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Zealand Pharma Annual Report 2018

Company reg. no. 20045078

Anders Stensbjerg Kristensen lives with type 1 diabetes

Changing lives with next generation peptide therapeutics.

Our ambition is to be a world leader in treating specialty gastrointestinal and metabolic diseases.

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Shareholder letter

2018 has been a remarkable year, with substantial advancement of our fully-owned medicines in development. Read more on

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A strong financial position to enable full-speed development of our pipeline. Read more on

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Pipeline overview

We have four late stage programs with potential to launch in two to four years, and a promising early pipeline. Read more on



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Zealand in brief.

Changing lives with next generation peptide therapeutics.

We are passionate about changing the lives of people with severe medical conditions through targeted development of next generation peptide therapeutics. To achieve this ambition, our organization is rapidly maturing towards a fully integrated biotech company with commercial operations in the U.S.

We have four late stage programs with the potential to launch into major markets in the next two to four years. Phase 3 is ongoing for **glepaglutide**, a long-acting GLP-2 analog for treatment of short bowel syndrome. Three late stage programs are based upon **dasiglucagon**, a stable glucagon analog: positive Phase 3 results for treatment of severe hypoglycemia in diabetes with anticipated new drug application (NDA) submission within the coming year; Phase 3 ongoing for treatment of the rare pediatric condition, congenital hyperinsulinism; and a Phase 2b study planned for use in dual-hormone fully automated pump therapy for management of type 1 diabetes.

Our early development pipeline consists of two clinical programs partnered with Boehringer Ingelheim, and a long-acting GLP-1/GLP-2 agonist for treatment of short bowel syndrome that is approaching Phase 1. We continue to leverage our established discovery peptide platform, which has already led to two approved medicines and provides multiple opportunities for near-term pipeline expansion.



Danish Biotech

Founded in Copenhagen (HQ) in 1998, opened U.S. subsidiary 2018



Expanding Capabilities

Transforming into a fully integrated biotech company with U.S. commercial organization



Leading Peptide Platform

A world leading peptide platform, with two medicines on the market



Experienced Team 153 employees of which 87% are in R&D



Four Late Stage Programs

Accelerating late stage programs to launch new products into major markets in 2 to 4 years



Dual Nasdaq Listing

Traded in Copenhagen and New York



Find out more about Zealand on **zealandpharma.com/about-us**

Shareholder Letter

Committed and on track, with a clear path ahead.

2018 was a remarkable year for Zealand. In line with our strong commitment to change the lives of people with severe medical conditions, we have substantially advanced our fullyowned medicines in development. In September, we executed the sale of future royalties associated with lixisenatide for USD 205 million, securing a strong financial position to enable full-speed development of our pipeline toward making our medicines available to patients.

On track with strategy execution

Zealand has a proven track record with two medicines, based on a Zealand invention, developed and launched through a partner. In 2015, we introduced an ambitious growth strategy to become a fully integrated biotech company, thus maintaining more control and a larger share of value creation. Today, we have three fully-owned product candidates in Phase 3 development, one of which is approaching filing to the FDA in the coming year. A fourth program is ready for Phase 3 initiation in early 2020, and we have advanced a number of new innovative product candidates: all based on our own inventions and leveraging our world leading peptide expertise.

This progress has been achieved by a dedicated, focused and highly skilled organization that is adept at developing medicines to treat rare diseases, in particular within the gastrointestinal and metabolic fields. Our successful business progress has led to an increased focus on activities where a partner can bring valuable additional capabilities. In 2018, we also continued to make progress in our two clinical partnerships with Boehringer Ingelheim, as well as in our multiple research partnerships. In 2018, Zealand made important positive advancement of its fullyowned programs as well as developing the organization with deeper capabilities. New exciting data has propelled our clinical candidates into the next stages of development, while the sale of future lixisenatide royalties and milestones provided financial strength for the ongoing key business activities. The company is positioned well, with a clear path ahead, to deliver on its objectives striving for creating shareholder value in 2019.

> Martin Nicklasson Chairman of the Board

Britt Meelby Jensen President & CEO (through February 28, 2019) Adam Steensberg Martin Nicklasson Chairman of the Board Interim CEO (effective March 1, 2019)

Leadership in short bowel syndrome

In 2018, we initiated Phase 3 development with our long acting GLP-2 analog, glepaglutide. We aspire to reduce the burden of living with short bowel syndrome by offering a best-in-class GLP-2 treatment. The Phase 3 program is on track. We are proud to be working with leading experts in the field, and 40 centers across the U.S., Europe and Canada are engaged in the development.

Our long-term ambition is to address the extensive medical need for short bowel syndrome patients. Therefore, we celebrated reaching a major milestone of successfully completing the pre-clinical phase with our GLP-1/GLP-2 dual agonist, which we believe represents the next generation therapy for SBS patients. This program will advance to Phase 1 in 2019.

Dasiglucagon offers multiple options

Our invention of dasiglucagon, a novel glucagon analog with unique stability in liquid formulation, provides opportunities for diabetes patients suffering from multiple acute and chronic conditions.

Phase 3 results confirmed the potential of our drug candidate as the fastest treatment option for severe hypoglycemia, a life-threatening acute condition in diabetes.

The dasiglucagon molecule is also in development for chronic use. The Phase 3 study was initiated for congenital hyperinsulinism, a treatment with potential to transform the lives of children affected by this severe and rare condition. In 2018, our equity investment with partner Beta Bionics strengthened our collaboration to deliver a solution for fully automated diabetes care, with the iLet[®] dual hormone pump using dasiglucagon. This holds potential to transform how insulin-dependent diabetes are treated, and we are excited to progress toward Phase 3 initiation in early 2020.

We change lives with next generation peptide therapeutics

We leverage our leading peptide R&D experience, built over the past 20 years, to transform peptides into next generation therapeutics. In 2018, we expanded our rare disease pre-clinical pipeline to include potent and selective inhibitors of complement C3 for the treatment of complement-mediated diseases.

Strong organization

All of our progress has been possible because of the drive and commitment of Zealand's employees, who have demonstrated boldness and dedication in achieving our goals. In 2018, we continued adding new capabilities to support the progress of our pipeline and to ensure a successful path ahead. While keeping our headquarters in the greater Copenhagen area, we established our first U.S. presence to be closer to this important market.

In Corporate Management, we added two new colleagues, bringing extensive U.S. experience to secure that we have the right competences to deliver on the 2019 priorities. These valuable additions combined with an already strong management team enable us to effectively manage the transition associated with the recruitment of a new CEO and CFO, without distraction from delivering on our business objectives.

Clear path ahead

With remarkable progress in 2018, our path is clear toward becoming a fully integrated biotech company. 2019 is off to a strong start, with three Phase 3 programs progressing according to plan and preparations underway for an NDA filing to the FDA. Zealand maintains a strong financial position to deliver on our plans, and multiple new opportunities are being pursued to continue building a successful and sustainable business.

On behalf of the Board, the entire Management team, and Zealand employees, we would like to thank our shareholders, partners and patients for placing trust in our company. We remain committed to maintaining and strengthening that trust, and delivering on our ambitious goals in the years ahead.

Martin Nicklasson Chairman of the Board

Britt Meelby Jensen

President & CEO (through February 28, 2019)

Adam Steensberg

Interim CEO (effective March 1, 2019)

2018 Achievements.

2018 was a very successful year for Zealand. We had multiple clinical successes, a substantial improvement of our cash position, and made clear organizational progress towards becoming a fully integrated biotech company.

Accelerated our late-stage pipeline	 Glepaglutide Phase 3 trial initiated with best-in-class potential Positive dasiglucagon HypoPal[®] rescue pen Phase 3 results reported Significant regulatory progress secured for dasiglucagon for dual- hormone pumps Dasiglucagon Phase 3 program for congenital hyperinsulinism initiated
Announced the next internal drug candidate for clinical development	• Long-acting GLP-1/GLP-2 analog (ZP7570) selected as next generation treatment of short bowel syndrome
Secured value-generating partnerships across existing programs	 Multiple partnership discussions are advancing, following positive pipeline developments DKK 22.8 million (USD 3.5 million) equity investment in strategic partner Beta Bionics, developer of the iLet[™] bionic pancreas system
Sale of future royalties and milestones	• DKK 1,320 million (USD 205 million) secured from sale of future royalties and milestones related to the lixisenatide program
Verified potential in obesity/ type-2 diabetes with Boehringer Ingelheim	 Once-weekly GLP-1/glucagon analog advanced into Phase 1b New once-weekly amylin analog lead selected for clinical testing

Celebrating 20 Years

In 2018, Zealand Pharma celebrated 20 years of achievements since the company's founding. Watch a video highlighting our biggest successes: zealandpharma.com/20years

Financial highlights and 2019 guidance.

Revenue

Revenue consists of royalty revenue from sales of products licensed to Sanofi and milestone payments relating to development and regulatory achievements from outlicensed programs.

Zealand's revenue in 2018 amounted to DKK 38.0 million (136.3), down 72% due to a decrease in both royalties and milestone payments.

Royalty revenue decreased by 30% versus the previous year and amounted to DKK 24.9 million (35.3). The decrease is a consequence of the sale of future Sanofi rovalties and milestones, which had the effect that only royalties earned before June 30, 2018 are included in the income statement. Royalty revenue from sales of Lyxumia[®]/Adlyxin[®] amounted to DKK 7.1 million (16.7) and from Soligua® 100/33 to DKK 17.8 million (18.7).

Milestone payments amounted to DKK 13.1 million (101.0).

The milestone payments comprised a payment of DKK 9.8 million from an undisclosed counterpart in connection with a Material Transfer Agreement, and a payment of DKK 3.3 million from a license agreement with Protagonist Therapeutics Inc.

Research, development and administrative expenses

Total research, development and administrative expenses amounted to DKK 481.8 million (372.1), up 29% on 2017.

The increase reflects higher research and development expenses as a result of accelerated development activities and more late-stage clinical trials. This includes costs for the three dasiglucagon programs, including the Phase 3 trials relating to the rescue pen for severe hypoglycemia and clinical costs for dasiglucagon to be used in a dual-hormone artificial

pancreas as well as treatment for congenital hyperinsulinism. It also includes costs for initiating the Phase 3 trial with glepaglutide as well as costs relating to pre-clinical activities. In addition, costs were impacted by an increase in the number of employees in our clinical development organization.

Net operating expenses and operating result

The net operating expenses amounted to DKK 481.1 million (371.6), which is in the lower end of the latest guidance (DKK 475-495 million) published in the interim report for the first nine months of 2018 on November 15, 2018. Operating result amounted to DKK 652.4 million (-249.4). The increase compared to 2017 is due to the sale of future Sanofi royalties and milestones leading to Other operating income of DKK 1.0995 million (0.6)

Financial guidance for 2019

For 2019, Zealand expects revenue from new potential partnership agreements and from milestones from existing license agreements. However, since such revenue is uncertain both in terms of size and timing, Zealand does not guide on such revenue.

Net operating expenses in 2019 are expected to be within the DKK 550 - 570 million range. The increase compared to 2018 is due to higher clinical development costs associated with advancing glepaglutide and the dasiglucagon programs into Phase 3.

Operating result is calculated as revenue from royalties and milestone payments less royalty expenses and net operating expenses.

	2019	2018
DKKm	guidance	realized
Revenue	No guidance	38
Net operating expenses ¹	550-570	481

¹ For definition of net operating expenses, see page 96, Alternative performance measures for the Group

Note: Comparative figures for 2017 are shown in brackets.



Find out more about Zealand at zealandpharma.com/investor-relations

Consolidated key figures.

DKK '000	2018	Restated ⁶ 2017	Restated ⁶ 2016	Restated ⁶ 2015	Restated ⁶ 2014
Income statement and					
comprehensive income					
Revenue	37,977	136,322	230,864	182,573	150,633
Royalty expenses	-3,356	-14,163	-30,931	-21,578	-13,352
Research and development					
expenses	-438,215	-324,667	-268,159	-217,741	-180,036
Administrative expenses	-43,542	-47,470	-52,503	-41,824	-39,826
Other operating income	1,099,526	607	1,697	12,828	6,328
Operating result	652,390	-249,371	-119,032	-85,742	-76,253
Net financial items	-27,334	-31,387	-43,764	-38,505	1,047
Result before tax	625,056	-280,758	-162,796	-124,247	-75,206
Income tax	-43,774	5,500	5,500	5,875	7,500
Net result for the year	581,282	-275,258	-157,296	-118,372	-67,706
Comprehensive income/loss	581,282	-275,258	-157,296	-118,372	-67,706
Earnings/loss per share					
– basic (DKK)	18.94	-9.88	-6.47	-5.13	-2.99
Earnings/loss per share					
– diluted (DKK)	18.94	-9.88	-6.47	-5.13	-2.99

Statement of financial position

Cash and cash equivalents	860,635	588,718	323,330	418,796	538,273
Restricted cash ¹	0	5,892	318,737	21,403	0
Securities	298,611	75,111	0	0	0
Total assets	1,229,797	721,285	683,116	627,621	593,273
Share capital ('000 shares)	30,787	30,751	26,142	24,353	23,193
Equity	1,116,281	514,669	267,381	244,803	249,815
Equity ratio ²	0.91	0.71	0.39	0.39	0.42
Royalty bond	0	135,734	332,243	312,951	272,170

<u> DKK '000</u>	2018	Restated ⁶ 2017	Restated ⁶ 2016	Restated ⁶ 2015	Restated ⁶ 2014
Cash flow					
Cash outflow/inflow from					
operating activities	-460,400	-278,746	40,904	-224,767	-42,183
Cash outflow/inflow from					
investing activities	881,905	221,351	-299,958	-1,594	19,763
Cash outflow/inflow from	155 440	337,930	157,146	96.413	272,170
financing activities Purchase of property,	-155,449	557,950	137,140	90,415	2/2,1/0
plant and equipment	-4.038	-7,226	-2,600	-4.040	-4,497
Free cash flow ³	-464,438	-285,972	38,304	-228,807	-46,680
Other					
Share price (DKK)	82.4	85.00	106.50	151.50	83.00
Market capitalization (DKKm) ⁴	2,537	2,614	2,784	3,689	1,925
Equity per share (DKK)⁵	36.33	16.77	11.24	10.29	11.04
Average number of employees	146	128	124	110	103
Number of full time employees					
at the end of the year	149	133	108	106	94

¹ Restricted cash serves as collateral for the royalty bond issued in 2014. Zealand has redeemed the outstanding royalty bond in 2018 and therefore Zealand no longer has restricted cash.

² Equity ratio is calculated as equity at the balance sheet date divided by total assets at the balance sheet date.

³ See page 96 regarding alternative performance measures.

⁴ Market capitalization is calculated as outstanding shares at the balance sheet date times the share price at the balance sheet date.

⁵ Equity per share is calculated as shareholders' equity divided by total number of shares less treasury shares.

⁶ Royalty revenue and royalty expenses have been restated for the period 2014-2017. See note 1 to the consolidated financial statements..

2019 Objectives.

We have clear success criteria for 2019, from continuing the advancement of our robust pipeline, to expanding strength through partnerships and organizational development.

Accelerate our late-stage pipeline	 Glepaglutide for short bowel syndrome: 60-80 patients enrolled in Phase 3, on track for 2020 results
	 Dasiglucagon HypoPal[®] rescue pen: Clinical program completion and NDA submission to the FDA
	Dasiglucagon for dual-hormone pump: Phase 2 completion
	 Dasiglucagon for congenital hyperinsulinism: Phase 3 program advancement
Advance our early pipeline	Once-weekly GLP-1/GLU: Phase 1 clinical results for obesity/type 2 diabetes
	 Once-weekly Amylin analog: Phase 1 trial initiation for obesity/type 2 diabetes
	 Long-acting GLP-1/GLP-2 dual agonist (ZP7570) for SBS: Phase 1 trial initiation
	 Complement C3 inhibitor: Preclinical development towards Phase 1 initiation in 2020
Expand our strong financial and organizational position	 Value-adding partnerships for selected fully-owned drug candidates concluded
	 Organizational preparedness for commercialization and expansion of U.S. presence
	 Disciplined financial management with tight cost control

With remarkable progress in 2018, our path is clear toward becoming a fully integrated biotech company.

Our Ambition and Business Model.

Our ambition is to provide next generation peptide therapeutics that change the lives of people affected by specialty gastrointestinal and metabolic diseases. We aim to deliver best-in-class treatment options that meet patient medical needs and ease the burden on the health care system. To achieve this, we utilize a business model with two approaches. First, within rare diseases, we aim to retain full ownership and control of product candidates all the way to market in selected geographies by transforming into a fully integrated R&D organization with commercial capabilities. Our agile organization engages with partners across the value chain, such as leading CROs and CMOs. Second, within diabetes and other broad indications, we progress clinical development ourselves to the point at which it makes business sense to engage in partnerships that expand the opportunity and probability of success by providing additional resources and investment.



Optimizing value through internal drug development and partnerships



Find out more about Zealand on **zealandpharma.com/strategy**

Delivering best-in-class treatment options to meet patient medical needs and ease burden on the health care system



Changing Lives

We work every day with patient communities and thought leaders to change the lives of people with severe medical conditions.



Transforming Peptides

We leverage our 20 years of experience discovering and developing peptide drugs to transform peptide projects into next generation therapeutics.



Engaging Partnerships

We engage with development and commercial partners to enhance innovation and expand opportunities across markets and therapeutics areas.



Approaching Commercialization

We are building a fully integrated commercial organization with U.S. operations to market our own therapies for rare diseases.



Pipeline Overview.

Zealand is a leader in the discovery of novel peptide therapeutics, with a focus on delivering next generation therapeutics for specialty gastrointestinal and metabolic diseases. We transform peptides into life-changing therapeutics by leveraging our leading peptide expertise. True to our biotech roots, we are opportunistic and efficient in applying our peptide platform to discover breakthrough treatments leading to new standards of patient care.

Zealand is developing treatments for gastrointestinal diseases, with a current focus on short bowel syndrome (SBS). One of the leading programs in Zealand's pipeline is glepaglutide, a long-acting GLP-2 analog in development for the treatment of SBS.

Our efforts to improve treatments for metabolic diseases is led by dasiglucagon, a liquid formulation glucagon analog in development as three distinct medicines: 1 - a ready-to-use rescue treatment for severe hypoglycemia; 2 - a treatment for the orphan disease congenital hyperinsulinism; and 3 - as an essential component in a dual-hormone pump system combined with insulin for the treatment of type 1 diabetes.

Our pipeline also includes two product candidates developed in collaboration with Boehringer Ingelheim for the treatment of obesity and type 2 diabetes: a GLP-1/GLU dual agonist and an amylin analog, both suitable for once-weekly dosing.

Several pre-clinical programs are also advancing Zealand's pipeline. These candidates have potential for development solely by Zealand or in partnership.

Four late stage programs and a promising early pipeline

Product Candidate	Indication	Pre-clinical	Phase 1	Phase 2	Phase 3	Registration
Development Programs						
Glepaglutide GLP-2 Analog	Short bowel syndrome					
ZP7570 GLP-1/GLP-2 Dual Agonist	Short bowel syndrome					
Dasiglucagon HypoPal® Rescue Pen	Severe hypoglycomia					
Dasiglucagon Rare Diseases	Congential hyperinsulinism					
Dasiglucagon Dual-hormone Pump Therapy	Diabetes management					
GLP-1/GLU Dual Agonist	Obesity/Type 2 diabetes ¹					
Amylin Analog	Obesity/Type 2 diabetes ²					
Pre-Clinical Programs						
Complement C3 Inhibitors	Undisclosed					
GIP/GLP-1/Glucagon Mono/Dual/Triple	Undisclosed					
Ion Channel Blockers	Undisclosed					



Find out more about Zealand's pipeline at zealandpharma.com/product-pipeline

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Our programs.

18

3%

Reducing the burden of
short bowel syndrome
Improving the lives of people
with insulin-dependent diabetes
Other Programs
Our Established Peptide Platform

"Going from 10 hours to 8 hours was the largest jump".

Dependent on parenteral support to survive, Mike must connect to infusion equipment for eight hours a day, six days a week. Reducing the complexity – and time spent – for parenteral support enables this driven college football coach to get back in the game.



Find more Zealand news at **zealandpharma.com/mikes-story**

Reducing the burden of short bowel syndrome

Mike was hospitalized after experiencing severe stomach pains and bleeding, from what he originally thought was a bad reaction to food. After several days of tests in two different hospitals, doctors discovered that Mike was born with an abnormal cluster of veins in his small bowel, and that cluster had ruptured. He then progressed through a series of surgeries that resulted in removing approximately seven meters of his intestine.

Mike had now become a patient with short bowel syndrome. The remaining eight centimeters of his intestine were not capable of absorbing the nutrition and fluids Mike needed to live, so he also became dependent on parenteral support to survive. For 12 hours every day, Mike connected to intravenous lines to absorb nutrients and fluids through his blood stream.

"Being tough, being strong. These are decisions that you make."

A former football player turned collegiate coach, Mike knew about pushing through physical boundaries and dealing with pain. Following his surgeries, Mike underwent months of physical therapy. He had to relearn daily tasks, like putting on socks and shoes, and walking up stairs.

"My very first physical therapy appointment was to sit in a chair. Seems simple. Yet, it was one of the most painful things I have ever gone through in my life. It was excruciating."





Regaining hours in the day

Initially, Mike connected to parenteral support for 12 hours a day. Eventually, he was decreased to 10 hours a day, an improvement, yet the time needed to absorb enough nutrition and fluids required Mike to carry and be connected to a backpack containing total parenteral nutrition (TPN).

"I would have to wear my backpack into the office. At work with a TPN backpack and cords hanging out of everywhere: that doesn't do much for trying to convince people you are healthy and can do the job."

For Mike, the biggest impact so far on his daily life came when he reduced time spent on parenteral support from 10 hours to 8 hours. He now gets his parenteral support needs covered while he sleeps, and no longer needs to be connected to a backpack with parenteral support during the day. Mike's ultimate goal is to be free of parenteral support.

"It is a longshot. If I can't get free [of parenteral support], it is moving toward it being an afterthought in my life rather than a dominating force in my life. That's just as important."

40,000 people are living with SBS

Short bowel syndrome is a chronic and debilitating disease affecting up to 40,000 people in the U.S. and Europe^{1.2}

¹ Jeppesen P. Expert Opin Orphan Drugs; 1:515-25;
 ² Transparency Market Research; Short Bowel Syndrome Market, 2017

About short bowel syndrome.

Short bowel syndrome (SBS) is a chronic and debilitating condition associated with reduced or complete loss of intestinal function.

About

Patients with SBS have undergone massive intestinal surgery resulting in significantly reduced or complete loss of intestinal function. Underlying causes for SBS include inflammatory bowel syndrome, intestinal infarction, radiation damage or trauma, and recurrent intestinal obstruction or congenital disorders.^{1,2,3} SBS affects an estimated 20,000-40,000 people in the U.S. and Europe.⁴

SBS patients cannot absorb adequate fluids and nutrition taken orally, and those most severely affected become dependent on home parenteral support to survive. Home parenteral support is delivered through daily infusion of intravenous fluids and nutrition via a central venous catheter.^{1.2} Long-term use of parenteral support carries a risk of catheter-related blood stream infections, blood clots, and organ impairment including liver and kidney damage. Patients are required to connect to the infusion lines and pumps for up to 16 hours every day, which can pose significant restrictions on ability to engage in normal daily activities.

Limitations of current treatments

Management of SBS is a complex multidisciplinary task with a focus on optimizing the patient's hydration and nutritional status. It includes striking the right balance between parenteral support and oral intake of fluids and nutrition. Treatment with GLP-2 analogs has been demonstrated to increase the absorptive capacity of the remaining intestines, and thus enables the patient to realize their full potential for intestinal rehabilitation following surgery.

Despite the clear benefits of reducing the dependency on parenteral support, people treated with the only currently available short-acting GLP-2 therapy have shown high levels of treatment discontinuation,^{1.2} emphasizing the need for more effective, less complex and better tolerated treatments tailored to the needs of SBS patients.



Find more Zealand news at **zealandpharma.com/disease-focus**

The gastrointestinal tract - in a healthy person and in a SBS patient

Normal person Length of gastrointestinal tract

~8.5 m / ~25 ft







We aspire to provide the next generation, bestin-class therapies to help transform the lives of people living with short bowel syndrome.

Expanding treatment options

Glepaglutide has the potential to be the bestin-class GLP-2 therapy, allowing people with SBS a fast, reliable and well-tolerated treatment option to reduce dependence on parenteral support. ZP7570 GLP-1/GLP-2 is designed to improve management of SBS beyond what is achievable with mono GLP-2 treatments, and may represent a next level of innovation for helping people with SBS.

Next steps

The pivotal Phase 3 trial for glepaglutide was initiated in 2018, and results are expected in 2020. ZP75750 is set to enter Phase 1 in 2019.



Glepaglutide for short bowel syndrome.

Glepaglutide is a long-acting GLP-2 analog being developed in an autoinjector with potential for convenient weekly administration.

About

GLP-2 molecules stimulate the growth of intestinal tissue, increase nutrient and fluid absorption, increase intestinal blood flow, and reduce gastric secretion and emptying.

Our Phase 2 results with glepaglutide demonstrated clinically significant increases in intestinal absorption following only three weeks of treatment with glepa-glutide.¹ With an effective plasma half-life of approximately 50 hours, glepaglutide has the potential to be the best-in-class GLP-2 therapy allowing SBS patients a fast, reliable and well-tolerated treatment option to reduce dependency on parenteral support.

Next steps

The pivotal Phase 3 trial for glepaglutide, EASE SBS 1 (Efficacy And Safety Evaluation of glepaglutide in treatment of SBS), was initiated in 2018 and results are expected in 2020. The trial seeks to establish the efficacy and safety of once- and twice-weekly administration of glepaglutide in patients with SBS. The primary endpoint is to evaluate the reduction in weekly parenteral support volume from baseline to week 24. Orphan drug designation is granted in the U.S.

Strong Phase 2 data with clinically significant increases in intestinal absorption following 3 weeks of glepaglutide treatment

Change in wet weight absorption (g/day)¹





www

¹ Naimi, R., ASPEN 2018 Nutrition Science and Practice Conference (Abstract number 2829969t).

ZP7570 (GLP-1/GLP-2) for short bowel syndrome.

ZP7570 is a potential first-inclass long-acting GLP-1/GLP-2 dual agonist.

Expanding treatment options for patients

The ZP7570 GLP-1/GLP-2 peptide is designed to improve management of SBS beyond what is achievable with mono GLP-2 treatments, and may represent a next level of innovation for helping SBS patients to further realize full potential for intestinal rehabilitation.

Pre-clinical and clinical evidence indicates that SBS patients may experience an improved outcome by combining the GLP-1 and GLP-2 mechanisms, over GLP-2 alone.^{1.2} GLP-2 primarily increases the absorptive capacity of the intestines, whereas GLP-1 is believed to act by reducing gastrointestinal motility, thereby allowing more time for the fluids and nutrition to be absorbed.

Next steps

IND enabling pre-clinical studies were concluded in 2018. ZP7570 is set to enter Phase 1 in 2019.



"Severe hypoglycemia is an extremely scary experience".

Anders was diagnosed with type 1 diabetes when he was fifteen months old. Now twenty-two, he must manage the constant challenges of the disease. His father, Finn, recalled when Anders experienced severe hypoglycemia, and acknowledged the constant fear of it happening again.



Find more Zealand news at **zealandpharma.com/anders-story**

Since he was seven years old, Anders has had an insulin pump to improve management of insulin injections. It accompanies constant monitoring of blood glucose levels to maintain glycemic control and good health. Anders must continually adapt to ever-changing insulin needs dictated by his blood glucose levels, food intake, exercise, sickness, and prior insulin injections.

"It is really difficult. After twenty years of living with type 1 diabetes, managing blood glucose levels is still a lot of guessing."

Anders

When his blood glucose levels crashed unexpectedly, Anders experienced severe hypoglycemia. Onset of severe hypoglycemia was unpredictable despite diligent management of blood glucose levels by Anders and his parents.

"I don't need anyone's pity, but I need to explain the fear that is involved."

Finn

Finn described what it was like when Anders, as a small child, had a severe hypoglycemic event.

"My son started shaking. Then out comes this uncontrolled primal screaming, in a different voice that I could not recognize as his. My wife and I could not get into contact with him. We really believed he was going to die."





Finn recalls having a glucagon rescue kit, but never using it. "In this panic, it was not possible to remember what to do or to read the instructions," said Finn. "The emergency kit required a complicated preparation process. Instead, we would dab honey in Anders's mouth, try to get him to drink juice, and call emergency medical service."

"These were the most terrible moments of my life. After one time, I never wanted it to happen again."

Unfortunately, Anders has experienced severe hypoglycemia multiple times. It remains one of the most feared challenges of living with his type 1 diabetes.

A rescue option to feel safer

Today, Anders is a university student and lives on his own. Having a ready-to-use rescue treatment is appealing to both Anders and Finn.

"Diabetes affects me all the time, and I have to think about it no matter what I do."

Anders

"Even with continuous glucose monitoring and an insulin pump, it is important to have rescue with you all the time. A rescue pen could be a great aid, in all occasions. It would certainly make us feel safer."



Dasiglucagon for severe hypoglycemia in diabetes.

HypoPal[®] rescue pen for fast and effective treatment of severe hypoglycemia.

About

All people with type 1 diabetes and those most severely affected by type 2 diabetes depend on multiple daily insulin injections to maintain blood glucose. Constant monitoring of blood glucose levels and frequent adjustment via insulin injections are required to maintain glycemic control and good health.^{1.2}

Severe hypoglycemia is an acute, life-threatening condition resulting from a critical drop in blood glucose levels.³ Unpredictable and among the most feared complications of diabetes treatment, severe hypoglycemia requires another person for rescue.² It happens to up to 40% of patients every year and can result in seizure, coma, and ultimately death.^{2.4.5}

Limitations of current treatments

Current glucagon emergency kits require a complicated preparation process.^{6.7} Studies have shown that more than 85% of trained caregivers fail to deliver the full dose of these products.⁸ Severe hypoglycemic events result in approximately 300,000 hospitalizations per year in the U.S.⁹

Zealand's ambition

To offer the millions of people living with diabetes the fastest and most effective rescue treatment for severe hypoglycemia.



HypoPal[®] rescue pen

The HypoPal[®] rescue pen is a ready-to-use auto-injector containing 0.6 mg dasiglucagon and is being developed as a fast and effective rescue treatment for severe hypoglycemia.

Next steps

A pediatric trial initiated in September 2018, with results expected Q3 2019. The New Drug Application (NDA) filing with the FDA is planned for the end of 2019.

Median time to plasma glucose recovery was 10 minutes with dasiglucagon^{10,11}



99% of patients injected with dasiglucagon recovered within 15 minutes¹⁰





Dasiglucagon for fully automated management of type 1 diabetes.

Dasiglucagon 1ml cartridge for use in dual-hormone artificial pancreas pumps.



Find more Zealand news at **zealandpharma.com/dasiglucagon-pump**

About

A person with type 1 diabetes depends on multiple daily insulin injections to maintain plasma glucose in the normal ranges.^{1,2} Currently, maintaining blood glucose levels requires continuous intervention with insulin. The amount of insulin administered is subject to continuous adaptation dictated by the individual's blood glucose levels, food intake, activities such as exercise, sickness, prior insulin injections, etc.

When too much insulin is injected, dangerously low blood glucose levels can develop and rapid intake of sugar-rich food is needed to prevent development of severe hypoglycemia. Conversely, injecting too little insulin will lead to dangerously high blood glucose, which is also associated with significant acute and chronic complications.

Limitations of current treatments

Despite progress with faster acting modern insulins and novel insulin pumps connected to glucose sensors, current therapies require considerable effort by the people with diabetes and their caregivers. As such, type 1 diabetes remains one of the most burdensome diseases to manage.

When a person with type 1 diabetes experiences dangerously low blood glucose, they produce an insufficient amount of the counteracting hormone glucagon, and depend on frequent ingestion of excessive food to re-establish normal glucose levels. Moreover, most people with type 1 diabetes keep blood glucose levels in the higher ranges; only 17% of children and 21% of adults diagnosed with diabetes in the U.S. achieved the glycemic targets recommended by American Diabetes Association.³

Zealand's ambition

A future with fully automated diabetes care realized by dual-hormone artificial pancreas pump systems using insulin together with dasiglucagon.



Dasiglucagon for dual hormone artificial pancreas pumps

Zealand is developing a 1 ml cartridge containing 4 mg dasiglucagon, intended for use in dualhormone artificial pancreas pumps.

We are collaborating with Beta Bionics, developer of the iLet™: a pocket-sized, dual-chamber, autonomous, glycemic control system. The iLet mimics a biological pancreas by calculating and dosing insulin and/or glucagon (dasiglucagon) as needed, based on data from the diabetic person's continuous glucose monitor.

Next steps

A Phase 2 study comparing dual-hormone to insulin-only artificial pancreas pump performance in people with type 1 diabetes is planned for H1 2019. Phase 3 initiation is planned for 2020 together with collaborator Beta Bionics.

Rare Diseases: dasiglucagon for congenital hyperinsulinism.

Dasiglucagon is a potential firstin-class glucagon analog for the treatment of children with congenital hyperinsulinism.

About

Congenital hyperinsulinism (CHI) is a rare disease affecting mainly newborns and toddlers. It is caused by a defect in pancreatic beta-cells, resulting in insulin overproduction. This leads to persistently and dangerously low blood sugar levels (hypoglycemia).

The most severely affected children need to have their pancreas surgically removed within a few months of birth in order to prevent hypoglycemia. This invariably results in the development of type 1 diabetes.¹

Current treatment options are insufficient: less than one-third of newborns and two-thirds of older children respond to approved medical therapy.²

CHI develops in one out of 50,000 (or fewer) children.^{3,4} This corresponds to approximately 300 children diagnosed in the U.S. and Europe every year.

Our ambition

From the earliest diagnosis, we aspire to improve the lives of children born with congenital hyperinsulinism.



CHI pump treatment

In Phase 3, Zealand is evaluating the potential of chronic dasiglucagon infusions delivered via a pump to prevent hypoglycemia in children with CHI. The aim is to reduce or eliminate the need for intensive hospital treatment, and to also potentially delay or eliminate the need for pancreatectomy.

In 2017, the U.S. FDA and the European Commission both granted orphan drug designation to dasiglucagon for the treatment of CHI, and the U.S. FDA approved Zealand's investigational new drug (IND) application.

Next steps

The first Phase 3 trial with children aged three months to 12 years has been initiated. The second Phase 3 trial with children up to one year of age is expected to start in 2019.



Find more Zealand news at **zealandpharma.com/dasiglucagon-orphan**

Partnered Programs: Obesity/type 2 diabetes.

Zealand has a long-term and productive partnership with Boehringer Ingelheim, to develop an amylin analog and GLP-1/GLU product candidates for obesity and/or type 2 diabetes.

About

Our partner Boehringer Ingelheim is progressing a GLP-1/glucagon agonist and a long-acting amylin analog. Both have the potential for once-weekly administration for the treatment of obesity and/or type 2 diabetes.

The dual-acting GLP-1/glucagon agonist activates both the GLP-1 and glucagon receptors, two key gut hormone receptors, and may offer better blood glucose and weight loss control than currently available single-agonist treatments. The compound builds partly on the effects of the natural gut hormone oxyntomodulin, which has been shown to decrease food intake and increase energy expenditure in humans.

Amylin is a pancreatic peptide hormone that plays an important role in decreasing food intake and in the regulation of postprandial plasma glucose levels. The compound is a long-acting analog of amylin and has demonstrated significant weight loss in pre-clinical models of obesity.

Partnership

Help people with type 2 diabetes and/or obesity to improve blood glucose management and better control weight loss.

Product candidates

The GLP-1/glucagon dual-acting analog and the long-acting amylin analog are onceweekly drug candidates with the potential to improve blood glucose and weight loss control, having shown weight loss in pre-clinical obesity models.

Next steps

A Phase 1b trial with the once-weekly GLP-1/ Glu dual agonist for treatment of diabetes/ obesity was initiated by Boehringer Ingelheim in 2018, with results expected in 2019.

The once-weekly amylin analog lead molecule for treatment of diabetes/obesity was replaced by a stronger back-up candidate with improved pharmaceutical properties. Phase 1 clinical testing is anticipated to start in 2019.

Our Established Peptide Platform.

Zealand's peptide discovery platform is built on 20 years of experience and has been extensively validated by our clinical pipeline, partnerships and marketed products.



Find out more about our research at **zealandpharma.com/our-approach**

Discovering and optimizing peptides to create new medicines

Peptides represent a growing therapeutic modality with over 90 approved and marketed peptide drugs and many more in clinical development.

Over the past twenty years, Zealand has achieved significant success in optimizing native gut peptide hormones to confer the necessary properties to be a safe and effective drug. Native peptides are composed of amino acids (fifty or less) in a linear or cyclic form, have powerful biological functions but are inherently unstable and short-lived. To convert these native peptides into an effective peptide therapeutic requires the instability and thus duration of action to be corrected while maintaining or enhancing the biological activity. This requires modifications to the amino acid sequence of the peptide, generally using substitution with another of the twenty natural amino acids found in the body. To make all the potential substitutions in a ten amino acid peptide results in over three million sequence possibilities, and testing of all of these is not feasible. Zealand uses its unique in depth understanding of peptide chemistry and biology to focus the substitution process on key amino acids to remove the weak points that result in poor solubility, stability or activity, and thus create new drug candidates.

We have successfully applied this approach to glucagon, amylin, GLP-1, and GLP-2, which exert pleiotropic effects on many organs. Enhancing their natural properties or combining their activities in single peptides has presented multiple therapeutic opportunities and led to lixizenatide, the first marketed peptide drug discovered by Zealand's peptide platform.



Pre-clinical pipeline

We continually look for opportunities to enhance native peptides, expand current Zealand drugs into new indications, or discover novel peptide therapeutics to address unmet needs in specialty gastrointestinal and metabolic diseases.

We have in-depth knowledge of the role of GLP-2 in physiology and disease through our work on glepaglutide, and we see exciting opportunities beyond short bowel syndrome. We have recently optimized a single peptide, ZP7570, which has activity at both the GLP-1 and GLP-2 receptors, with the potential to treat specialty gastrointestinal and liver diseases. This program will enter clinical development in the first half of 2019.

We further utilize our understanding to discover peptides that act as agonists and antagonists of other endogenous hormones and their receptors. Our pre-clinical pipeline contains programs focused on analogs of endogenous peptide hormones, as well as exploration of peptides as therapeutics acting on components of the complement cascade, ion channels and other target classes.

Working with external innovation

In line with Zealand's strategy to access cutting-edge technology, we have a range of research collaborations providing us with access to novel peptide libraries (e.g. Orbit Discovery UK, the Torrey Pines Institute for Molecular Studies U.S.A) or new technologies for peptide stabilisation and delivery. All are focused on identifying peptides that act on targets relevant to specialty gastrointestinal and metabolic diseases.

Pre-Clinical Projects

Complement C3 inhibitors

Altered activation of the complement cascade is implicated in many immune mediated diseases and in particular rare diseases such as paroxysmal nocturnal hemoglobinuria, cold agglutinin disease, myasthenia gravis and C3 glomerulopathy. There is currently only one approved drug to treat complement mediated diseases: an antibody that blocks the complement cascade at C5, the final step in complement activation.

We have identified novel peptides that are potent, selective, long-acting inhibitors of the complement cascade acting at factor C3, upstream of C5 and thus offering potential differentiation and broader utility than current therapy. A candidate is selected for pre-clinical toxicology in 2019 and progression to clinical development in 2020.

GIP analogs

Expanding on our GLP-1 experience, we have discovered potent selective analogs of gastric inhibitory peptide (GIP) and extended this to single peptides that have dual activity at both GIP and GLP-1 as well as single peptides with triple activity (GIP/GLP-1/glucagon).

These peptides have therapeutic potential to treat metabolic diseases such as type 2 diabetes and obesity with early clinical validation of GIP/GLP-1 dual agonist provided by a Phase 2 study reported in 2018 (Frias et al, The Lancet 392:2180-2193).

In addition, there is potential to treat other metabolic diseases such as NASH, and CNS conditions such as Alzheimer's and Parkinson's disease. We are actively seeking partnerships as these programs advance into clinical development.

Ion Channel Blockers

Ion channels are transmembrane proteins that control Na⁺, Ca2⁺, K⁺ ion flow across cell membranes in almost all living cells. Their dysregulation is implicated in many diseases including inflammatory diseases, metabolic disorders and rare channelopathies, and blocking their function is likely to be therapeutically relevant.

We have identified novel peptides that are potent and selective blockers of ion channels that may play roles in gastrointestinal inflammation. Further optimisation is required and we expect these programs to contribute to the clinical pipeline in the future.



Corporate Governance.

Zealand's approach to corporate governance is founded on ethics and integrity, and forms the basis of our efforts to ensure strong confidence from our shareholders, partners, employees and other stakeholders.

www

Read the full report on corporate governance at **zealandpharma.com/corporate-governance**

As a company incorporated under the laws of Denmark, and with its shares admitted to trading and official listing on Nasdaq Copenhagen, as well as having American Depositary Shares representing Zealand shares trading on Nasdaq Global Select Market in New York, Zealand is subject to various applicable legislations, standards and other regulations for publicly traded companies. These include Danish and U.S. securities law and the recommendations on corporate governance issued by the Danish Committee on Corporate Governance (in the below "the Recommendations").

Management structure

Zealand has a two-tier management structure composed of the Board of Directors and the Corporate Management. The Board is responsible for the overall visions, strategies and objectives, the financial and managerial supervision of Zealand as well as for regular evaluation of the work of the Corporate Management. In addition, the Board of Directors provides general oversight of Zealand's activities and ensures that it is managed in a manner and in accordance with applicable law and Zealand's articles of association.

The Board of Directors approves the policies and procedures, and Corporate Management is responsible for the day-to-day management of Zealand in compliance with the guidelines and directions set by the Board of Directors. The allocation of responsibilities between the Board of Directors and the Corporate Management is stipulated in the Rules of Procedure.

Corporate governance structure



Board of Directors

The Board of Directors plays an active role in setting Zealand's strategies and goals and in monitoring the operations and results. The Board of Directors functions according to its rules of procedure. Board duties include establishing Zealand's strategy, policies and activities to achieve Zealand's objectives in accordance with the Articles of Association.

In line with the Recommendations, the Board of Directors annually reviews and determines the qualifications and experience needed on the Board. The chairman supervises the Board of Director's annual self-evaluation of its performance.

The Board of Directors met twelve times in 2018, of which six meetings were physical meetings.

Board Committees

The Board has established a number of committees to support the Board in its duties: Audit Committee,

Remuneration and Compensation Committee, and a Nomination Committee.

Audit Committee

The Audit Committee assists the Board of Directors with oversight of financial reporting, internal control and risk management systems, external auditing of the annual report, and control of the auditor's independence, including oversight of non-audit services and other activities delegated by the Board of Directors.

Specific topics discussed in 2018 included accounting treatment of sale of future royalties and milestones from the Sanofi license, auditor's reports, accounting policies, internal controls, including SOX (Sarbanes-Oxley Act) compliance, risk management, insurance policy, year-end issues and external financing.

The Audit Committee met eight times in 2018, of which four meetings were physical meetings.

Evaluation of the Board of Directors

In 2018, the annual evaluation of the Board of Directors was performed through questionnaire to each board member followed by a one-one meeting between the chairman and each board member.

The conclusions were discussed at the December 2018 meeting.

The evaluation, in general, revealed a good performance by the Board of Directors as well as good collaboration between the Board of Directors and the Corporate Management.

The evaluation also resulted in a need of increased commercial competences in the U.S. market.

Overview of meetings in 2018

	Board	Audit Committee	Remuneration and Compensation Committee	Nomination Committee
Martin Nicklasson	12/12	8/8	3/3	2/2
Rosemary Crane	12/12	8/8	-	2/2
Kirsten A. Drejer ¹	6/8	-	-	2/2
Catherine Moukheibir	11/12	8/8	-	2/2
Alain Munoz²	11/12	-	2/2	2/2
Michael J Owen	12/12	-	3/3	2/2
Hanne Heidenheim Bak	12/12	-	-	-
Jens Peter Stenvang	12/12	-	-	-
Helle Haxgart ³	4/4	-	-	-

¹ Elected at the Annual General Meeting on April 19, 2018

² Appointed member after the Annual General Meeting on April 19, 2018

³ Stepped down at the Annual General Meeting on April 19, 2018

Remuneration and Compensation Committee

The Remuneration and Compensation Committee proposes the remuneration policy and general guidelines for incentive pay for the Board of Directors and the CEO of Zealand as well as targets for company-operated performance-related incentive programs. These policies and guidelines set out the various components of the remuneration, including fixed and variable remuneration such as pension schemes, benefits, retention bonuses, severance and incentive schemes as well as the related bonus and evaluation criteria.

Specific topics discussed in 2018 included warrant programs, long-term incentive programs in general, company goals, employee salary levels, employee pensions, and CEO and Board compensation.

The Remuneration and Compensation Committee met physically three times in 2018.

Nomination committee

At the annual general meeting held on April 19, 2018 the Shareholder Nomination Committee was dissolved by the Shareholders. This committee has been replaced by a Board committee, similar to the Audit and Remuneration and Compensation Committees.

The Nomination Committee make recommendations for decisions to the Board of Directors regarding board and CEO positions and identifies and recommend candidates for the Board of Directors.

Specific topics discussed in 2018 included the replacement of CEO, as Britt Meelby Jensen resigned in November 2018, and candidates for the Board of Directors.

The Nomination Committee met physically two times in 2018.

Compliance with the Corporate Governance Recommendations

Zealand complies with the Recommendations on Corporate Governance issued by the Danish Committee on Corporate Governance, November 23, 2017, with the following two exceptions:

2.3 Chairman and vice-chairman of the board of directors (Recommendation, section 2.3.1): The Board has not appointed a vice chairman after the annual general meeting on April 19, 2018 due to the current composition of the Board and since the board has executed its governance role as a well-functioning team. If the board composition changes the issue will be reconsidered.

3.4 Board committees (Recommendation, section 3.4.8): The Remuneration and Compensation Committee will be using the same external advisers as the Executive Management. The Board considers that the external advisers will provide professional and unbiased advice in both capacities: as advisers to the Executive Management and to the Remuneration and Compensation Committee

www

The charter of the Audit Committee is available at: **www.zealandpharma.com/audit-committee/**

The charter of the Remuneration and Compensation Committee, the remuneration report, the remuneration policy and the guidelines for incentive pay are available at: www.zealandpharma.com/remuneration-andcompensation-committee/

The rules of procedure of the Nomination Committee are available at: <u>www.zealandpharma.com/</u> <u>nomination-committee/</u>



Corporate social responsibility (CSR).

In addition to contributing to the sustainability of the world in which we live and work, acting responsibly will further our ability to develop meaningful and similarly sustainable relationships with customers, suppliers, investors, and key stakeholders including current and future employees.



Read the full report at **zealandpharma.com/csr**

Our corporate social responsibility (CSR) efforts are based on the requirements of the Danish Financial Statements Act, and we comply with relevant laws, standards and guidelines for reporting on CSR activities.

Zealand's CSR policy focuses on areas most relevant to our core business:

- Working environment and employee well-being,
- Diversity,
- Quality in relation to research, development, and supply chain activities,
- Patient-centric approach,
- Environmental sustainability and climate, and
- Business ethics.

Commitment to Sustainable Development Goals

Zealand is making a commitment to Sustainable Development Goals established by the United Nations. This introduces yet another perspective to making effective and sustainable business decisions, and will connect Zealand's efforts with those of other companies to address global challenges.

We have selected six sustainable development goals that are relevant to our business. Additional goals may be considered as our company continues to grow and evolve.

Diversity

Diversity provides better understanding of the communities in which we operate, so that we can create value for patients and our stakeholders. Zealand aims to achieve equal representation of both genders at all management levels – from the Board of Directors to the heads of departments.

Zealand has an even distribution of female and male managers, and slightly more women than men across the organization in general. The overall management level is made up of 41% females (2017: 43%) and is regarded to be an even gender distribution.

As of December 31, 2018, the Board of Directors consisted of four women and four men, giving a female representation of 50% (2017: 40%).

Quality in everything we do

Zealand's quality policy describes compliance with rigorous internationally recognized standards and guidelines at all stages of research and development, to ensure that we do not place patients or animals at risk due to inadequate safety, quality or efficacy. Zealand maintains oversight of the outsourced GxP activities to ensure vendor compliance with the requirements of pharmaceutical quality standards as articulated in Good Laboratory Practice (GLP), Good Manufacturing Practice (GMP), Good Clinical Practice (GCP), Good Pharmacovigilance Practice (GVP), and others.

Focus on patients

At Zealand, we work to create better lives for patients through collaborations with advocacy groups and patient organizations. We aim to demonstrate our commitment to patients and caregivers by serving their interests with the aim of consolidating relations and obtaining better treatment options.
Our People.

Highly qualified and motivated employees are a prerequisite for achieving the ambitious Zealand business goals. We aspire to attract, develop and retain the best people and to be a company where employees thrive, regardless of their background or nationality.

Engagement

Highly qualified and motivated employees are a prerequisite for achieving the ambitious Zealand business goals. Zealand's annual employee engagement survey helps leaders and employees to continuously improve the working environment, and results from the 2018 survey show that Zealand employees are both dedicated and motivated.

Competency development

Ensuring every employee has opportunity to both improve upon their existing strengths while developing skills is critical to attracting and retaining qualified and engaged employees. An analysis of all competency development plans made in 2018 showed that the quantity and quality of competency development plans has increased compared to previous years.

Health and well-being

We work to ensure our employees' well-being and have a number of policies in place to promote physical and psychosocial health as well as the safety of Zealand's working environment. Zealand has taken Danish Labor Law as a starting point for related policies and, in many cases, has gone beyond what is required of public companies in order to be more considerate of and responsive to the needs of its workforce.

Safe work environment

Zealand works systematically to maintain a safe and healthy work environment. We implement numerous procedures to support our work environment, and train all Zealand employees in standard safety protocols to enable self-management of their own occupational safety.

Diversity

	2018 Male	2018 Female
Zealand total	41%	59%
Corporate Management	83%	17%
People managers	54%	46%
Other employees	37%	63%

Other key employee ratios

	2018
Average age of workforce	46.3
Non-Danish employees (%)	16%
Ph.D. students	3
Other trainees	0



Read about Zealand as a workplace at **zealandpharma.com/zealand-as-a-work-place**

Risk management and internal control.

We constantly monitor and assess the overall risk of doing business in the pharmaceutical/biotech industry and the particular risks associated with our current activities and corporate profile. This section contains a summary of Zealand's key risk areas and how we attempt to address and mitigate such risks. Environmental and ethical risks are covered in our corporate social responsibility reporting, and risks related to financial reporting are covered in our corporate governance reporting.

Doing business in the pharmaceutical/biotech industry involves major financial risks. The development of novel medicines takes several years, costs are high, and the probability of reaching the market is relatively low due to developmental and regulatory hurdles.

Zealand's Management is responsible for implementing adequate systems and policies in relation to risk management and internal control, and for assessing the overall and specific risks associated with Zealand's business and operations. Furthermore, Zealand's Management seeks to ensure that such risks are managed optimally and in a responsible and efficient manner.

Risks of particular importance to Zealand are scientific and development risks, commercial risks, intellectual property risks, clinical trial risks, regulatory risks, partner interest risks, and financial risks. Risk and mitigation plans are monitored by Management, and the continuous risk assessment is an integral part of the yearly reporting to the Board of Directors.

Zealand risk and mitigation

	Risk	Mitigation	
Commercial activities – products in research and development	Risks relating to market size, competition, de- velopment time and costs, partner interest and pricing of products in development.	From early in the research phase and throughout development, commercial potential and risks are assessed to ensure that final products have the potential to be commercially viable. Any major changes in the commercial potential of a drug candidate can lead to reduced value prospects and, ultimately, discontinued development.	
Research and development	Research and development of new pharmaceu- tical medicines is inherently a high-risk activity. The probability of discovering and developing an efficient and safe new medicine with strong IP protection is very low.	Throughout the research and development process, Zealand regularly assesses these risks by means of a quarterly risk assessment of all the Company's research and development projects, conducted by Management together with the department heads and project managers. This assessment, which is presented to the Board of Directors, describes each project and measures its progress based on milestones. It analyzes the individual risks of each project and prioritizes the project portfolio.	

Risks at Zealand and mitigation – continued

	Risk	Mitigation
Clinical trials	Our product candidates will need to undergo time-consuming and expensive trials to document efficacy and safety, the outcome of which is unpredictable, and for which there is a high risk of failure. If clinical trials of our product candidates fail to satisfactorily demonstrate safety and efficacy to the FDA, the EMA and other compa- rable regulatory authorities, Zealand may incur additional costs or experience delays in completing, or ultimately not be able to complete, the development of these product candidates.	Zealand's clinical project teams work closely with external expert clinicians and product development experts within the industry to design, set up and conduct the clinical programs. Zealand's employees have been selected due to their extensive experience within their field of expertise, receive training and are continuously de- veloped to fulfill requirements.
Intellectual property	If Zealand or its partners were to face infringement claims or challenges by third par- ties, an adverse outcome could subject Zealand or its partners to significant liabilities to such third parties. This could lead Zealand or its partners to curtail or cease the development of some or all of their candidate drugs, or cause Zealand's partners to	Zealand's patent department works closely with external patent counsels and part- ners' patent counsels to minimize the risk of patent infringement claims as well as to prepare any patent defence should this be necessary.
seek legal or contractual remedies against Zealand, potentially involving a reduction in the royalties due to Zealand.		Zealand's employees receive training and updates on policies regarding the correct and lawful management of external intellectual property.
Regulatory	The regulatory approval processes of the FDA, the EMA and other comparable regulatory authorities are lengthy, time consuming and inherently unpredictable, and if Zealand or its collaboration partners are ultimately unable to obtain regulatory approval for their internal or outlicensed product candidates, Zealand's business could be substantially harmed.	Zealand's regulatory department works closely with external consultants and regula- tory agents to develop regulatory strategies and frequently interacts with regulatory agencies.
Future partnerships	Entering into collaborations with partners can bring significant benefits as well as involve risks. In addition, full control of the product is often given to the partner.	Zealand has taken a decision to increase its focus on proprietary programs in order to decrease its dependence on partners in the development process and capture more of the value of its projects.
		However, partnerships may still be relevant in the future and, in order to maximize the value of such partnerships, Zealand strives to foster a close and open dialogue with its partners, thereby building strong partnerships that work effectively.
Financial	Financial risks relate to cash and treasury management, liquidity forecasts and financing opportunities.	Financial risks are managed in accordance with the Finance Policy, regularly as- sessed by the Company's Management and reported to the Audit Committee and the Board of Directors. During 2018 Zealand has worked to design and implement an Internal Control Framework to respond to the requirements of the Sarbanes-Ox- ley Act as a result of the US listing. See also p. 84, Note 23 - Financial risks.

Zealand maintains a strong financial position to deliver on our plans, and multiple new opportunities are being pursued to continue building a successful and sustainable business.

Financial review.

Financial review for the period January 1 – December 31, 2018.

Since there is no significant difference in the development of the Group and the parent company, except for the royalty bond, the financial review is based on the Group's consolidated financial information for the year ended December 31, 2018, with comparative figures for 2017 in brackets.

Income statement

The net result for the financial year 2018 was DKK 581.3 million (-275.3). The increased result is mainly a consequence of an increase in Other operating income as a result of the sale of future milestones and royalties relating to the Sanofi licence having a net impact of DKK 1,098.9 million. This is partly offset by decreased revenue of DKK 98.3 million and increased costs of DKK 98.8 million.

Revenue

Revenue in 2018 amounted to DKK 38.0 million (136.3).

Revenue from milestone payments amounted to DKK 13.1 million (101.0), corresponding to an 87% decrease versus the previous year. The milestone payments comprised a payment of DKK 9.8 million from an undisclosed counterpart in connection with a Material Transfer Agreement and a payment of DKK 3.3 million from a license agreement with Protagonist Therapeutics Inc.

Total royalty revenue amounted to DKK 24.9 million (35.3), a decrease of 30%. The decrease is a consequence of the sale of future Sanofi royalties and milestones which had the effect that only royalties earned before June 30, 2018 are included in the income statement. Royalty revenue from sales of Lyxumia[®]/ Adlyxin[®] amounted to DKK 7.1 million (16.7) and from Soliqua[®] 100/33 to DKK 17.8 million (18.7).

During Q2 2018, it was determined that royalty revenue from Sanofi recognized from 2013 until Q1 2018 included DKK 17.1 million of royalty revenue on net sales in countries with no valid IP protection for Zealand, and therefore revenue has been overstated in this period. Such misstatements have been corrected with retrospective impact and thus comparable periods as of and for the years ended December 31, 2017, 2016 and 2015 have been restated. The restatement also includes correction of a misstatement related to royalty expenses as discussed below under "Royalty expenses".

Royalty Expenses

Royalty expenses for the year amounted to DKK 3.4 million (14.2) and relate to royalties paid to third parties on milestone payments received and royalty income relating to the license agreement with Sanofi. As a consequence of the restatement mentioned above, royalty expenses from 2013 until Q1 2018 were misstated by DKK 2.3 million. Such misstatements have been corrected with retrospective impact and thus comparable periods as of and for the years ended December 31, 2017, 2016 and 2015 have been restated, as presented in note 1 to the condensed consolidated interim financial statements.

Research and development expenses

Research and development (R&D) expenses amounted to DKK 438.2 million (324.7). The increase in R&D

R&D and administrative expenses



expenses for the year ended December 31, 2018, was primarily related to external costs of DKK 79.6 million from accelerated development activities. This figure comprises costs for the three dasiglucagon programs, including the Phase 3 trials relating to the rescue pen for severe hypoglycemia, and clinical costs for dasiglucagon to be used in a dual-hormone artificial pancreas and to treat CHI. It also includes costs for initiating the Phase 3 trial with glepaglutide as well as costs relating to pre-clinical activities.

The R&D share of the personnel expenses for the year ended December 31, 2018, was DKK 153.5 million (119.5). The increase is mainly related to an increase in the number of employees in the clinical development organization.

Administrative expenses

Administrative expenses amounted to DKK 43.5 million (47.5). The decrease is due to a change in the composition of employees working in R&D and Administration in comparison to the previous year.

Other operating income

Other operating income amounted to DKK 1.099.5 million (0.6) and mainly consists of the net effect from the agreement to sell future royalty streams and USD 85 million of potential commercial milestones for Soliqua® 100/33/ Suliqua® and Lyxumia®/Adlyxin® to Royalty Pharma. Zealand received DKK 1,310.2 million or USD 205 million in September 2018 at closing of the transaction. Costs directly related to the transaction amounted to DKK 211.3 million and consists of 13.5% or DKK 176.9 million paid to third parties plus other transaction costs of DKK 34.5 million.

Other operating income also consists of government grants of DKK 0.6 million (0.6)

Operating result

The operating result for the year was DKK 652.4 million (-249.4).

Net financial items

Net financial items amounted to DKK -27.3 million (-31.4). The decrease is mainly due to positive exchange rate adjustments in 2018 compared to negative exchange rate adjustments in 2017 and decreased interest expenses as the royalty bond has been redeemed in September 2018. Net financial items consist of interest income and expenses, amortized costs relating to the royalty bond financing, banking fees and exchange rate adjustments. DKK 15.1 million of the net financial items (18.9) relates to interest expense on the royalty bond, and DKK 18.3 million (5.7) relates to amortized costs of the royalty bond financing. The increased amortized costs is a result of the repayment of the outstanding royalty bond in September 2018 as all remaining capitalized financing costs has been expensed.

Result before tax

Result before tax was DKK 625.1 million (-280.8).

Income tax

Income tax amount to DKK -43.8 million (5.5). The income tax is a consequence of the positive result before tax for the year stemming mainly from the net effect from the agreement to sell future royalty streams and USD 85 million of potential commercial milestones for Soliqua® 100/33/ Suliqua® and Lyx-umia®/Adlyxin® to Royalty Pharma, see "Other oper-ating income" above. No deferred tax asset has been recognized in the statement of financial position due to uncertainty as to when and whether tax losses can be utilized.

Net result and comprehensive result

The net result and comprehensive result both amounted to DKK 581.3 million (-275.3), in both cases due to the factors described above.

Allocation of result

No dividend has been proposed, and the net result for the year of DKK 581.3 million (-275.3) has been transferred to retained loss.

Statement of financial position

Securities, cash and cash equivalents

At December 31, 2018, securities, cash and cash equivalents amounted to DKK 1,159.2 million (663.8). Restricted cash was no longer held as collateral for the royalty bond DKK 0.0 million (5.9). In 2018, Zealand has invested DKK 298.6 million (75.1) in securities (listed bonds). The increase in securities, cash and cash equivalents is due to the net effect from the agreement to sell future royalty streams and milestones from Sanofi, partly offset lower revenue, higher costs and by the repayment of the remaining outstanding royalty bond.

Equity

Equity amounted to DKK 1,116.3 million (514.7) at December 31, 2018, corresponding to an equity ratio of 91% (71%). The increase in equity is a result of the net result for the year of DKK 581.3 million (-275.3), offset by a capital increase of DKK 2.8 million (6.8) related to the exercise of warrants by employees during the year, and warrant compensation expenses of DKK 17.5 million (20.2).

Royalty bond

Zealand has since December 2014 had a royalty bond financing arrangement, based on part of the royalties from lixisenatide as a stand-alone product. The bond has carried an interest rate of 9.375%.

On September 6, 2018 Zealand entered into an agreement to sell future royalties and USD 85 million of potential commercial milestones for Soliqua® 100/33/ Suliqua® and Lyxumia®/Adlyxin® to Royalty Pharma. As part of the transaction Zealand has redeemed the outstanding royalty bond of USD 24.7 million (DKK 157.6 million), after which Zealand is debt free.

Cash flow

Cash outflow/inflow from operating activities

Cash flow from operating activities amounted to DKK -460.0 million (-278.7), mainly as a result of the net profit for the year adjusted for the net effect from the agreement to sell future royalty streams and USD 85 million of potential commercial milestones for Soliqua® 100/33/ Suliqua® and Lyxumia®/Adlyxin® and for other non-cash items.

Cash outflow/inflow from investing activities

Cash flow from investing activities amounted to DKK 881.9 million (221.4), mainly comprising the net effect from the agreement to sell future royalty streams and USD 85 million of potential commercial milestones for Soliqua® 100/33/ Suliqua® and Lyxumia®/Adlyxin of DKK 1,105.5 million (0.0).

Net investments in securities for the period amounted to DKK 225.6 million (75.0). Zealand's securities portfolio comprises listed bonds in Danish kroner.

Cash flows related to other investments for the period amounted to DKK 0.0 million (9.3). Zealand has invested in Beta Bionics, Inc. in 2018, but payment related to such investment did not occur in 2018.

Investments in plant and equipment for the period amounted to DKK 4.0 million (7.2), mainly related to new laboratory equipment.

Cash and cash equivalents, restricted cash and securities



Cash outflow/inflow from financing activities

Cash flow from financing activities amounted to DKK -155.4 million (337.9), related to the repayment of the royalty bond of DKK -158.3 million (-176.4) and proceeds from issuance of shares related to exercise of warrants of DKK 2.9 million (6.8). For previous year cash flow from financing activities also included the net proceeds from the U.S. IPO of DKK 0.0 million (507.5).

The total cash flow for full-year 2018 amounted to DKK 266.1 million (280.5).

Shareholder information.

Zealand is dual listed on Nasdaq Copenhagen and Nasdaq Global Select Market, New York, under the ticker symbol "ZEAL".

www

Find out more about our investor relations at zealandpharma.com/investor-relations

At December 31, 2018, the nominal value of Zealand's share capital was DKK 30,786,827, divided into 30,786,827 shares with a nominal value of DKK 1 each. The share capital has remained unchanged in 2019 (at March 7, 2019).

The share capital has increased by a nominal value of DKK 35,500 in 2018 as a result of the exercise of employee warrants. All Zealand shares are ordinary shares and belong to one class. Each share listed by name in Zealand's shareholder register represents one vote at the annual general meeting and other shareholders' meetings.

Stable number of shareholders during 2018

The number of registered Zealand shareholders was stable during 2018. From 16,043 registered shareholders at December 31, 2017, the number grew to 16,204 at December 31, 2018. In addition, 3,132,086 shares were represented by ADSs traded on Nasdaq Global Select Market, New York.

At March 4, 2019, Zealand had 15,871 registered shareholders, representing a total of 30,786,827 shares.

Ownership

The following shareholders are registered in Zealand's register of shareholders as being the owners of a minimum of 5% of the voting rights or a minimum of 5% of the share capital (one share equals one vote) at March 7, 2019:

- Wellington Management Group LLP,U.S. (8% of votes/8% of capital).
- Sunstone LSV Management A/S, Denmark (7% of votes/7% of capital).





Institutional shares by investment style



Institutional shares by geography



- Van Herk Investments, Netherlands (6% of votes/6% of capital).
- Bank Julius Bär & Co. AG, Switzerland (6% of votes/6% of capital).

Share price performance

The price of Zealand's shares decreased by 3% during the year, which was above relevant indexes. The share price at year-end 2018 was DKK 82.40, compared to DKK 85.00 at year-end 2017. Despite reaching several major milestones during the year, with strong clinical progress for both glepaglutide and dasiglucagon as well as the sale of future royalties and milestones from Sanofi the share price decreased, partly caused by a general downturn in biotech shares at the end of the year.

Positive development in share liquidity

Zealand's share liquidity remained strong in 2018, with an average daily turnover on Nasdaq Copenhagen of 123,028 shares, or DKK 8.5 million and 13,273 ADS, or USD 0.2 million. In the first two months of 2019, liquidity has continued to increase to a daily turnover of approximately DKK 6.6 million.

Analyst coverage

Zealand is followed by the financial institutions and analysts listed below:



United Kingdom

Goldman, Sachs & Co.	Graig C. Suvannavejh
Jefferies	Peter Welford

France

Bryan, Garnier & Co	Eric Le Berrigaud	
Oddo Securities	Oussama Denguir	
Netherlands		
Kempen	Suzanne van Voorthuizen	
Denmark		
Danske Bank	Thomas Bowers	
Handelsbanken	Peter Sehested	
Nordea	Michael Novod	

Core share data

	Denmark	U.S.
Number of shares and ADSs at Dec. 31, 2018	30,786,827	3,132,086
Listing	Nasdaq Copenhagen	Nasdaq Global Select Market, New York
Ticker symbol	ZEAL	ZEAL
Index membership	OMXC Copenhagen Midcap	STOXX Europe TMI Pharm

Financial calendar 2019

Date	Event
April 4	Annual General Meeting
May 16	Interim report for Q1 2019
August 15	Interim report for H1 2019
November 14	Interim report for Q3 2019

Nasdaq charting 2018 of Zealand's share price



Board of Directors and Corporate Management.

Zealand Board of Directors at March 7, 2019

	Martin Nicklasson	Rosemary Crane	Kirsten A. Drejer
Position	Chairman	Board member	Board member
Year of birth	1955	1960	1956
Nationality	Swedish	American	Danish
Gender	Male	Female	Female
First elected	2015	2015	2018
Committee	AuC, RemCo chair and Nom- Co chair	AuC	
Independent	Yes	Yes	Yes
Special competencies	Extensive general man- agement and research and development experience from AstraZeneca Plc and Swedish Orphan Biovitrum AB.	Marketing and a knowledge base within diabetes and cardiovascular disease from Johnson & Johnson and BMS.	More than 30 years of inter- national experience in the pharmaceutical and biotech industry. Before co-founding Symphogen A/S in 2000, held several scientific and manage- rial positions at Novo Nordisk A/S.
Current positions	Chairman of the board of Orexo AB and Kymab Ltd. Board member of Basilea Pharmaceutica Ltd.	Member of the board of Teva Pharmaceutical Industries Ltd. and Edge Therapeutics.	Chairman of the board of Antag Therapeutics, Bioneer and Resother Pharma. Board member of Bioporto, Lyhne & Co.
Zealand shares at December 31, 2018	1,000	0	500
Zealand warrants at December 31, 2018	0	0	0
Change in ownership in 2018	0	0	+500



Find out more about the Board of Directors at zealandpharma.com/ board-of-directors-and-nomination-committee

	Catherine Moukheibir	Alain Munoz	Michael John Owen	Hanne Heidenheim Bak	Jens Peter Stenvang
Position	Board member	Board member	Board member	Employee-elected board member ³	Employee-elected board member ²
Year of birth	1959	1949	1951	1953	1954
Nationality	British	French	British	Danish	Danish
Gender	Female	Male	Male	Female	Male
First elected	2015	20051	2012	2012 ³	2014
Committee	AuC chair	RemCo and NomCo	RemCo and NomCo		
Independent	Yes	Yes	Yes	No	No
Special competencies	Particular experience in align- ing corporate and financial strategy at various stages of a biotech's development. Has held senior management positions at several European biotech companies.	Physician qualified cardiology and intensive care. Experience in the pharmaceutical industry at senior management level. Served as SVP for international development in the Sanofi Group and in the pharma- ceutical division of Fournier Laboratories.	Research experience focusing on the immune system and more than 150 publications. Has held several leading positions at GlaxoSmithKline, most recently as SVP and head of biopharma- ceuticals research.	Project management expe- rience in drug development from lead to launch, focusing on CNS diseases and orphan drugs. Experience in disease awareness and customer rela- tionship management.	
Current positions	Chairman of the board of MedDay Pharmaceuticals S.A., board member of Ablynx NV, Cerenis Therapeutics Holding SA, Orphazyme and GenKyo- Tex. Advisory board member of the Yale School of Manage- ment, U.S., and Imperial Col- lege Business School, UK.	Independant Board member of Valneva SEHybrigenics, , Auris medical and Oxthera, adviser to Kurma Biofund.	Chairman of the board of Ossianix Inc and is also a member of the board of Avacta Group plc, ReNeuron Group plc, Sareum Holdoings plc, Iksuda Therapeutics and Gam- maDelta Therapeutics. He is also an adviser to the CRT Pioneer Fund.	Senior Project Director, GI, External Relations and Collaborations.	Laboratory Technician (Biology).
Zealand shares at December 31, 2018	0	5,250	0	24,684	3,500
Zealand warrants at December 31, 2018	0	0	0	15,500	3,500
Change in ownership in 2018	0	0	0	0	0

1 Resigned in 2006 and re-elected in 2007. 2 Employee-elected board members are elected for a period of four years. 3 Elected term ended in 2014; re-elected in 2016 for a period of two years.

Zealand Corporate Management at March 7, 2019

Adam Steensberg	Mats Blom	Andrew Parker	Ivan Møller	Marino Garcia
Executive Management Interim Chief Executive Officer (from March 1, 2019); Executive Vice President and Chief Medical and Development Officer	Executive Management Executive Vice President and Chief Financial Officer (through March 31, 2019)	Executive Vice President and Chief Scientific Officer	Senior Vice President, Technical Development and Operations (from March 1, 2018)	Senior Vice President, Corporate and Business Development (from October 1, 2018)
1974	1965	1965	1972	1966
Danish	Swedish	British	American/Danish	Canadian/Spanish
Male	Male	Male	Male	Male
2010	2010	2016	2018	2018
Prior to joining Zealand, Adam led clinical research teams as medical director at Novo Nord- isk and worked as a clinician at Rigshospitalet, University of Co- penhagen. Adam was a medical and scientific adviser in the areas of endocrinology, cardiology, gastroenterology and rheu- matology, and has significant experience of leading regulatory strategies. Adam is a board member of Beta Bionics, Inc.	Prior to joining Zealand, Mats served as CFO of Swedish Or- phan International, a leading Eu- ropean orphan drug company. Mats has extensive managerial experience and has held CFO positions at Active Biotech and Anoto, both publicly listed on Nasdaq Stockholm. Previously, Mats worked as a management consultant at Gemini Consulting and for Ernst & Young. Mats is chairman of the board of Medical Need AB and a board member of Auris Medical AG.	 Prior to joining Zealand, Andrew was general partner and scientific director of Eclosion2 & Cie SCPC in Switzerland. CEO of Arisgen SA, an Eclosion2 portfolio company developing an oral peptide drug delivery technology. Andrew has more than 20 years of experience in international pharmaceutical, biotech and start-up companies, including several years at Shire Pharmaceuticals, Opsona Therapeutics and AstraZeneca. 	Prior to joining Zealand, Ivan worked for Novartis in both generics and pharmaceutical manufacturing, as well as in strategy, quality assurance, con- tract manufacturing and supply chain leadership in Germany, the U.S. and Switzerland. Ivan was project leader at The Boston Consulting Group in the pharmaceutical R&D and manu- facturing areas.	Prior to joining Zealand, Marino has held various U.S. and inter- national leadership positions of increasing responsibility at pharmaceutical companies, in- cluding Synergy Pharma, Aptalis Pharma, Vifor Pharma, Aspreva Pharmaceuticals, Pfizer and Eli Lilly & Co. Marino has almost 25 years of global pharma and biotech ex- perience in senior commercial, corporate strategy, and business development roles.
22,800	120,000	0	0	0
227,000	217,000	147,000	40,000	3,3334
-2,200	+2,000	0	0	0
	Executive Management Interim Chief Executive Officer (from March 1, 2019); Executive Vice President and Chief Medical and Development Officer 1974 Danish Male 2010 Prior to joining Zealand, Adam led clinical research teams as medical director at Novo Nord- isk and worked as a clinician at Rigshospitalet, University of Co- penhagen. Adam was a medical and scientific adviser in the areas of endocrinology, cardiology, gastroenterology and rheu- matology, and has significant experience of leading regulatory strategies. Adam is a board member of Beta Bionics, Inc. 22,800 227,000	Executive Management Interim Chief Executive Officer (from March 1, 2019); Executive Vice President and Chief Medical and Development OfficerExecutive Vice President and Chief Financial Officer (through March 31, 2019)19741965DanishSwedishMale201020102010Prior to joining Zealand, Adam led clinical research teams as medical director at Novo Nord- isk and worked as a clinician at Rigshospitalet, University of Co- penhagen. Adam was a medical and scientific adviser in the areas of endocrinology, cardiology, gastroenterology and rheu- matology, and has significant experience of leading regulatory strategies.Prior to joining Cealand, Mats served as CFO of Swedish Or- phan International, a leading Eu- ropean orphan drug company. Mats has extensive managerial experience and has held CFO positions at Active Biotech and Anoto, both publicly listed on Nasdaq Stockholm. Previously, Mats worked as a management consultant at Gemini Consulting and for Ernst & Young.Adam is a board member of Beta Bionics, Inc.Mats is chairman of the board of Medical Need AB and a board member of Auris Medical AG.22,800120,000227,000217,000	Executive Management Interim Chief Executive Officer (from March 1, 2019); Executive Vice President and Chief Medical and Development OfficerExecutive Vice President and Chief Financial Officer (through March 31, 2019)Executive Vice President and Chief Scientific Officer197419651965DanishSwedishBritishMaleMale2010201020102016Prior to joining Zealand, Adam led clinical research teams as of endocrinology, cardiology, gastroenterology and has strategies.Prior to joining Zealand, Andrew was general partner and sci- entific director of Eclosion2 & Gres CPC in Switzerland. CEO of Arisgen SA, an Eclosion2 positions at Active Biotech and Anoto, both publicly listed on Nasdag Stockholm. Previously, Mats is chairman of the board of Medical Need AB and a board member of Auris Medical AG.Andrew has more than 20 years of experience in International and for Ernst & Young.22,800120,0000227,000217,000147,000	Executive Management Interim Chief Executive Vice President and Chief Financial Officer (from March 1, 2019); Executive Vice President and Chief Financial Officer (through March 31, 2019)Executive Vice President and Chief Scientific Officer (from March 1, 2018); (from March 1, 2018)Senior Vice President, Technical Development Operations (from March 1, 2018);1974196519651972DanishSwedishBritishAmerican/DanishMaleMaleMaleMale2010201020162018Prior to joining Zealand, Adam led clinical research teams as medical director at Novo Nord- pish and scientific adviser in the areas of endorrinology, cardiology, mato loga Stochtom- Nasdag Stockholm- nexperience of leading regulator, strategies.Prior to joining Zealand, Previous, Mats has extensive managerial experience and has held CFO on Nasdag Stockholm- newsdag Stockholm- nexperience of leading regulator, strategies.Prior to joining Zealand, Ivan worked for Novartis in both generics and pharmaceutical optifolic company developing and scientific adviser in the areas

⁴ A total of 40,000 warrants have been granted with a vesting over 36 months

Financial statements.

Consolidated financial statements

Income statement
Statement of comprehensive income
Statement of financial position
Statement of cash flows
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Consolidated income statement for the years ended December 31, 2018, 2017 and 2016

DIVIN I			Restated ¹	Restated ¹
DKK thousand	Note	2018	2017	2016
Revenue	2	37,977	136,322	230,864
Royalty expenses	3	-3,356	-14,163	-30,931
Research and development expenses	4,5,6	-438,215	-324,667	-268,159
Administrative expenses	4,5,6	-43,542	-47,470	-52,503
Other operating income	7	1,099,526	607	1,697
Operating result		652,390	-249,371	-119,032
Financial income	8	9,988	2,122	592
Financial expenses	9	-37,322	-33,509	-44,356
Result before tax		625,056	-280,758	-162,796
Income tax	10	-43,774	5,500	5,500
Net result for the year		581,282	-275,258	-157,296
Earnings/loss per share – DKK				
Basic earnings/loss per share	11	18.94	-9.88	-6.47
Diluted earnings/loss per share	11	18.94	-9.88	-6.47

¹ See note 1 to the consolidated financial statements.

Consolidated statements of comprehensive income for the years ended December 31, 2018, 2017 and 2016

DKK thousand	Note	2018	Restated ¹ 2017	Restated ¹ 2016
Net result for the year		581,282	-275,258	-157,296
Other comprehensive income (loss)		0	0	0
Comprehensive result for the year		581,282	-275,258	-157,296

¹ See note 1 to the consolidated financial statements.

The Business overview on page 54 and the accompanying notes on pages 55 to 87 form an integral part of these financial statements.

Consolidated statements of financial position as of December 31, 2018 and 2017

			Restated ¹
DKK thousand	Note	2018	2017
Assets			
Non-current assets			
Plant and machinery	12	13,650	14,855
Other fixtures and fittings, tools and equipment	12	1,794	953
Leasehold improvements	12	186	304
Deposits		2,762	2,729
Restricted cash	18	0	5,892
Other investments	13	32,582	9,312
Total non-current assets		50,974	34,045
Current assets			
Trade receivables	14	3,274	5,679
Prepaid expenses	15	11,740	7,253
Income tax receivable	10	1,195	5,500
Other receivables	16	3,368	4,979
Securities	17	298,611	75,111
Cash and cash equivalents	18	860,635	588,718
Total current assets		1,178,823	687,240
Total assets		1,229,797	721,285
Can wate 1 to the annualidated General statements			

¹ See note 1 to the consolidated financial statements

DKK thousand	Note	2018	Restated ¹ 2017
Liabilities and equity			
Share capital	19	30,787	30,751
Share premium		1,979,493	1,959,199
Retained loss		-893,999	-1,475,281
Equity		1,116,281	514,669
Royalty bond	20	0	132,986
Non-current liabilities		0	132,986
Trade payables		32,652	29,428
Royalty bond	20	0	2,748
Other liabilities	21	80,864	41,454
Current liabilities		113,516	73,630
Total liabilities		113,516	206,616
Total equity and liabilities		1,229,797	721,285
¹ See note 1 to the consolidated financial statements			

¹ See note 1 to the consolidated financial statements

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Consolidated statements of cash flows for the years ended December 31, 2018, 2017 and 2016

DKK thousand	Note	2018	Restated ¹ 2017	Restated ¹ 2016
Net result for the year		581,282	-275,258	-157,296
Adjustments for non-cash items	25	101,926	25,379	57,685
Change in working capital	26	12,785	-11,304	156,838
Financial income received		5,283	2,048	592
Financial expenses paid		-16,705	-25,111	-22,790
Sale of future royalties and milestones	7	-1,105,471	0	0
Income tax receipt	10	5,500	5,500	5,875
Income tax paid	10	-45,000	0	0
Cash (outflow)/inflow from operating activities		-460,400	-278,746	40,904
Transfer to restricted cash related to the royalty b	oond	0	-60,675	-305,120
Transfer from restricted cash related to the royal		6,124	365,795	0
Transfer from restricted cash for royalty bond	5			
interest payments		0	7,725	7,786
Sale of future royalties and milestones	7	1,275,802	0	0
Royalty expenses regarding sale of				
future royalties and milestones	7	-170,331	0	0
Change in deposit		-33	-39	-24
Purchase of other investments		0	-9,312	0
Purchase of securities		-299,849	-75,037	0
Sale of securities		74,230	0	0
Purchase of property, plant and equipment		-4,038	-7,226	-2,600
Sale of fixed assets		0	120	0
Cash (outflow)/inflow from investing activities		881,905	221,351	-299,958
Proceeds from issuance of shares related to				
exercise of warrants		2,862	6,790	21,935
Proceeds from initial public offering		0	567,076	0
Costs related to initial public offering		0	-59,576	0
Proceeds from private placement of new shares		0	0	143,072
Costs related to private placement of new shares	5	0	0	-7,861
Repayment of royalty bond		-158,311	-176,360	0
Cash (outflow)/inflow from financing activities		-155,449	337,930	157,146
Increase/(Decrease) in cash and cash equivalents	5	266,056	280,535	-101,908
Cash and cash equivalents at January 1		588,718	323,330	418,796
Exchange rate adjustments		5,861	-15,147	6,442
Cash and cash equivalents at December 31		860,635	588,718	323,330
1 Can wate 1 to the environment for a sign state water				

Consolidated statements of changes in equity at December 31, 2018, 2017 and 2016

DKK thousand	Share capital	Share premium	Retained loss (Restated)	Total
Equity at January 1, 2018	30,751	1 959 199	-1,475,281	514,669
Comprehensive result for the year	50,751	1,333,133	1,475,201	514,005
Net result for the year	0	0	581,282	581,282
	Ŭ	0	001,202	001,202
Warrant compensation expenses	0	17,468	0	17,468
Capital increases	36	2,826	0	2,862
Equity at December 31, 2018	30,787	1,979,493	-893,999	1,116,281
Equity at January 1, 2017	26,142	1,441,263	-1,189,211	278,194
Restatement ¹			-10,812	-10,812
Comprehensive loss for the year				
Net loss for the year	0	0	-275,258	-275,258
Warrant compensation expenses	0	20,156	0	20,156
Capital increases	4,609	569,041	0	573,650
Costs related to capital increases	0	-71,261	0	-71,261
Equity at December 31, 2017	30,751	1,959,199	-1,475,281	514,669
Equity at January 1, 2016	24,353	1,263,179	-1,035,301	252,231
Restatement ¹	0	0	-7,427	-7,427
Comprehensive loss for the year				
Net loss for the year	0	0	-157,296	-157,296
Warrant compensation expenses	0	22,727	0	22,727
Capital increases	1,789	163,218	0	165,007
	0	7 0 6 4	0	7 0 6 4

0

-7,861

26,142 1,441,263 -1,200,024

0

-7,861

267,381

¹ See note 1 to the consolidated financial statements.

Costs related to capital increases

Equity at December 31, 2016

¹ See note 1 to the consolidated financial statements.

Business overview

Zealand (the "Company", the "Group", "Zealand" and "we") was founded in 1998 and is a biotechnology company focused on the discovery and development of innovative peptide-based medicines. More than 10 drug candidates invented by Zealand have advanced into clinical development, of which two have reached the market. Zealand's current pipeline of internal product candidates focus on specialty gastrointestinal and metabolic diseases. Zealand's portfolio also includes two clinical license collaborations with Boehringer Ingelheim.

We have since 2003 had a license collaboration with Sanofi in the diabetes field. On September 6, 2018 we entred into an agreement with Royalty Pharma to transfer all the royalties that we were due to earn from our agreement with Sanofi in exchange for an upfront one-time payment of USD 205 million. Excluded from this agreement was a potential milestone payment from Sanofi of up to USD 15 million. Please refer to note 7.

We have four fully owned programs in late clinical development:

1 Glepaglutide, a long-acting GLP-2 analog in development for the treatment of short bowel syndrome (SBS).

The pivotal Phase 3 trial in 129 patients was initiated in Q4 2018 with expected results by mid-2020.

Dasiglucagon, a Zealand-invented proprietary glucagon analog currently in development for three different indications:

2 Dasiglucagon in Dual-hormone pump therapy for diabetes treatment

Zealand has already reported positive results from two Phase 2a trials during the second quarter of 2017, and the initiation of a small Phase 2b trial in iLet[™] dual-hormone artificial pancreas system is planned for 2019.

3 Dasiglucagon Hypoplal® Rescue Pen for severe hypoglycemia

Ready-to-use dasiglucagon may offer diabetes patients and their families a fast treatment solution for severe hypoglycemia that is easier to use than currently marketed glucagon kits. The pivotal Phase 3 trial with dasiglucagon for the treatment of severe hypoglycemia was completed with good results in 2018. A peadiatric Phase 3 trial was initiated in by end 2018, with results expected in H2 2019.

4 Dasiglucagon for Congenital hyperinsulinism

Congenital hyperinsulinism, or CHI, is an ultra-rare but devastating disease caused by inappropriately elevated insulin secretion irrespective of glucose levels. This leads to frequent and often severe hypoglycemia and long-term irreversible damage to health. In 2017, the FDA in the U.S. and the Committee for Orphan Medicinal Products in the EU issued a positive opinion on an orphan medicinal product application for Zealand's glucagon analog. In January 2018, the FDA issued a safe-to-proceed letter, and the Phase 3 program started in Q1 2019.

In addition to the late stage clinical programs we also have a pipeline of pre-clinical programs with the potential to enter into the clinic in 2019 and the years to come.

Company summary	Domicile	Owner- ship	Voting rights
Zealand Pharma A/S subsidiaries			
	Denmark	100%	100%
ZP Holding SPV K/S	Denmark	100%	100%
ZP General Partner 1 ApS	Denmark	100%	100%
Zealand Pharma US Inc.	United States	100%	100%
ZP Holding SPV K/S subsidiaries			
ZP SPV 1 K/S	Denmark	100%	100%
ZP General Partner 2 ApS	Denmark	100%	100%
ZP General Partner 2 ApS	Denmark	100%	

Note 1 - Significant accounting policies, and significant accounting estimates and assessments

Significant accounting policies

Basis of preparation

The consolidated financial statements of Zealand have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and as adopted by the EU and additional requirements under the Danish Financial Statements Act.

The Board of Directors considered and approved the 2018 Annual Report of Zealand on March 7, 2019. The Annual Report will be submitted to the shareholders of Zealand for approval at the Annual General Meeting on April 4, 2019.

The consolidated financial statements are presented on a historical cost basis.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique.

For financial reporting purposes, fair value measurements are categorized into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and on the significance of the inputs to the fair value measurement as a whole. The inputs are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly
- Level 3 inputs are fair value measures derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The consolidated financial statements are presented in Danish kroner (DKK), which is the functional currency of the Company.

In the narrative sections of the financial statements, comparative figures for 2017 and 2016 are shown in brackets.

Implementation of new and revised standards and interpretations

The IASB has issued the following new standards and revisions to existing standards and new interpretations that are mandatory for accounting periods commencing on or after January 1, 2018:

IFRS 9 Financial instruments. The Group's implementation of IFRS 9 'Financial Instruments', that replaces IAS 39 'Financial Instruments: Recognition and Measurement', comprises amendments to the measurement categories for financial assets. These amendments have not resulted in any changes to the measurement basis for financial assets. Further, it has lead to the implementation of a new impairment model that requires the recognition of impairment provisions based on the "expected credit loss model" rather than the "incurred-loss model." The majority of Zealand's receivables are receivables from sales with its strategic partners, Boehringer Ingelheim and Sanofi, and due to the low credit risk in the Group, the new rules have not had a significant impact on the valuation of trade receivables. In the annual report for 2017, Management indicated an expected increase of DKK 5 million to financial liabilities due to the revised guidance regarding modification of financial liabilities introduced by IFRS 9 Financial Instruments'. Based on further analyses, Management has concluded that the current accounting treatment is in line with IFRS 9 ', hence no impact is recognized as the cost of the amendment to the royalty bond from March 2017 is considered transaction costs, which are deducted in financial liabilities.

IFRS 15 Revenue from Contracts with Customers. The Group has implemented IFRS 15 'Revenue from Contracts with Customers' using the modified retrospective approach. IFRS 15 replaces the current standards on revenue (IAS 11 'Construction Contracts' and IAS 18 'Revenue'). In 2003, Zealand Pharma entered into a licensing agreement with Sanofi under which Zealand Pharma was entitled to milestone payments and sales based royalty payments. Refer to note 2 for further disclosure about the arrangement. Although the arrangement provided Sanofi with all rights related to the use of the underlying IP, Management has concluded that the license guidance of IFRS 15 applies to the arrangement. Therefore, sales based royalties has continued to be recognized along with the underlying sale and milestone payment have not been recognized until the milestone is met. Therefore, no adjustment is made to the opening balance as of January 1, 2018 for this arrangement. The right to the royalty and milestone payments under the arrangement was unconditionally transferred to a third party in September 2018 and a gain on the sale recognized as other operating income.

In 2011 and 2014 respectively, Zealand Pharma entered into license, research and development agreements with Boehringer Ingelheim. Refer to note 2 for further disclosure about the arrangement. Due to the continuing involvement through the research and development collaboration, these are arrangements subect to the license guidance of IFRS 15. Consequently,

Note 1 - Significant accounting policies, and significant accounting estimates and assessments (continued)

sales based royalties continue to be recognized along with the underlying sale and milestone payment are not recognized until the milestone is met.

The Group had no other revenue generating activities as of January 1, 2018, and consequently, there is no impact from the adoption of IFRS 15.

Other standards and amendments adopted

- Amendments to IFRS 2 Share-based Payment.
- Part of Annual Improvements to IFRSs Cycle 2014-2016.

The implementation of these new or revised standards and interpretations has not resulted in any significant impact on the net result for the year or the financial position.

Standards and interpretations not yet effective

At the date of approval of the annual report, the following new and revised standard have been issued but are not yet effective. Therefore, they have not been adopted in the present financial statements:

IFRS 16 Leases, effective for annual periods beginning on or after January 1, 2019

IFRS 16 requires all leases (except for short-term leases and leases of low-value assets) to be recognized as a right-of-use asset and lease liability, measured at the present value of future lease payments. The right-of-use asset is subsequently depreciated in a similar way to other depreciable assets over the lease term and interest calculated on the lease liability in a similar way to how it is calculated on finance leases under IAS 17. Consequently, the change will also impact the presentation in the income statement and the statement of cash flows.

Zealand has assessed the standard, and the changes will require capitalization of several of Zealand's operating lease contracts, representing approximately 0.1-0.3% of the total assets. The impact on operating result will be insignificant.

The Group will apply the standard from its mandatory adoption date of January 1, 2019. The Group intends to apply the simplified transition approach and will not restate comparative amounts for the year prior to first adoption. Right-of-use assets will be measured at the amount of the lease liability on adoption (adjusted for any prepaid or accrued lease expenses).

As at the reporting date, the Group has operating leasing commitments of approx. DKK 5.7 million from 2019 – 2025 from leases that are currently available for use by the Group. The Group has assessed that approx. DKK 3.7 million of these commitments relate to short-term

and low-value leases which will both be recognised on a straight-line basis as expense in the income statement.

The Group has entered into a property lease expexted to commence September 1, 2019 with a non-cancellable lease term of 13 years with annual payments of approx. DKK 9.8 million. This property lease will be recognised in the statement of financial position on the date of commencement.

For the current lease commitments, the Group expects to recognise right-of-use assets and lease liabilities in the range of approx. DKK 1.8 – 1.9 million on the date of transition. This amount excludes all current property leases as they have a remaining lease term at January 1, 2019 of less than a year.

In calculating the discounted value of future lease payments, the Group will apply its incremental borrowing rate.

In general, the Group does not expect any significant impact on the financial statements as a result of adoption of IFRS 16.

Other relevant standards or interpretations adopted by the IASB, but not adopted by the EU, have not been applied in this annual report.

Accounting policies

The accounting policies are unchanged from last year, except for clarification to the accounting policy on 'Other operating income', included in note 7. The accounting policies for specific line items and transactions are included in the respective notes to the financial statements except for basis of consolidation, foreign currency translation and the cash flow statement, which are included below.

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities (including structured entities) controlled by the Company and its subsidiaries. Control is achieved when the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

The Company reassesses whether it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

Note 1 - Significant accounting policies, and significant accounting estimates and assessments (continued)

Principles of consolidation

The consolidated financial statements are prepared on the basis of the financial statements of the parent company and the individual subsidiaries, which are based on uniform accounting policies and accounting periods in all Group entities. Consolidation of Group entities is performed after elimination of all intra-Group transactions, balances, income and expenses.

Foreign currency translation

Transactions denominated in foreign currencies are translated at the exchange rates on the transaction dates.

Exchange differences arising between the rate on the transaction date and the rate on the payment day are recognized in the income statement as financial income or financial expenses.

Receivables, payables and other monetary items denominated in foreign currencies that have not been settled at the balance sheet date are translated by applying the exchange rates at the balance sheet date. Differences arising between the rate at the balance sheet date and the rate at the date on which the receivable or payable arose are recognized in the income statement as financial income and financial expenses.

Non-monetary assets purchased in foreign currencies are measured at the exchange rate on the transaction date.

Consolidated financial statements

Income statement

The income statement is classified by function.

Segment reporting

The Group is managed by a Corporate Management team reporting to the Chief Executive Officer. The Corporate Management team, including the Chief Executive Officer, represents the chief operating decision maker (CODM). No separate business areas or separate business units have been identified in connection with product candidates or geographical markets. Consequently, there is no segment reporting concerning business areas or geographical areas.

Statement of financial position

Financial assets

Financial assets include receivables, securities and cash. Financial assets are divided into categories of which the following are relevant for the Group:

- 1. Financial assets at amortised cost comprising of receivables with contractual cash flows solely comprising of payment of principal and interest and which are held for the purpose of collecting the contractual cash flow.
- 2. Financial assets at fair value through the income statement, which are securities held in a business model whose purpose is to regularly sell securities within the portfolio.
- 3. Equity investments. These investments are measured at fair value through profit or loss.

Financial assets are assigned to the different categories by Management on initial recognition, depending on the cash flow characteristics and purpose for which the assets were acquired. All financial assets are recognized on their settlement date. All financial assets other than those classified at fair value through the income statement are initially recognized at fair value, plus transaction costs.

Statement of cash flows

The cash flow statement is prepared in accordance with the indirect method on the basis of the net loss for the year. The statement shows the cash flows broken down into operating, investing and financing activities, cash and cash equivalents at the beginning and end of the year, and the impact of the calculated cash flows on cash and cash equivalents.

Cash flows in foreign currencies are translated into Danish kroner at the exchange rate on the transaction date.

Cash flow from operating activities

Cash flow from operating activities is presented indirectly and is calculated as the net loss adjusted for sale of royalties, non-cash operating items, changes in net working capital, financial items paid and income tax benefits received and paid.

Cash flow from investing activities

Cash flow from investing activities includes cash flows from the sale of future royalties and milestones relating to the Sanofi license, purchase and sale of property, plant and equipment, investments and deposits, as well as transfers to and from restricted cash related to the royalty bond.

Cash flow from financing activities

Cash flow from financing activities includes new equity, loan financing, sale of treasury shares and funds from private placements.

Cash and cash equivalents

Cash and cash equivalents comprise cash and bank balances.

Note 1 - Significant accounting policies, and significant accounting estimates and assessments (continued)

Significant accounting estimates and assessments

In preparing the financial statements, Management makes a number of accounting estimates that form the basis for the recognition and measurement of our assets and liabilities.

In applying our accounting policies, Management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The 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.

The estimates used are based on assumptions assessed to be reasonable by Management. However, estimates are inherently uncertain and unpredictable. The assumptions may be incomplete or inaccurate, and unexpected events or circumstances may occur. Furthermore, we are subject to risks and uncertainties that may result in deviations in actual results compared with estimates.

No significant changes have been made to accounting estimates and assessments in 2018.

The following are the most significant accounting estimates and assessments applied by Management in these financial statements:

Revenue recognition

Revenue comprises license payments, milestone payments and royalty income. License payments which provide the buyer with the right to use the license as it exists at the date of transfer are recognized upon transfer of the associated licensing rights at the point at which the buyer obtains the right to use the license. Milestone payments are related to the collaborative research agreements with commercial partners when it is highly probable that Zealand Pharma will become entitled to the milestone which is generally when the milestone is achieved. Royalty income from licenses is based on third-party sales of licensed products and is recognized in accordance with contract terms in the period in which the sales occur.

Revenue from transactions involving the rendering of services which are consumed by the customer simultaneously with delivery is recognized along with delivery of the services.

Upon entering into agreements with multiple components, Management determines whether individual components are distinct, which is the case if the buyer can obtain benefits from the

goods or service and the promise is distinct within the context of the contract. If no individual components are distinct, the contract is treated as a single performance obligation.

Employee incentive programs

In accordance with IFRS 2 Share-based Payment, the fair value of the warrants classified as equity settled is measured at the grant date and recognized as an expense in the income statement. The fair value of each warrant granted during the year is calculated using the Black–Scholes option pricing model. This requires the input of subjective assumptions such as:

- The expected stock price volatility, which is based on the historical volatility of Zealand's share price
- The risk-free interest rate, which is determined as the interest rate on Danish government bonds with a maturity of five years
- The duration of the warrants, which is assumed to be until the end of the last exercise period

The total fair value of the warrants is recognized in the income statement over the vesting period, if any. An adjustment is made to reflect an expected attrition rate during the vesting period. The attrition rate is re-estimated at year-end based on the historical attrition rate resulting in recognition of an expense equal to grant date fair value of the number of warrants which actually vest.

Restatement

The Company has been eligible to receive royalty revenue of 10% on Sanofi's net sales of Lyxumia[®] / Adlyxin[®] (lixisenatide) in countries with a valid IP protection for Zealand and potentially up to USD 100 million in commercial milestones.

During Q2 2018 it was determined that royalty revenue from Sanofi recognized from 2013 until Q1 2018 included DKK 17.1 million of royalty revenue on net sales in countries with no valid IP protection for Zealand and therefore revenue has been overstated in these periods. As a consequence of this, royalty expenses from 2013 until Q1 2018 has been overstated in this same period. Such misstatements have been corrected with retrospective impact and thus comparable periods as of and for the years ended December 31, 2017, 2016 and 2015 have been restated.

The nature and impact of each restatement per line item in the consolidated income statements and consolidated statement of financial position for Zealand is presented below.

Note 1 - Significant accounting policies, and significant accounting estimates and assessments (continued)

Income statement:

A) Revenue

Royalty revenue has been restated as Zealand has previously recognized royalty revenue on net sales in countries with no valid IP protection.

B) Royalty expenses

Royalty expenses comprise contractual amounts due to third parties that are derived from royalty revenue earned from the corresponding collaboration agreements. The restatement on royalty revenue therefore leads to a corresponding restatement of royalty expenses.

Statement of financial position:

C) Trade receivables and other liabilities

The restatement related to trade receivables and other liabilities corresponds to the restatement on royalty revenue and royalty expenses, as discussed in tickmark A and B.

D) Retained loss

The restatement related to net loss for the period amounts to the combined impact of the restatements on royalty revenue and royalty expenses from 2013 through December 2016.

Statement of cash flow:

The impact of the restatement on the statement of cash flow is solely a reclassification between "Net loss for the period" and "Change in working capital" in the amount of DKK 3.0, 3.4 and 4.4 million respectively as of December 31, 2017, 2016 and 2015. The restatement related to net loss for the period amounts to the net impact of the restatements for the respective years on royalty revenue and royalty expenses while the restatement related to working capital for the period amounts to the net impact of the misstatements in trade receivables and other liabilities in the statement of financial position. Hence, there is no impact on the cash flow from operating activities. Based on the above outlined factors, the Company deemed irrelevant to present restated statements of cash flow for the years ended December 31, 2017 and 2016. Condensed consolidated income statement for the twelve month period ended December 31, 2017

DKK thousand	As originally reported, December 31, 2017	Restate- ment	Tickmark	Amount as adjusted, December 31, 2017
Revenue	139,775	-3,453	A	136,322
Royalty expenses	-14,629	466	В	-14,163
Research and development				
expenses	-324,667	0		-324,667
Administrative expenses	-47,470	0		-47,470
Other operating income	607	0		607
Operating loss	-246,384	-2,987		-249,371
Financial income	2,122	0		2,122
Financial expenses	-33,509	0		-33,509
Loss before tax	-277,771	-2,987		-280,758
Income tax benefit	5,500	0		5,500
Net loss for the period	-272,271	-2,987		-275,258
Loss per share - basic (DKK)	-9.77	-0.11		-9.88
Loss per share - diluted (DKK)	-9.77	-0.11		-9.88

Condensed consolidated statements of comprehensive

income for the twelve month period ended December 31, 2017

income (loss) Net loss for the period	0 -272.271	0 -2,987	0 -275,258
Net loss for the period Other comprehensive	-272,271	-2,987	-275,258
DKK thousand	As originally reported, December 31, 2017	Restate- ment	Amount as adjusted, December 31, Tickmark 2017

Note 1 – Significant accounting policies, and significant accounting estimates and assessments (continued)

Condensed consolidated income statement for the twelve month period ended December 31, 2016

	As originally reported,		_	Amount as adjusted,
DKK thousand	December 31, 2016	Restate- ment	D Tickmark	ecember 31, 2016
Revenue	234,778	-3,914	А	230,864
Royalty expenses	-31,459	528	B	-30,931
Research and development	51,105	020	D	00,001
expenses	-268,159	0		-268,159
Administrative expenses	-52,503	0		-52,503
Other operating income	1,697	0		1,697
Operating loss	-115,646	-3,386		-119,032
Financial income	592	0		592
Financial expenses	-44,356	0		-44,356
Loss before tax	-159,410	-3,386		-162,796
Income tax benefit	5,500	0		5,500
Net loss for the period	-153,910	-3,386		-157,296
Loss per share - basic (DKK)	-6.33	-0.14		-6.47
Loss per share - diluted (DKK)	-6.33	-0.14		-6.47

Condensed consolidated statements of comprehensive income for the twelve month period ended December 31, 2016

DKK thousand	As originally reported, December 31, 2016	Restate- ment	Amount as adjusted, December 31, Tickmark 2016
Net loss for the period	-153,910	-3,386	-157,296
Other comprehensive income (loss)	0	0	0
Net loss for the period	-153,910	-3,386	-157,296

Condensed consolidated income statement for the twelve month period ended December 31, 2015

	As originally reported, December 31,	Restate-		Amount as adjusted, December 31,
DKK thousand	2015	ment	Tickmark	2015
Revenue	187,677	-5,104	A	182,573
Royalty expenses	-22,267	689	В	-21,578
Research and development				
expenses	-217,741	0		-217,741
Administrative expenses	-41,824	0		-41,824
Other operating income	12,828	0		12,828
Operating loss	-81,327	-4,415		-85,742
Financial income	3,889	0		3,889
Financial expenses	-42,394	0		-42,394
Loss before tax	-119,832	-4,415		-124,247
Income tax benefit	5,875	0		5,875
Net loss for the period	-113,957	-4,415		-118,372
Loss per share - basic (DKK)	-4.94	-0.19		-5.13
Loss per share - diluted (DKK)	-4.94	-0.19		-5.13

Condensed consolidated statements of comprehensive income for the twelve month period ended

DKK thousand	As originally reported, December 31, 2015	Restate- ment	Amount as adjusted, December 31, Tickmark 2015
	2015	ment	
Net loss for the period	-113,957	-4,415	-118,372
Other comprehensive			
income (loss)	0	0	0
Net loss for the period	-113,957	-4,415	-118,372

Note 1 – Significant accounting policies, and significant accounting estimates and assessments (continued)

Condensed consolidated statement of financial position as of December 31, 2017

Condensed consolidated statement of financial position as of December 31, 2017 (continued)

	As originally reported, December 31,	Restate-	Amount as adjusted, December 31,
DKK thousand	2017	ment	Tickmark 2017
ASSETS			
Non-current assets			
Plant and machinery	14,855		14,855
Other fixtures and fittings,			
tools and equipment	953		953
Leasehold improvements	304		304
Deposits	2,729		2,729
Restricted cash	5,892		5,892
Other investments	9,312		9,312
Total non-current assets	34,045	0	34,045
Current assets			
Trade receivables	21,632	-15,953	C 5,679
Prepaid expenses	7,253		7,253
Income tax receivable	5,500		5,500
Other receivables	4,979		4,979
Securities	75,111		75,111
Cash and cash equivalents	588,718		588,718
Total current assets	703,193	-15,953	687,240
Total assets	737,238	-15,953	721,285

	As originally reported, December 31,	Restate-	ſ	Amount as adjusted, December 31,
DKK thousand	2017	ment	Tickmark	2017
EQUITY AND LIABILITIES				
Share capital	30,751			30,751
Share premium	1,959,199			1,959,199
Retained loss	-1,461,482	-13,799	D	-1,475,281
Equity	528,468	-13,799		514,669
Royalty bond	132,986			132,986
Non-current liabilities	132,986	0		132,986
Trade payables	29,428			29,428
Royalty bond	2,748			2,748
Other liabilities	43,608	-2,154	С	41,454
Current liabilities	75,784	-2,154		73,630
Total liabilities	208,770	-2,154		206,616
Total equity and liabilities	737,238	-15,953		721,285

Note 1 – Significant accounting policies, and significant accounting estimates and assessments (continued)

Condensed consolidated statement of financial position as of December 31, 2016

Condensed consolidated statement of financial position as of December 31, 2016 (continued)

	As originally reported, December 31,	Restate-	Amount as adjusted, December 31,
DKK thousand	2016	ment	Tickmark 2016
ASSETS			
Non-current assets			
Plant and machinery	12,081		12,081
Other fixtures and fittings,			
tools and equipment	1,154		1,154
Leasehold improvements	408		408
Deposits	2,690		2,690
Restricted cash	305,120		305,120
Total non-current assets	321,453	0	321,453
Current assets			
Trade receivables	11,510	-11,510	C 0
Prepaid expenses	13,837		13,837
Income tax receivable	5,500		5,500
Other receivables	5,379		5,379
Restricted cash	13,617		13,617
Cash and cash equivalents	323,330		323,330
Total current assets	373,173	-11,510	361,663
Total assets	694,626	-11,510	683,116

	As originally reported, December 31,	Restate-		Amount as adjusted, December 31,
DKK thousand	2016	ment	Tickmark	2016
EQUITY AND LIABILITIES				
Share capital	26,142			26,142
Share premium	1,441,263			1,441,263
Retained loss	-1,189,211	-10,813	D	-1,200,024
Equity	278,194	-10,813		267,381
Royalty bond	328,878			328,878
Non-current liabilities	328,878	0		328,878
Trade payables	19,739			19,739
Royalty bond	3,365			3,365
Other liabilities	64,450	-697	С	63,753
Current liabilities	87,554	-697		86,857
Total liabilities	416,432	-697		415,735
Total equity and liabilities	694,626	-11,510		683,116

Note 1 – Significant accounting policies, and significant accounting estimates and assessments (continued)

Condensed consolidated statement of financial position as of December 31, 2015

Condensed consolidated statement of financial position as of December 31, 2015 (continued)

	As originally reported, December 31,	Restate-		
DKK thousand	2015	ment	Tickmark	2015
ASSETS				
Non-current assets				
Plant and machinery	14,672			14,672
Other fixtures and fittings,				
tools and equipment	1,153			1,153
Leasehold improvements	628			628
Deposits	2,666			2,666
Total non-current assets	19,119	0		19,119
Current assets				
Trade receivables	158,158	-8,587	С	149,571
Prepaid expenses	2,430			2,430
Income tax receivable	5,875			5,875
Other receivables	10,427			10,427
Restricted cash	21,403			21,403
Cash and cash equivalents	418,796			418,796
Total current assets	617,089	-8,587		608,502
Total assets	636,208	-8,587		627,621

DKK thousand	As originally reported, December 31, 2015	Restate- ment	[Tickmark	Amount as adjusted, December 31, 2015
EQUITY AND LIABILITIES				
EQUITY AND LIABILITIES				
Share capital	24,353			24,353
Share premium	1,263,179			1,263,179
Retained loss	-1,035,301	-7,428	D	-1,042,729
Equity	252,231	-7,428		244,803
Royalty bond	312,951			312,951
Non-current liabilities	312,951	0		312,951
Trade payables	21,676			21,676
Other liabilities	49,350	-1,159	С	48,191
Current liabilities	71,026	-1,159		69,867
Total liabilities	383,977	-1,159		382,818
Total equity and liabilities	636,208	-8,587		627,621

Note 2 – Revenue

Accounting policies

Revenue comprises license payments, milestone payments and royalty income. License payments which provide the buyer with the right to use the license as it exists at the date of transfer are recognized upon transfer of the associated licensing rights at the point at which the buyer obtains the right to use the license. Milestone payments are related to the collaborative research agreements with commercial partners when it is highly probable that Zealand Pharma will become entitled to the milestone which is generally when the milestone is achieved. Royalty income from licenses is based on third-party sales of licensed products and is recognized in accordance with contract terms in the period in which the sales occur.

Revenue from transactions involving the rendering of services which are consumed by the customer simultaneously with delivery is recognized along with delivery of the services.

Upon entering into agreements with multiple components, Management determines whether individual components are distinct, which is the case if the buyer can obtain benefits from the goods or service and the promise is distinct within the context of the contract. If no individual components are distinct, the contract is treated as a single performance obligation.

Accounting for the Sanofi License Agreement

In 2003, Zealand entered into a license agreement with Sanofi (the Sanofi License Agreement), pursuant to which Zealand granted Sanofi exclusive rights to its patents, know-how and other intellectual property relating to lixisenatide, for all fields. Pursuant to the Sanofi License Agreement, which has been amended over the years, Sanofi assumed responsibility for the further development, manufacturing and marketing of lixisenatide, and we cannot research or develop lixisenatide while the Sanofi License Agreement remains in effect.

Under the Sanofi License Agreement, we were eligible to receive remaining milestone payments relating to commercialized products of up to USD 100 million, contingent on the achievement of certain sales levels, as well as royalties on global sales of such products. Royalties correspond to tiered, low-double-digit percentages of Sanofi's global net sales of lixisenatide (branded as Adlyxin[®] in the U.S. and as Lyxumia[®] in the EU and in other countries) plus a 10% royalty on global net sales of a combination of lixisenatide and insulin glargine 100 units/ml (Lantus[®]) marketed under the brand name Soligua[®] 100/33 in the U.S. and as Suligua[®] in the EU. In 2016, Sanofi challenged the validity of certain patents owned by a competitor, AstraZeneca (and its affiliates), in both administrative and court proceedings in the U.S. and in certain other countries, and AstraZeneca brought counterclaims in the U.S. proceedings asserting that products containing lixisenatide infringe its patents. Sanofi and AstraZeneca subsequently agreed to settle all claims and counterclaims between them in various proceedings relating to lixisenatide. Our financial obligations related to this now-resolved intellectual property dispute could reduce our net revenue from the original commercial milestone payments from Sanofi relating to Soligua® 100/33/Suligua®. The amount and timing of any such reductions are not currently known. but they will not exceed USD 15 million in total.

We pay Alkermes plc 13% of all payments received on lixisenatide while lixisenatide is subject to a commercialization agreement such as the Sanofi License Agreement. We also pay one of the inventors of the Structure Induced Probe (SIP) technology employed in lixisensatide a 0.5% royalty on amounts received in connection with drug candidates that, like lixisenatide, are produced using the SIP technology.

Milestone payments have been recognized as revenue when the relevant milestones are achieved.

As of September 2018, all future royalties and all but up to USD 15 million of future milestones relating to the Sanofi License Agreement have been sold to Royalty Pharma. Refer to note 7.

Accounting for the Boehringer Ingelheim License Agreements

In 2011, Zealand entered into a license, research and development collaboration agreement with Boehringer Ingelheim International GmbH (BI) to advance novel GLP-1/glucagon dual-acting peptide receptor agonists (GGDAs) for the treatment of patients with type 2 diabetes and obesity. Under the terms of the 2011 BI License Agreement, BI paid a fixed amount per full-time employee and other costs related to all research, development and commercialization in respect of the compounds covered by the agreement.

We are eligible to receive license and milestone payments of up to EUR 386 million, of which EUR 365 million was outstanding at December 31, 2018, related to the achievement of prespecified development, regulatory and commercial milestones for the lead product. We are also eligible to receive tiered royalties ranging from high-single-digit to low-double-digit percentages on BI's sales of all products stemming from this collaboration. In addition, we retain copromotion rights in Scandinavia.

In 2014, Zealand entered into a second global license, research and development collaboration agreement with BI (the 2014 BI License Agreement). This agreement pertained to a collaboration on a specific therapeutic peptide project from our portfolio of preclinical programs for a period of up to four and a half years, with the aim of developing novel drugs to improve the treatment of patients with cardiometabolic diseases. In 2015, BI selected a novel peptide therapeutic to be advanced into preclinical development under this agreement.

Pursuant to this agreement, we have worked with BI to advance the therapeutic peptides stemming from this research collaboration into preclinical development. BI is responsible for conducting preclinical and clinical development as well as for the commercialization of products stemming from the agreement and funding all activities under the agreement. We are eligible to receive license and milestone payments of up to EUR 295 million for the first compound to be developed and marketed under the collaboration, of which EUR 283 million was outstanding at December 31, 2018. We are also eligible to receive tiered royalties ranging from low-single-digit to low-double-digit percentages on global sales of products arising from

Note 2 – Revenue (continued)

this collaboration. We retain copromotion rights in Scandinavia and are not eligible for royalty payments in those countries if we exercise such rights.

No product candidates outlicensed to BI are currently marketed, and accordingly we have not received any royalty payments to date under our licensing agreements with BI.

Milestone payments are recognized as revenue when the relevant milestones are achieved.

Accounting for other license agreements

In 2018, Zealand entered into a Material Transfer agreement with an undisclosed counterpart. A milestone payment was recognized as revenue, when the relevant milestone was achieved. Such Material Transfer agreement related to the delivery of an existing material to the undisclosed third party. No remaining performance obligations exist related to such agreement.

In 2012, Zealand entered into an agreement with Protagonist Therapeutics, Inc., but this research collaboration was terminated in 2014. In line with the terms of the terminated agreement, Zealand is entitled to receive up to USD 15 million if certain milestone events occur.

Milestone payments are recognized as revenue when the relevant milestones are achieved.

Recognized revenue can be specified as follows for all agreements:

DKK thousand	2018	Restated 2017	Restated 2016
Sanofi-Aventis Deutschland GmbH	0	69,603	208,692
Boehringer Ingelheim International GmbH	0	29,750	0
Helsinn Healthcare S.A.	0	0	112
Undisclosed counterpart	9,845	0	0
Protagonist Therapeutics, Inc.	3,274	1,662	1,636
Total license and milestone revenue	13,119	101,015	210,440
Sanofi-Aventis Deutschland GmbH	24,858	35,307	20,424
Total royalty revenue	24,858	35,307	20,424
Total revenue	37,977	136,322	230,864
Royalty revenue can be specified as follows:			
Soliqua®	17,786	18,655	0
Lyxumia®	7,072	16,652	20,424
Total royalty revenue	24,858	35,307	20,424

¹ See Note 1 to the consolidated financial statements.

On September 6, 2018, Zealand entered into an agreement under which all rights to sales based royalties and milestone payments under the Sanofi agreement were transferred to Royalty Pharma for a fixed consideration. The gain net of transaction costs and settlement of the liability to Alkermes plc and another investor is included in other operating income. Refer to note 7.

No transfers of licenses occurred in 2017 or 2016.

All Zealand revenue can be attributed to countries other than Denmark.

Revenue from Sanofi¹

In 2018, we recognized DKK 24.9 million as royalty income, reflecting sales of Lyxumia® of EUR 9.5 million and sales of Soliqua® 100/33 of EUR 23.8 million. No milestone revenue was received.

In 2017, we recognized DKK 69.6 million in revenue from milestone payments from Sanofi under the Sanofi License Agreement in connection with the approval of Suliqua® in the EU in January 2017. In addition, in 2017 we recognized DKK 35.3 million as royalty income, reflecting sales of Lyxumia® of EUR 22.4 million and sales of Soliqua® 100/33 of EUR 25.1 million.

In 2016, we recognized DKK 208.7 million in revenue from milestone payments from Sanofi under the Sanofi License Agreement in connection with the approval of lixisenatide as Adlyxin® in July 2016 amounting to DKK 33.5 million, and in connection with the approval of Soliqua® 100/33 in November 2016 amounting to DKK 175.2 million, both in the U.S. In addition, in 2016 we recognized DKK 20.4 million as royalty income, reflecting sales of Lyxumia® of EUR 27.4 million.

Revenue from Boehringer Ingelheim

No revenue was recognized from BI in 2018, as no milestone event was reached.

In 2017, we recognized DKK 29.8 million in revenue from milestone payments from BI related to the initiation of the Phase 1 trial for the long-acting amylin analog.

No revenue was recognized from BI in 2016, as no milestone event was reached.

Revenue from Helsinn

No revenue was recognized from Helsinn in 2018 and 2017. In 2016, we recognized DKK 0.1 million in revenue from Helsinn, representing contractual payments rather than milestone payments.

Note 2 – Revenue (continued)

Revenue from other agreements

In 2018, we recognized DKK 9.8 million in revenue from a milestone payment from an undisclosed counterpart relating to a Material Transfer Agreement. No revenue was recognized in 2017 or 2016.

In 2018, we recognized DKK 3.3 million in revenue from a milestone payment from the Protagonist Therapeutics agreement in connection with the start of Phase 2 with the novel hepcidin mimetic PTG-300.

In 2017, we recognized DKK 1.7 million in revenue from a milestone payment from the Protagonist Therapeutics agreement in connection with the start of Phase 1 with the novel hepcidin mimetic PTG-300.

In 2016, we recognized DKK 1.6 million in revenue from a milestone payment from the Protagonist Therapeutics agreement in connection with its selection of a development candidate.

Note 3 – Royalty expenses

Accounting policies

Royalty expenses comprise contractual amounts payable to third parties that are derived from the milestone payments and royalty income earned from the corresponding collaboration agreements.

We have agreed to pay some of our revenue in deferred payments or royalties to third parties. At the time of the dissolution of a former joint venture with Elan Corporation, plc (Elan) and certain of its subsidiaries that were party to the joint venture agreement with us, we agreed to pay royalties to Elan – now Alkermes plc, as successor in interest to a termination agreement between us and the Elan entities – including 13% of future payments we receive in respect of lixisenatide under the Sanofi License Agreement.

In addition, we have agreed to pay a royalty of 0.5% of the total amounts we receive in connection with our SIP-modified peptides, including lixisenatide, to one of the inventors of our SIP technology, who is one of our employees. The royalty to be paid to this inventor is calculated on the basis of all the amounts we receive, including license payments, milestone payments and sales.

In 2018 and 2017, the royalty expenses related to royalties from sales of Lyxumia[®] and Soliqua[®] 100/33 and milestone payments received from Sanofi. In 2016, the royalty expenses related to royalties from sales of Lyxumia[®] and milestone payments received from Sanofi.

As further discussed in note 7, the arrangement was settled in 2018 as part of transferring the right to future royalty and milestone payments under the Sanofi agreement.

Note 4 - Research, development and administrative expenses

Accounting policies

Research and development expenses

Research expenses comprise salaries, contributions to pension schemes and other expenses, including patent expenses, as well as depreciation and amortization directly attributable to the Group's research activities. Research expenses are recognized in the income statement as incurred.

Development expenses comprise salaries, contributions to pension schemes and other expenses, including depreciation and amortization, directly attributable to the Group's development activities. Development expenses are recognized in the income statement as incurred.

Note 4 - Research, development and administrative expenses (continued)

No indirect costs that are not directly attributable to research and development activities are included in the disclosure of research and development expenses recognized in the income statement. Overhead expenses have been allocated to research and development or administrative expenses based on the number of employees in each department, determined according to the respective employees' associated undertakings.

Accounting estimates and assessments related to research and development expenses

A development project involves a single product candidate undergoing a large number of tests to demonstrate its safety profile and its effect on human beings, prior to obtaining the necessary final approval for the product from the appropriate authorities. The future economic benefits associated with the individual development projects are dependent on obtaining such approval. Considering the significant risk and duration of the development period for biological products, Management has concluded that whether the intangible asset will generate probable future economic benefits cannot be estimated with sufficient certainty until the project has been finalized and the necessary final regulatory approval of the product has been obtained. Accordingly, Zealand has not recognized such assets at this time, and all research and development expenses are therefore recognized in the income statement when incurred.

Capitalization of development costs assumes that, in the Group's opinion, the development of the technology or the product has been completed, all necessary public registrations and marketing approvals have been received, and expenses can be reliably measured. Furthermore, it must be established that the technology or the product can be commercialized and that the future income from the product can cover not only the production, selling and administrative expenses but also development expenses. Zealand has not capitalized any development expenses in 2018, 2017 or 2016.

Administrative expenses

Administrative expenses include expenses for administrative personnel, expenses related to company premises, operating leases, investor relations, etc. Overhead expenses have been allocated to research and development or administrative expenses according to the number of employees in each department, based on the respective employees' associated undertakings.

Note 5 - Fees to auditors appointed at the Annual General Meeting

DKK thousand	2018	2017	2016
Audit	1.661	1,199	1,937
Audit-related services and other assurance engagements	718	2,418	4,107
Tax advice	106	114	43
Other	0	196	232
Total fees	2,485	3,927	6,319

The fee for audit-related services and other assurance engagements, tax advice and other services provided to the Group by Deloitte Statsautoriseret Revisionspartnerselskab amounts to DKK 0.8 million and consists of review of tax returns, work in relation to existing internal control processes at the Company, and other general financial reporting matters.

Note 6 – Information on staff and remuneration

DKK thousand	2018	2017	2016
Total staff salaries can be specified as follows:			
Salaries	141,661	112,614	104,614
Pension schemes (defined contribution plans)	11,065	9,135	8,239
Other payroll and staff-related costs	27,252	30,291	32,838
Total	179,978	152,040	145,691
The amount is charged as:			
Research and development expenses	153,521	119,474	109,509
Administrative expenses	26,457	32,566	36,182
Total	179,978	152,040	145,691
Average number of employees	146	128	124

Note 6 – Information on staff and remuneration (continued)

Remuneration DKK thousand	Base board fee 2018	Committee Fees 2018	Total fees 2018	Base board fee 2017	Committee Fees 2017	Total fees 2017	Base board fee 2016	Committee Fees 2016	Total fees 2016
Remuneration to the Board of Directors									
Martin Nicklasson ¹	650	100	750	550	100	650	550	200	750
Rosemary Crane	333	50	383	350	50	400	350	50	400
Catherine Moukheibir	300	150	450	250	150	400	250	150	400
Alain Munoz	300	50	350	250	33	283	250	0	250
Michael Owen	300	50	350	250	50	300	250	0	250
Kirsten Drejer	200	0	200	0	0	0	0	0	0
Jens Peter Stenvang ²	300	0	300	250	0	250	250	0	250
Hanne Heidenheim Bak ²	300	0	300	198	0	198	167	0	167
Helle Haxgart ^{2, 3}	100	0	100	21	0	21	0	0	0
Rasmus Just ^{2, 4}	0	0	0	229	0	229	167	0	167
Peter Benson ⁵	0	0	0	0	0	0	104	0	104
Christian Thorkildsen ^{2, 5}	0	0	0	0	0	0	83	0	83
Helle Størum ^{2, 5}	0	0	0	0	0	0	83	0	83
Total	2,783	400	3,183	2,348	383	2,731	2,504	400	2,904

¹ In addition to the base board fee, Martin Nicklasson received an observation fee for his period as Observer to the Board before being appointed at the Annual General Meeting in 2015. This fee amounted to DKK 150,000, and was paid in 2016.

² Employee-elected board members; the table only includes remuneration for board work.

³ This board member resigned from the Board in 2018.

⁴ This board member resigned from the Board in 2017.

⁵ These board members resigned from the Board in 2016.

Note 6 - Information on staff and remuneration (continued)

			Pension	Other	Severance co		
DKK thousand	Base salary	Bonus	contribution	benefits	payment	expenses	Total
2018							
Remuneration to the Executive Management							
Britt Meelby Jensen	4,189	2,513	419	320	0	0	7,441
Mats Blom	2,621	1,031	262	273	0	2,219	6,406
Total	6,810	3,544	681	593	0	2,219	13,847
Other Corporate Management ¹	6,689	2,653	604	1,035	0	5,804	16,785
Total	6,689	2,653	604	1,035	0	5,804	16,785
Total	13,499	6,197	1,285	1,628	0	8,023	30,632
2017							
Remuneration to the Executive Management							
Britt Meelby Jensen	3,915	2,482	392	231	0	4,058	11,078
Mats Blom	2,496	999	250	271	0	2,389	6,405
Total	6,411	3,481	642	502	0	6,447	17,483
Other Corporate Management ¹	4,416	1,787	442	388	0	4,779	11,812
Total	4,416	1,787	442	388	0	4,779	11,812
Total	10,827	5,268	1,084	890	0	11,226	29,295
2016							
Remuneration to the Executive Management							
Britt Meelby Jensen	3,795	683	380	231	0	4,442	9,531
Mats Blom	2,448	526	245	268	0	1,111	4,598
Total	6,243	1,209	625	499	0	5,553	14,129
Other Corporate Management ¹	6,422	833	642	1,324	1,782	7,322	18,325
Total	6,422	833	642	1,324	1,782	7,322	18,325
Total	12,665	2,042	1,267	1,823	1,782	12,875	32,454

1 Other Corporate Management in 2018 and 2017 comprised two members. Other Corporate Management in 2016 comprised four members, including two members who resigned during the year.

Note 6 - Information on staff and remuneration (continued)

Employee incentive programs

Accounting policies

The value of services received as consideration for granted warrants is measured at the fair value of the warrant. The fair value is determined at the grant date and is recognized in the income statement as employee benefit expense over the period in which the warrants vest.

The 2010 employee incentive program

The offsetting entry to this is recognized under equity. an estimate is made of the number of warrants expected to vest. Subsequently, an adjustment is made for changes in the estimate of the number of warrants which will vest, so the total expense is equal to fair value of the actual number of warrants which vest. The fair value of warrants granted is estimated using the Black–Scholes pricing model.

	Program of 2010 10/Feb/11	Program of 2010 17/Nov/11	Program of 2010 10/Feb/12	Program of 2010 19/Nov/12	Program of 2010 08/Feb/13	Program of 2010 01/Apr/14	Program of 2010 25/Mar/15	Program of 2010 05/May/15	Total
Number of warrants									
Outstanding at January 1, 2018	0	0	0	0	183,425	100,000	100,000	46,359	429,784
Granted during the year	0	0	0	0	0	0	0	0	0
Forfeited during the year	0	0	0	0	0	0	0	0	0
Exercised during the year	0	0	0	0	0	-28,000	0	0	-28,000
Expired during the year	0	0	0	0	-183,425	0	0	0	-183,425
Outstanding at December 31, 2018	0	0	0	0	0	72,000	100,000	46,359	218,359
Specified as follows:									
Executive Management	0	0	0	0	0	0	0	0	0
Other employees	0	0	0	0	0	72,000	100,000	46,359	218,359
Total	0	0	0	0	0	72,000	100,000	46,359	218,359
Number of warrants									
Outstanding at January 1, 2017	0	0	6,250	214,883	261,137	100,000	100,000	46,359	728,629
Granted during the year	0	0	0	0	0	0	0	0	0
Forfeited during the year	0	0	0	0	0	0	0	0	0
Exercised during the year	0	0	0	0	-77,712	0	0	0	-77,712
Expired during the year	0	0	-6,250	-214,883	0	0	0	0	-221,133
Outstanding at December 31, 2017	0	0	0	0	183,425	100,000	100,000	46,359	429,784
Specified as follows:									
Executive Management	0	0	0	0	0	0	0	0	0
Other employees	0	0	0	0	183,425	100,000	100,000	46,359	429,784
Total	0	0	0	0	183,425	100,000	100,000	46,359	429,784

Note 6 - Information on staff and remuneration (continued)

The 2010 employee incentive program (continued)

	Program of 2010 10/Feb/11	Program of 2010 17/Nov/11	Program of 2010 10/Feb/12	Program of 2010 19/Nov/12	Program of 2010 08/Feb/13	Program of 2010 01/Apr/14	Program of 2010 25/Mar/15	Program of 2010 05/May/15	Total
Number of warrants									
Outstanding at January 1, 2016	11,600	105,259	151,741	214,883	326,012	100,000	100,000	46,359	1,055,854
Granted during the year	0	0	0	0	0	0	0	0	0
Forfeited during the year	0	0	0	0	-1,250	0	0	0	-1,250
Exercised during the year	0	-105,259	-145,491	0	-63,625	0	0	0	-314,375
Expired during the year	-11,600	0	0	0	0	0	0	0	-11,600
Outstanding at December 31, 2016	0	0	6,250	214,883	261,137	100,000	100,000	46,359	728,629
Specified as follows:									
Executive Management	0	0	0	31,019	0	0	0	0	31,019
Other employees	0	0	6,250	183,864	261,137	100,000	100,000	46,359	697,610
Total	0	0	6,250	214,883	261,137	100,000	100,000	46,359	728,629
Exercise period									
From	10/Feb/14	17/Nov/14	10/Feb/15	19/Nov/15	10/Feb/16	01/Apr/17	25/Mar/18	05/May/18	
Until	10/Feb/16	17/Nov/16	10/Feb/17	19/Nov/17	10/Feb/18	01/Apr/19	25/Mar/20	05/May/20	
Black-Scholes parameters									
Term (months)	60	60	60	60	60	60	60	60	
Share price	70.0	45.7	70.0	86.0	79.05	69.0	115.5	92.0	
Exercise price (DKK)	77.0	50.27	77.0	113.3	87.45	75.9	127.05	101.2	
Volatility*	33.0%	34.0%	44.0%	56.0%	39.3%	37.5%	41.9%	43.7%	
Risk-free interest rate	3.09%	1.02%	0.37%	0.86%	0.66%	0.71%	-0.21%	-0.10%	
Cost price	21.36	12.90	24.74	23.76	25.38	21.05	37.78	31.63	
Dividend	not expected								

* The volatility rate used is based on the actual volatility of the Zealand share price.

Note 6 - Information on staff and remuneration (continued)

The 2015 employee incentive program

	Program of 2015 05/may/15	Program of 2015 05/may/15	Program of 2015 05/Apr/16	Program of 2015 05/Apr/16	Program of 2015 15/Jul/16	Program of 2015 06/Apr/17	Program of 2015 06/Apr/17	Program of 2015 25/Aug/17	Program of 2015 25/Aug/17	Program of 2015 22/May/18	Program of 2015 15/Oct/18	Total
Number of warrants												
Outstanding												
at January 1, 2018	100,000	349,750	328,750	85,434	40,000	405,500	93,392	14,566	6,608	0	0	1,424,000
Granted during the year	0	0	0	0	0	0	0	0	0	615,500	40,000	655,500
Forfeited during the year	-100,000	0	-7,000	-85,434	0	-24,500	-93,392	-14,566	-6,608	-105,500	0	-437,000
Exercised during the year	0	-7,500	0	0	0	0	0	0	0	0	0	-7,500
Expired during the year	0	0	0	0	0	0	0	0	0	0	0	0
Outstanding												
at December 31, 2018	0	342,250	321,750	0	40,000	381,000	0	0	0	510,000	40,000	1,635,000
Specified as follows:												
Executive Management	0	75,000	25,000	0	0	57,000	0	0	0	60,000	0	217,000
Other employees	0	267,250	296,750	0	40,000	324,000	0	0	0	450,000	40.000	1,418,000
Total	0	342,250	321,750	0	40,000	381,000	0	0	0	510,000	40,000	1,635,000
lotat	0	542,250	521,750	0	40,000	561,000	0	0	0	510,000	40,000	1,035,000
Number of warrants												
Outstanding												
at January 1, 2017	100,000	357,250	345,000	100,000	40,000	0	0	0	0	0	0	942,250
Granted during the year	0	0	0	0	0	424,000	93,392	14,566	6,608	0	0	538,566
Forfeited during the year	0	-7,500	-16,250	-14,566	0	-18,500	0	0	0	0	0	-56,816
Exercised during the year	0	0	0	0	0	0	0	0	0	0	0	0
Expired during the year	0	0	0	0	0	0	0	0	0	0	0	0
Outstanding												
at December 31, 2017	100,000	349,750	328,750	85,434	40,000	405,500	93,392	14,566	6,608	0	0	1,424,000
Specified as follows:												
Executive Management	100,000	75,000	25,000	85,434	0	57,000	93,392	14,566	6,608	0	0	457,000
Other employees	0	274,750	303,750	00,101	40,000	348,500	0	0	0	0	0	967,000
Total	100,000	349,750	328,750	85,434	40,000	405,500	93,392	14,566	6,608	0	0	1,424,000
Note 6 - Information on staff and remuneration (continued)

The 2015 employee incentive program

	Program of 2015 05/may/15	Program of 2015 05/may/15	Program of 2015 05/Apr/16	Program of 2015 05/Apr/16	Program of 2015 15/Jul/16	Program of 2015 06/Apr/17	Program of 2015 06/Apr/17	Program of 2015 25/Aug/17	Program of 2015 25/Aug/17	Program of 2015 22/May/18	Program of 2015 15/Oct/18	Total
Number of warrants												
Outstanding												
at January 1, 2016	100,000	363,250	0	0	0	0	0	0	0	0	0	463,250
Granted during the year	0	0	347,250	100,000	40,000	0	0	0	0	0	0	487,250
Forfeited during the year	0	-6,000	-2,250	0	0	0	0	0	0	0	0	-8,250
Exercised during the year	0	0	0	0	0	0	0	0	0	0	0	0
Expired during the year	0	0	0	0	0	0	0	0	0	0	0	0
Outstanding												
at December 31, 2016	100,000	357,250	345,000	100,000	40,000	0	0	0	0	0	0	942,250
Specified as follows: Executive Management Other employees	100,000 0	75,000 282,250	25,000 320.000	100,000 0	0 40,000	0	0	0	0	0	0	300,000 642,250
Total	100,000	357,250	345,000	100,000	40,000	0	0	0	0	0	0	942,250
1000	100,000	337,230	515,000	100,000	10,000		0					512,230
Exercise period												
From	05/May/16	05/May/18	05/Apr/19	05/Apr/17	15/Jul/19	06/Apr/20	06/Apr/18	25/Aug/17	06/Apr/18	22/May/21	15/Oct/21	
Until	05/May/20	05/May/20	05/Apr/21	05/Apr/21	15/Jul/21	06/Apr/22	06/Apr/22	25/Aug/22	06/Apr/22	22/May/23	15/Oct/23	
Black-Scholes parameters												
Term (months)	60	60	60	60	60	60	60	60	60	60	60	
Share price (DKK)	92.0	92.0	129.5	129.5	126.0	123.0	123.0	118.5	118.5	100.8	90.0	
Exercise price (DKK)	101.2	101.2	142.45	142.45	138.6	135.3	135.3	142.45	135.3	100.8	90.0	
Volatility*	43.7%	43.7%	43.5%	43.5%	45.0%	43.6%	43.6%	43.0%	43.0%	42.6%	42.5%	
Risk-free interest rate	-0.10%	-0.10%	-0.04%	-0.04%	-0.33%	-0.24%	-0.24%	-0.16%	-0.16%	0.05%	-0.03%	
Cost price (DKK)	31.63	31.63	44.42	44.42	44.23	41.92	41.92	36.74	38.58	36.98	32.83	
Dividend	not expected											

* For warrants granted in 2015 and earlier, the volatility rate used is based on the actual volatility of the Zealand share price. For warrants granted after January 1, 2016, the volatility rate used is based on the 5-year historical volatility of the Zealand share price. The average traded share price on the exercise date(s) of the 2010 warrant programme was 120.9 and the average traded share price on the exercise date(s) of the 2015 warrant programme was 87.4.

Note 6 - Information on staff and remuneration (continued)

Employee warrant programs

In order to motivate and retain key employees and encourage the achievement of common goals for employees, Management and shareholders, the Company has established an incentive plan based on warrant programs. Incentive programs were offered in 2005, 2007 and in the periods 2009-2018.

The warrants are granted in accordance with the authorizations given to the Board of Directors by the shareholders. The Board of Directors has fixed the terms of and size of the grants, taking into account authorizations from the shareholders, the Group's guidelines for incentive pay, an assessment of expectations of the recipient's work efforts and contribution to the Group's growth, as well as the need to motivate and retain the recipient. Grant takes place on the date of establishment of the program. Exercise of warrants is by default subject to continuing employment with the Group. The warrants granted are subject to the provisions of the Danish Public Companies Act regarding termination of employees prior to their exercise of warrants in the case of recipients covered by the Act.

The exercise price is determined by the closing price of Zealand's shares on Nasdaq Copenhagen on the day prior to the grant date. For warrants granted before April 19, 2018, the exercise price is determined by the closing price of Zealand's shares on Nasdaq Copenhagen on the day prior to the grant date plus 10%.

Warrants expire automatically after five years. Warrants are considered vested at the grant date, when there is no vesting period explicit in the warrant agreement, and may be exercised after three years. Warrants granted on October 15, 2018 are vested over 36 months with 1/36 of the warrants vesting per month from the date of grant, and can be exercised after three years.

Warrants may be exercised four times a year during a four-week period starting from the date of the publication of Zealand's Annual Report or interim reports.

2010 employee incentive program

This program was established in 2010 for Zealand's Board of Directors, Executive Management, employees and consultants.

The Board of Directors was authorized to issue up to 2,750,000 warrants in the period until November 2, 2015. The program has expired and a total of 2,355,495 warrants have been granted. As of December 31, 2018, 1,579,809 warrants have been exercised, 422,327 warrants have expired without being exercised, and 135,000 warrants have forfeited. The total proceeds amount to DKK 127.4 million (2017: DKK 125.3 million and 2016: DKK 116.3 million). As of December 31, 2018, 218,359 warrants can still be exercised.

2015 employee incentive program

This program was established in 2015 for Zealand's Executive Management and employees.

The Board of Directors was authorized to issue up to 2,750,000 warrants in the period until April 20, 2020, of which 602,434 have not yet been granted. As of December 31, 2018, 2,147,566 warrants have been granted, 7,500 warrants have been exercised, and 505,066 warrants have forfeited. This means that the remaining amount of warrants that can be granted is 1,107,500. As of December 31, 2018, 1,635,000 warrants can be exercised. The total proceeds amount to DKK 0.8 million.

Effect on income statement

In 2018, the fair value of warrants recognized in the income statement amounted to DKK 17.4 million (2017: DKK 20.2 million and 2016: DKK 22.7 million), of which DKK 2.2 million (2017: DKK 6.4 million and 2016: DKK 5.6 million) related to Executive Management.

Costs for the warrant programs have been adjusted at the end of the year by DKK 0,0 million (2017: DKK 0.7 million and 2016: DKK 2.4 million) due to the actual attrition rate and an adjustment to the warrant programs granted in 2015 to reflect the estimated attrition rate split between Executive Management and employees. Warrants granted to the CEO, Britt Meelby Jensen in May 2018, have been reversed by DKK 3.7 million, as a consequense of Britt Meelby Jensen's resignation.

DKK thousand	2018	2017	2016
The amount is charged as:			
Research and development expenses	13,838	12,190	14,290
Administrative expenses	3,631	7,966	8,437
Total	17,469	20,156	22,727

Note 7 – Other operating income

Accounting policies

Other operating income comprises gains from sale of intangible assets, research funding from business partners and government grants. A gain from disposal of intangible assets is recognized when control over the asset is transferred to the buyer. The gain is determined as the disposal proceeds less the carrying amount, if any, and disposal costs.

Research funding is recognized in the period when the research activities have been performed, and government grants are recognized periodically when the work supported by the grant has been reported.

Note 7 – Other operating income (continued)

Government grants are recognized when a final and firm right to the grant has been obtained. Government grants are included in Other operating income, as the grants are considered to be cost refunds. •

DKK thousand	2018	2017	2016
Gross proceeds from sale of future royalties			
and milestones	1,310,237	0	0
Royalty expenses regarding the above sale of future royalties and milestones	-176,882	0	0
Fee, advisors regarding the above sale of future	74 450	0	0
royalties and milestones Research funding	-34,459 0	40	920
Government grants	630	567	777
Total other operating income	1,099,526	607	1,697

Zealand has on September 6, 2018 entered into an agreement to sell future royalties and USD 85.0 million of potential commercial milestones for Soliqua® 100/33/ Suliqua® and Lyxumia®/ Adlyxin® to Royalty Pharma. Under the agreement, all rights and obligations under the Sanofi Licensing agreement apart from a potential payment from Sanofi of up to USD 15.0 million, expected in 2020 (see note 22) have been transferred to the buyer. Zealand has received USD 205.0 million (DKK 1,310.2 million) upon closing of the transaction on September 17, 2018. Royalty expenses to third parties amounts to 13.5% or DKK 176.9 million and fees to advisors amounts to DKK 34.5 million. Zealand has also redeemed the outstanding royalty bond of USD 24.7 million (DKK 157.6 million), after which Zealand is debt free. The Sanofi license agreement was classified as an intangible asset upon adoption of IFRS 15 (see note 1), and the agreement with Royalty Pharma is treated as a sale of this license. The payment to the third parties is considered additional cost price for a license forming part of the rights under the Sanofi agreement and therefore forming part of the gain.

As part of the license agreements with BI, BI is responsible for conducting preclinical and clinical development, as well as for commercializing the products stemming from the agreement and funding all activities under the agreement. In the first quarter of 2016 Zealand was entitled to research funding from BI amounting to DKK 0.9 million. The funding related to the 2014 BI License Agreement and ended in March 2016. In addition, Zealand received government grants in 2018, 2017 and 2016.

Note 8 – Financial income

Accounting policies

Financial income includes interest from trade receivables, as well as realized and unrealized exchange rate adjustments and fair value adjustments of securities.

Interest income is recognized in the income statement in accordance with the effective interest rate method. •

DKK thousand	2018	2017	2016
Interest income from financial assets			
measured at amortized costs	4,263	2,048	592
Fair value adjustments of securities	0	74	0
Exchange rate adjustments	4,705	0	0
Dividend, securities	1,020	0	0
Total financial income	9,988	2,122	592

Note 9 – Financial expenses

$\ominus \ominus$ Accounting policies

Financial expenses include interest expenses, as well as realized and unrealized exchange rate adjustments and fair value adjustments. In addition, expenses related to the royalty bond are amortized over the expected duration of the bond and recognized as financial expenses. The royalty bond is described further in note 20.

Interest expense is recognized in the income statement in accordance with the effective interest rate method. ${\bullet}$

DKK thousand	2018	2017	2016
Interest expenses from financial liabilities measured at			
amortized costs	15,080	18,913	32,157
Amortization of financing costs	18,347	5,748	8,369
Fair value adjustments of securities	1,389	0	0
Loss on sale of securities	881	0	0
Other financial expenses	1,625	949	255
Exchange rate adjustments	0	7,899	3,575
Total financial expenses	37,322	33,509	44,356

Note 10 - Income tax benefit

Accounting policies

Income tax on results for the year, which comprises current tax and changes in deferred tax, is recognized in the income statement, whereas the portion attributable to entries in equity is recognized directly in equity.

Current tax liabilities and current tax receivables are recognized in the statement of financial position as tax calculated on the taxable income for the year adjusted for tax on previous years' taxable income and taxes paid on account/prepaid.

Deferred tax is measured according to the statement of financial position liability method in respect of temporary differences between the carrying amount and the tax base of assets and liabilities. Deferred tax liabilities are generally recognized for all taxable temporary differences, and deferred tax assets are recognized to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. In addition, deferred tax liabilities are not recognized if the temporary form the initial recognition of goodwill.

Deferred tax liabilities are recognized for taxable temporary differences arising on investments in subsidiaries except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not be reversed in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interest are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to be reversed in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each balance sheet date 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.

This judgment is made on an ongoing basis and is based on recent historical losses carrying more weight than factors such as budgets and business plans for the coming years, including planned commercial initiatives. The creation and development of therapeutic products within the biotechnology and pharmaceutical industry is subject to considerable risks and uncertainties. With exception of the one-off gain driven by the sale of Sanofi royalties and milestones in 2018, Zealand has so far reported significant losses and, consequently, has unused tax losses. Management has concluded that deferred tax assets should not be recognized at December 31, 2018 or 2017.

The tax assets are currently not deemed to meet the criteria for recognition, as Management has determined that it was not probable that future taxable profit would be available against which the deferred tax assets could be utilized.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities, they relate to income taxes levied by the same taxation authority and the Company intends to settle its current tax assets and liabilities on a net basis.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realized, based on tax laws and rates that have been enacted or substantively enacted at the balance sheet date.

Income tax receivables are recognized in accordance with the Danish tax credit scheme (Skattekreditordningen). Companies covered by the tax credit scheme may obtain payment of the tax base of losses originating from research and development expenses of up to DKK 25 million.

DKK thousand	2018	Restated 2017	Restated 2016
Net result for the year before tax	625,056	-280,758	-162,796
Tax rate	22.0%	22.0%	22.0%
Even et al tax avenues (/han afit)	177 510	61 767	75 015
Expected tax expenses/(benefit)	137,512	-61,767	-35,815
Difference in tax rate in subsidiary	9	0	0
Adjustment for nondeductible expenses	56	62	100
Adjustment for exercised warrants	2,228	1,732	36
Adjustment for R&D super deduction	-1,427	0	0
Tax effect on exercise of warrants	-8	-688	-2,864
Tax effect on expired warrants	-151	4,407	0
Change in tax assets (not recognized)	-94,445	50,754	33,043
Total income tax expense/benefit	43,774	-5,500	-5,500

Note 10 – Income tax benefit (continued)

DKK thousand	2018	2017	2016
Breakdown of unrecognized deferred tax assets:			
Tax losses carried forward (available indefinitely)	580,932	873.515	722.186
Research and development expenses	136,755	210,148	145,822
Rights	35,849	43,019	43,019
Non-current assets	50,308	67,590	62,953
Other	79,986	104,377	102,074
Total temporary differences	883,830	1,298,649	1,076,054
Tax rate	22%	22%	22%
Calculated potential deferred tax asset at local tax rate	194,443	285,703	236,732
Write-down of deferred tax asset	-194,443	-285,703	-236,732
Recognized deferred tax asset	0	0	0

As a consequence of tax losses from previous years, no deferred net tax assets have been recognized. Deferred tax reductions (tax assets) have not been recognized in the consolidated statement of financial position due to uncertainty as to when and whether they can be utilized.

Under Danish tax legislation, Zealand was eligible to receive DKK 5.5 million in 2017 and 2016 in cash relating to the surrendered tax loss of DKK 156.5 million for 2017 and DKK 81.5 million for 2016 based on qualifying research and development expenses. These tax receipts comprise the entire current tax benefit in 2017 and 2016 respectively.

As a consequence of the sale of future royalties and milestones in 2018, Zealand is no longer eligible to receive up to DKK 5.5 million in income tax benefit for 2018. The sale of future royalties and milestones in 2018 are considered to be a one-off transaction.

As a result of the taxable income for the year, Zealand recognized an income tax expense of DKK 43.7 million, after utilization of a portion of the unrecognized deferred tax asset.

Note 11 - Basic and diluted earnings per share

Accounting policies

Basic result per share

Basic result per share is calculated as the net result for the period that is allocated to the parent company's ordinary shares, divided by the weighted average number of ordinary shares outstanding.

Diluted result per share

Diluted result per share is calculated as the net result for the period that is allocated to the parent company's ordinary shares, divided by the weighted average number of ordinary shares outstanding and adjusted by the dilutive effect of potential ordinary shares.

The result and weighted average number of ordinary shares used in the calculation of basic and diluted result per share are as follows:

DKK thousand	2018	Restated 2017	Restated 2016
	E 01 202	275 250	157 206
Net result for the year	581,282	-275,258	-157,296
Net result used in the calculation of basic and diluted			
earnings per share	581,282	-275,258	-157,296
Weighted average number of ordinary shares	30,754,948	27,918,271	24,873,940
Weighted average number of treasury shares	-64,223	-64,223	-564,223
Weighted average number of ordinary shares used			
in the calculation of basic earnings per share	30,690,725	27,854,048	24,309,717
Weighted average number of ordinary shares used			
in the calculation of diluted earnings per share	30,696,404	27,854,048	24,309,717
Basic earnings/loss per share (DKK)	18.94	-9.88	-6.47
Diluted earnings/loss per share (DKK)	18.94	-9.88	-6.47

The following potential ordinary shares are dilutive at December 31, 2018 (anti-dilutive at December 31, 2017 and December 31, 2016) and are therefore included in the weighted average number of ordinary shares for the purpose of diluted earnings per share:

Note 11 - Basic and diluted earnings per share (continued)

Potential ordinary shares are included at December 31, 2018 due to dilutive effect (excluded			
at December 31, 2017 and 2016) related to:	2018	2017	2016
Outstanding warrants under the 2010 employee			
incentive program	218,359	429,784	728,629
Outstanding warrants under the 2015 employee			
incentive program	1,635,000	1,424,000	942,250
Total outstanding warrants	1,853,359	1,853,784	1,670,879
- out of which these warrants are dilutive	72,000	0	0
- out of which these warrants are anti-dilutive	1,781,359	1,853,784	1,670,879

Note 12 – Property, plant and equipment

Accounting policies

Plant and machinery, other fixtures and fittings, tools and equipment and leasehold improvements are measured at cost less accumulated depreciation.

Cost comprises acquisition price and costs directly related to acquisition until the time when the Group starts using the asset.

The basis for depreciation is cost less estimated residual value at the end of the useful life. Assets are depreciated using the straight-line method over the expected useful lives of the assets. The depreciation periods are as follows:

- Leasehold improvements 5 years
- Plant and machinery 5 years
- Other fixtures and fittings, tools and equipment 3-5 years

Gains and losses arising from disposal of plant and equipment are stated as the difference between the selling price less the costs of disposal and the carrying amount of the asset at the time of the disposal. Gains and losses are recognized in the income statement under Research and development expenses and Administrative expenses.

At the end of each reporting period, the Company reviews the carrying amount of property, plant and equipment as well as non-current asset investments to determine whether there is an indication that those assets have suffered an impairment loss. If any such indication exists, the

Note 12 – Property, plant and equipment

recoverable amount of the asset is estimated to determine the extent of the impairment loss (if any). If 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. If a reasonable and consistent basis of allocation can be identified, assets are also allocated to cash-generating units, or allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

The recoverable amount is the higher of fair value less costs of disposal and value in use. The estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects the 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.

Impairments are recognized in a separate line in the income statement. No impairments have been recognized for 2018, 2017 or 2016.

DKK thousand	Plant and machinery	Other fixtures and fittings in	Leasehold mprovements
	== ===	4 700	10.000
Cost at January 1, 2018	53,629	4,382	10,800
Additions	2,748	1,290	0
Retirements	-832	-542	0
Cost at December 31, 2018	55,545	5,130	10,800
Depreciation at January 1, 2018	38,774	3,429	10,496
Depreciation for the year	3,941	449	118
Retirements	-820	-542	0
Depreciation at December 31, 2018	41,895	3,336	10,614
Carrying amount at December 31, 2018	13,650	1,794	186
Depreciation for the financial year has been charged as:			
Research and development expenses	3,941	382	100
Administrative expenses	0	67	18
Total	3,941	449	118

Note 12 - Property, plant and equipment (continued)

DKK thousand	Plant and machinery	Other fixtures and fittings in	Leasehold nprovements
Cost at January 1, 2017	47,170	3.612	10.715
Adjustment to prior year	47,170	286	10,713
Additions	6,657	484	85
Retirements	-198	0	0
Cost at December 31, 2017	53,629	4,382	10,800
Depreciation at January 1, 2017	35,089	2,458	10.307
Adjustment to prior year	00,009	286	10,000
Depreciation for the year	3,883	685	189
Retirements	-198	0	0
Depreciation at December 31, 2017	38,774	3,429	10,496
Carrying amount at December 31, 2017	14,855	953	304
Depreciation for the financial year has been charged as:			
Research and development expenses	3,883	569	157
Administrative expenses	0	116	32
Total	3,883	685	189

Note 13 – Other investments

Accounting policies

Other investments are measured on initial recognition at fair value, and subsequently at fair value. Changes in fair value are recognized in the income statement under financial items.

The Group's other investments consist of a USD 5.0 million (2017: USD 1.5 million) investment in Beta Bionics, Inc., the developer of iLet[™], a fully integrated dual-hormone pump (bionic pancreas) for autonomous diabetes care. The investment in Beta Bionics, Inc. is recorded at fair value through profit and loss. This investment represents 2.0% (2017: 0.9%) ownership of Beta Bionics, Inc., and is recorded at a fair value of DKK 32.6 million as of December 31, 2018 (DKK 9.3 million as of December 31, 2017).

The payment related to this investment has not been made as of December 31, 2018 and is recorded within "other liabilities". Refer to Note 21.

Note 14 - Trade receivables

Accounting policies

Trade receivables are recognized and derecognized on a settlement date basis. They are measured at nominal value less expected credit losses based on historical experience. Zealand Pharma applies the simplified approach for determining expected credit losses.

Trade receivables are mainly related to milestone and royalty payments from our collaboration agreements, and are due in 30-60 days.

There are no overdue receivables and the write down for expected credit losses is not material.

At December 31, 2018, Zealand had trade receivables related to the milestone from Protagonist.

At December 31, 2017, trade receivables related to accrued royalty income on sales of Lyxumia[®] and Soliqua[®].

Note 15 - Prepaid expenses

Accounting policies

Prepaid expenses comprise amounts paid in respect of goods or services to be received in subsequent financial periods. Prepayments are measured at cost and are tested for impairment at the balance sheet date.

Note 16 – Other receivables

Accounting policies

Other receivables are measured on initial recognition at fair value and subsequently at amortized cost, usually equal to the nominal value.

DKK thousand	2018	2017
VAT	2,980	3,378
Other	388	1,601
Total other receivables	3,368	4,979

Note 17 – Securities

Accounting policies

The Group's securities portfolio comprises a bond portfolio. The investment strategy allows for regular sales and Management has determined that the "hold to collect" or "hold to collect and sell" criteria are not met. Consequently, the securities are classified at fair value through profit or loss. See Note 23, Interest rate risk.

Note 18 - Cash and cash equivalents

Accounting policies

Cash is measured on initial recognition at fair value and subsequently at amortized cost, usually equal to the nominal value.

DKK thousand	2018	2017
DKK	343,585	12,824
USD	96,526	252,884
EUR	420,524	323,010
Total cash and cash equivalents	860,635	588,718

In addition, at December 31, 2017, restricted cash amounted to DKK 5.9 million. See also note 20.

Note 19 – Share capital

Accounting policies

Consideration paid and proceeds from selling treasury shares recognized directly in equity within retained earnings. Capital reductions through cancellation of treasury shares reduce the share capital by an amount equal to the orginal cost price of the shares. Dividend payments are recognized as a deduction of equity and a corresponding liability when declared.

Share capital

Share capital at January 1, 2018	30,751,327
Capital increase on September 14, 2018	7,500
Capital increase on December 14, 2018	28,000
Share capital at December 31, 2018	30,786,827
Share capital at January 1, 2017	26,142,365
Capital increase on March 23, 2017	9,500
Capital increase on April 13, 2017	22,000
Capital increase on May 30, 2017	5,000
Capital increase on June 15, 2017	8,537
Capital increase on August 14, 2017	4,375,000
Capital increase on August 18, 2017	156,250
Capital increase on September 1, 2017	1,500
Capital increase on September 22, 2017	28,675
Capital increase on November 20, 2017	2,500
Share capital at December 31, 2017	30,751,327

Note 19 – Share capital (continued)

Share capital

Share capital at January 1, 2016	24,352,769
Capital increase on March 30, 2016	46,613
Capital increase on April 14, 2016	50,453
Capital increase on May 26, 2016	43,071
Capital increase on June 16, 2016	41,269
Capital increase on September 6, 2016	7,400
Capital increase on September 23, 2016	45,457
Capital increase on September 29, 2016	1,475,221
Capital increase on November 17, 2016	8,200
Capital increase on November 25, 2016	57,913
Capital increase on December 8, 2016	13,999
Share capital at December 31, 2016	26,142,365
Share capital at January 1, 2015	23,193,047
Capital increase on March 21, 2015	120,833
Capital increase on April 11, 2015	106,220
Capital increase on June 2, 2015	51,487
Capital increase on June 20, 2015	46,521
Capital increase on September 8, 2015	383,190
Capital increase on September 26, 2015	150,702
Capital increase on November 4, 2015	60,843
Capital increase on November 13, 2015	176,456
Capital increase on December 4, 2015	63,470
Share capital at December 31, 2015	24,352,769

There were no changes in share capital in 2014.

At December 31, 2018, the total number of authorized ordinary shares was 32,640,186 (2017: 32,840,494).

The share capital at December 31, 2018 consisted of 30,786,827 (2017: 30,751,327) ordinary shares issued of DKK 1 each. The parent company has only one class of shares, and all shares rank equally. The shares are negotiable instruments with no restrictions on their transferability.

All shares have been fully paid. On August 9, 2017, American Depositary Shares (ADSs) representing Zealand shares started trading on the Nasdaq Global Select Market in the U.S. under the symbol ZEAL. On August 14, 2017, Zealand registered a capital increase of 4,375,000 new shares and completed its initial public offering on Nasdaq Global Select Market in the U.S. Following full exercise of a 15% overallotment option, a further 156,250 new shares were issued on August 15, 2017. In addition, 500,000 treasury shares were sold. The total gross proceeds of the offering amounted to DKK 567.1 million. Other capital increases in 2018 and 2017 related to exercise of warrant programs.

Expenses directly related to capital increases are deducted from equity. In 2018 expenses of DKK 0.1 million related to the exercise of warrant programs. In 2017 expenses related to the initial public offering on August 14 and 15, 2017 amounted to DKK 71.5 million, and DKK 0.1 million related to the exercise of warrant programs.

At December 31, 2018, there were 64,223 treasury shares (2017: 64,223), equivalent to 0.2% (2017: 0.2%) of the share capital and corresponding to a market value of DKK 5.3 million (2017: DKK 5.5 million). 500,000 treasury shares were sold in 2017 in relation to the initial public offering.

The treasury shares were purchased for DKK 1.3 million in 1999-2001 and DKK 0.4 million in 2011, giving a total purchase cost of DKK 1.7 million.

Rules on changing the Articles of Association

All resolutions put to the vote of shareholders at general meetings are subject to adoption by a simple majority of votes, unless the Danish Companies Act (Selskabsloven) or our Articles of Association prescribe other requirements.

Note 20 - Royalty bond

Accounting policies

The royalty bond was initially measured at the time of borrowing at fair value less any transaction costs. In subsequent periods, the royalty bond has been measured at amortized cost corresponding to the capitalized value using the effective interest method. Consequently, the difference between the proceeds of the loan and the amount to be repaid is recognized as a financial expense in the income statement over the term of the loan.

In December 2014, Zealand established four 100%-owned subsidiaries: ZP Holding SPV K/S, ZP General Partner 1 ApS, ZP SPV 1 K/S and ZP General Partner 2 ApS. The purpose of this structure was to make the royalty bond nonrecourse for Zealand and at the same time protect the bond investors from a parent company bankruptcy. On December 11, 2014, ZP SPV 1 K/S issued the royalty bond, which represents senior secured notes issued at par with a USD-denominated principal amount of USD 50 million (DKK 299.3 million at issue) and a stated fixed interest rate of 9.375% per annum. The royalty bond falls due on March 15, 2026.

Concurrent with the issue of the royalty bond, Zealand contributed the Sanofi License Agreement to ZP Holding SPV K/S, among other things. See Note 2 Revenue, Accounting for the Sanofi License Agreement.

Among the rights arising under the License Agreement were the rights to receive patent royalties, including relating to Adlyxin[®]/Lyxumia[®], a single remaining milestone payment relating to Adlyxin[®]/Lyxumia[®] and three regulatory event milestone payments in 2016 and January 2017 relating to certain other products containing lixisenatide combined with one or more other active pharmaceutical ingredients ("Group 2 Products"). ZP Holding SPV K/S sold and transferred to ZP SPV 1 K/S an interest in such royalties and milestone payments equal to 86.5% of the amount of such royalties payable from and after December 11, 2014, and 86.5% of such milestone payments.

Under the License Agreement, royalties are payable by Sanofi in EUR and at a varying percentage of annual net sales as defined in the License Agreement. In addition, at December 11, 2014, the aggregate remaining regulatory milestone payments (86.5% of which were transferred to ZP SPV 1 K/S) amounted to USD 60 million, plus value added taxes, payable subject to various terms and conditions of the License Agreement. In addition, at December 31, 2017 and 2016, restricted cash held by the Company also related to the Interest Reserve Account, established upon issue of the royalty bond.

The source of payment of the principal of and interest on the royalty bond is ZP SPV 1 K/S' interest on Adlyxin®/Lyxumia® royalties. Interest on the senior secured notes is payable biannually on March 15 and September 15 each year. The principal of the royalty bond was to be paid from available cash in ZP SPV 1 K/S commencing on the third payment date (March 15, 2016). Beginning with the third payment date, the royalty bond indenture states that available royalty revenue in ZP SPV 1 K/S in excess of interest payments is to be used for principal repayments of the royalty bond at each payment date. Upon full repayment of the royalty bond, the bondholders have no rights to future royalty payments. It is possible for ZP SPV 1 K/S to make voluntary repayments from March 2016, subject to various provisions and at various redemption premiums established in the royalty bond indenture.

In February 2017, USD 8.7 million (DKK 60.7 million) was transferred to the restricted cash account following receipt of the USD 10 million milestone payment from Sanofi related to the approval of Suliqua® in the EU.

On March 15, 2017, Zealand used restricted cash of USD 25 million (DKK 175 million) to repay half of the outstanding bond. Furthermore, the remaining restricted cash of USD 26.9 million (DKK 184 million) held as collateral for the bond was released to Zealand in exchange for a parent company guarantee. The maturity date of the royalty bond was also changed from March 15, 2026 to March 15, 2021.

As a consequence of the repayment of the royalty bond in March 2017, the carrying amount of the royalty bond was adjusted. This resulted in a loss of DKK 11.2 million, which was recognized in the consolidated income statement for 2017 in net financial items. Furthermore, a fee of DKK 5.2 million was paid due to the repayment and amendment of the financing agreement. DKK 3.5 million of this fee has been capitalized, and DKK 1.7 million was recognized in the consolidated income statement for 2017 in financial expenses.

As a consequence of deferrals of the expected repayment of the royalty bond at December 31, 2017, the carrying amount of the royalty bond was adjusted again. This had a positive impact on net financial items of DKK 10.8 million, which was recognized in the consolidated income statement for 2017 in financial expenses.

On September 6, 2018 Zealand entered into an agreement to sell future royalties and USD 85 million of potential commercial milestones for Soliqua® 100/33/ Suliqua® and Lyxumia®/Adlyxin® to Royalty Pharma. Zealand has received USD 205.0 million (DKK 1,310.2 million) upon closing of the transaction on September 17, 2018. Zealand has also redeemed the outstanding royalty bond of USD 24.7 million (DKK 157.6 million), after which Zealand is debt free. Zealand will remain eligible for a payment from Sanofi up to USD 15.0 million, expected in 2020 (see note 22).

Note 20 – Royalty bond (continued)

As of December 31, 2018, total outstanding debt on the royalty bond is DKK 0 million (2017: DKK 153.8 million). In the consolidated statements of financial position, this is therefore presented as DKK 0 million (2017: DKK 135.7 million), net of capitalized financing costs of DKK 0 million (2017: DKK 18.1 million). Accrued interest expenses related to the royalty bond amount to DKK 0 million (2017: DKK 4.3 million) and are recognized in other liabilities.

The change in the balance of the royalty bond from December 31, 2016 to December 31, 2017 was attributable to movements in the USD/DKK exchange rate and repayment of 50.4% of the principal.

The table below details changes in the Group's liabilities arising from financing activities regarding the royalty bond, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the Group's consolidated statements of cash flows as cash flows from financing activities.

DKK thousand

December 31, 2017	135,734
Exchange rate adjustments	-25,897
Amortization of financing costs	5,748
Financing cash flows (repayment)	-176,360
January 1, 2017	332,243
December 31, 2018	0
Exchange rate adjustments	4,230
Amortization of financing costs	18,347
Financing cash flows (repayment)	-158,311
January 1, 2018	135,734

Note 21 – Other liabilities

Accounting policies

Financial liabilities are recognized initially at fair value less transaction costs. In subsequent periods, financial liabilities are measured at amortized cost corresponding to the capitalized value using the effective interest method.

Provisions are measured as the best estimate of the costs needed at the balance sheet date to settle obligations. Provisions also include contingent payments on the conclusion of agreements, contracts, etc.

		Restated
DKK thousand	2018	2017
Severance payment	925	896
Employee benefits	34,971	28,165
Royalty payable to third party	6,682	763
Interest payable on royalty bond	0	4,295
Investment in Beta Bionics	22,803	0
Other payables	15,483	7,335
Total other liabilities	80,864	41,454

Note 22 - Contingent assets, liabilities and other contractual obligations

Contingent assets include potential future milestone payments. Contingent liabilities and other contractual obligations include contractual obligations related to agreements with contract research organizations (CROs) and lease commitments.

Accounting policies

Contingent assets and liabilities are disclosed, unless the possibility of an outflow of resources embodying economic benefits is remote. •

At December 31, 2018, Zealand is eligible for a payment from Sanofi of up to USD 15.0 million, expected in 2020. However, it is Management's opinion that the amount of any payment cannot be determined on a sufficiently reliable basis, and therefore have not recognized an asset in the statement of financial position of the Group.

At December 31, 2018, total contractual obligations related to agreements with CROs amounted to DKK 245.6 million (DKK 156.4 million for 2019 and DKK 89.2 million for the years 2020 up to and including 2022).

Note 22 – Contingent assets, liabilities and other contractual obligations (continued)

At December 31, 2017, total contractual obligations related to agreements with CROs amounted to DKK 76.6 million (DKK 52.6 million for 2018 and DKK 24.0 million for the years 2019 up to and including 2020).

Accounting policies

Lease agreements are classified as either finance or operating leases based on the criteria in IAS 17 Leases. Lease payments under operating leases and other rental agreements are recognized in the income statement over the term of the agreements. The Group has not entered into any finance leases.

DKK thousand	2018	2017
Total future minimum lease payments related		
to operating lease agreements:		
Within 1 year	6,945	4,292
1-3 years	31,098	2,593
4-5 years	29,464	117
Total	67,507	7,002

Operating lease agreements include rental agreement of building, company cars and office equipment. Based on management's analysis according to the accounting policy, all leases have been determined to be operating lease commitments.

The leases are subject to terms of interminability of between 6 and 156 months.

In 2018, DKK 7.9 million (2017: DKK 7.4 million and 2016: DKK 7.4 million) was recognized as an expense in the income statement, with DKK 6.7 million (2017: DKK 6.1 million and 2016: DKK 6.1 million) allocated to Research and development expenses and DKK 1.2 million (2017: DKK 1.3 million and 2016: DKK 1.3 million) to Administrative expenses.

Note 23 - Financial risks

The objective of Zealand's financial management policy is to reduce the Group's sensitivity to fluctuations in exchange rates, interest rates, credit rating and liquidity. Zealand's financial management policy has been endorsed by Zealand's Audit Committee and ultimately approved by Zealand's Board of Directors.

Zealand receives milestone payments from its current partners in USD and EUR.

Zealand is mainly exposed to research and development expenses. As such, Zealand is exposed to various financial risks, including foreign exchange rate risk, interest rate risk, credit risk and liquidity risk.

Capital structure

Zealand aims to have an adequate capital structure in relation to the underlying operating results and research and development projects, so that it is always possible to provide sufficient capital to support operations and long-term growth targets.

The Board of Directors finds that the current capital and share structure is appropriate for the shareholders and the Group.

Exchange rate risk

Most of Zealand's financial transactions are in DKK, USD and EUR.

Due to Denmark's long-standing fixed exchange rate policy vis-à-vis the EUR, Zealand has evaluated that there is no transaction exposure or exchange rate risk regarding transactions in EUR.

Zealand's milestone payments have been agreed in foreign currencies, namely USD and EUR. However, as milestone payments are unpredictable in terms of timing, the payments are not included in the basic exchange rate risk evaluation.

As Zealand from time to time conducts clinical trials and toxicology studies in the U.S., Zealand will be exposed to the exchange rate fluctuations and risks associated with transactions in USD. To date, Zealand's policy has been to manage the transaction and translation risk associated with the USD passively, placing the revenue received from milestone payments in USD in a USD account for future payment of Zealand's expenses denominated in USD, covering payments for the next 12-24 months and thus matching Zealand's assets with its liabilities.

Up until September 2018, a USD denominated royalty bond was outstanding which up until this point in time established a significant exchange rate risk vs. USD. After redemption of the remaining outstanding amount, USD 24.7 million, Zealand is debt free.

As of December 31, 2018, Zealand holds DKK 96.5 million (2017: 252.9) of its cash in USD.

Note 23 – Financial risks (continued)

Interest rate risk

Zealand has a policy of avoiding any financial instrument that exposes the Group to any unwanted financial risk. As of December 31, 2018, Zealand is debt free. Up until this point in the Zealand had a fixed rate royalty bond.

During 2018, all cash has been held in current bank accounts in USD, EUR and DKK. Interest rates on bank deposits in DKK and EUR have been negative for most of 2018, while USD accounts have generated a low level of positive interest.

During 2018, Zealand has invested in securities. The Group's securities portfolio comprises bonds in Danish kroner. The average weighted duration of the bond portfolio on the balance sheet date was 3 years. The bond portfolio has fixed interest rates.

Credit risk

Zealand is exposed to credit risk in respect of receivables, bank balances and bonds. The maximum credit risk corresponds to the carrying amount. Management believes that credit risk is limited, as the counterparties to the trade receivables are large global pharmaceutical companies.

Cash and bonds are not deemed to be subject to credit risk, as the counterparties are banks with investment-grade ratings (i.e. BBB- or higher from Standard & Poor's).

Liquidity risk

The purpose of Zealand's cash management is to ensure that the Group has sufficient and flexible financial resources at its disposal at all times.

Zealand's short-term liquidity is managed and monitored by means of the Company's quarterly budget revisions to balance the demand for liquidity and maximize the Company's interest income by matching its free cash in fixed-rate, fixed-term bank deposits and bonds with its expected future cash burn.

Sensitivity analysis

The table shows the effect on profit/loss and equity of reasonably likely changes in the financial variables in the statement of financial position.

	2018		20	017
DKK thousand	Fluctuation	Effect	Fluctuation	Effect
USD	+/-10%	9,627	+/-10%	12,304
Interest rate	+/-100b.p	7,974	+/-100b.p	5,562

Contractual maturity (liquidity risk)

A breakdown of the Group's aggregate liquidity risk on financial assets and liabilities is given below.

The following table details the Group's remaining contractual maturity for its financial liabilities with agreed repayment periods. The table has been prepared using the undiscounted cash flows for financial liabilities, based on the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows. To the extent that the specific timing of interest or principal flows is dependent on future events, the table has been prepared based on Management's best estimate of such timing at the end of the reporting period. The contractual maturity is based on the earliest date on which the Group may be required to pay.

There are no interest cash-flows to be included in the table below for the existing financial liabilities as they are not interest-bearing financial liabilities.

DKK thousand	<6 months	6<12 months	1-5 years	Total
Trade payables	32,652	0	0	32,652
Other	80,864	0	0	80,864
Total financial liabilities				
at December 31, 2018	113,516	0	0	113,516
Trade payables	29,428	0	0	29,428
Royalty bond repayments	1,401	1,347	132,986	135,734
Interest payments on royalty bond	7,249	7,302	35,140	49,691
Other (restated)	34,242	0	0	34,242
Total financial liabilities				
at December 31, 2017	72,320	8,649	168,126	249,095

Note 23 - Financial risks (continued)

All cash flows are nondiscounted and include all liabilities under contracts.

Interest payments on the royalty bond in 2017 are calculated using the fixed interest rate (9.375%) and the expected payback time as of each balance sheet date.

Zealand has redeemed the outstanding royalty bond in September, 2018.

Fair value measurement of financial instruments

DKK thousand	2018	Restated 2017
Categories of financial instruments		
Trade receivables	3,274	5,679
Other receivables	3,368	4,979
Restricted cash	0	5,892
Cash and cash equivalents	860,635	588,718
Financial assets at amortised cost ¹⁾	867,277	605,268
Securities	298,611	75,111
Other investments	32,582	9,312
Financial assets measured at fair value	331,193	84,423
Royalty bond	0	135,734
Trade payables	32,652	29,428
Other liabilities	80,864	41,454
Financial liabilities measured at amortized cost	113,516	206,616

¹⁾ Classified as loans and receivables under IAS 39

The fair value of securities is based on Level 1 in the fair value hierarchy.

The fair value of other investments is based on level 3 in the fair value hierarchy.

The carrying amount of financial assets and financial liabilities approximated the fair value.

Note 24 – Related parties

Zealand has no related parties with controlling interest.

Zealand's other related parties comprise the Company's Board of Directors and Corporate Management.

Remuneration to the Board of Directors and Corporate Management is described in note 6.

No further transactions with related parties were conducted during the year.

Ownership

The following shareholders are registered in Zealand's register of shareholders as owning minimum 5% of the voting rights or minimum 5% of the share capital (1 share equals 1 vote) at December 31, 2018:

- Sunstone Capital A/S, Copenhagen, Denmark
- Wellington Management Company LLP, Boston, U.S.
- Van Herk Investments, Rotterdam, Netherlands
- Bank Julius Bär & Co. AG, Zurich, Switzerland

Note 25 – Adjustments for non-cash items

DKK thousand	2018	2017	2016
Depreciation	4,508	4,757	5,410
Warrant compensation expenses	17,468	20,156	22,727
Income tax receipt	0	-5,500	-5,500
Income tax expense	43,774	0	0
Financial income	0	-2,048	-592
Financial expenses	19,736	25,610	40,781
Non paid royalty expenses regarding sale of future			
royalties and milestones	6,575	0	0
Exchange rate adjustments	9,865	-17,596	-5,141
Total adjustments	101,926	25,379	57,685

Note 26 – Change in working capital

DKK thousand	2018	Restated 2017	Restated 2016
Increase/decrease in receivables	-471	1.306	143.212
Increase/decrease in payables	13,256	-12,610	13,626
Change in working capital	12,785	-11,304	156,838

Note 27 – Significant events after the balance sheet date

There have been no significant events between December 31, 2018 and the date of approval of these financial statements that would require a change to or additional disclosure in the consolidated financial statements.

Note 28 – Approval of the annual report

The Annual Report has been approved by the Board of Directors and Executive Management and authorized for issue on March 7, 2019.

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Financial statements of the parent company.

Income statement

DKK thousand	Note	2018	2017
Revenue	2	13,119	31,412
Research and development expenses		-437,951	-324,051
Administrative expenses		-42,952	-46,157
Other operating income		630	607
Operating result		-467,154	-338,189
Income from subsidiaries	6	1,000,000	173,486
Financial income	3	12,904	1,751
Financial expenses	4	-3,512	-14,287
Result before tax		542,238	-177,239
Income tax		-43,722	5,500
Net result for the year		498,516	-171,739
Earnings per share – DKK			
Basic earnings/loss per share	5	16.24	-6.17
Diluted earnings/loss per share	5	16.24	-6.17

Statement of comprehensive income

DKK thousand Note	2018	2017
Net result for the year	498,516	-171,739
Other comprehensive income (loss)	0	0
Comprehensive result for the year	498,516	-171,739

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Financial statements of the parent company.

Statement of financial position at December 31

DKK thousand	Note	2018	2017
Assets			
Non-current assets			
Plant and machinery		13,650	14.855
Other fixtures and fittings, tools and equipment		1.794	953
Leasehold improvements		186	304
Investment in subsidiaries	6	380	380
Deposits		2,762	2,729
Other investments	7	32,582	9,312
Total non-current assets		51,354	28,533
Current assets			
Trade receivables		3,274	0
Receivables from subsidiaries		0	127
Prepaid expenses		11,698	7,253
Income tax receivable		1,278	5,500
Other receivables	8	3,103	4,950
Securities		298,611	75,111
Cash and cash equivalents	9	804,303	493,575
Total current assets		1,122,267	586,516
Total assets		1,173,621	615,049

DKK thousand	Note	2018	Restated 2017
Liabilities and equity			
Share capital		30,787	30,751
Share premium		1,976,736	1,956,514
Retained loss		-940,611	-1,439,127
Equity		1,066,912	548,138
Trade payables		32,409	29,424
Payables to subsidiaries		546	0
Other liabilities	10	73,754	37,487
Current liabilities		106,709	66,911
Total liabilities		106,709	66,911
Total equity and liabilities		1,173,621	615,049

Significant accounting policies, and significant accounting estimates and assessments

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Financial statements of the parent company.

Statement of cash flows

DKK thousand No	te	2018	2017
		100 51 6	
Net result for the year		498,516	-171,739
	13	58,501	20,779
	14	11,250	23,302
Financial income received		4,289	1,751
Financial expenses paid		-1,242	-730
Income tax receipt		5,500	5,500
Income tax paid		-45,000	0
Cash inflow/outflow from operating activities		531,814	-121,137
Change in deposit		-33	-39
Purchase of other investments		0	-9,312
Purchase of securities		-299,849	-75,037
Sale of securities		74,230	0
Purchase of property, plant and equipment		-4,038	-7,226
Sale of fixed assets		0	120
Cash outflow from investing activities		-229,690	-91,494
Proceeds from issuance of shares related to exercise of warrants		2,862	6,790
Proceeds from initial public offering		0	567,076
Costs related to initial public offering		0	-59,576
Cash inflow from financing activities		2,862	514,290
Decrease/increase in cash and cash equivalents		304,986	301,659
Cash and cash equivalents at January 1		493,575	206,399
Exchange rate adjustments		5,742	-14,483
Cash and cash equivalents at December 31		804,303	493,575

Statement of changes in equity

DKK thousand	Share capital	Share premium	Retained loss	Total
Equity at January 1, 2018	30,751	1,956,514	-1,439,127	548,138
Comprehensive income for the year				
Net profit for the year	0	0	498,516	498,516
Warrant compensation expenses	0	17,396	0	17,396
Capital increases	36	2,826	0	2,862
Equity at December 31, 2018	30,787	1,976,736	-940,611	1,066,912
Equity at January 1, 2017	26,142	1 //38 578	-1,266,297	198,423
Restatement ¹	20,142	1,730,370	-1,200,297	-1,091
Comprehensive loss for the year	0		-1,091	-1,091
Net loss for the year	0	0	-171,739	-171,739
Warrant compensation expenses	0	20,156	0	20,156
Capital increases	4,609	569,041	0	573,650
Costs related to capital increases	0	-71,261	0	-71,261
Equity at December 31, 2017	30,751	1,956,514	-1,439,127	548,138
1 See note 1 to the consolidated financial statements SSS				

1 See note 1 to the consolidated financial statements.SSS

Note 1 – Significant accounting policies, and significant accounting estimates and assessments

Significant accounting policies

Basis of preparation

The financial statements of the parent company have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and additional requirements under the Danish Financial Statements Act.

The financial statements are presented in Danish kroner (DKK), which is the functional currency of the Company.

In the narrative sections of the financial statements, comparative figures for 2017 are shown in brackets.

The accounting policies for the financial statements of the parent company are unchanged from the last financial year. The accounting policies are the same as for the consolidated financial statements with the exception of the supplementary accounting policies. For a description of the accounting policies for the Group, please refer to the consolidated financial statements, pp 55-87.

Supplementary accounting policies for the parent company are described below.

Restatement

During Q2 2018, it was determined that royalty revenue from Sanofi recognized from 2013 until Q1 2018, included DKK 17.1 million of royalty revenue on net sales in countries with no valid IP protection for Zealand and therefore revenue has been overstated in this period. The restatement for the years 2013 and 2014 had an effect on the parent company and therefore equity at the beginning of the period has been restated by DKK 1.1 million.

Investments in subsidiaries

Please refer to note 6 Investments in subsidiaries.

Note 2 – Revenue

Recognized revenue can be specified as follows:

DKK thousand	2018	2017
Boehringer Ingelheim International GmbH	0	29,750
Undisclosed counterpart	9,845	0
Protagonist Therapeutics, Inc.	3,274	1,662
Total license and milestone revenue	13,119	31,412

Please refer to note 2 to the consolidated financial statements.

Note 3 - Financial income

DKK thousand		2017
Interest income from financial assets measured at amortized costs	3,269	1.677
Fair value adjustments of securities	0	74
Dividend, securities	1,020	0
Exchange rate adjustments	8,615	0
Total financial income	12,904	1,751

Note 4 – Financial expenses

DKK thousand	2018	2017
Other financial our anges	1 2 4 2	770
Other financial expenses	1,242	730
Fair value adjustments of securities	1,389	0
Loss on sale or securities	881	0
Exchange rate adjustments	0	13,557
Total financial expenses	3,512	14,287

Note 5 - Basic and diluted earnings per share

The result and weighted average number of ordinary shares used in the calculation of basic and diluted result per share are as follows:

DKK thousand	2018	2017
Net result for the year	498,516	-171,739
Net result used in the calculation of basic and diluted loss per share	498,516	-171,739
Weighted average number of ordinary shares	30,754,948	27,918,271
Weighted average number of treasury shares	-64,223	-64,223
Weighted average number of ordinary shares used in		
the calculation of basic earnings per share	30,690,725	27,854,048
Weighted average number of ordinary shares used in		
the calculation of basic and diluted loss per share	30,696,404	27,854,048
Basic loss per share (DKK)	16.24	-6.17
Diluted loss per share (DKK)	16.24	-6.17

Regarding a specification of potential ordinary shares, which are dilutive or antidilutive, please refer to note 11 to the consolidated financial statements.

Note 6 – Investments in subsidiaries

Accounting policies

Investments in subsidiaries are measured at cost in the parent company's financial statements. Where the recoverable amount of the investment is lower than cost, the investments are written down to this lower value.

DKK thousand

Cost at January 1, 2018	380
Additions	0
Cost at December 31, 2018	380
Revaluation at January 1, 2018	0
Impairment for the year	0
Revaluation at December 31, 2018	0
Carrying amount at December 31, 2018	380

DKK thousand

Cost at January 1, 2017	380
Additions	0
Cost at December 31, 2017	380
Revaluation at January 1, 2017	0
Impairment for the year	0
Revaluation at December 31, 2017	0
Carrying amount at December 31, 2017	380

Note 6 – Investments in subsidiaries (continued)

Company summary	Domicile Ownership		Voting rights
Zealand Pharma A/S subsidiaries:			
ZP Holding SPV K/S	Denmark	100%	100%
ZP General Partner 1 ApS	Denmark	100%	100%
Zealand Pharma US Inc	United States	100%	100%
ZP Holding SPV K/S subsidiaries:			
ZP SPV 1 K/S	Denmark	100%	100%
ZP General Partner 2 ApS	Denmark	100%	100%

Pursuant to section 146(1) of the Danish Financial Statements Act, Management has chosen to submit an exemption declaration (Undtagelseserklæring) and has not issued annual reports for ZP SPV 1 K/S and ZP Holding SPV K/S.

The financial statements of the two companies are fully consolidated in the consolidated financial statements of Zealand Pharma A/S.

Income from subsidiaries relates to dividends from subsidiaries received during the year. Total income from subsidiaries amounts to DKK 1,000.0 million (2017: 173.5 million).

Note 7 – Other investments

Accounting policies

Other investments are measured on initial recognition at fair value, and subsequently at fair value. Changes in fair value are recognized in the income statement under financial items.

Other investments consist of a USD 5.0 million (2017 USD 1.5 million) investment in Beta Bionics, Inc., the developer of iLet[™], a fully integrated dual-hormone pump (bionic pancreas) for autonomous diabetes care. The investment in Beta Bionics, Inc. is recorded at fair value through profit and loss. This investment represents 2.0% (2017: 0.9%) ownership of Beta Bionics, Inc., and is recorded at a fair value of DKK 32.6 million as of December 31, 2018 (DKK 9.3 million as of December 31, 2017).

Note 8 – Other receivables

DKK thousand	2018	2017
VAT	2,771	3,359
Other	332	1,591
Total other receivables	3,103	4,950

Note 9 - Cash and cash equivalents

DKK thousand	2018	2017
DKK	309,482	10,183
USD	95,025	247,107
EUR	399,796	236,285
Total cash and cash equivalents	804,303	493,575

Note 10 – Other liabilities

DKK thousand	2018	Restated 2017
Coverance poverant	925	896
Severance payment	925	896
Employee benefits	34,940	28,165
Investment in Beta Bionics	22,803	0
Other payables	15,086	8,426
Total other liabilities	73,754	37,487

Note 11 - Contingent liabilities and other contractual obligations

Zealand Pharma A/S is part of a Danish joint taxation. Consequently, referring to the Danish Corporation Tax Act regulations, Zealand Pharma A/S is liable for any income taxes, etc. for the jointly taxed companies and Zealand Pharma A/S is likewise liable for any obligations to withhold tax at source on interest, royalties and returns for the jointly taxed companies.

Please refer to note 22 to the consolidated financial statements.

Note 12 – Financial risks

Please refer to note 23 to the consolidated financial statements.

Contractual maturity (liquidity risk)

A breakdown of the Company's aggregate liquidity risk on financial assets and liabilities is given below.

The following table details the Company's remaining contractual maturity for its financial liabilities with agreed repayment periods. The table has been prepared using the undiscounted cash flows for financial liabilities, based on the earliest date on which the Company can be required to pay. The table includes both interest and principal cash flows. To the extent that the specific timing of interest or principal flows is dependent on future events, the table has been prepared based on Management's best estimate of such timing at the end of the reporting period. The contractual maturity is based on the earliest date on which the Company may be required to pay.

There are no interest cash-flows to be included in the table below for the existing financial liabilities as they are not interest-bearing financial liabilities.

DKK thousand	<6 months	6<12 months	1-5 years	Total
Diric thousand	montris	montris	1-5 years	TOTAL
Trade payables	32,409	0	0	32,409
Other	73,754	0	0	73,754
Total financial liabilities				
at December 31, 2018	106,163	0	0	106,163
Trade payables	29,424	0	0	29,424
Other (restated)	37,487	0	0	37,487
Total financial liabilities				
at December 31, 2017	66,911	0	0	66,911

All cash flows are undiscounted and include all liabilities under contracts.

Fair value measurement of financial instruments

B 10000		Restated
DKK thousand	2018	2017
Categories of financial instruments		
Trade receivables	3,274	0
Receivables from subsidiaries	0	127
Income tax receivable	1,278	5,500
Other receivables	3,103	4,950
Cash and cash equivalents	804,303	493,575
Financial assets measured at amortized cost	811,958	504,152
Securities	298,611	75,111
Other investments	32,582	9,312
Financial assets measured at fair value	331,193	84,423
Trade payables	32,409	29,424
Payables to subsidiaries	546	0
Other liabilities	73,754	37,487
Financial liabilities measured at amortized cost	106,709	66,911

The fair value of securities is based on Level 1 in the fair value hierarchy.

The fair value of other investments is based on level 3 in the fair value hierarchy.

At December 31, 2018 and 2017, the carrying amount of other financial assets and financial liabilities approximated the fair value.

Note 13 – Adjustments for non-cash items

DKK thousand	2018	2017
Depreciation	4,508	4,757
Warrant compensation expenses	17,396	20,156
Income tax receipt	0	-5,500
Income tax expense	43,722	0
Financial income	0	-1,751
Financial expenses	1,389	730
Exchange rate adjustments	-8,514	2,387
Total adjustments	58,501	20,779

Note 14 - Change in working capital

DKK thousand	2018	2017
Increase/decrease in receivables	-5,745	6,627
Increase/decrease in payables	16,995	16,675
Change in working capital	11,250	23,302

Note 15 - Transactions with related parties

The parent company had payables to Group subsidiaries of DKK 546 thousand at December 31, 2018 (2017: receivables of DKK 127 thousand). In 2018, interest paid by the parent company to subsidiaries amounted to DKK 0 thousand (2017: DKK 0 thousand).

Note 16 - Allocation of result

The Board of Directors proposes that the parent company's 2018 net result of DKK 498.5 million (2017: net result of DKK – 171.7 million) be carried forward to next year by transfer to retained loss.

Note 17 - Significant events after the balance sheet date

Please refer to note 27 to the consolidated financial statements.

Note 18 – Approval of the annual report

Please refer to note 28 to the consolidated financial statements.

Alternative performance measures for the Group (non-audited).

Net operating expenses

Net operating expenses consist of research, development and administrative expenses less other operating income (excluding net effect from sale of Sanofi royalties and milestones). Net operating expenses is used to show the total cost level, excluding costs related to revenue, i.e. royalty expenses. This is used to show the cost level that needs to be covered by revenues minus royalty expenses in order to show an operating profit. The table below shows a reconciliation of net operating expenses for the years ended 2018, 2017 and 2016:

DKK thousand	2018	2017	2016
Research and development expenses	438,215	324,667	268,159
Administrative expenses	43,542	47,470	52,503
Other operating income	-630	-607	-1,697
Net operating expenses	481,127	371,530	318,965

Free cash flow

Free cash flow is calculated as the sum of cash flows from operating activities and purchase of property, plant and equipment. A positive free cash flow shows that the Group is able to finance its activities and that external financing is thus not necessary for the Group's operating activities. Therefore, Executive Management believes that this non-IFRS liquidity measure provides useful information to investors in addition to the most directly comparable IFRS financial measure "Net cash flow from operating activities." The table below shows a reconciliation of free cash flow for 2018, 2017 and 2016:

DKK thousand	2018	2017	2016
Cash (outflow)/inflow from operating activities	-460,400	-278,746	40,904
Less purchase of property, plant and equipment	-4,038	-7,226	-2,600
Free cash flow	-464,438	-285,972	38,304

Statement of the Board of Directors and Executive Management.

The Board of Directors and Executive Management have today discussed and approved the Annual Report of Zealand Pharma A/S for the financial year January 1 – December 31, 2018.

The consolidated financial statements and parent company financial statements have been prepared in accordance with International Financial Reporting Standards as adopted by the EU and additional requirements under the Danish Financial Statements Act.

We consider the accounting policies used to be appropriate. In our opinion, the financial statements give a true and fair view of the Group's and the parent company's financial position as of December 31, 2018, and of the results of the Group's and the parent company's operations and cash flows for the financial year January 1 – December 31, 2018.

In our opinion, the Management's review includes a fair review of the development of the Group's and the parent company's operations and economic conditions, the results for the year, and the Group's and the parent company's financial position, as well as a review of the principal risks and uncertainties to which the Group and the parent company are exposed.

We recommend that the Annual Report be approved at the Annual General Meeting.

Glostrup, March 7, 2019

Executive Management

Adam Sinding Steensberg

Adam Sinding Steensberg Interim Chief Executive Officer, Executive Vice President and Chief Medical and Development Officer

Board of Directors

1,06602

Alf Gunnar Martin Nicklasson Chairman

Catherine Moukheibir Board member

Hame H. Bak

Hanne Heidenheim Bak Board member Employee elected

Mats Peter Blom Executive Vice President and Chief Financial Officer

Rosemary Crane Board member

Alain Munoz Board member

Jens Peter Stenvang Board member Employee elected

Kirsten Aarup Dreier

Board member

Michael John Owen Board member

Independent auditor's report.

To the shareholders of Zealand Pharma A/S

Opinion

We have audited the consolidated financial statements and the parent financial statements of Zealand Pharma A/S for the financial year January 1 – December 31, 2018 which comprise the income statement, statement of comprehensive income, statement of financial position, statement of changes in equity, statement of cash flows and notes, including a summary of significant accounting policies, for the Group as well as for the Parent. The consolidated financial statements and the parent financial statements are prepared in accordance with International Financial Reporting Standards as adopted by the EU and additional requirements of the Danish Financial Statements Act.

In our opinion, the consolidated financial statements and the parent financial statements give a true and fair view of the Group's and the Parent's financial position at December 31, 2018, and of the results of their operations and cash flows for the financial year Janaury 1 – December 31, 2018 in accordance with International Financial Reporting Standards as adopted by the EU and additional requirements of the Danish Financial Statements Act.

Our opinion is consistent with our audit book comments issued to the Audit Committee and the Board of Directors.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs) and the additional requirements applicable in Denmark. Our responsibilities under those standards and requirements are further described in the Auditor's responsibilities for the audit of the consolidated financial statements and the parent financial statements section of this auditor's report. We are independent of the Group in accordance with the International Ethics Standards Board of Accountants' Code of Ethics for Professional Accountants (IESBA Code) and the additional requirements applicable in Denmark, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

To the best of our knowledge and belief, we have not provided any prohibited non-audit services as referred to in Article 5(1) of Regulation (EU) No 537/2014.

We were first appointed auditors of Zealand Pharma A/S on April 29, 2014 for the financial year 2014. We have been reappointed annually by decision of the general meeting for a total contiguous engagement period of five years up to and including the financial year 2018.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements and the parent financial statements for the financial year January 1 – December 31, 2018 These matters were addressed in the context of our audit of the consolidated financial statements and the parent financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Sale of future royalty and milestones to Royalty Pharma

On September 6, 2018 Zealand Pharma A/S entered into an agreement to sell future royalties and milestones for Soligua[®] 100/33/ Suligua[®] and Lyxumia[®]/ Adlyxin[®] to Royalty Pharma. Under the agreement, Management has concluded that all rights and obligations under the Sanofi Licensing agreement apart from a potential payment from Sanofi of up to USD 15 million, expected in 2020 have been transferred to Royalty Pharma. Zealand Pharma A/S has received USD 205.0 million (DKK 1,310.2 million) upon closing of the transaction on September 17, 2018. This income is presented in the consolidated income statement net of related royalty expenses to third parties amounting to 13.5% or DKK 176.9 million and fees to advisors amounting to DKK 34.5 million representing a net gain of DKK 1,098.9 million. Following the sale. Zealand Pharma A/S has also redeemed the outstanding royalty bond of USD 24.7 million (DKK 157.6 million).

We have identified this transaction as a key audit matter as there is judgement taken by Management and as this is a significant transaction that is out of the scope of the normal business undertaken by Zealand Pharma A/S.

How the matter was addressed in the audit

Based on our risk assessment procedures focused on the Group's business process and internal controls for significant unusual transactions during the year, we tested the appropriateness of the recognition and disclosures related to the transaction. We read the Sales Agreement as well as Management's accounting memo and discussed it with Management and evaluated the related accounting treatment including disclosures. We obtained Management's calculation of the accounting impact of the transaction and evaluated the validity of the calculation by testing the accuracy and completeness of the inputs to such calculation.

Refer to notes 1, 2 and 7 in the consolidated financial statements.

Royalty revenue from Sanofi and related restatement

Royalty revenue recognized in 2018 amounted to DKK 25 million (DKK 35 million in 2017 and DKK 20 million in 2016). Royalty revenue correspond to a 10% royalty on global net sales of a combination of lixisenatide marketed under the brand name Lyxumia[®] and insulin glargine 100 units/ml (Lantus[®]) marketed under the brand name Soliqua[®] 100/33 in the U.S. and as Suliqua[®] in the EU. Sanofi sales of Lyxumia[®] of EUR 9.5 million and sales of Soliqua[®] and Suliqua[®] of EUR 23.8 million generated DKK 25 million of royalty revenue for Zealand Pharma A/S in 2018.

During Q2 2018, it was determined that royalty revenue from Sanofi recognized from 2013 until Q1 2018 included DKK 17.1 million of royalty revenue on net sales in countries with no valid IP protection for Zealand Pharma A/S and therefore revenue had been overstated in this period. As a consequence of this, royalty expenses from 2013 until Q1 2018 has been overstated in this same period. Such misstatements have been corrected with retrospective impact and thus comparable periods as of and for the years ended December 31, 2017, 2016, and 2015, have been restated.

While there is limited Management judgement in determining the appropriateness of recognition of royalty revenue in 2018, we have identified this as a key audit matter as the inputs used in the calculation of royalty revenue are driven by third-party sources and as there was a restatement identified in 2018 related to current and prior period royalty revenue.

How the matter was addressed in the audit

Based on our risk assessment procedures focused on the Group's business process and internal controls for royalty revenue, we tested the appropriateness of the Group's revenue recognition. We read the Sanofi Royalty Agreement, discussed it with Management and evaluated the related accounting treatment. We obtained Management's calculation of royalty revenue and evaluated the validity of the calculation by testing the accuracy and completeness of the inputs to such calculation. In regards to the restatement, we performed testing on the accuracy and completeness of the restatement calculation and ensured that only countries with a valid IP protection for Zealand Pharma A/S was included. We also evaluated the disclosures in the consolidated financial statements related to royalty revenue and the related restatement.

Refer to notes 1 and 2 in the consolidated financial statements.

Statement on the Management review

Management is responsible for the Management review.

Our opinion on the consolidated financial statements and the parent financial statements does not cover the Management review, and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements and the parent financial statements, our responsibility is to read the Management review and, in doing so, consider whether the Management review is materially inconsistent with the consolidated financial statements and the parent financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Moreover, it is our responsibility to consider whether the Management review provides the information required under the Danish Financial Statements Act. Based on the work we have performed, we conclude that the Management review is in accordance with the consolidated financial statements and the parent financial statements and has been prepared in accordance with the requirements of the Danish Financial Statements Act. We did not identify any material misstatement of the Management review.

Management's responsibilities for the consolidated financial statements and the parent financial statements

Management is responsible for the preparation of consolidated financial statements and parent financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the EU and additional requirements of the Danish Financial Statements Act, and for such internal control as Management determines is necessary to enable the preparation of consolidated financial statements and parent financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements and the parent financial statements, Management is responsible for assessing the Group's and the Parent's ability to continue as a going concern, for disclosing, as applicable, matters related to going concern, and for using the going concern basis of accounting in preparing the consolidated financial statements and the parent financial statements unless Management either intends to liquidate the Group or the Entity or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements and the parent financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements and the parent financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and the additional requirements applicable in Denmark will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and these parent financial statements.

As part of an audit conducted in accordance with ISAs and the additional requirements applicable in Denmark, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

 Identify and assess the risks of material misstatement of the consolidated financial statements and the parent financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrep-resentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the Parent's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.
- Conclude on the appropriateness of Management's use of the going concern basis of accounting in preparing the consolidated financial statements and the parent financial statements, and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the Parent'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 consolidated financial statements and the parent 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 Group and the Entity to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements and the parent financial statements, including the disclosures in the notes, and whether the consolidated financial statements and the parent financial statements represent the underlying transactions and events in a manner that gives a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

We also provide those charged with governance 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 those charged with governance, we determine those matters that

were of most significance in the audit of the consolidated financial statements and the parent 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, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Copenhagen, March 7, 2019

Deloitte

Statsautoriseret Revisionspartnerselskab Business Registration No 33 96 35 56

Martin Norin Faarborg State-Authorized Public Accountant MNE no mne29395

Sunit Sida

Sumit Sudan State-Authorized Public Accountant MNE no mne33716

Other information. Sources 103 **Company information** 103

Sources.

Pipeline Overview

- ¹ Partnered with Boehringer Ingelheim. Zealand eligible for EUR 366m in outstanding milestones
- ² Partnered with Boehringer Ingelheim. Zealand eligible for EUR 283m in outstanding milestones
- ³ Partnered with Boehringer Ingelheim

About short bowel syndrome

- ¹ Pironi L et al. Clin Nutr 2016;352:247–307
- ² Jeppesen P. Expert Opin Orphan Drugs 2013;1:515-25
- ³ Bielawska B. Nutrients 2017;9:466-60
- ⁴ Transparency Market Research; Short Bowel Syndrome Market, 2017

Glepaglutide for short bowel syndrome

¹ Naimi, R., ASPEN 2018 Nutrition Science and Practice Conference (Abstract number 2829969t)

ZP7570 (GLP-2/GLP-1) for short bowel syndrome

- ¹ K.B. Madsen, C. Askov-Hansen, R.M. Naimi, C.F. Brandt, B. Hartmann, J.J. Holst, P.B. Mortensen, P.B. Jeppesen, Acute effects of continuous infusions of glucagon-like peptide (GLP)-1, GLP-2 and the combination (GLP-1+GLP-2) on intestinal absorption in short bowel syndrome (SBS) patients. A placebo-controlled study, Regulatory Peptides, Volume 184, 2013, Pages 30-39, ISSN 0167-0115, https://doi.org/10.1016/j.regpep.2013.03.025.
- ² Hvistendahl, M., Brandt, C. F., Tribler, S., Naimi, R. M., Hartmann, B., Holst, J. J., Rehfeld, J. F., Hornum, M., Andersen, J. R., Henriksen, B. M., Brøbech Mortensen, P. and Jeppesen, P. B. (2018), Effect of Liraglutide Treatment on Jejunostomy Output in Patients With Short Bowel Syndrome: An Open-Label Pilot Study. Journal of Parenteral and Enteral Nutrition, 42: 112-121. doi:10.1177/0148607116672265

Dasiglucagon for severe hypoglycemia in diabetes

- ¹ ADA Section 8 2017
- ² ADA Section 6 2017: p60C; p61A; p60D
- ³ Kalra 2013: p9B
- ⁴ International Hypoglycemia Study Group. Diabetes Care. 2015;38:1583–1591.
- 5 Cryer PE 2015: p2C
- ⁶ Lilly-rglucagon-ppi: p1A; p2A; p3A
- ⁷ GlucaGen[®] Instructions for use: p1A; p2A
- ⁸ Needle-free nasal delivery of glucagon is superior to injectable delivery in simulated hypoglycaemia rescue, ePoster # 867, EASD 2015, Stockholm.
- 9 National Diabetes Statistics Report. CDC. 2014.
- ¹⁰ Company announcement No. 23/2018, Zealand Pharma achieves primary and key secondary endpoints in pivotal Phase 3 trial with dasiglucagon for severe hypoglycemia
- ¹¹ Time to plasma glucose recovery defined as first increase in plasma glucose of >/=20 mg/dL (1.1 mmol/L) from baseline without administration of rescue intravenous glucose

Dasiglucagon for fully automated management of type 1 diabetes

- ¹ ADA Section 8 2017: p71A
- ² ADA Section 6 2017: p60C; p61A
- ³ Nicole C. Foster, et al, and for the T1D Exchange Clinic Network. Diabetes Technology & Therapeutics. Feb 2019.

Rare Diseases: Dasiglucagon for congenital hyperinsulinism

- ¹ Yorifuji et al. Pediatrics International 2014;56:467
- ² Welters A, Lerch C, Kummer S, Marquard J, Salgin B, Mayatepek E, Meissner T. Long-term medical treatment in congenital hyperinsulinism: a descriptive analysis in a large cohort of patients from different clinical centers. Orphanet Journal of Rare Disease. (2015) 10;150
- ³ https://www.orpha.net/consor/cgi-bin/ (not including transient cases due to perinatal stress or diabetic mother)
- ⁴ Congenital Hyperinsulinism International. Available at: http://congenitalhi.org

Company information.

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Auditors

Deloitte Statsautoriseret Revisionspartnerselskab CVR no.: 33 96 35 56

