test, in which QR-010 restored saliva secretion to normal levels in female mice.

### **Research Grants**

In August 2014, we entered into an agreement with Cystic Fibrosis Foundation Therapeutics, Inc., or CFFT, a subsidiary of the Cystic Fibrosis Foundation, pursuant to which CFFT agreed to provide us with up to \$ 3 million to support the clinical development of QR-010. In 2015, the Company and its academic partners received a grant from the European Union under the Horizon 2020 research and innovation programme under grant agreement No. 633545. The maximum amount of  $\in$  6.0 million was granted to support the clinical development of QR-010. In 2016, ProQR also received additional tranches totaling  $\notin$ 0.4 million under the Innovation credit program or "Innovatiekrediet" by the Dutch government, through its agency RVO (previously: "AgentschapNL") of the Ministry of Economic Affairs, for the cystic fibrosis development program.

### Leber's Congenital Amaurosis LCA Background

LCA is the most common genetic cause of blindness in childhood. We believe that the p.Cys998X mutation (also known as c.2991+1655A>G) in the CEP290 (Centrosomal protein of 290 kDa) gene is the most prevalent mutation which generally accounts for the most severe disease phenotype (LCA 10). Patients affected by this mutation typically lose sight in the first years of life. In LCA 10 patients, this mutation leads to significant decrease in CEP290 protein within the photoreceptor cells in the retina. Clinical features of CEP290-mediated LCA include loss of vision, involuntary eye movement or nystagmus, abnormalities of pupil reactions and no detectable photoreceptor electrical signals on electroretinography (ERG).

### LCA Genetics

The p.Cys998X mutation is a single nucleotide substitution in the CEP290 gene that creates a new splice site, also called a cryptic splice site, between exon 26 and 27. During the splicing of the pre-mRNA this causes a part of the intron, or pseudoexon, to be included in the mRNA. The pseudoexon contains a premature stop



codon thus the mRNA is not translated into the full length CEP290 protein. The CEP290 protein is involved in the formation and stability of the connecting cilium in photoreceptor cells, which facilitates the transport of proteins from the inner segment to the outer segment of the cell. When CEP290 is absent, there is a disturbance in normal protein transport to the outer segments which provokes the shortening of the outer segment and its inability to perform its light transducing function.

### LCA Prevalence and Diagnosis

LCA is caused by a genetic defect in 20 or more associated genes. The most common mutation is the p.Cys998X in the CEP290 gene causing LCA 10. Although diagnosis rates vary, our estimations indicate this mutation to occur in approximately 2,000 patients in the Western world.

Patients are initially diagnosed through the presence of clinical symptoms. Nystagmus, rapid

involuntary movements of the eyes, tends to be the first symptom visible as well as oculo-digital signs comprising eye poking, pressing, and rubbing, in the most severe cases; vision impairment or blindness becomes obvious as age increases. After ophthalmological examination, LCA is diagnosed. A genetic screening including all known mutations causing LCA is performed to confirm the diagnosis and determine the type of LCA in order to give the patient the most accurate prognosis possible (approximately 30% of all patients carry a mutation that has not been described to date).

### Approaches for the Treatment of LCA 10

There are currently no disease modifying treatments approved or potential treatments in clinical trials for patients with p.Cys998X associated LCA 10, a form of LCA. There are other approaches in pre-clinical development for the p.Cys998X mutation that target the disease at the DNA level. The eye is highly suitable for oligonucleotide therapies as it is a contained organ with physical cellular barriers (i.e. efficient blood-retina barrier and lack of efferent lymphatics) which strongly limits the free entry and exit of cells and larger molecules in and out of the eye therefore limiting the systemic exposure of locally administered therapies.

### QR-110 for the treatment of LCA 10

Our lead product candidate in the LCA 10 space, QR-110, is a first-in-class single stranded RNA oligonucleotide of 17 nucleotides long. It is designed to treat the disease by binding to the pre-mRNA and thereby silencing the cryptic splice site caused by the p.Cys998X mutation. The splicing machinery can thus splice the pre-mRNA correctly resulting in normal mRNA and we expect the production of full-length functional wild-type CEP290 protein. The intended route of delivery is through intravitreal injection.



We believe the activity seen in our pre-clinical models of LCA 10 provides strong support for the clinical development and therapeutic potential of QR-110. Currently, we are finalizing preclinical good laboratory practice, or GLP, safety studies and other work to start our first clinical trial in LCA 10 patients.

We expect to commence clinical development of QR-110 in the first half of 2017 with the initiation of a

Phase 1b/2 clinical trial. This trial is an open label trial evaluating multiple doses of QR-110 at different dose levels. Eligible subjects will be LCA 10 patients that are homozygous or compound heterozygous for the p.Cys998X mutation. The primary objective will be to evaluate the safety and tolerability of QR-110 administered via intravitreal injection in subjects with LCA 10 due to the p.Cys998X mutation. Secondary objectives will include the assessment of pharmacokinetics and efficacy as assessed by specialized ophthalmic tests.

### Pre-clinical evidence for QR-110

We have conducted in vitro and in vivo pre-clinical studies that we believe support the clinical development to explore the therapeutic potential of QR-110.

### QR-110 assessment in patient fibroblasts

Since QR-110 targets the splicing process, the most direct measurable outcome of activity is the profiling and quantification of CEP290 transcripts (wild-type and mutant) and protein before and after treatment. In preclinical studies to date, QR-110 has demonstrated restoration of CEP290 wild-type (correctly spliced) mRNA and protein in cultured fibroblast cells of LCA 10 patients homozygous and compound heterozygous for the p.Cys998X mutation.

### **Clinical Development for QR-110**



*Effect of QR-110 at the mRNA and protein level in fibroblast cells from LCA 10 patients that are A) homozygous and B) compound heterozygous for the p.Cys998X mutation. Normalized wild-type and mutant CEP290 mRNA expression (copies/ng) after transfection of LCA 10 fibroblasts with QR-110, analyzed with one-step ddPCR. For protein data (Western Blot), expression is shown relative to control cells without the mutation. Error bars show mean with SEM. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001, vs. mock treated cells, Student's t-test.* 

The figure above summarizes the observations from our pre-clinical data that treatment with QR-110 may be able to increase the expression of wild-type CEP290 mRNA and protein in fibroblast cells from LCA 10 patient that are homozygous for the p.Cys998X mutation. Furthermore, we observed that treatment with QR-110 resulted in a decrease in levels of mutant mRNA (figure A, left and center). The mRNA and protein profile restoration trend is also observed in LCA 10 fibroblasts that are compound heterozygous for the p.Cys998X mutation (figure B, left and center).

Changes in the mRNA profile are supported by a wild-type CEP290 protein increase illustrated by Western blot. Results demonstrate that in LCA 10 fibroblasts that are homozygous for the p.Cys998X mutation, in vitro treatment with QR-110 restored CEP290 protein levels to that of control cells (figure A, right panel). In LCA 10 fibroblast that are compound heterozygous for the p.Cys998X mutation, QR-110 treatment in vitro restored CEP290 protein levels to ~50% of control cells (figure B, right panel). This is expected since in these compound heterozygous cells only one mutated allele carries the p.Cys998X mutation and therefore only one allele can be targeted by QR-110 treatment. It is worth it to point out that patients that are heterozygous for the p.Cys998X mutation, with one normal allele and one allele carrying the p.Cys998X mutation, are asymptomatic. This indicates that correction of one diseased allele could be enough to prevent or stop progression of the disease.

### QR-110 activity in optic cup model

Optic cups are a retinal organoid model derived from fibroblasts of a LCA 10 patient harvested through skin biopsies. The cells are reprogrammed into induced pluripotent stem cells, or iPSC, and later differentiated into retinal pigmented epithelium cells and neural retinal cells, also known as three-dimensional optic cups.
Optic cups constitute a convenient and clinically relevant model system to thoroughly study the mechanisms of inherited retinal degeneration since, unlike the classic cell models, these 3D organoids simulate the disease phenotype and provide an appropriate cellular model with the genetic mutations in genomic context.

The clinical and molecular relevance of the optic cup model, coupled with the absence of an animal model, makes the optic cup the best model in which to simulate the mechanisms of CEP290 LCA and effectively test the potential of QR-110.

LCA 10 patient derived optic cups were exposed to QR-110. First, we observed from the results that QR-110 is able to enter the cells without use of any transfection agents. Second, QR-110 elicited a dose-dependent restoration of CEP290 wild-type mRNA expression. And third, increased CEP290 mRNA expression was also associated with a commensurate decrease in mutant CEP290 mRNA.



LCA 10 p.Cys998X homozygous patient fibroblasts were reprogrammed into iPSC which were differentiated into optic cups for 96 days and treated with different amounts of QR-110 for another 28 days (Parfitt et al. 2016) and analyzed using end-point PCR.

#### Retinal Distribution of QR-110

Labelled QR-110 (green) administered via intravitreal injection into wild-type mice eyes. We demonstrated that QR-110 enters the target cells of the retina, including the photoreceptor cells. QR-110 was detected 60 days (the maximum time point tested) following a single injection.



Retinal distribution of 6FAM-labelled QR-110 following single intravitreal injection of 100 μg in wild-type mice.

# Dystrophic Epidermolysis Bullosa

### DEB Background

Epidermolysis bullosa (EB) is a rare genetic disorder, primarily manifesting as a debilitating disease of the skin and mucosal membranes. It is characterized by mechanical fragility of epithelial tissues, blister formation, scarring and, in some subtypes, involvement of multiple other organs. EB is classified into four main subtypes, namely EB simplex (EBS), junctional EB (JEB), dystrophic epidermolysis bullosa (DEB), and Kindler Syndrome (KS). The four main EB subtypes are distinguished by the level of the skin at which blisters develop.

In DEB the outer layer of the skin, the epidermis, separates from the inner layer, the dermis. This separation renders the skin fragile and causes severe blistering and scarring. All mucosal membranes are affected in DEB, therefore blistering is not limited to the skin, but is also present in the mouth, esophagus and downstream intestines.

DEB is usually a chronic, seriously debilitating disease with a shortened life expectancy due to malnutrition, infections, and malignancies.

#### **DEB Genetics**

The disease is caused by mutations in the COL7A1 gene. This gene is responsible for the production of a protein called collagen type VII (also referred to as C7), which is a major component of the anchoring fibril located below the basement membrane in the upper dermis that normally links the epidermis and the dermis together. DEB causing mutations occur more often in certain parts of the gene. One of those parts is exon 73.

### DEB Prevalence and Diagnosis

DEB is a genetic disease that in some cases is inherited as an autosomal dominant (DDEB) and in others as an autosomal recessive trait (RDEB). The prevalence of DEB could differ across countries due to founder effects and differences in ethnic composition. While spatial variations, compounded with the scarcity of available data, make accurate calculations difficult, the estimated number of DEB patients in the western world is approximately 6,000 of which approximately 2,000 have mutations in exon 73.

Diagnostic testing for DEB is based the identification of the level of skin cleavage via immunofluorescence antigen mapping with C7 specific antibodies and/or determination of anchoring fibrils using transmission electron microscopy on, preferably, newly formed blisters.

# Approaches for the Treatment of DEB

Currently no disease modifying treatment is available for DEB. Palliative treatment is the only treatment available for DEB patients and constitutes a time-consuming daily activity. Palliative treatment primarily consists of 1) treatment of (new) blisters by puncturing and draining blisters to prevent further spread from fluid pressure, 2) wound management to prevent infections, 3) prevention of skin trauma to avoid new blister formation, and 4) pain and itch relief.

# QR-313 for the treatment of DEB

QR-313 is designed to specifically target mutations in exon 73 of the COL7A1 gene. QR-313 binds to a specific sequence in the COL7A1 pre-mRNA, thereby excluding exon 73 from the mature mRNA. This leads to a shortened version of the C7 protein that is functional in the formation of anchoring fibrils.

Because of the exon skipping approach, QR-313 is not specific to a single mutation but instead targets any mutation contained in exon 73.



Schematic shows pathway for generation of C7 protein in the healthy and disease situations (left and center diagrams, respectively). Hybridization of QR-313 to a specific sequence in COL7A1 pre-mRNA results in the exclusion of exon 73 from the mRNA, which leads to the production of a truncated but still functional C7 protein (right diagram).

# Pre-clinical evidence for QR-313

Clinical development of QR-313 focusses on topical delivery in the wounded skin of patients, with the aim of improved wound healing and reduced skin fragility. Therefore we aim to formulate QR-313 into a hydrogel for wound application that can be incorporated in the standard of care of patients.

# Activity of QR-313 after topical application on human skin equivalents

In order to investigate topical delivery and exon skip potential of QR-313 we used Human Skin Equivalents, or HSEs. HSEs are an often used model to mimic the human skin. They are composed of both a dermal layer containing fibroblasts and an epidermal layer containing keratinocytes. The keratinocytes are fully differentiated to form all the different layers in the epidermis, including the stratum corneum. The culturing of HSEs is done at the air-liquid interface and therefore mimics the human situation. Moreover, by removing the epidermis from a portion of the skin equivalent, the blister phenotype of DEB can be modeled. Cy5-labeled QR-313 in a hydrogel formulation was used in HSEs where a DEB blister was mimicked by removal of part of the epidermis. The figure below shows that diffusion of QR-313 into the dermis was observed both in the middle of the blister (blister bed) and at the edge of the blister (blister edge). QR-313 is not able to penetrate intact HSEs, and ex vivo skin (not shown).



After 24 hour treatment (indicated at left of picture rows), HSE pieces (indicated at top of picture columns) were analyzed. QR-313 is depicted in red, nuclei are depicted in blue. White dotted line represents border between epidermis and dermis.





Splicing products of COL7A1 mRNA either untreated or following treatment with Cy5-labeled QR-313 formulated in a hydrogel. RNA was isolated from treated HSEs (indicated at top of columns) and RT-PCR analysis was performed. The different COL7A1 mRNA products were analyzed for length. The 350 bp fragment represents the wild-type, full length amplicon including exon 73 mRNA while the 150 bp nucleotide fragment represents the modified  $\Delta$ 73 mRNA product. To examine the ability of QR-313 to induce exon skipping in dermal fibroblasts, we separated the epidermis from the dermis from the 24-hours incubated HSEs. RNA isolation was performed and analyzed for exclusion of exon 73 using RT-PCR. Exon 73 exclusion from the COL7A1 mRNA was observed in dermal cells treated with QR-313 formulated in a hydrogel. This shows that upon local application QR-313 is active in this model that mimics blistered EB skin.

#### **Other Research and Development**

Our internal discovery engine that we call the innovation unit, is a dedicated group in our company that focuses on the discovery and early development of RNA therapeutics in genetic indications with a high unmet medical need. Leveraging our experience with RNA therapeutics, we are screening for therapeutic molecules that can be used to treat severe genetic disorders beyond CF, LCA 10 and DEB. We have built a diverse toolbox of RNA technologies that we believe can address underlying genetic defects in a novel way. We have grouped the different programs in franchises by therapeutic area so that we can leverage our expertise in the different fields and create synergies between

programs. We have identified five therapeutic areas that show high potential for RNA based oligonucleotides: respiratory, ophthalmology, dermatology, CNS and neuromuscular disorders. We go through a thorough selection process prior to advancing programs into development, and consider criteria including: high unmet medical need, a pre-clinical proof-of-concept that shows strong promise for translation to the clinic, well understood relationship between the genetic defect and disease manifestations, feasibility of delivery to target organ(s), and strong IP position and initial freedom to operate.

### Respiratory

Besides our program for CF caused by the F508del mutation we are working on other CFTR mutations that can potentially be treated using our RNA technologies. We could potentially target an additional 5% of the CF population with these programs.

## Ophthalmology

Our ophthalmology group was founded on the basis that the eye is a well validated target for oligonucleotides. Given the long half-life of these molecules and the lower risk of systemic exposure, we believe oligonucleotide based therapies have the potential to be an important class of drugs for ophthalmic indications. Besides our LCA 10 program that we intend to take into clinical development in 2017, we have several discovery stage programs, including two programs targeting Usher syndrome and a program targeting Fuchs endothelial corneal dystrophy (FECD).

Usher syndrome is a genetic orphan disease that is the leading cause of combined deafness and blindness. Usher syndrome type II is most commonly caused by mutations in the USH2A gene. Patients with this syndrome generally progress to a stage in which they have severely limited central vision and moderate to severe deafness. The moderate to severe deafness that patients experience with this subtype of the disease is manageable with cochlear implants. However, there are currently no available treatment options for the vision loss associated with this disease. The disease is caused by a genetic defect that results in the lack of a functional USH2A protein. Similar to CEP290, this protein is responsible for the maintenance of the connecting cilium in photoreceptor cells and lack of a fully functional USH2A protein results in reduced protein trafficking to the photoreceptor outer segments with a consequent impact on photo-transduction. With our two programs, called QRX-411 & QRX-421, we aim to target genetic alterations in the USH2A gene that lead to this vision loss. QRX-411 targets the frequent deep-intronic c.7595-2144A>G mutation that causes the inclusion of a pseudoexon in the mRNA disrupting the function of the protein. QRX-411 is designed to target the pre-mRNA and restore a wild-type sequence in the mRNA leading to wild-type mRNA and functional USH2A protein. QRX-421 targets mutations in exon 13 of the USH2A gene by skipping exon 13 from the mRNA restoring the reading frame and producing a truncated but functional protein. Both QRX-411 and QRX-421 are single-stranded RNA oligonucleotides intended to be administered by intravitreal injections.

FECD is a common inherited condition characterized by the dysfunction and degeneration of the corneal endothelium. The disease segregates into early-onset and age-related FECD that are caused by different mutations. Early signs of FECD are the presence of corneal guttae and a large proportion of patients over 40 years old have evident corneal guttae. A portion of these patients develop advanced disease with corneal edema and corneal clouding. These symptoms can worsen leading to complete vision loss and the requirement for surgical intervention and a corneal transplant. There are currently no other treatment options for any form of FECD patients with vision loss, apart from corneal transplantation. However, transplantation has several limitations, including the availability of donors, risk of rejection, the inherent risk of an invasive procedure and is only available to patients with advanced FECD. The majority of age-related FECD is caused by a repeat expansion mutation in the TCF4 gene. Such expansions result in toxic RNA species which aggregate as nuclear foci and sequester important splicing proteins rendering the cell devoid of the splicing proteins for other important genes. The impact of acquired splicing defects in these other genes are thought to result in corneal endothelial dysfunction and Fuchs. Our program, called QRX-504, is a single-stranded RNA oligonucleotide that aims to prevent the buildup of RNA-protein foci that cause the corneal dystrophy in patients with expansion repeat mutation in the TCF4 gene.

# Dermatology

Our product candidate, QR-313 targeting DEB caused by mutations in exon 73 has been moved into clinical development. If the exon skipping approach is proven to be of benefit for DEB patients, there may be other COL7A1 mutations that can be targeted with an exon skipping approach similar to QR-313.

### CNS

In our CNS group we are working on product candidates for several disease targets, including a wide range of neuronal and cerebrovascular related amyloid beta disorders and Huntington's disease, or HD.

Amyloid beta, or A $\beta$  is a highly toxic and aggregate-prone family of peptides that are appears crucially involved in Alzheimer's disease, or AD, cerebral amyloid angiopathy, or CAA, and its familial form hereditary cerebral hemorrhage with amyloidosis of the Dutch type (HCHWA-D). We are developing QRX-203, a RNA modulation therapy for A $\beta$ -induced amyloidosis. Using antisense oligonucleotide mediated exon skipping, we believe QRX-203 may prevent the translation of the amyloid region into its precursor protein APP. We believe this approach renders the release and aggregation of A $\beta$  impossible and may ultimately prevent the onset and/or or slow the progression of disease.

HD is an inherited progressive neurodegenerative disease, and one of the most common genetic disorders, with symptoms including involuntary movements, incoordination, impaired speech, cognitive decline, and depression. Individuals with HD have shortened life expectancy, and there is currently no disease-modifying treatment available. The disease is caused by an expanded repeat of CAG nucleotides in the Huntingtin, or HTT, gene, resulting in a mutated Huntingtin protein. When the mutated protein is present in the cells, small polyglutamine-containing protein fragments are formed. These fragments stick to each other, and accumulate in nerve cells, interfering with normal cellular functions, eventually leading to cell death. QRX-704 is an oligonucleotide based approach that is aimed to modify the HTT mRNA to prevent the formation of the toxic fragments, while the Huntingtin protein remains functional.

#### Neuromuscular

Friedreich's ataxia, or FA, is the most common inherited ataxia that causes progressive damage to the nervous system. The disease is caused by GAA repeat expansion mutations in the gene that codes for the Frataxin protein. The expanded repeat mutations cause silencing of the gene leading to decreased levels of the Frataxin protein. Symptoms range from muscle weakness and speech problems to heart disease. With only palliative treatments available, most patients are wheelchair bound within 10–15 years after diagnosis and do not live beyond early adulthood. Frataxin is an essential mitochondrial protein involved in the regulation of energy production in cells and enzymes that contain an iron-sulfur cluster. We have identified a potential treatment, called QRX-604, with the aim to increase Frataxin levels.

#### Human resources

At ProQR we have set ourselves the immense task of developing drugs that will potentially transform the lives of patients suffering from severe genetic diseases like cystic fibrosis, Leber's congenital amaurosis, and epidermolysis bullosa. To make this happen we demand the utmost of ourselves. We actively create a caring atmosphere filled with fun and joy, in which we love to work and maintain productive and happy lives. At ProQR we foster empowerment, self development, creativity and a sense of community.

We are a supportive, ingenious and persistent team that does things different. We're passionate and driven to change the lives of patients and their loved ones.

#### **Corporate social responsibility**

It is required by regulatory authorities to demonstrate the safety and efficacy of a new drug in both animals and humans, before the authorities can approve the new product and will provide Marketing Authorization.

ProQR attaches great importance to the welfare of animals and humans participating in our pre-clinical and clinical studies for reasons of ethics, quality, reliability and applicability of scientific studies. For conducting high quality (scientific) animal research, animal welfare is a prerequisite. By actively pursuing the 3R principles (Reduce, Refine and Replace), we are committed to minimalizing the number of animals needed, minimizing discomfort and pain of animals used and to using alternatives to animal research whenever possible in research and in the obligatory animal studies. All our current studies are approved by the (institutional or national) animal care and use committees.

Our aim is to monitor continually that animal experiments will be performed only if there are no viable or legal alternatives. Additionally, case by case, it will be evaluated if advances can be made in study designs (such as by ex-vivo studies or by conduction of small pilot studies first), or by using new technologies to achieve adequate statistical power without increasing the number of animals, combining studies, and improving use of TK data to optimize dose selection.

External collaborators contracted for the execution of our in-vivo pre-clinical studies (contract research organizations, CROs) are selected based on their expertise, quality and accreditations for laboratory animal care and welfare. CRO facilities are audited in person prior contracting. The housing, husbandry and animal welfare must comply with the highest international standards. Personnel responsible for housing, husbandry and care of the animals must have received adequate and relevant documented education.

We strive for welfare improvements to be implemented in CRO policies. An important achievement in 2014 was that on our request our preferred CRO has replaced the housing which was compliant with their national legislations and installed new group housings with significantly more living space that to a larger extent take in consideration the physiological and behavioral needs of the laboratory animals concerned. This will also contribute to higher welfare standards in the studies for other (future) clients.

In 2015 we became part of an interdisciplinary consortium with Utrecht University (Faculty of Veterinary medicine and Ethics Institute), Radboud University (Medical Center, SYRCLE) and another private company, partly financed by The Netherlands Organization for Scientific Research, Responsible Innovation grant. The project proposes a more integrated approach towards innovation in the field of animal testing and focuses on translational strategies. ProQR is involved in the part of the project that aims to deliver step stones for practical guidelines to build robust translational strategies, to design innovative experiments (including animal models) for cystic fibrosis and develop a translational strategy for CF as a showcase.

# Main financial developments

# Financial position

In 2016, we successfully expanded our operating activities. Operating costs went up significantly while our liquidity and solvency went down. ProQR's cash and cash equivalents at December 31, 2016 amounted to  $\notin$  59,200,000 compared to  $\notin$  94,865,000 at December 31, 2015. During the year 2015, operating cash used amounted to  $\notin$  34,221,000, compared to  $\notin$  24,232,000 in 2015. Shareholders' equity decreased to  $\notin$  53,136,000.

As at December 31, 2016, we had non-current liabilities of € 5,697,000, which fully consisted of borrowings from a government body.

### Income statement

We have generated losses since our formation in February 2012. For the years ended December 31, 2015 and 2016, we incurred net losses of  $\in$  20,832,000 and  $\in$  39,103,000, respectively. As at December 31, 2016, we had an accumulated deficit of  $\in$  75,733,000. We expect to continue incurring losses for the foreseeable future as we continue our pre-clinical studies of our product candidates, continue clinical development of our product candidate QR-010, advance QR-110 and QR-313 into clinical development, increase investments in our other research programs, apply for marketing approval of our product candidates and, if approved, build a sales and marketing infrastructure for the commercialization of our product candidates. To date, we have not generated any revenues from royalties or product sales. Based on our current plans, we do not expect to generate royalty or product revenues for the foreseeable future.

Other income is incidental by nature. In August 2014, we entered into an agreement with Cystic Fibrosis Foundation Therapeutics, Inc., or CFFT, a subsidiary of the Cystic Fibrosis Foundation, pursuant to which CFFT agreed to provide us with up to \$ 3 million to support the clinical development of QR-010. In 2015, the QR-010 project has received funding of € 6 million from the European Union's Horizon 2020 research and innovation programme under grant agreement No 633545. Other income amounted to € 1,828,000 in 2016, compared to € 3,235,000 in 2015. We expect to continue generating other income from CFFT and Horizon 2020 in 2017.

Research and development costs increased to € 31,923,000 from € 23,401,000 in 2015. These research and development costs comprise allocated employee costs including share-based payments, the costs of materials and laboratory consumables, outsourced activities, license and intellectual property costs and other allocated costs. These costs were primarily related to our product candidates, QR-010, QR-110 and QR-313, and our innovation unit. Our research and development expense is highly dependent on the development phases of our product candidates and is expected to continue to increase at a moderate level, although it fluctuates significantly from period to period.

The increase in expenses was primarily due to the advancement of our pipeline, which included clinical development of QR-010, preclinical development of QR-110 and QR-313 and progress of our innovation programs in ophthalmology, neuromuscular and central nervous system (CNS) diseases. The variances in research and development costs between the years ended December 31, 2016 and 2015 are mainly due to:

- costs we incurred on clinical trials for QR-010;
- increased staff costs as a result of increased staff working on (pre-)clinical development of our product candidates and the growth of our innovation unit. The number of full-time equivalent employees working on research and development increased from 72 at December 31, 2015 to 100 at December 31, 2016;
- increased costs for externally conducted studies, including various in vivo studies, proof of concept studies and dose ranging and toxicity studies conducted in connection with the development of our product candidates;
- costs for the production of QR-010 and QR-110 compounds, including the costs of GMP batches in preparation of our clinical studies;
- increased laboratory costs including purchases of compounds and laboratory materials used by the research and development staff in proportion to the increase in the number of employees, and increased costs for the use of laboratories;
- increased project-related consultancy costs, including regulatory and intellectual property support; and
- increased share-based compensation, reflecting grants of share options to research and development staff made after we adopted our Option Plan in September 2013.

General and administrative costs increased to  $\in$  9,478,000 in 2016 from  $\in$  6,837,000 in 2015. These general and administrative costs comprise employee costs, office costs, general consultancy costs and other costs. As a public company, we face increased legal, accounting, administrative and other costs and expenses. The increase was primarily related to:

- increased staff costs associated with the increase of our general and administrative staff from 27 fulltime equivalent employees at December 31, 2015 to 33 full-time equivalent employees at December 31, 2016;
- increased office and general costs, including office rent, information technology and communication costs, travel costs and office consumables, as well as costs to improve our internal control environment;
- increased costs for legal support, accounting and other consultancy costs; and
- increased share-based compensation, reflecting grants of share options to non-research and development staff made after we adopted our Option Plan in September 2013.

In 2016 share-based compensation amounted to  $\leq 2,454,000$ , compared to  $\leq 1,212,000$  in 2015. Net financial income amounted to  $\leq 470,000$ , compared to  $\leq 6,171,000$  in 2015. Financial income mainly results from foreign exchange differences on cash denominated in U.S. dollars and can fluctuate significantly.

# Outlook

In 2017, we continue to invest in our organization, while we continue our pre-clinical studies and clinical development of our product candidates and increase investments in our other research programs. Our goal is to realise this at our current operational level. A significant increase in headcount is not expected. We believe we have sufficient cash to fund these expenses and to prepare the Company for future growth. Given the development stage of the Company, we do not anticipate revenues in the foreseeable future.

Leiden, March 31, 2017

On behalf of the Management Board,

Daniel de Boer CEO

# Supervisory Board Report

ProQR Therapeutics has chosen for its governance structure to be a so-called two-tier system. In such a setting the Supervisory Board supervises and advises the Management Board in performing their management tasks and setting the strategy of the Company. The Supervisory Board as well as its individual members act in the interests of ProQR, its business and development and all its stakeholders.

In 2016, James Shannon was formally appointed as a Board member. James is a seasoned pharma executive with ample know-how in drug development from his previous positions as Chief Medical Officer at Glaxo SmithKline and Global Head Pharma Development at Novartis. The Supervisory Board and its subcommittees held frequent and productive interactions with the Executive Board. Where appropriate, decision taking was endorsed by the Supervisory Board and matters of both short term as well as long term strategic importance were discussed in a constructive and transparent manner.

Below is a more specific description of the Supervisory Board's activities during the financial year 2016 and other relevant information on its functioning.

### Activities of the Supervisory Board

The Supervisory Board and the Board of Directors met 5 times during 2016, and have held various additional informal meetings and telephone conferences, both collectively and individually. During these meetings, the progress of the various projects, the main risks of the business, the funding and the strategic direction of the Company were discussed. In addition, a two-day off-site was held during which the long-term strategy of the company was discussed. The Supervisory Board meetings were very well attended (100%) and the Committees reported back on their activities to the full Supervisory Board on a regular basis.

### **Committees of the Supervisory Board**

We have an audit committee, a compensation committee and a nominating and corporate governance committee. We have adopted a charter for each of these committees.

#### **Compensation Committee**

The Compensation Committee has met 2 times in 2016.

#### Compensation report 2016

In September 2014, the supervisory board adopted our Compensation Policy. This Compensation Policy also applied to the financial year 2016 and will apply to subsequent years. Attraction and retention of world class talent is a prerequisite for the success of ProQR and competitive compensation plays a vital role in our ability to achieve this. The Compensation Committee have elected to offer compensation for all employees including the Management Board into a fixed annual salary and a variable, performance related, short and long term incentive element. The Compensation Policy is designed based on the following principles:

- Three compensation pillars consisting of:
  - Annual Base Salary;
  - Short Term Incentive (annual cash bonus);
  - Long Term Incentive (Stock Option Plan);
- Flexibility: The Compensation Policy should provide flexibility to allow the Supervisory Board, acting on the recommendation of the Compensation Committee, to reward the Management Board in a fair and equitable manner;

- This Compensation Policy should drive the right kind of management behaviour, discourage unjustified risk taking and minimise any gaming opportunity;
- This Compensation Policy should pay for performance, considering not only the measurable financial performance of / or milestones achieved by the Company, but also, where appropriate, the efforts made by the Management Board, individually and as a group, in managing the Company. For the variable components, the Compensation Committee performs an analysis of the possible outcomes under different scenarios;
- Design of the Compensation Policy shall be based on current legislation applicable in the Netherlands;
- This Compensation Policy shall foster alignment of interests with shareholders;
- The pension of the Management Board shall be based on the defined contribution system; and
- Pay differentials and position within the Company are considered and evaluated regularly.

# Annual Base Salary

The Compensation Committee reviewed the annual base salary of the Management Board taking into consideration the Compensation Reference Group as contained in the Compensation Policy. Based on this review the annual base salary levels for 2016 have been set at € 285,000 for the CEO, Daniel de Boer and at € 255,000 for the chief corporate development officer and general counsel, René Beukema.

### Short Term Incentive

The Compensation Committee reviewed the performance of the Company during 2016 in comparison to the objectives and reviewed the achievements of the members of the Management Board versus their personal objectives.

Based on the recommendation of the Compensation Committee, the Supervisory Board decided early 2017 that the CEO Daniel de Boer has achieved 88.5% and the chief corporate development officer and general counsel, René Beukema has achieved 88.5% of the objectives that had been set to determine their individual bonus awards for the year 2016. For 2016 the individual bonuses have been set at € 130,927 for Daniel de Boer and € 76,430 for René Beukema. These bonuses will be paid in cash in the first quarter of 2017.

### Long Term Incentive

Based on the recommendation of the Compensation Committee, the Supervisory Board decided to grant stock options in 2016 to the CEO, Daniel de Boer and the chief corporate development officer and general counsel, René Beukema. Based on this decision stock options with an exercise price of \$ 7.23 have been granted with respect to 129,727 shares to the CEO, Daniel de Boer and 50,608 shares to the chief corporate development officer and general counsel, René Beukema.

### Pensions

The pension contributions paid during 2016 amount to  $\in$  7,050 for the CEO, Daniel de Boer and  $\in$  12,926 for the chief corporate development officer and general counsel, René Beukema.

### Supervisory board remuneration

In June 2016, our shareholders approved an amended compensation policy whereby members of our supervisory board will receive board fees of  $\notin$  25,000 per year and the chairperson will receive board fees of  $\notin$  30,000 per year. In addition, each board committee chairperson will receive  $\notin$  5,000 per year for service on such committee (except for the chairperson for the nominating committee who will receive  $\notin$  3,000), and each other member of a board committee will receive  $\notin$  3,000 per year for service on such committee. On top of that, several supervisory board members were granted options as set out in Note 23 to the financial statements or \$ 55,000 in cash.

#### Nominating and Corporate Governance Committee

The chairman of the Nominating and Corporate Governance Committee elected to involve the entire Supervisory Board in the selection process of additional Supervisory Board members. Hence no formal nomination committee meeting was held. Based on discussions held, it was concluded that the Supervisory Board is complete. Currently, no new nominations are considered necessary.

#### Audit Committee

The audit committee met 5 times in 2016. Main topics addressed were the quarterly results, financial risk management, compliance and SOx implementation, the audit plan and management letter of the external auditor, cash management and corporate governance.

The audit committee also reviewed ProQR's annual financial statements, including non-financial information, prior to publication thereof. These financial statements for 2016 have been audited and provided with an unqualified opinion by our external auditor, Deloitte Accountants B.V., and were extensively discussed with the auditors in the meetings of the Supervisory Board, Audit Committee and Management Board on March 27, 2017. The Supervisory Board is of the opinion that the Financial Statements 2016 meet all requirements and recommends that the Annual General Meeting of Shareholders adopts the financial statements and the appropriation of net result proposed by the Management Board.

The Company's external auditor attended all Audit Committee meetings. The Audit Committee evaluates the performance of Deloitte as independent external auditor annually. Due to the limited size of the Company, it was concluded that there was currently no need to appoint an internal auditor.

The Supervisory Board is responsible for the quality of its own performance and it discusses, once a year on its own, without the members of the Management Board present, both its own functioning and that of the individual members, and the functioning of the Management Board and that of its individual members. The Supervisory Board discussed its composition and competencies and concluded no changes are necessary based on this review. We feel the additional efforts of all staff at ProQR form a strong foundation for the success and growth of the Company and all milestones reached this past year. Therefore, we would like to express our thanks to the members of the Management Board, senior management and all other employees for their contribution and performance during the year. We thank our shareholders for their continued support.

Leiden, March 31, 2017

On behalf of the Supervisory Board,

Dinko Valerio Chairman

# **Corporate Governance**

ProQR values the importance of complying with Corporate Governance regulations. At the same time, the Board of Directors is of the opinion that certain deviations from the provisions of the Dutch Corporate Governance Code 2008 ("DCGC" or "the Code") are justified, in view of our activities, our size and the specific circumstances in which we operate. In such cases, which are mentioned in this corporate governance statement, we apply the "comply or explain" principle.

Deviations from certain aspects of the Code, when deemed necessary in the interests of the Company, will be disclosed in the Annual Report. Deviations are due to our Company being listed in the United States with most of our investors being outside of the Netherlands, as well as to the international business focus of our Company. As a Company listed on NASDAQ, we comply with NASDAQ's corporate governance listing standards, except for instances where we follow our home country's corporate governance practices in lieu of certain NASDAQ's standards as explained below, as NASDAQ investors are more familiar with NASDAQ's rules than with the Code.

In this report, the Company addresses its overall corporate governance structure and states to what extent and how it applies the principles and best practice provisions of the Code. This report also includes the information which the Company is required to disclose pursuant to the Dutch governmental decree on Article 10 Takeover Directive and the governmental decree on Corporate Governance.

Substantial changes in the Company's corporate governance structure and in the Company's compliance with the DCGC, if any, will be submitted to the General Meeting of Shareholders for discussion under a separate agenda item. The Supervisory Board and the Management Board, which are responsible for the corporate governance structure of the Company, are of the opinion that the principles and best practice provisions of the DCGC that are addressed to the management board and the supervisory board, interpreted and implemented in line with the best practices followed by the Company, are being applied.

The full text of the DCGC can be found at the website of the Monitoring Commission Corporate Governance Code (www.commissiecorporategovernance.nl) and for an overview of our conformity with the Code the following documents are available at our website (www.ProQR.com): audit committee charter, compensation committee charter, nominating and corporate governance committee charter and our code of business conduct and ethics.

### **Management Board**

The Management Board's role is setting and achieving the operational and financial objectives of the company in order to pursue the long-term success of ProQR. The Board does so by assuming the authority and responsibilities assigned to it by Dutch corporate law and by combining expertise and experience with entrepreneurial leadership. The management Board operates under the supervision of the supervisory board. The management board is required to:

- keep the supervisory board informed in a timely manner in order to allow the supervisory board to carry out its responsibilities;
- consult with the supervisory board on important matters; and
- submit important decisions to the supervisory board for its approval.

Our management board may perform all acts necessary or useful for achieving our corporate purposes, other than those acts that are prohibited by law or by our articles of association. The management board as a whole and any management board member individually, are authorized to represent us in dealings with third parties.

Under our articles of association, the number of management board members is determined by the supervisory board, and the management board must consist of at least one member. The supervisory board elects a CEO from among the members of the management board.

Members of the management board are appointed by the general meeting of shareholders upon a binding nomination of the supervisory board. Our general meeting of shareholders may at all times deprive such a nomination of its binding character by a resolution passed by at least two-thirds of the votes cast representing more than 50% of our issued share capital, following which our supervisory board shall draw up a new binding nomination.

Our management board rules provide that, unless the resolution appointing a management board member provides otherwise, members of our management board will serve for a maximum term of four years. Our articles of association provide that the management board members must retire periodically in accordance with a rotation schedule adopted by the management board. A management board member who retires in accordance with the rotation schedule may be reappointed immediately for a term of not more than four years at a time.

### **Supervisory Board**

Our supervisory board is responsible for the supervision of the activities of our management board and our Company's general affairs and business. Our supervisory board may, also on its own initiative, provide the management board with advice and may request any information from the management board that it deems appropriate. In performing its duties, the supervisory board is required to act in the interests of our Company (including its stakeholders) and its associated business as a whole. The members of the supervisory board are not authorized to represent us in dealings with third parties.

Pursuant to Dutch law, members of the supervisory board must be natural persons. Under our articles of association, the number of supervisory board members is determined by our supervisory board itself, provided there will be at least three supervisory board members. Our articles of association provide that members of the supervisory board are appointed by the general meeting of shareholders upon a binding nomination by the supervisory board. Our general meeting of shareholders may at all times deprive such a nomination of its binding character by a resolution passed by at least two-thirds of the votes cast representing more than 50% of our issued share capital, following which our supervisory board shall draw up a new binding nomination.

Our supervisory board rules provide that members of our supervisory board will serve for a maximum duration of three terms of four years. Our articles of association provide that the supervisory board members must retire periodically in accordance with a rotation schedule adopted by the supervisory board. A supervisory board member who retires in accordance with the rotation schedule can be reappointed immediately. The supervisory board appoints a chairman from among its members.

With the exception of Antoine Papiernik, each member of our supervisory board has been and remains fully independent within the meaning of best practice provision III.2.2 of the DCGC. Mr. Papiernik is affiliated with Sofinnova which holds 11.9 % of our shares and is therefore not independent within the meaning of best practice provision III.2.2.f of the Code. We feel this deviation is justified by his specific knowledge and

experience of our business. Based on the above, we comply with best practice provision III.2.1 of the DCGC, according to which not more than one supervisory board member is allowed not to be independent.

Under our articles of association, the general meeting of shareholders may suspend or remove supervisory board members at any time. A resolution of our general meeting of shareholders to suspend or remove a supervisory board member may be passed by a simple majority of the votes cast, provided that the resolution is based on a proposal by our supervisory board. In the absence of a proposal by our supervisory board, a resolution of our general meeting of shareholders to suspend or remove a supervisory board member shall require a majority of at least two-thirds of the votes cast representing more than 50% of our issued share capital.

In a meeting of the supervisory board, each supervisory board member is entitled to cast one vote. A supervisory board member may grant a written proxy to another supervisory board member to represent him at a meeting of the supervisory board. All resolutions by our supervisory board are adopted by a simple majority of the votes cast unless our supervisory board rules provide otherwise. In case of a tie in any vote of the supervisory board, the chairman of the supervisory board shall have the casting vote. Our supervisory board may also adopt resolutions outside a meeting, provided that such resolutions are adopted in writing, all supervisory board members are familiar with the resolution to be passed and provided that no supervisory board member objects to such decision-making process.

#### **Committees of the Supervisory Board**

We have an audit committee, a compensation committee and a nominating and corporate governance committee. We have adopted a charter for each of these committees.

### Audit Committee

Our audit committee consists of Paul Baart (chairman), Alison Lawton and James Shannon. James Shannon was appointed at our AGM on June 21, 2016. Until that date, Antoine Papiernik was member of the audit committee. Each member satisfies the independence requirements of the NASDAQ listing standards / Rule 10A-3(b)(1) under the Exchange Act, and each member meets the criteria for independence set forth in best practice III.2.2 of the DCGC. Paul Baart qualifies as an "audit committee financial expert," as defined by the SEC in Item 16A: "Audit Committee Financial Expert" and as determined by our supervisory board. The audit committee oversees our accounting and financial reporting processes and the audits of our financial statements. The audit committee is responsible for, among other things:

- the operation of the internal risk management and control systems, including supervision of the enforcement of relevant primary and secondary legislation, and supervising the operation of codes of conduct;
- the provision of financial information by the company (choice of accounting policies, application and assessment of the effects of new rules, information about the handling of estimated items in the financial statements, forecasts, work of internal and external auditors, etc.);
- compliance with recommendations and observations of internal and external auditors;
- reviewing the need for an internal audit function;
- the policy of the company on tax planning;
- relations with the external auditor, including, in particular, his independence, remuneration and any non-audit services for the company;
- the financing of the company; and
- the applications of information and communication technology.

#### **Compensation Committee**

Our compensation committee consists of James Shannon (chairman), Dinko Valerio and Alison Lawton. Each member satisfies the independence requirements of the NASDAQ listing standards / Rule 10A-3(b)(1) under the Exchange Act, and each member meets the criteria for independence set forth in best practice III.2.2 of the DCGC. The compensation committee assists our supervisory board in reviewing and approving or recommending our compensation structure, including all forms of compensation relating to our supervisory board members, our management board members and our officers. Members of our management board may not be present at any compensation committee meeting while their compensation is deliberated. Subject to and in accordance with the terms of the compensation policy approved by our general meeting of shareholders from time to time, as required by Dutch law, the compensation committee is responsible for, among other things:

- making a proposal to the supervisory board for the remuneration policy to be pursued;
- making a proposal for the remuneration of the individual members of the management board, for adoption by the supervisory board; such proposal shall, in any event, deal with: (i) the remuneration structure and (ii) the amount of the fixed remuneration, the shares and/or options to be granted and/or other variable remuneration components, pension rights, redundancy pay and other forms of compensation to be awarded, as well as the performance criteria and their application; and
- preparing the remuneration report as referred to in best practice provision II.2.12.

Our supervisory board may also delegate certain tasks and powers under our Option Plan to the compensation committee.

### Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of Dinko Valerio (chairman), Henri Termeer and Paul Baart. Each member satisfies the independence requirements of the NASDAQ listing standards as well as the criteria for independence set forth in best practice III.2.2 of the DCGC. The nominating and corporate governance committee assists our supervisory board in selecting individuals qualified to become our supervisory board members and management board members and in determining the composition of the management board, supervisory board and its committees and our officers. The nominating and corporate governance committee is responsible for, among other things:

- drawing up selection criteria and appointment procedures for supervisory board members and management board members;
- periodically assessing the size and composition of the supervisory board and the management board, and making a proposal for a composition profile of the supervisory board;
- periodically assessing the functioning of individual supervisory board members and management board members, and reporting on this to the supervisory board;
- making proposals for appointments and reappointments; and
- supervising the policy of the management board on the selection criteria and appointment procedures for senior management.

### Insurance and Indemnification of Management Board and Supervisory Board Members

Under Dutch law, management board members, supervisory board members and certain other representatives may be held liable for damages in the event of improper or negligent performance of their duties. They may be held jointly and severally liable for damages to the Company for infringement of the articles of association or of certain provisions of the Dutch Civil Code. They may also be liable towards third parties for infringement of certain provisions of the Dutch Civil Code. In certain circumstances they may also incur additional specific civil and criminal liabilities.

Our articles of association provide that we will indemnify our management board members, supervisory board members, former management board members and former supervisory board members (each an "Indemnified Person") against (i) any financial losses or damages incurred by such Indemnified Person and (ii) any expense reasonably paid or incurred by such Indemnified Person in connection with any threatened, pending or completed suit, claim, action or legal proceedings, whether civil, criminal, administrative or investigative and whether formal or informal, in which he becomes involved, to the extent this relates to his position with the Company, in each case to the fullest extent permitted by applicable law. No indemnification shall be given to an Indemnified Person (a) if a Dutch court has established, without possibility for appeal, that the acts or omissions of such Indemnified Person that led to the financial losses, damages, suit, claim, action or legal proceedings result from either an improper performance of his duties as an officer of the Company or an unlawful or illegal act and (b) to the extent that his financial losses, damages and expenses are covered by an insurance and the insurer has settled these financial losses, damages and expenses (or has indicated that it would do so). Our supervisory board may stipulate additional terms, conditions and restrictions in relation to such indemnification.

### Board composition and diversity

Our management board comprised two persons in 2015, both of whom are male. Our supervisory board has five male members and one female member. As a Company, we support diversity of culture, gender and age in our Company. Our current management board and supervisory board members were selected based on the required profile and talent and abilities of the members without positive or negative bias on gender, culture or age. In the future, this will continue to be our basis for selection of new board members.

### **Controls and procedures**

Our managing board and our chief financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of December 31, 2015, have concluded that based on the evaluation of these controls and procedures required by Rule 13a-15(b) of the Exchange Act, our disclosure controls and procedures were effective. The internal risk management and control systems provide reasonable assurance that the financial reporting does not contain any errors of material importance and that the risk management and control systems worked properly in the year under review.

Risk factors and the risk management approach, as well as the sensitivity of our results to external factors and variables are described in more detail in "Risk Management". Our internal control system has been discussed with the Audit Committee and the external auditors.

In view of the requirements of the U.S. Securities Exchange Act, procedures are in place to enable the CEO (chief executive officer) and the CFO (chief financial officer) to provide certifications with respect to the Annual Report on Form 20F.

### **General Meeting of Shareholders**

General meetings of shareholders are held in Leiden, Oegstgeest, Leidschendam, Katwijk, Noordwijk, Wassenaar, Amsterdam, Rotterdam, The Hague, or Schiphol Airport (municipality of Haarlemmermeer) (Schiphol Airport), the Netherlands. All shareholders and others entitled to attend general meetings of shareholders are authorized to attend the general meeting of shareholders, to address the meeting and, in so far as they have such right, to vote, either in person or by proxy.

Annually, at least one general meeting of shareholders shall be held, within six months after the end of our financial year. A general meeting of shareholders shall also be held within three months after our management board has considered it to be likely that the Company's equity has decreased to an amount

equal to or lower than half of its paid up and called up capital. If the management board and supervisory board have failed to ensure that such general meetings of shareholders as referred to in the preceding sentences are held in a timely fashion, each shareholder and other person entitled to attend shareholders' meetings may be authorized by the Dutch court to convene the general meeting of shareholders.

Our management board and our supervisory board may convene additional extraordinary general meetings of shareholders whenever they so decide. Pursuant to Dutch law, one or more shareholders and/or others entitled to attend general meetings of shareholders, alone or jointly representing at least ten percent of our issued share capital may on their application, be authorized by the Dutch court to convene a general meeting of shareholders. The Dutch court will disallow the application if it does not appear to it that the applicants have previously requested that the management board or supervisory board convenes a shareholders' meeting and neither the management board nor the supervisory board has taken the necessary steps so that the shareholders' meeting could be held within six weeks after the request.

General meetings of shareholders are convened by a notice which includes an agenda stating the items to be discussed. For the annual general meeting of shareholders the agenda will include, among other things, the adoption of our annual accounts, the appropriation of our profits or losses, discharge of the members of the Management Board for their management, discharge of the members of the Supervisory Board for their supervision on the management and proposals relating to the composition and filling of any vacancies of the management board or supervisory board. In addition, the agenda for a general meeting of shareholders includes such items as have been included therein by our management board or our supervisory board. Pursuant to Dutch law, one or more shareholders and/or others entitled to attend general meetings of shareholders, alone or jointly representing at least 3% of the issued share capital have the right to request the inclusion of additional items on the agenda of shareholders' meetings. Such requests must be made in writing, substantiated, or by a proposal for a resolution and received by us no later than the sixtieth day before the day the relevant general meeting is held. No resolutions will be adopted on items other than those which have been included in the agenda.

We will give notice of each general meeting of shareholders by publication on our website and, to the extent required by applicable law, in a Dutch daily newspaper with national distribution, and in any other manner that we may be required to follow in order to comply with Dutch law, applicable stock exchange and SEC requirements. We will observe the statutory minimum convening notice period for a general meeting of shareholders.

Pursuant to our articles of association, our management board may determine a record date (registratiedatum) of 28 calendar days prior to a general meeting of shareholders to establish which shareholders and others with meeting rights are entitled to attend and, if applicable, vote in the general meeting of shareholders. The record date, if any, and the manner in which shareholders can register and exercise their rights will be set out in the convocation notice of the general meeting. Our articles of association provide that a shareholder must notify the Company in writing of his identity and his intention to attend (or be represented at) the general meeting. If this requirement is not complied with or if upon direction of the Company to that effect no proper identification is provided by any person wishing to enter the general meeting of shareholders, the chairman of the general meeting of shareholders may, in his sole discretion, refuse entry to the shareholder or his proxy holder.

Pursuant to our articles of association, our general meeting of shareholders is chaired by the chairman of our supervisory board. If the chairman of our supervisory board is absent and has not charged another person to chair the meeting in his place, the supervisory board members present at the meeting shall appoint one of

them to be chairman. If no supervisory board members are present at the general meeting of shareholders, the general meeting of shareholders will be chaired by our CEO or, if our CEO is absent, another managing board member present at the meeting and, if none of them is present, the general meeting shall appoint its own chairman. The person who should chair the meeting may appoint another person in his stead.

The chairman of the general meeting may decide at his discretion to admit other persons to the meeting. The chairman of the general meeting shall appoint another person present at the shareholders' meeting to act as secretary and to minute the proceedings at the meeting. The chairman of the general meeting may instruct a civil law notary to draw up a notarial report of the proceedings at the Company's expense, in which case no minutes need to be taken. The chairman of the general meeting is authorized to eject any person from the general meeting of shareholders if the chairman considers that person to disrupt the orderly proceedings. The general meeting of shareholders shall be conducted in the English language.

### Voting Rights and Quorum Requirements

In accordance with Dutch law and our articles of association, each issued ordinary share and preferred share confers the right on the holder thereof to cast one vote at the general meeting of shareholders. The voting rights attached to any shares held by us or our direct or indirect subsidiaries are suspended as long as they are held in treasury. Dutch law does not permit cumulative voting for the election of management board members or supervisory board members.

Voting rights may be exercised by shareholders or by a duly appointed proxy holder (the written proxy being acceptable to the chairman of the general meeting of shareholders) of a shareholder, which proxy holder need not be a shareholder. Our articles of association do not limit the number of shares that may be voted by a single shareholder.

Under our articles of association, blank votes, abstentions and invalid votes shall not be counted as votes cast. Further, shares in respect of which a blank or invalid vote has been cast and shares in respect of which the person with meeting rights who is present or represented at the meeting has abstained from voting are counted when determining the part of the issued share capital that is present or represented at a general meeting of shareholders. The chairman of the general meeting shall determine the manner of voting and whether voting may take place by acclamation.

In accordance with Dutch law and generally accepted business practices, our articles of association do not provide quorum requirements generally applicable to general meetings of shareholders. To this extent, our practice varies from the requirement of NASDAQ Listing Rule 5620(c), which requires an issuer to provide in its bylaws for a generally applicable quorum, and that such quorum may not be less than one-third of the outstanding voting shares.

Resolutions of the general meeting of shareholders are adopted by a simple majority of votes cast without quorum requirement, except where Dutch law or our articles of association provide for a special majority and/or quorum in relation to specified resolutions.

### Anti-takeover provisions

We have adopted several provisions that may have the effect of making a takeover of our Company more difficult or less attractive, including:

• granting a perpetual and repeatedly exercisable call option to a protection foundation, which confers upon the protection foundation the right to acquire, under certain conditions, the number of preferred shares in the capital of the Company. The issuance of such preferred shares will occur upon the protection foundation's exercise of the call option and will not require shareholder consent;

- the staggered four-year terms of our supervisory board members, as a result of which only approximately one-fourth of our supervisory board members will be subject to election in any one year;
- a provision that our management board members and supervisory board members may only be appointed upon a binding nomination by our supervisory board, which can be set aside by a two-thirds majority of our shareholders representing more than half of our issued share capital;
- a provision that our management board members and supervisory board members may only be removed by our general meeting of shareholders by a two-thirds majority of votes cast representing more than 50% of our issued share capital (unless the removal was proposed by the supervisory board); and
- a requirement that certain matters, including an amendment of our articles of association, may only be brought to our shareholders for a vote upon a proposal by our management board that has been approved by our supervisory board.

### Deviations from the Dutch Corporate Governance Code

The Code contains a "comply-or-explain" principle, offering the possibility to deviate from the Code as long as any such deviations are explained. We acknowledge the importance of good corporate governance. However, at this stage, we do not comply with all the provisions of the DCGC for specific reasons. The main deviations from best practice provisions are listed below.

- Pursuant to the best practice provisions II.2.4 and II.2.5 of the DCGC, options granted to our management board members should not be exercisable during the first three years after the date of grant; shares granted to our management board members for no financial consideration should be retained by them for a period of at least five years or until they cease to hold office, whichever is the shorter period; and the number of options and/or shares granted to our management board members should be dependent on the achievement of pre-determined performance criteria. We do not intend to comply with all of the above requirements as we believe it is in the best interest of the company to attract and retain highly skilled management board members on conditions based on market practice, as we believe these are.
- Pursuant to best practice provision II.2.8 the remuneration of the management board in the event of dismissal may not exceed one year's salary. The management services agreements with our management board members provide for a lump-sum equal to 24 months of the individual's monthly gross fixed salary. Based on the risk profile of the Company and to be able to attract highly skilled management, we assumed this period to be appropriate.
- Best practice provision III.7.1 prohibits the granting of shares or rights to shares to members of the supervisory board as compensation. It is common practice for companies listed on the NASDAQ Global Market to grant shares to the members of the supervisory board as compensation, in order to align the interests of the members of the supervisory board with our interests and those of our shareholders, and we have granted and expect to grant options to acquire ordinary shares to some of our supervisory board members.
- Pursuant to best practice provision III.7.2, any shares held by supervisory board members are long-term investments. We do not request our supervisory board members to comply with this provision. We believe it is in the best interest of the Company not to apply this provision in order to be able to attract and retain highly skilled supervisory board members on internationally competitive terms.
- Best practice provision IV.1.1 provides that the general meeting of shareholders may pass a resolution to cancel the binding nature of a nomination for the appointment of a member of the management board or of the supervisory board or a resolution to dismiss such member by an absolute majority of the votes cast. It may be provided that such majority should represent a given proportion of the issued capital, but this proportion may not exceed one third. In addition, best practice IV.1.1. provides that if such proportion of the share capital is not represented at the meeting, but an absolute majority of the votes cast is in favor of a resolution to cancel the binding nature of the nomination, a new general

meeting of shareholders will be convened where the resolution may be adopted by absolute majority, regardless of the proportion of the share capital represented at the meeting. Our articles of association provide that these resolutions can only be adopted with at least a 2/3 majority which must represent more than 50% of our issued capital, and that no such second meeting will be convened, because we believe that the decision to overrule a nomination by the management board or the supervisory board for the appointment or dismissal of a member of our management board or of our supervisory board must be widely supported by our shareholders.

- Best practice provision IV.3.1 stipulates that meetings with analysts, presentations to analysts, presentations to investors and institutional investors and press conferences must be announced in advance on the Company's website and by means of press releases. Provision must be made for all shareholders to follow these meetings and presentations in real time, for example by means of webcasting or telephone. After the meetings, the presentations must be posted on the Company's website. We believe that enabling shareholders to follow in real time all the meetings with analysts, presentations to analysts and presentations to investors, would create an excessive burden on our resources and therefore, we do not intend to comply with all of the above requirements.
- Best practice provision IV.3.13 stipulates that an outline policy on bilateral contacts with the shareholders shall be formulated and published on the Company's website. The Company has not formulated such policy as it believes this is already covered by our regular process for public disclosure of information.

### Summary of significant corporate governance differences from NASDAQ Listing Standards

Our ordinary shares are listed on NASDAQ. The Sarbanes-Oxley Act of 2002, as well as related rules subsequently implemented by the SEC, requires foreign private issuers, including our Company, to comply with various corporate governance practices. As a foreign private issuer, subject to certain exceptions, the NASDAQ listing standards permit a foreign private issuer to follow its home country practice in lieu of the NASDAQ listing standards. Our corporate governance practices differ in certain respects from those that U.S. companies must adopt in order to maintain a NASDAQ listing. The home country practices followed by our Company in lieu of NASDAQ rules are described below:

- We do not intend to follow NASDAQ's quorum requirements applicable to meetings of shareholders. In accordance with Dutch law and generally accepted business practice, our articles of association do not provide quorum requirements generally applicable to general meetings of shareholders.
- We do not intend to follow NASDAQ's requirements regarding the provision of proxy statements for
  general meetings of shareholders. Dutch law does not have a regulatory regime for the solicitation of
  proxies and the solicitation of proxies is not a generally accepted business practice in the Netherlands.
  We do intend to provide shareholders with an agenda and other relevant documents for the general
  meeting of shareholders and shareholders will be entitled to give proxies and voting instructions to us
  and/or third parties.

We intend to take all actions necessary for us to maintain compliance as a foreign private issuer under the applicable corporate governance requirements of the Sarbanes-Oxley Act of 2002, the rules adopted by the SEC and NASDAQ's listing standards.

### New Dutch Corporate Governance Code

A new DCGC has been issued by the DCGC Monitoring Committee as per December 8, 2016 and will replace the DCGC 2008 from financial year 2017 and onwards. During 2017 the DCGC will be formally approved by the Dutch Authoritities and incorporated in Dutch law. The amendments will focus on the following topics:

- More focus on long term value creation by management board and supervisory board;
- Importance of risk management and strengthening of internal control;
- Company culture should be an explicit part of the corporate governance structure;
- A number of provisions with respect to remuneration will be revised;
- Deviations should be more carefully explained. The new code will include a number of requirements for reporting of deviations.

Based on our initial assessment, we expect no major impact on ProQR Corporate Governance.

# **Risk Management**

Our business is subject to numerous risks and uncertainties. In the table below, we focus on the key risks and uncertainties the Company currently faces. For the avoidance of doubt, this does not mean that the risks which were previously signaled and not described here are no longer relevant. For a complete understanding of the risks that we face you should also read the full list of risks and uncertainties as disclosed in item 3.D Risk Factors of the annual report on Form 20-F. Some of these risks and uncertainties are outside the control of the Company, others may be influenced or mitigated. In 2015, we have implemented a Risk & Control framework, based on the COSO 2013 internal control framework, for enhancing our control environment as well as compliance with the U.S. SEC's Sarbanes Oxley (SOx) Act of 2002, which we are required to as a company listed on the NASDAQ. As part of the SOx implementation program, our Risk & Control framework was further enhanced in 2016, focusing on IT and entity level controls. Improvement of our Risk & Control framework is an ongoing effort for the Company.

Our main risks are those that threaten the achievement of the Company's corporate objectives, including compliance. If any of these risks actually occurs, our business, prospects, operating results and financial condition could suffer materially. These risks include, but are not limited to, the following:

Risk related to	Risk area	Expected impact upon materialization	Risk-mitigating actions
Development and Regulatory Approval of our Product Candidates	Our products will not be able to demonstrate safety and efficacy in the preclinical studies and clinical trials that are needed to obtain product approval.	The Company will be unable to commercialize the product and therefore generate revenues.	This is an inherent risk with drug development as the safety and efficacy of products can only be assessed when these studies are conducted. However, the Company has multiple products in the pipeline and therefore is diversified. The Company also monitors the progress of the programs and aims to make decisions that mitigate safety and efficacy related risks.
	The regulatory approval process is lengthy, time-consuming and unpredictable and products developed may ultimately not lead to regulatory approval of the product.	Failure to comply with the requirements in the regulatory process could result in delays, suspension, refusals and withdrawal of approvals as well as fines.	Although the Company monitors the regulatory landscape and engages with the authorities when it deems that necessary, this is an inherent risk in biotech drug development and therefore has limited mitigation abilities.
	We may not able to maintain orphan product status for QR- 010 and QR-110 or obtain such status for QR-313.	We may not benefit from rewards including fee reductions and market exclusivity. Sales could be impacted if other products are granted authorization for the same indications as QR-010 and QR-110.	We take orphan drug requirements into consideration in the design of our clinical development plans.
	We may be precluded from obtaining marketing authorization for our products when our competitors have	We may encounter delays in marketing our products for a significant period of time.	We take orphan drug requirements into consideration in the design of our clinical development plans.

obtained market exclusivity before we do.

	before we do.		
Risk related to	Risk area	Expected impact upon materialization	Risk-mitigating actions
Capital Needs and Financial Position	The Company depends largely on equity financing and financing through third party collaboration agreements and government subsidies.	Volatility of the Company's share price, failure to deliver under collaboration agreements and/or the reevaluation or withdrawal of government subsidies may have a negative impact on the Company's ability to obtain future financing.	The ability of third party financing is dependent on external factors and is therefore not entirely in the Company's control. The Company monitors the market conditions for opportunities to add additional capital.
Dependence on Third Parties	The Company relies upon third- party contractors and service providers for the execution of several aspects of its preclinical and clinical development programs, which include CRO's, third party manufacturers and other service providers.	Failure of third parties to provide services of a suitable quality and within acceptable timeframes may cause delay or failure of the Company's development programs.	The Company reviews and monitors the activities of the third parties. These include setting contractual deliverables, quality assurance audits and performance reports, among other activities.
Intellectual Property	The Company is highly dependent on its portfolio of patents and other intellectual property, proprietary information and knowhow and its ability to protect and enforce these assets. The Company is subject to the risk of infringing third party intellectual property rights.	Inadequate intellectual property protection or enforcement may impede the Company's ability to compete effectively. If the Company is not able to protect its trade secrets, know-how or other proprietary information, the value of its technology and product candidates could be significantly diminished. Intellectual property rights conflicts may result in costly litigation and could result in the Company having to pay substantial damages or limit the Company's ability to commercialize its product candidates.	The Company files and prosecutes patent applications to protect its products and technologies to the best of its knowledge and with assistance from internal and external counsel. Prior to disclosing any confidential information to third parties, the Company maintains strict confidentiality standards and agreements for collaborating parties.
Commercialization of Our Product Candidates	We face competition from entities that have developed or may develop product candidates for our target indications.	If our competitors develop technologies or product candidates more rapidly than we do or their technologies, including delivery technologies, are more effective, our ability to develop and successfully commercialize our product candidates may be adversely affected.	Competition is an inherent risk for any industry including drug development. Through our IP strategy and orphan drug designation application, we attempt to have data exclusivity for our products. Development in other companies is essentially out of our control but we monitor the competitive landscape and incorporate that into our business strategy.

In addition to the above key risks, the Company's activities expose it to a variety of financial risks: market risk (including currency risk, interest rate risk and price risk), credit risk and liquidity risk. Unfavorable exchange rate developments and historically low interest rates may impact the financial income of the Company. The Company has a cash management policy in place to minimize potential adverse effects resulting from unpredictability of financial markets on the Company's financial performance.

# Financial Statements 2016

# Consolidated statement of financial position at December 31, 2016

	Note	December 31, 2016	December 31, 2015
		€ 1,000	€ 1,000
ASSETS			
Non-current assets			
Intangible assets	7	90	141
Property, plant and equipment	8	3,438	2,199
		3,528	2,340
Current assets			
Social securities and other taxes	9	395	956
Prepayments and other receivables	10	2,420	1,948
Cash and cash equivalents	11	59,200	94,865
		62,015	97,769
TOTAL ASSETS		65,543	100,109
EQUITY			
Shareholders' equity			
Share capital		934	934
Share premium reserve		123,597	123,595
Equity settled employee benefits reserve		4,353	1,899
Translation reserve		(15)	1
Accumulated deficit		(75,733)	(36,630)
	12	53,136	89,799
LIABILITIES			
Non-current liabilities			
Finance lease liabilities			
Borrowings		5,697	4,824
	13	5,697	4,824
Current liabilities			
Finance lease liabilities			15
Trade payables		328	885
Social securities and other taxes		312	235
Pension premiums		13	16
Deferred income			144
Other current liabilities		6,057	4,191
	14	6,710	5,486
TOTAL EQUITY AND LIABILITIES		65,543	100,109

# Consolidated statement of profit or loss and comprehensive income for the year ended December 31, 2016

	Note	2016	2015
		€ 1,000	€ 1,000
Other income	15	1,828	3,235
	16	(31,923)	(23,401)
General and administrative costs		(9,478)	(6,837)
Total operating costs		(41,401)	(30,238)
Operating result	·	(39,573)	(27,003)
Financial income and expense	18	470	6,171
Result before corporate income taxes		(39,103)	(20,832)
Corporate income taxes	19		
Result for the year (attributable to equity holders of the Company)		(39,103)	(20,832)
Other comprehensive income			
Items that will never be reclassified to profit or loss			
Items that are or may be reclassified to profit or loss			
Foreign operations – foreign currency translation differences		(16)	1
Total comprehensive income for the year (attributable to equity holders of the Company)		(39,119)	(20,831)
Share information	20		
Weighted average number of shares outstanding <sup>1</sup>		23,346,507	23,343,262
Earnings per share attributable to the equity holders of the Company (expressed in Euro per share)			
Basic earnings per share <sup>1</sup>		(1.68)	(0.89)
Diluted earnings per share <sup>1</sup>		(1.68)	(0.89)

<sup>&</sup>lt;sup>1</sup> Basic and diluted earnings are equal due to the anti-dilutive nature of the options outstanding since the Company is lossmaking.

	Share Capital	Share Premium	Equity Settled Employee Benefit Reserve	Translation Reserve	Accumulated Deficit	Total Equity
	€ 1,000	€ 1,000	€ 1,000	€ 1,000	€ 1,000	€ 1,000
Balance at January 1, 2015	934	123,581	687		(15,798)	109,404
Result for the year					(20,832)	(20,832)
Other comprehensive income				1		1
Recognition of share-based payments			1,212			1,212
Share options exercised	0	14				14
Balance at December 31, 2015	934	123,595	1,899	1	(36,630)	89,799
Result for the year					(39,103)	(39,103)
Other comprehensive income				(16)		(16)
Recognition of share-based payments			2,454			2,454
Share options exercised	0	2				2
Balance at December 31, 2016	934	123,597	4,353	(15)	(75,733)	53,136

# Consolidated statement of changes in equity for the year ended December 31, 2016

# Consolidated statement of cash flows for the year ended December 31, 2016

	Note	2016	2015
		€ 1,000	€ 1,000
Cash flow from operating activities			
Result for the year		(39,119)	(20,831
Adjustments for:			
— Depreciation	7, 8	1,245	480
— Share-based compensation	12	2,454	1,212
— Financial income and expense	18	(470)	(6,171
Changes in working capital		1,433	637
Cash used in operations		(34,457)	(24,673
Corporate income tax paid			
Interest received/(paid)		236	441
Net cash used in operating activities		(34,221)	(24,232
Cash flow from investing activities			
Purchases of intangible assets			(28
Purchases of property, plant and equipment		(2,539)	(1,296
Net cash used in investing activities		(2,539)	(1,324
Cash flow from financing activities			
Proceeds from exercise of share options		2	14
Proceeds from borrowings	13	370	1,640
Redemption of financial lease	13	(15)	(34
Net cash generated by financing activities		357	1,620
Net increase/(decrease) in cash and cash equivalents		(36,403)	(23,936
Currency effect cash and cash equivalents		738	6,065
Cash and cash equivalents at the beginning of the year	11	94,865	112,736
Cash and cash equivalents at the end of the year		59,200	94,865

# Notes to the consolidated financial statements for the year ended December 31, 2016

# **1. General Information**

ProQR Therapeutics N.V., or "ProQR" or the "Company", is a development stage company domiciled in the Netherlands that primarily focuses on the development and commercialization of novel therapeutic medicines.

Since September 18, 2014, the Company's ordinary shares are listed on the NASDAQ Global Market under ticker symbol PRQR.

The Company was incorporated in the Netherlands, on February 21, 2012 (Chamber of Commerce no. 54600790) and was reorganized from a private company with limited liability to a public company with limited liability on September 23, 2014. The Company has its statutory seat in Leiden, the Netherlands. The address of its headquarters and registered office is Zernikedreef 9, 2333 CK Leiden, the Netherlands.

At December 31, 2016, ProQR Therapeutics N.V. is the ultimate parent company of the following entities:

- ProQR Therapeutics Holding B.V. (the Netherlands, 100%);
- ProQR Therapeutics I B.V. (the Netherlands, 100%);
- ProQR Therapeutics II B.V. (the Netherlands, 100%);
- ProQR Therapeutics III B.V. (the Netherlands, 100%);
- ProQR Therapeutics IV B.V. (the Netherlands, 100%);
- ProQR Therapeutics VI B.V. (the Netherlands, 100%);
- ProQR Therapeutics VII B.V. (the Netherlands, 100%);
- ProQR Therapeutics VIII B.V. (the Netherlands, 100%);
- ProQR Therapeutics IX B.V. (the Netherlands, 100%);
- ProQR Therapeutics I Inc. (United States, 100%).

As used in these consolidated financial statements, unless the context indicates otherwise, all references to "ProQR", the "Company" or the "Group" refer to ProQR Therapeutics N.V. including its subsidiaries.

### 2. Basis of preparation

#### (a) Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards, or IFRS, as adopted by the European Union ("EU").

With reference to the income statement of the Company, use has been made of the exemption pursuant to Section 402 of Book 2 of the Netherlands Civil Code.

#### (b) Basis of measurement

The financial statements have been prepared on the historical cost basis except for financial instruments and share-based payment obligations which have been based on fair value. Historical cost is generally based on the fair value of the consideration given in exchange for assets.

### (c) Functional and presentation currency

These consolidated financial statements are presented in euro, which is the Company's functional currency. All amounts have been rounded to the nearest thousand, unless otherwise indicated.

### (d) Going Concern

The management board of ProQR has, upon preparing and finalizing the 2016 financial statements, assessed the Company's ability to fund its operations for a period of at least one year after the date of signing these financial statements.

The management board of the Company is confident about the continuity of the Company based on its existing funding, taking into account the Company's current cash position and the projected cash flows based on the activities under execution on the basis of ProQR's business plan and budget.

# (e) Use of estimates and judgements

In preparing these consolidated financial statements, management has made judgements, 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 estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

Information about assumptions and estimation uncertainties that may have a significant risk of resulting in a material adjustment is included below.

### (i) Share-based payments

Share options granted to employees and consultants are measured at the fair value of the equity instruments granted. Fair value is determined through the use of an option-pricing model considering, among others, the following variables:

- the exercise price of the option;
- the expected life of the option;
- the current value of the underlying shares;
- the expected volatility of the share price;
- the dividends expected on the shares; and
- the risk-free interest rate for the life of the option.

For the Company's share option plans, management's judgment is that the Black-Scholes valuation method is the most appropriate for determining the fair value of the Company's share options.

Initially, the Company's ordinary shares were not publicly traded and consequently the Company needed to estimate the fair value of its share and the expected volatility of that value. The expected volatility of all options granted was therefore based on the average historical volatility of the Company's peers over a period that agrees with the expected option life. All assumptions and estimates are further discussed in Note 12(d) to the financial statements. The value of the underlying shares was determined on the basis of the prior sale of company stock method. As such, the Company has benchmarked the value per share to external transactions of Company shares and external financing rounds.

For options granted from the moment of listing, the Company uses the closing price of the ordinary shares on the previous business day as exercise price of the options granted.

The result of the share option valuations and the related compensation expense is dependent on the model and input parameters used. Even though Management considers the fair values reasonable and defensible

based on the methodologies applied and the information available, others might derive a different fair value for the Company's share options.

### (ii) Corporate income taxes

The Company recognizes deferred tax assets arising from unused tax losses or tax credits only to the extent that the Company has sufficient taxable temporary differences or there is convincing evidence that sufficient taxable profit will be available against which the unused tax losses or unused tax credits can be utilized. Management's judgment is that such convincing evidence is currently not sufficiently available and a deferred tax asset is therefore only recognized to the extent that the Company has sufficient taxable temporary differences.

#### (iii) Grant income

Grants (to be) received are reflected in the balance sheet as other receivables or deferred income. At each balance sheet date, for grants approved, the Company estimates the associated costs incurred, the level of service performed and the progress of the associated projects. Based on this analysis grant income is recognized.

#### (iv) Research and development expenditures

Research expenditures are currently not capitalized but are reflected in the income statement because the criteria for capitalization are not met. At each balance sheet date, the Company estimates the level of service performed by the vendors and the associated costs incurred for the services performed.

Although we do not expect the estimates to be materially different from amounts actually incurred, the understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and could result in reporting amounts that are too high or too low in any particular period.

### (f) Changes in accounting policies

The financial statements have been prepared on the basis of International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board ("IASB"). New Standards and Interpretations, which became effective as of January 1, 2016, did not have a material impact on our financial statements.

### 3. Significant Accounting Policies

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

#### (a) Basis of consolidation

#### (i) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

#### (ii) Loss of control

When the Group loses control over a subsidiary, it derecognises the assets and liabilities of the subsidiary, and any non-controlling interests and other components of equity. Any resulting gain or loss is recognised in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

#### (iii) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated. Unrealised gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

### (b) Classes of financial instruments

Financial instruments are both primary financial instruments, such as receivables and payables, and financial derivatives. For primary financial instruments, reference is made to the treatment per the corresponding balance sheet item.

Financial derivatives are valued at fair value. Upon first recognition, financial derivatives are recognized at fair value and then revalued as at balance sheet date.

### (c) Foreign currencies

### (i) Foreign currency transactions

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing 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 the reporting date. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are translated into the functional currency at the exchange rate when the fair value was determined. Foreign currency differences are generally recognized in profit or loss. Non-monetary items that are measured based on historical cost in a foreign currency are not translated.

### (ii) Foreign operations

The assets and liabilities of foreign operations are translated into euro at exchange rates at the reporting date. The income and expenses of foreign operations are translated into euros at the exchange rates at the dates of the transactions. Foreign currency differences are recognized in OCI and accumulated in the translation reserve, except to the extent that the translation difference is allocated to NCI.

# (d) Recognition of other income

Other income includes amounts earned from third parties and are recognized when earned in accordance with the substance and under the terms of the related agreements and when it is probable that the economic benefits associated with the transaction will flow to the entity and the amount of the income can be measured reliably. The grants are recognized in other income in the same period in which the related R&D costs are recognized.

# (e) Government grants—WBSO

The WBSO ("afdrachtvermindering speur- en ontwikkelingswerk") is a Dutch fiscal facility that provides subsidies to companies, knowledge centers and self-employed people who perform research and development activities (as defined in the WBSO Act). Under this Act, a contribution is paid towards the labor costs of employees directly involved in research and development. The contribution is in the form of a reduction of payroll taxes and social security contributions. Subsidies relating to labor costs are deferred and recognized in the income statement as negative labor costs over the period necessary to match them with the labor costs that they are intended to compensate.

# (f) Employee benefits

## (i) Short-term employee benefits

Short-term employee benefits are expensed as the related service is provided. A liability is recognized for the amount expected to be paid if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

## (ii) Share-based payment transactions

The grant-date fair value of equity-settled share-based payment awards granted to employees is generally recognized as an expense, with a corresponding increase in equity, over the vesting period of the awards. 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. For share-based payment awards with non-vesting conditions, the grant-date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

# (iii) Pension obligations

The Company operates defined contribution pension plans for all employees funded through payments to insurance companies. The Company has no legal or constructive obligation to pay further contributions once the contributions have been paid. The contributions are recognized as employee benefit expense when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

# (g) Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax. It is recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in OCI.

### (i) Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the income statement because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Company's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

### (ii) Deferred tax

Deferred tax is recognized on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. Since the Company does not expect to be profitable in the foreseeable future, its deferred tax assets are valued at nil.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

## (h) Intangible assets

#### (i) Licenses

Acquired patents have a finite useful life and are carried at cost less accumulated amortization and impairment losses. Amortization is calculated using the straight-line method to allocate the cost of patents over their estimated useful lives (generally 10 years unless a patent expires prior to that date). Amortization begins when an asset is available for its intended use.

#### (ii) Research and development

Research expenditures are recognized as expenses as incurred. Costs incurred on development projects are recognized as intangible assets as of the date that it can be established that it is probable that future economic benefits that are attributable to the asset will flow to the Company considering its commercial and technological feasibility, generally when filed for regulatory approval for commercial production, and when costs can be measured reliably. Given the current stage of the development of the Company's products no development expenditures have yet been capitalized.

Registration costs for patents are part of the expenditures for the research and development project. Therefore, registration costs for patents are expensed as incurred as long as the research and development project concerned does not yet meet the criteria for capitalization.

#### (iii) Other intangible assets

Other intangible assets, including software, that are acquired by the Company and have finite useful lives are measured at cost less accumulated amortization and accumulated impairment losses.

#### (iv) Amortization

Amortization is calculated to write off the cost of intangible assets less their estimated residual values using the straight-line method over their estimated useful lives, and is recognized in profit or loss.

The estimated useful lives for current and comparative periods are as follows:

• software: 3 years.

Amortization methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

### (i) Property, plant and equipment

### (i) Recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated depreciation and any accumulated impairment losses. If significant parts of an item of property, plant and equipment have different useful lives, then they are accounted for as separate items (major components) of property, plant and equipment. Any gain or loss on disposal of an item of property, plant and equipment is recognized in profit or loss.

#### (ii) Depreciation

Depreciation is calculated to write off the cost of items of property, plant and equipment less their estimated residual values using the straight-line method over their estimated useful lives, and is recognized in profit or loss. Leased assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Company will obtain ownership by the end of the lease term.

The estimated useful lives of property, plant and equipment for current and comparative periods are as follows:

- leasehold improvements: 5 10 years.
- laboratory equipment: 5 years.
- other: 3 5 years.

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

# (j) Impairment of tangible and intangible assets

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

The recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are 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 for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss, unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately in profit or loss, unless the relevant asset is carried at a revalued amount, in which case the reversal of the impairment loss is treated as a revaluation increase.

# (k) Financial assets

All financial assets are recognized and derecognized on the trade date where the purchase or sale of a financial asset is under a contract whose terms require delivery of the financial asset within the timeframe established by the market concerned, and are initially measured at fair value, plus transaction costs, except for those financial assets classified as at fair value through profit or loss, which are initially measured at fair value.

#### (i) Loans and receivables

Trade receivables, loans and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as "loans and receivables". Loans and receivables are measured at amortized cost using the effective interest method, less any impairment.

An allowance for doubtful accounts is established when there is objective evidence that the Company will not be able to collect all amounts due according to the original terms of receivables. Significant financial difficulties of the debtor, probability that the debtor will enter into bankruptcy or financial reorganization, and default or delinquency in payments are considered indicators that the trade receivable is impaired. Loans and receivables are included in 'current assets', except for maturities greater than 12 months after the balance sheet date, which are classified as 'non-current assets'.

For all financial assets, the fair value approximates its carrying value.

# (l) Cash and cash equivalents

Cash and cash equivalents include cash on hand and all highly liquid investments with original maturities of three months or less that are convertible to a known amount of cash and bear an insignificant risk of change in value.

### (m) Financial liabilities and equity instruments

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangement.

#### (i) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

### (ii) Other financial liabilities

Other financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs incurred, and are subsequently measured at amortized cost using the effective interest method, with interest expense recognized on an effective yield basis.

The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or, where appropriate, a shorter period.

Borrowings and other financial liabilities are classified as 'non-current liabilities,' other than liabilities with maturities up to one year, which are classified as "current liabilities".

The Company derecognizes financial liabilities when the liability is discharged, cancelled or expired. For all financial liabilities, the fair value approximates its carrying amount.

### (n) Leases

### (i) Determining whether an arrangement contains a lease

At inception of an arrangement, the Company determines whether such an arrangement is or contains a lease.
At inception or on reassessment of an arrangement that contains a lease, the Company separates payments and other consideration required by such an arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Company concludes for a finance lease that it is impracticable to separate the payments reliably, then an asset and a liability are recognized at an amount equal to the fair value of the underlying asset. Subsequently, the liability is reduced as payments are made and an imputed finance cost on the liability is recognized using the Company's incremental borrowing rate.

#### (ii) Leased assets

Assets held by the Company under leases that transfer to the Company substantially all of the risks and rewards of ownership are classified as finance leases. The leased assets are measured initially at an amount equal to the lower of their fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the assets are accounted for in accordance with the accounting policy applicable to that asset.

Assets held under other leases are classified as operating leases and are not recognized in the Company's statement of financial position.

#### (iii) Lease payments

Payments made under operating leases are recognized in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognized as an integral part of the total lease expense, over the term of the lease.

Minimum lease payments made under finance leases are apportioned between the finance expense and the reduction of the outstanding liability. The finance expense is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

## 4. New standards and interpretations not yet adopted

A number of new standards, amendments to standards and interpretations are effective for annual periods beginning after 1 January 2017, and have not been applied in preparing these consolidated financial statements. Those which may be relevant to the Group are set out below. The Group does not plan to adopt these standards early.

#### **IFRS 9 Financial Instruments**

IFRS 9, published in July 2014, replaces the existing guidance in IAS 39 Financial Instruments: Recognition and Measurement. IFRS 9 includes revised guidance on the classification and measurement of financial instruments, including a new expected credit loss model for calculating impairment on financial assets, and the new general hedge accounting requirements. It also carries forward the guidance on recognition and derecognition of financial instruments from IAS 39.

IFRS 9 is effective for annual reporting periods beginning on or after 1 January 2018, with early adoption permitted.

## IFRS 15 Revenue from Contracts with Customers

IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It replaces existing revenue recognition guidance, including IAS 18 Revenue, IAS 11 Construction Contracts and IFRIC 13 Customer Loyalty Programmes.

IFRS 15 is effective for annual reporting periods beginning on or after 1 January 2018, with early adoption permitted.

#### **IFRS 16 Leases**

IFRS 16 specifies how a company will recognise, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognise assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value. Lessors continue to classify leases as operating or finance, with IFRS 16's approach to lessor accounting substantially unchanged from its predecessor, IAS 17.

IFRS 16 is effective for annual reporting periods beginning on or after 1 January 2019, with early adoption permitted.

The adoption of these Standards and Interpretations are not expected to have a material effect on the financial statements.

#### 5. Financial Risk Management

#### 5.1. Financial risk factors

The Company's activities expose it to a variety of financial risks: market risk (including currency risk, interest rate risk and price risk), credit risk and liquidity risk. The Company's overall financial risk management seeks to minimize potential adverse effects resulting from unpredictability of financial markets on the Company's financial performance.

Financial risk management is carried out by the finance department. The finance department identifies and evaluates financial risks and proposes mitigating actions if deemed appropriate.

#### (a) Market risk

Market risk is the risk that changes in market prices – such as foreign exchange rates, interest rates and equity prices – will affect the Company's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return.

#### Foreign exchange risk

Foreign exchange risk arises from future commercial transactions and recognized assets and liabilities in foreign currencies, primarily with respect to the U.S. Dollar. The Company has an exposure associated with the time delay between entering into a contract, budget or forecast and the realization thereof. The Company operates a foreign exchange policy to manage the foreign exchange risk against the functional currency based on the Company's cash balances and the projected future spend per major currency.

At December 31, 2016 there was a net liability in U.S. Dollars of  $\in$  2.4 million (2015:  $\in$  1.1 million). Foreign currency denominated receivables and trade payables are short term in nature (generally 30 to 45 days). As a result foreign exchange rate movements on receivables and trade payables, during the years presented had an immaterial effect on the financial statements.

At year-end, a substantial amount of our cash balances are denominated in U.S. Dollars. This amount reflects our current expectation of future expenditure in U.S. dollars.

A reasonably possible strengthening (weakening) of the U.S. Dollar by 10% against all other currencies at December 31, 2016 would have affected the measurement of our cash balances denominated in a U.S. Dollar and affected equity and profit or loss by  $\leq 2.5$  million (2015:  $\leq 5.2$  million). The analysis assumes that all other variables, in particular interest rates, remain constant.

#### Price risk

The market prices for the production of preclinical and clinical materials and services as well as external contracted research may vary over time. Currently, the commercial prices of any of the Company's product candidates is uncertain. When the development products near the regulatory approval date or potential regulatory approval date, the uncertainty of the potential sales price decreases. The Company is not exposed to commodity price risk.

Furthermore the Company does not hold investments classified as available-for-sale or at fair value through profit or loss, therefore are not exposed to equity securities price risk.

#### Cash flow and fair value Interest rate risk

The Company's exposure to interest rate risks is limited due to the use of loans with fixed rates. The Company has one loan with a fixed interest, amounting to  $\leq$  5,697,000 at December 31, 2016 (2015:  $\leq$  4,824,000). Details on the interest rates and maturities of these loans are provided in Note 13.

#### (b) Credit risk

Credit risk represents the risk of financial loss caused by default of the counterparty. The Company has no large receivables balances with external parties. The Company's principal financial assets are cash and cash equivalents which are placed at ABN Amro, Rabobank and Wells Fargo. Our cash management policy is focused on preserving capital, providing liquidity for operations and optimizing yield while accepting limited risk (Short-term credit ratings must be rated A-1/P-1/F1 at a minimum by at least one of the Nationally Recognized Statistical Rating Organizations (NRSROs) specifically Moody's, Standard & Poor's or Fitch. Long-term credit rating must be rated A- or A3 at a minimum by at least one NRSRO).

At December 31, 2016 and December 31, 2015, substantially all of our cash and cash equivalents were placed at two large institutions, Rabobank and ABN Amro. In 2016, this also included Wells Fargo. All institutions are highly rated (ratings of Aa2, A1 and A2 for Rabobank, ABN Amro and Wells Fargo respectively) with sufficient capital adequacy and liquidity metrics.

There are no financial assets past due date or impaired. No credit limits were exceeded during the reporting period.

#### (c) Liquidity risk

Liquidity risk represents the risk that an entity will encounter difficulty in meeting obligations associated with its financial liabilities. Prudent liquidity risk management implies ensuring sufficient availability of cash resources for funding of operations and planning to raise cash if and when needed, either through issue of shares or through credit facilities. Management monitors rolling forecasts of the Company's liquidity reserve on the basis of expected cash flow.

The table below analyzes ProQR's undiscounted liabilities into relevant maturity groupings based on the remaining period at year-end until the contractual maturity date:

	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
	€ 1,000	€ 1,000	€ 1,000	€ 1,000
At December 31, 2016				
Borrowings		1,839	4,860	
Trade payables and other payables	6,710			
	6,710	1,839	4,860	

	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
	€ 1,000	€ 1,000	€ 1,000	€ 1,000
t December 31, 2015				
Borrowings		1,691	4,712	
inance lease liabilities	15			
rade payables and other payables	5,471			
	5,486	1,691	4,712	

## 5.2. Capital risk management

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders, benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Company may adjust the amount of dividends paid to shareholders (although at this time the Company does not have retained earnings and is therefore currently unable to pay dividends), return capital to shareholders, issue new shares or sell assets to reduce debt.

The total amount of equity as recorded on the balance sheet is managed as capital by the Company.

#### 5.3. Fair value measurement

For financial instruments that are measured on the balance sheet at fair value, IFRS 13 requires disclosure of fair value measurements by level of the following fair value measurement hierarchy:

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

The Company has no assets and liabilities that are measured at fair value at December 31, 2016 and 2015.

The carrying amount of all financial assets and financial liabilities is a reasonable approximation of the fair value and therefore information about the fair values of each class has not been disclosed.

#### 6. Segment Information

The Company operates in one reportable segment, which comprises the discovery and development of innovative, RNA based therapeutics. The management board is identified as the chief operating decision maker. The management board reviews the operating results regularly to make decisions about resources and to assess overall performance.

The Company has not generated any sales revenues since inception.

All non-current assets of the Company are located in the Netherlands. The amounts provided to the management board with respect to total assets and liabilities are measured in a manner consistent with that of the financial statements.

## 7. Intangible Assets

	Licenses	Software	Total
	€ 1,000	€ 1,000	€ 1,000
Balance at January 1, 2015			
Cost	39	124	163
Accumulated amortization			
Carrying amount	39	124	163
Additions		28	28
Amortization		(50)	(50)
Movement for the period		(22)	(22)
Balance at December 31, 2015			
Cost	39	152	191
Accumulated amortization		(50)	(50)
Carrying amount	39	102	141
Additions			
Amortization		(51)	(51)
Movement for the period		(51)	(51)
Balance at December 31, 2016			
Cost	39	152	191
Accumulated amortization		(101)	(101)
Carrying amount	39	51	90

In 2012, the Company acquired an exclusive license from the Massachusetts General Hospital. The initial payment in respect of the license, in the amount of  $\in$  39,000, will be amortized over the commercial life of products based on the license during the patent-life.

The amortization charge for 2016 is included in the general and administrative costs for an amount of  $\notin$  51,000 (2015:  $\notin$  50,000).

## 8. Property, Plant and Equipment ('PP&E')

	Leasehold improvements	Laboratory equipment	Other	Total
	€ 1,000	€ 1,000	€ 1,000	€ 1,000
Balance at January 1, 2015				
Cost	326	769	242	1,337
Accumulated depreciation	(17)	(104)	(29)	(150)
Carrying amount	309	665	213	1,187
Additions	659	367	415	1,441
Depreciation	(77)	(201)	(145)	(423)
Disposals			(6)	(6)
Movement for the period	582	166	264	1,012
Balance at December 31, 2015		·		
Cost	985	1,136	651	2,772
Accumulated depreciation	(94)	(305)	(174)	(573)
Carrying amount	891	831	477	2,199
Additions	1,166	806	461	2,433
Depreciation	(499)	(340)	(332)	(1,171)
Transfer	(196)		196	
Disposals	(23)			(23)
Movement for the period	448	466	325	1,239
Balance at December 31, 2016				
Cost	1,847	1,957	1,283	5,087
Accumulated depreciation	(508)	(660)	(481)	(1,649)
Carrying amount	1,339	1,297	802	3,438

The depreciation charge for 2016 is included in the research and development costs for an amount of  $\notin$  907,000 (2015:  $\notin$  361,000) and in the general and administrative costs for an amount of  $\notin$  264,000 (2015:  $\notin$  62,000).

## 9. Social Security and Other Taxes

	December 31, 2016	December 31, 2015
	€ 1,000	€ 1,000
e added tax	395	953
e tax		3
	395	956

All receivables are considered short-term and due within one year.

#### 10. Prepayments and Other Receivables

	December 31, 2016	December 31, 2015
	€ 1,000	€ 1,000
Prepayments	1,250	1,401
Other receivables	1,170	547
	2,420	1,948

All receivables are considered short-term and due within one year.

## 11. Cash and Cash Equivalents

	December 31, 2016	December 31, 2015
	€ 1,000	€ 1,000
Cash at banks	56,354	94,865
Bank deposits	2,846	
	59,200	94,865

The cash at banks is at full disposal of the Company. Bank deposits are convertible into cash upon request of the Company.

## 12. Shareholders' Equity

#### (a) Share capital

	Number of ordi	nary shares
	2016	2015
In issue at January 1	23,345,965	23,338,154
Issued for cash		
Exercise of share options	891	7,811
In issue at December 31 – fully paid	23,346,856	23,345,965

The authorized share capital of the Company amounting to  $\leq$  3,000,000 consists of 37,500,000 ordinary shares and 37,500,000 preference shares with a par value of  $\leq$  0.04 per share. At December 31, 2016, 24,520,814 ordinary shares were issued and fully paid in cash, of which 1,173,958 were held by the Company as treasury shares (2015: 1,174,849).

On October 2, 2015, the Company filed a shelf registration statement, which permitted: (a) the offering, issuance and sale by the Company of up to a maximum aggregate offering price of \$ 200,000,000 of its ordinary shares, warrants and/or units; and (b) as part of the \$ 200,000,000, the offering, issuance and sale by

us of up to a maximum aggregate offering price of \$ 60,000,000 of its ordinary shares that may be issued and sold under a sales agreement with Cantor Fitzgerald & Co in one or more at-the-market offerings. At December 31, 2016, no shares had been sold pursuant to its current at-the-market offering program.

## (b) Equity settled employee benefit reserve

The costs of share options for employees, members of the supervisory board and members of the management board are recognized in the income statement, together with a corresponding increase in equity during the vesting period, taking into account (deferral of) corporate income taxes. The accumulated expense of share options recognized in the income statement is shown separately in the equity category 'equity settled employee benefit reserve' in the 'statement of changes in equity'.

#### (c) Translation reserve

The translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

#### (d) Share options

The Company operates an equity-settled share-based compensation plan which was introduced in 2013. Options may be granted to employees, members of the supervisory board, members of the management board and consultants. The compensation expenses included in operating costs for this plan were  $\notin$  2,454,000 in 2016 (2015:  $\notin$  1,212,000), of which  $\notin$  1,480,000 (2015:  $\notin$  801,000) was recorded in general and administrative costs and  $\notin$  974,000 (2015:  $\notin$  411,000) was recorded in research and development costs.

Options granted under this stock option plan are exercisable once vested. Any vesting schedule may be attached to the granted options, however the typical vesting period is four years (25% after every year). The options expire ten years after date of grant. Options granted under the stock option plan are granted at exercise prices which equal the fair value of the ordinary shares of the Company at the date of the grant.

The Company accounts for its employee stock options under the fair value method. The fair value of the options is estimated at the date of grant using the Black-Scholes option-pricing model, with on average the following assumptions:

	Options granted in 2016	Options granted in 2015
Risk-free interest rate	1.467%	1.497%
Expected dividend yield	0%	0%
Expected volatility	86.3%	86.8%
Expected life in years	5 years	5 years

The resulting weighted average grant date fair value of the options amounted to  $\leq$  3.72 in 2016 (2015:  $\leq$  10.35). The stock options granted have a 10 year life following the grant date and are assumed to be exercised five years from date of grant for all awards.

Movements in the number of options outstanding and their related weighted average exercise prices are as follows:

	20	16	2015	
	Number of options	Average exercise price	Number of options	Average exercise price
Balance at January 1	1,108,935	€ 4.19	998,765	€ 2.78
Granted	1,214,126	€ 5.49	125,798	€ 15.27
Forfeited	(116,181)	€ 4.64	(7,817)	€ 4.64
Exercised	(891)	€ 2.38	(7,811)	€ 1.78
Lapsed				
Balance at December 31	2,205,989	€ 4.88	1,108,935	€ 4.19
Exercisable	615,246		339,352	

The options outstanding at December 31, 2016 had an exercise price in the range of  $\in$  1.11 to  $\in$  20.34 (2015:  $\in$  1.11 to  $\in$  20.34) and a weighted-average contractual life of 8.3 years (2015: 8.3 years).

The weighted-average share price at the date of exercise for share options exercised in 2016 was  $\in$  4.23 (2015:  $\in$  19.30).

Please refer to Note 23 for the options granted to key management personnel.

#### 13. Non-current liabilities

#### (a) Borrowings

	December 31, 2016	December 31, 2015
	€ 1,000	€ 1,000
Innovation credit	4,598	4,228
Accrued interest on innovation credit	1,099	596
	5,697	4,824

#### Innovation credit ("Innovatiekrediet")

On June 1, 2012, ProQR was awarded an Innovation credit by the Dutch government, through its agency RVO of the Ministry of Economic Affairs, for the Company's cystic fibrosis program. Amounts were drawn under this facility in the course of the years 2013 through 2016. The credit covers 35% of the costs incurred in respect of the program up to an initial maximum of  $\in$  5.0 million.

The credit is interest-bearing at a rate of 10% per annum. The credit, including accrued interest, is repayable in three installments on November 30, 2018, November 30, 2019 and November 30, 2020, depending on the technical success of the program.

The assets which are co-financed with the granted innovation credit are subject to a right of pledge for the benefit of RVO.

#### (b) Finance lease liabilities

	2016	2015
	€ 1,000	€ 1,000
Balance at January 1		49
Initial recognition new finance leases		
Interest expense accrued		
Payment of finance lease liabilities	(15)	(34)
Balance at December 31		15
Current portion at December 31		15

Certain of the Company's property, plant and equipment items are subject to finance leases. These leases relate to laboratory equipment. The net carrying amount of leased assets amounts to nil in 2016 (2015: € 48,000).

Future minimum lease payments under finance leases as at December 31 are as follows:

	201	2016		5
	Minimum payments	Present value of payments	Minimum payments	Present value of payments
Less than 1 year			15	15
Between 1 and 5 years				
More than 5 years				

The interest used for the present value of payments is 2%.

## 14. Current Liabilities

	December 31, 2016	December 31, 2015
	€ 1,000	€ 1,000
portion finance lease liabilities		15
ayables	328	885
ecurities and other taxes	312	235
sion premiums	13	16
erred income		144
crued expenses and other liabilities	6,057	4,191
	6,710	5,486

At December 31, 2015, current liabilities included deferred income resulting from receipt of the first installment of the € 6 million grant from the European Commission (EC) under the Horizon 2020 program to finance the clinical development of QR-010.

## 15. Other income

	2016	2015
	€ 1,000	€ 1,000
ant income	1,632	3,188
ental income from property subleases	196	47
	1,828	3,235

In August 2014, the Company entered into an agreement with Cystic Fibrosis Foundation Therapeutics, Inc., or CFFT, a subsidiary of the Cystic Fibrosis Foundation, pursuant to which CFFT agreed to provide the Company with up to \$ 3 million to support the clinical development of QR-010. The grant is recognized in other income in the same period in which the related R&D costs are recognized.

In 2015, the European Commission (EC) through its Horizon 2020 program awarded ProQR and its academic partners a grant of  $\in$  6 million (ProQR:  $\in$  4.4 million) to support the clinical development of QR-010 through December 31, 2017. Horizon 2020 is one of the largest research and innovation programs in the European Union with nearly  $\in$  80 billion in available funding for qualified projects from 2014 to 2020.

Both grants are recognized in other income in the same period in which the related R&D costs are recognized.

## 16. Research and Development Costs

Research and development costs amounted to € 31,923,000 in 2016 (2015: € 23,401,000) and comprise allocated employee costs, the costs of materials and laboratory consumables, the costs of external studies including, amongst others, clinical studies and toxicology studies and external research, license- and IP-costs and allocated other costs.

## 17. Employee Benefits

	2016	2015
	€ 1,000	€ 1,000
Wages and salaries	10,184	7,128
Social security costs	1,093	596
Pension costs – defined contribution plans	764	478
Equity-settled share based payments	2,454	1,212
	14,495	9,414
Average number of employees for the period	133.4	86.1

#### Employees per activity at December 31 (converted to FTE):

	December 31, 2016	December 31, 2015
Research and Development	100.4	72.4
General and Administrative	32.9	27.1
	133.3	99.5

Of all employees 128.3 FTE are employed in the Netherlands (2015: 94.5 FTE).

Included in the wages and salaries for 2016 is a credit of € 807,000 (2015: € 372,000) with respect to WBSO subsidies.

## 18. Financial Income and Expense

	2016	2015
	€ 1,000	€ 1,000
Interest income		
Current accounts and deposits	270	501
Interest costs		
Interest on loans and borrowings	(538)	(395)
Foreign exchange result		
Net foreign exchange benefit/(loss)	738	6,065
	470	6,171

#### 19. Income Taxes

The calculation of the tax charge is as follows:

	2015	2015
	€ 1,000	€ 1,000
Income tax provision based on domestic rate (25%)	9,776	5,208
Tax effect of:		
Non-deductible expenses	(622)	(309)
Tax incentives	(46)	136
Current year losses for which no deferred tax asset was recognized	(9,045)	(5,035)
Change in unrecognized deductible temporary differences	(63)	
Income tax charge		
Effective tax rate	0%	0%

Due to the operating losses incurred since inception the Company has no tax provisions as of the balance sheet date. Furthermore, no significant temporary differences exist between accounting and tax results.

Realization of deferred tax assets is dependent on future earnings, if any, the timing and amount of which are uncertain. Accordingly, the Company has not yet recognized any deferred tax asset related to operating losses. As per December 31, 2016, the Company has a total amount of € 82.9 million (2015: € 46.9 million) tax loss carry-forwards available for offset against future taxable profits. According to current tax regulations the first amount of the tax loss carry-forwards will expire in 2021.

## 20. Earnings Per Share

#### (a) Basic and diluted earnings per share

Basic earnings per share are calculated by dividing the result attributable to equity holders of the Company by the weighted average number of shares outstanding during the year.

	2016	2015
Result attributable to equity holders of the Company (€ 1,000)	(39,103)	(20,832)
Weighted average number of shares	23,346,507	23,343,262
Basic (and diluted) earnings per share (€ per share)	€ (1.68)	€ (0.89)

#### (b) Diluted earnings per share

For the periods included in these financial statements, the share options are not included in the diluted earnings per share calculation as the Company was loss-making in all periods. Due to the anti-dilutive nature of the outstanding options, basic and diluted earnings per share are equal.

#### (c) Dividends per share

The Company did not declare dividends for any of the years presented in these financial statements.

## **21. Operational Leases**

Since 2012, the Company is domiciled in Leiden, the Netherlands where it currently has concluded rental agreements for laboratory space and offices. In addition, the Company has one office in the US.

The lease expenditure charged to the income statement in 2016 amounts to € 1,849,000 (2015: € 703,000). The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	December 31, 2016	December 31, 2015
	€ 1,000	€ 1,000
Less than 1 year	1,775	1,938
Between 1 and 5 years	5,508	7,212
More than 5 years		
	7,283	9,150

The Company leases out a part of its office in the US. In 2016, total sublease income amounted to  $\leq$  196,000 (2015:  $\leq$  47,000), which is recorded in other income. At 31 December, the future minimum lease payments under non-cancellable leases are receivable as follows:

	December 31, 2016	December 31, 2015
	€ 1,000	€ 1,000
Less than 1 year	463	185
Between 1 and 5 years		
More than 5 years		
	463	185

## 22. Commitments and Contingencies

#### (a) Claims

There are no claims known to management related to the activities of the Company.

#### (b) Patent license agreement

The Company and the General Hospital Corporation (MGH) have entered into a Patent License Agreement pursuant to which the Company may have certain royalty obligations. The Company is also obligated to pay MGH up to \$ 700,000 in milestone payments upon the achievement of certain development and regulatory milestones and, beginning after its first commercial sale of a product covered by the licensed patent rights, a \$ 10,000 annual license fee which is creditable against royalties due to MGH in the same calendar year. In addition, the Company is obligated to pay MGH 2% of any net sales by the Company, its affiliates or sublicensees on licensed products made or sold in the United States, as well as a low double-digit percentage of any payments the Company may receive from any sublicensee anywhere in the world.

The Company has entered into various other Patent License Agreements, including those with Radboud University Medical Center, Leiden University Medical Centre and PARI Pharma GmbH, under which the Company is granted world-wide exclusive licenses pursuant to which the Company may have certain royalty obligations in relation to its product candidates. Pursuant to the terms of these agreements, the Company has made upfront payments, is obligated to make milestone payments and has to make sales-based royalty payments after market authorization. In specific cases, the Company has the option to make a one-time payment to buy of royalty obligations or in case the Company terminates an agreement before or after regulatory approval of the product. The Company may terminate an agreement for any reason.

#### (c) Clinical support agreement

In August 2014, the Company entered into an agreement with Cystic Fibrosis Foundation Therapeutics, Inc., or CFFT, a subsidiary of the Cystic Fibrosis Foundation, pursuant to which CFFT agreed to provide the Company with up to \$ 3 million to support the clinical development of QR-010.

Pursuant to the terms of the agreement, the Company is obligated to make a one-time milestone payment to CFFT of up to approximately \$ 80 million, payable in three equal annual installments following the first commercial sale of QR-010, the first of which is due within 90 days following the first commercial sale. The Company is also obligated to make a one-time milestone payment to CFFT of up to \$ 3 million if net sales of QR-010 exceed \$ 500 million in a calendar year. Lastly, the Company is obligated to make a payment to CFFT of up to approximately \$ 6 million if it transfers, sells or licenses QR-010 other than for certain clinical or development purposes, or if the Company enters into a change of control transaction. Either CFFT or the

Company may terminate the agreement for cause, which includes the Company's material failure to achieve certain commercialization and development milestones. The Company's payment obligations survive the termination of the agreement.

## (d) Research and development commitments

The Company has research and development commitments, mainly with CRO's, amounting to  $\in$  8,856,000 at December 31, 2016 (2015:  $\in$  9,481,000). Of these obligations an amount of  $\in$  6,258,000 is due in 2017, the remainder is due in 1 to 5 years.

## 23. Related-Party Transactions

Details of transactions between the Company and related parties are disclosed below.

#### (a) Compensation of the Supervisory Board

On June 21, 2016, Mr. James Shannon was appointed to our supervisory board. The remuneration of the supervisory board members in 2016 is set out in the table below:

		2016			
	Short term employee benefits	Post employment benefits	Share-based payment	Total	
	€ 1,000	€ 1,000	€ 1,000	€ 1,000	
Dinko Valerio	36		52	88	
Henri Termeer	31		51	82	
Antoine Papiernik	78			78	
lison Lawton	31		74	105	
Paul Baart	82			82	
Mr. James Shannon	29		27	56	
	287		204	491	

The remuneration of the supervisory board members in 2015 is set out in the table below:

	2015			
	Short term employee benefits	Post employment benefits	Share-based payment	Total
	€ 1,000	€ 1,000	€ 1,000	€ 1,000
Mr. Dinko Valerio	36		12	48
Mr. Henri Termeer	34		11	45
Mr. Antoine Papiernik	73			73
Ms. Alison Lawton	31		48	79
Mr. Paul Baart	73			73
	247		71	318

As at December 31, 2016:

- Mr. Valerio holds 1,043,420 ordinary shares in the Company, as well as 56,261 options. In 2014, Mr. Valerio was granted 64,646 options under the Option Plan to acquire depositary receipts issued for ordinary shares at an exercise price of € 1.11 per option. Under this option grant, 32,374 options were exercisable immediately, while the remaining 32,272 options vest in four annual equal tranches of 25% starting for the first time as of the first anniversary of the date of grant. Mr. Valerio exercised 32,374 options on June 30, 2014, for which he received 32,374 depositary receipts issued for ordinary shares after payment of the exercise price. These depositary receipts have been included in his total number of ordinary shares held. In 2016, Mr. Valerio was granted 23,989 options at an average exercise price of € 6.08 per option.
- Mr. Termeer holds 1,730,714 ordinary shares in the Company as well as 52,698 options. In 2014, Mr. Termeer was granted 57,520 options under the Option Plan to acquire depositary receipts issued for ordinary shares at an exercise price of € 1.11 per option. Under this option grant 28,811 options were exercisable immediately, while the remaining 28,709 options vest in four annual equal tranches of 25% starting for the first time as of the first anniversary of the date of grant. Mr. Termeer exercised 28,811 options on June 30, 2014, for which he received 28,811 depositary receipts issued for ordinary shares after payment of the total exercise price. These depositary receipts have been included in his total number of ordinary shares. In 2016, Mr. Termeer was granted 23,989 options at an average exercise price of € 6.08 per option.
- Mr. Antoine Papiernik does not hold any shares or options in the Company. As a managing partner of Sofinnova Partners SAS, the management company of Sofinnova Capital VII FCPR, holder of 2,769,125 ordinary shares, Mr. Papiernik may be deemed to have share voting and investment power with respect to such shares.
- Ms. Lawton holds 36,809 options. In 2014, Ms. Lawton was granted 7,850 options under the Option Plan to acquire depositary receipts issued for ordinary shares at an exercise price of € 10.03 per option. In 2015, she was granted 4,970 options with an exercise price of € 16.10 per option. In 2016, she was granted 23,989 options with an average exercise price of € 6.08 per option. Under these option grants options vest in four annual equal tranches of 25% starting for the first time as of the first anniversary of the date of grant.
- Mr. Paul Baart does not hold any shares or options in the Company.
- Mr. James Shannon holds 33,069 options. In 2016, he was granted 33,069 options at an exercise price of
   € 4.32 per option. Under these option grants options vest in four annual equal tranches of 25% starting
   for the first time as of the first anniversary of the date of grant.

#### (b) Compensation of key management personnel

Our management board is supported by our officers, or senior management. The total remuneration of the management board and senior management in 2016 amounted to  $\leq$  3,038,000 with the details set out in the table below:

		2016					
	Short term employee benefits	Post employment benefits	Share-based payment	Total			
	€ 1,000	€ 1,000	€ 1,000	€ 1,000			
/r. D.A. de Boer	429	7	391	827			
٨r. R.K. Beukema	346	13	165	524			
Management Board	775	20	556	1,351			
Senior Management	1,020	48	619	1,687			
	1,795	68	1,175	3,038			

1 Short term employee benefits includes a bonus for Mr. Daniel de Boer of  $\notin$  131,000 based on goals realised in 2016.

2 Short term employee benefits includes a bonus for Mr. René Beukema of € 76,000 based on goals realised in 2016.

The total remuneration of the management board and senior management in 2015 amounted to  $\leq$  2,420,000 with the details set out in the table below:

		2015					
	Short term Po employee employmer benefits benefi		Share-based payment	Total			
	€ 1,000	€ 1,000	€ 1,000	€ 1,000			
Mr. D.A. de Boer	397 <sup>1</sup>	7	164	568			
Mr. R.K. Beukema	313 <sup>2</sup>	13	88	414			
Management Board	710	20	252	982			
Senior Management	943	27	468	1,438			
	1,653	47	720	2,420			

1 Short term employee benefits includes a bonus for Mr. Daniel de Boer of € 100,000 based on goals realised in 2015.

2 Short term employee benefits includes a bonus for Mr. René Beukema of € 46,000 based on goals realised in 2015.

As at December 31, 2016:

- Mr. de Boer holds 1,171,208 ordinary shares in the Company as well as 209,621 options. In 2014, Mr. de Boer was awarded a total number of 55,992 options to acquire ordinary shares at € 3.04 per option. In 2015, he was awarded 23,902 options at an exercise price of € 16.10 per option. In 2016, he was awarded 129,727 options at an exercise price of € 6.64 per option. These options vest over four years in equal annual installments and had a remaining weighted-average contractual life of 8.5 years at December 31, 2016.
- Mr. Beukema holds 300,000 ordinary shares in the Company as well as 197,673 options. In 2014,
   Mr. Beukema was awarded 30,541 options to acquire ordinary shares at € 3.04 per option. In 2015, he

was awarded 8,713 options at an exercise price of  $\leq$  16.10 per option. In 2016, he was awarded 50,608 options at an exercise price of  $\leq$  6.64 per option. These options vest over four years in equal annual installments and had a remaining weighted-average contractual life of 7.5 years at December 31, 2016.

ProQR does not grant any loans, advanced payments and guarantees to members of the Management and Supervisory Board.

#### 24. Subsequent events

On March 27, 2017, the Company announced that it appointed David M. Rodman, MD as Chief Development Strategy Officer. David will join ProQR in April 2017 having previously served in leadership roles with Novartis Institutes for Biomedical Research (NIBR), Vertex Pharmaceuticals, miRagen Therapeutics and Nivalis Therapeutics. Prior to moving to industry in 2005, David had a distinguished academic career, leading the Center for Genetic Lung Diseases at the University of Colorado and directing the Cystic Fibrosis Care, Teaching and Research efforts at the National Jewish Medical and Research Center in Denver, Colorado. During 12 years in industry, David has had global responsibility for driving innovation in the translation of cutting-edge science into transformational new therapies for rare diseases including CF, pulmonary fibrosis, pulmonary artery hypertension and severe immunologic and inflammatory diseases. At Vertex Pharmaceuticals he directed early- and late-stage CF clinical development programs including Kalydeco®, Orkambi® and VX-661. David received a BA in Economics from Haverford College in 1976, an MD from the University of Pennsylvania in 1980 and completed training in Internal Medicine, Pulmonary and Critical Care Medicine at the University of Colorado. He has served as an advisor to the National Institutes of Health, was elected to the American Society for Clinical Investigation and is a Fellow of the American Heart Association.

# Company balance sheet at December 31, 2016

(Before appropriation of result)

	Note	December 31, 2016	December 31, 2015
		€ 1,000	€ 1,000
ASSETS			
Non-current assets			
Intangible assets			
Property, plant and equipment			
Financial fixed assets	27	0	0
		0	0
Current assets			
Social securities and other taxes	28	395	774
Prepayments and other receivables	29	12,217	1,638
Cash and cash equivalents	30	59,042	94,862
		71,654	97,274
TOTAL ASSETS		71,654	97,274
EQUITY			
Shareholders' equity			
Share capital		934	934
Share premium reserve		123,597	123,595
Equity settled employee benefits reserve		4,343	1,899
Translation reserve		(15)	1
Accumulated deficit		(36,630)	(15,798)
Unappropriated result		(39,103)	(20,832)
	31	53,136	89,799
LIABILITIES			
Provisions	32	12,175	1,922
Non-current liabilities			
Borrowings	13	5,697	4,824
		5,697	4,824
Current liabilities			
Trade payables			
Social securities and other taxes		106	38
Pension premiums			
Deferred income			144
Other current liabilities		540	547
	33	646	729
TOTAL EQUITY AND LIABILITIES		71,654	97,274

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

# Company income statement for the year ended December 31, 2016

	Note	2016	2015
		€ 1,000	€ 1,000
Share in results of participating interests, after taxation	27	(37,537)	(14,104)
Other result after taxation		(1,566)	(6,728)
Net result for the year		(39,103)	(20,832)

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

## Notes to the Company financial statements for the year ended December 31, 2016

#### 25. General

The company financial statements are part of the 2016 financial statements of ProQR Therapeutics N.V. (the 'Company') and have been prepared in accordance with the legal requirements of Part 9, Book 2 of the Netherlands Civil Code.

With reference to the income statement of the company, use has been made of the exemption pursuant to Section 402 of Book 2 of the Netherlands Civil Code.

# 26. Principles for the measurement of assets and liabilities and the determination of the result

For setting the principles for the recognition and measurement of assets and liabilities and determination of the result for its company financial statements, the Company makes use of the option provided in section 2:362(8) of the Netherlands Civil Code. This means that the principles for the recognition and measurement of assets and liabilities and determination of the result (hereinafter referred to as principles for recognition and measurement) of the company financial statements of the Company are the same as those applied for the consolidated IFRS financial statements. See page 51 for a description of these principles.

#### Participating interests in group companies

Participating interests in group companies are accounted for in the company financial statements according to the equity method. If the net asset value is negative, the participating interest is valued at nil. This likewise takes into account other long-term interests that should effectively be considered part of the net investment in the participating interest. If the company fully or partly guarantees the liabilities of the associated company concerned, or has the effective obligation respectively to enable the associated company to pay its (share of the) liabilities, a provision is formed. Upon determining this provision, provisions for doubtful debts already deducted from the receivables from the associated company are taken into account. Refer to the basis of consolidation accounting policy in the consolidated financial statements.

#### **Result of participating interests**

The share in the result of participating interests consists of the share of the Company in the result of these participating interests. In so far as gains or losses on transactions involving the transfer of assets and liabilities between the Company and its participating interests or between participating interests themselves can be considered unrealised, they have not been recognised.

## 27. Financial fixed assets

	December 31, 2016	December 31, 2015
	€ 1,000	€ 1,000
Participating interests in group companies	0	0

Movements in financial fixed assets were as follows:

	Participating interests in group companies	Total
	€ 1,000	€ 1,000
Net asset value as of January 1	0	0
Share in results of participating interests, after taxation	37,537	37,537
Exchange differences	(16)	(16)
Change in provisions for negative net asset value	(37,553)	(37,553)
Net asset value as of December 31	0	0

At December 31, 2016, the Company, having its statutory seat in Leiden, the Netherlands, is the ultimate parent company of the following consolidated participating interests:

Name	Location	Share in issued capital
ProQR Therapeutics Holding B.V.	Leiden, the Netherlands	100%
ProQR Therapeutics I B.V.	Leiden, the Netherlands	100%
ProQR Therapeutics II B.V.	Leiden, the Netherlands	100%
ProQR Therapeutics III B.V.	Leiden, the Netherlands	100%
ProQR Therapeutics IV B.V.	Leiden, the Netherlands	100%
ProQR Therapeutics VI B.V.	Leiden, the Netherlands	100%
ProQR Therapeutics VII B.V.	Leiden, the Netherlands	100%
ProQR Therapeutics VIII B.V.	Leiden, the Netherlands	100%
ProQR Therapeutics IX B.V.	Leiden, the Netherlands	100%
ProQR Therapeutics I Inc.	Delaware, United States	100%

For details on the accounts receivable from participating interests and the other receivables, reference is made to note 29.

## 28. Social Security and Other Taxes

	December 31, 2016	December 31, 2015
	€ 1,000	€ 1,000
Value added tax	395 <b>395</b>	774 <b>774</b>

All receivables are considered short-term and due within one year.

## 29. Prepayments and Other Receivables

	December 31, 2016	December 31, 2015
	€ 1,000	€ 1,000
Accounts receivable from group companies	10,854	855
Prepayments	235	270
Other receivables	1,128	513
	12,217	1,638

All receivables are considered short-term and due within one year.

## 30. Cash and Cash Equivalents

	December 31, 2016	December 31, 2015
	€ 1,000	€ 1,000
Cash at banks	56,196	94,862
Bank deposits	2,846	
	59,042	94,862

The cash at banks is at full disposal of the Company. Bank deposits are convertible into cash upon request of the Company.

## 31. Shareholders' equity

	Share Capital	Share Premium	Equity Settled Employee Benefit Reserve	Trans- lation Reserve	Accumu- lated Deficit	Unappro- priated result	Total Equity
	€ 1,000	€ 1,000	€ 1,000	€ 1,000	€ 1,000	€ 1,000	€ 1,000
Balance at January 1, 2015	934	123,581	687		(3,671)	(12,127)	109,404
Retained result					(12,127)	12,127	
Foreign exchange differences				1			1
Recognition of share-based payments			1,212				1,212
Share options exercised	0	14					14
Result for the year						(20,832)	(20,832)
Balance at December 31, 2015	934	123,595	1,899	1	(15,798)	(20,832)	89,799
Retained result					(20,832)	20,832	
Foreign exchange differences				(16)			(16)
Recognition of share-based payments			2,454				2,454
Share options exercised	0	2					2
Result for the year						(39,103)	(39,103)
Balance at December 31, 2016	934	123,597	4,353	(15)	(36,630)	(39,103)	53,136

The 2015 result was added to the accumulated deficit in accordance with the resolution of the Annual General Meeting of shareholders. At the upcoming Annual General Meeting of shareholders, it will be proposed to add the 2016 result to the accumulated deficit. For more details we refer to note 12 to the consolidated financial statements.

## 32. Provisions

	December 31, 2016	December 31, 2015
Provision for negative equity group companies	€ 1,000	€ 1,000
Balance at January 1	1,922	
Provisions made during the year	10,253	1,922
Balance at December 31	12,175	1,922

## 33. Current Liabilities

	December 31, 2016	December 31, 2015
	€ 1,000	€ 1,000
Trade payables		
Social securities and other taxes	106	38
Pension premiums		
Deferred income		144
Accrued expenses and other liabilities	540	547
	646	729

## 34. Commitments and Contingencies

#### (a) Claims

There are no claims known to management related to the activities of the Company.

#### (b) Clinical support agreement

In August 2014, the Company entered into an agreement with Cystic Fibrosis Foundation Therapeutics, Inc., or CFFT, a subsidiary of the Cystic Fibrosis Foundation, pursuant to which CFFT agreed to provide the Company with up to \$ 3 million to support the clinical development of QR-010.

Pursuant to the terms of the agreement, the Company is obligated to make a one-time milestone payment to CFFT of up to approximately \$ 80 million, payable in three equal annual installments following the first commercial sale of QR-010, the first of which is due within 90 days following the first commercial sale. The Company is also obligated to make a one-time milestone payment to CFFT of up to \$ 3 million if net sales of QR-010 exceed \$ 500 million in a calendar year. Lastly, the Company is obligated to make a payment to CFFT of up to approximately \$ 6 million if it transfers, sells or licenses QR-010 other than for certain clinical or development purposes, or if the Company enters into a change of control transaction. Either CFFT or the Company may terminate the agreement for cause, which includes the Company's material failure to achieve certain commercialization and development milestones. The Company's payment obligations survive the termination of the agreement.

#### (c) Several liability and guarantees

The Company has issued declarations of joint and several liabilities for debts arising from the actions of Dutch consolidated participating interests, as meant in article 2:403 of the Netherlands Civil Code.

The Company constitutes a tax entity with its Dutch subsidiaries for corporate income tax purposes; the standard conditions prescribe that all companies of the tax entity are jointly and severally liable for the corporate income tax payable.

#### 35. Auditor fees

The fees for services provided by our external auditor, Deloitte Accountants B.V., are specified below for each of the financial years indicated:

	2016	2015
	€ 1,000	€ 1,000
Audit fees	165	193
Audit-related fees	39	
Tax fees		
All other fees		
	204	193

#### Audit fees

Consist of aggregate fees for professional services provided in connection with the annual audit of our financial statements, the review of our quarterly financial statements, consultations on accounting matters directly related to the audit, and comfort letters, consents and assistance with and review of documents filed with the SEC.

# Signing of the Annual Report

Leiden, March 31, 2017,

D.A. de Boer

D. Valerio

R.K. Beukema

H.A. Termeer

A.B. Papiernik

A. Lawton

P.R. Baart

J.S.S. Shannon (as of June 21, 2016)

## **Other information**

#### Independent auditor's report

Reference is made to the independent auditor's report as included hereinafter.

#### Statutory arrangement concerning the appropriation of the result

In Article 21 of the Company statutory regulations the following has been presented concerning the appropriation of result:

1. The profit is at the free disposal of the General Meeting of Shareholders.

2. The Company may only distribute profits to shareholders and other recipients to distributable profits to the extent that the equity exceeds the paid-up capital plus the reserves required by law.

3. Distribution of profits shall take place after adoption of the annual accounts from which it becomes clear that distribution is permissible.

4. When calculating the distribution of profits shares held by the Company shall be disregarded, unless this shares has been encumbered with usufruct or right of pledge or certificates thereof are issued as a result of which the entitlement to profits accrue to the usufructuary, pledgee or holder of the certificates.

5. Certificates held by the Company or whereon the Company holds limited rights as a result of which the Company is entitled to distribution of profits shall also be disregarded when calculating the distribution of profits.

6. The Company may make interim distributions, only if the requirements in paragraph 2 are met.

## Independent auditor's report

To the Shareholders and the Supervisory Board of ProQR Therapeutics N.V.

#### Report on the financial statements 2016

#### **Our Opinion**

We have audited the financial statements 2016 of ProQR Therapeutics N.V., based in Leiden, the Netherlands. The financial statements include the consolidated financial statements and the company financial statements.

In our opinion:

- The consolidated financial statements give a true and fair view of the financial position of ProQR Therapeutics N.V. as at December 31, 2016, and of its result and its cash flows for 2016 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.
- The company financial statements give a true and fair view of the financial position of ProQR Therapeutics N.V. as at December 31, 2016, and of its result for 2016 in accordance with Part 9 of Book 2 of the Dutch Civil Code.

The consolidated financial statements comprise:

- The consolidated statement of financial position as at December 31, 2016.
- The following statements for 2016: the consolidated statement of profit or loss and comprehensive income, changes in equity and cash flows.
- The notes comprising a summary of the significant accounting policies and other explanatory information.

The company financial statements comprise:

- The company balance sheet as at December 31, 2016.
- The company income statement for 2016.
- The notes comprising a summary of the 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 ProQR Therapeutics N.V. in accordance with the Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO) and other relevant independence regulations in the Netherlands. Furthermore we have complied with the Verordening gedrags- en beroepsregels accountants (VGBA).

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

#### Materiality

Based on our professional judgement we determined the materiality for the financial statements as a whole at EUR 2.5 million. The materiality is based on 7.5% of normalized loss before tax. 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 Supervisory Board that misstatements in excess of EUR 125,000, which are identified during the audit, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

#### Scope of the group audit

ProQR Therapeutics N.V. is at the head of a group of entities. The financial information of this group is included in the consolidated financial statements of ProQR Therapeutics N.V..

The financial administration for all group entities is centralized in the Netherlands. Consequently, we have centralized our audit approach and we have been able to obtain sufficient and appropriate audit evidence about the group's financial information to provide an opinion about the financial statements.

#### 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 Supervisory Board. 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 these matters.

#### Research and development expenses

The total research and development expenses for the year 2016 amounts to EUR 31.9 million. These research and development expenses consists of payroll costs of employees as well as outsourced research and development activities with third party suppliers. The research and development activities with these suppliers are concluded in master service agreements and statements of work. These outsourced research and development activities are typically performed over a period of time and allocation of expenses in each reporting period based on the progress of the work involves judgement. Our audit procedures included, amongst others, the review of the agreements with suppliers and the related accounting evaluation as well as the timing of expenses recognized.

#### Significant contracts

ProQR Therapeutics N.V. concluded several significant contracts, amongst others, the agreements with European Commission in relation to H2020 grant and the above mentioned research and development agreements. These contracts contain terms and conditions that may require complex accounting and/or significant long-term commitments that require disclosure in the financial statements. Our audit procedures included, amongst others, the review of the contract register, review of the contract terms and related accounting evaluation of the impact on the financial statements including disclosures of the commitments.

#### Cash and cash equivalents

The total cash and cash equivalents as per December 31, 2016 amounts to EUR 59.2 million. We focused on this area as the cash and cash equivalents are material to the financial statements. We reconciled the bank balances to bank confirmations, recalculated the foreign exchange result on these balances and reviewed the bank confirmations and underlying agreements for deposit balances to assess the presentation and disclosure in the financial statements.

#### Report on the other information included in the annual accounts

In addition to the financial statements and our auditor's report, the annual accounts contain other information that consists of:

- Management Board's Report.
- Other Information as required by Part 9 of Book 2 of the Dutch Civil Code.

Based on the following procedures performed, we conclude that the other information:

- Is consistent with the financial statements and does not contain material misstatements.
- Contains the information as required by Part 9 of Book 2 of the Dutch Civil Code.

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 substantially less than the scope of those performed in our audit of the financial statements.

Management is responsible for the preparation of other information, including the Management Board's Report in accordance with Part 9 of Book 2 of the Dutch Civil Code, and the other information as required by Part 9 of Book 2 of the Dutch Civil Code.

#### Report on other legal and regulatory requirements

#### Engagement

We were engaged by the Supervisory Board as auditor of ProQR Therapeutics N.V. as of the audit for year 2012 and have operated as statutory auditor ever since that date.

Description of responsibilities for the financial statements

#### Responsibilities of management and the Supervisory Board for the financial statements

Management 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 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.

As part of the preparation of the financial statements, management is responsible for assessing the company's ability to continue as a going concern. Based on the financial reporting framework mentioned, management should prepare the financial statements using the going concern basis of accounting unless management either intends to liquidate the company or to cease operations, or has no realistic alternative but to do so.

Management 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 Supervisory Board is responsible for overseeing the company's financial reporting process.

#### Our responsibilities for the audit of the financial statements

Our objective is to plan and perform the audit assignment 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 have detected all material errors and fraud.

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.

We have exercised professional judgment and have maintained professional skepticism throughout the audit, in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our audit included e.g.:

- Identifying and assessing the risks of material misstatement of the financial statements, whether due to
  fraud or error, designing and performing audit procedures responsive to those risks, and obtaining
  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.
- Obtaining 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 company's internal control.
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Concluding on the appropriateness of management'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 company'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 company to cease to continue as a going concern.
- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures.
- Evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Because we are ultimately responsible for the opinion, we are also responsible for directing, supervising and performing the group audit. In this respect we have determined the nature and extent of the audit procedures to be carried out for group entities. Decisive were the size and/or the risk profile of the group entities or operations. On this basis, we selected group entities for which an audit or review had to be carried out on the complete set of financial information or specific items.

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

We provide the Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Supervisory Board, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

Amsterdam, March 31, 2017

Deloitte Accountants B.V.

P.J.M.A. van de Goor

# **ProQR Therapeutics N.V.**

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