



Fourth quarter and
full year results

2018

targovax

About Targovax

Activating the patient's immune system to fight cancer

Targovax (OSE:TRVX) is a clinical stage biotechnology company developing immune activators to target hard-to-treat solid tumors. Immuno-oncology is currently one of the fastest growing therapeutic fields in medicine.

Targovax's lead product candidate, ONCOS-102, is a genetically modified oncolytic adenovirus, which has been engineered to selectively infect and replicate in cancer cells. It has been shown to activate the immune system to generate tumor-specific immune responses. In phase I trials, ONCOS-102 induced both local and systemic innate and adaptive immune activation, which has been associated with clinical benefit. ONCOS-102's targeted path-to-market indication is mesothelioma, where the virus is currently being tested in a randomized phase II trial. Another trial, in checkpoint inhibitor refractory advanced melanoma, is expected to produce important proof-of-concept immune activation data in heavily pre-treated patients.

Targovax is also developing a neoantigen cancer vaccine targeting tumors with oncogenic RAS-mutations, which are known to drive cancer. The TG vaccine program has shown strong RAS-specific immune activation and a signal of clinical efficacy in a 32-patient trial with TG01 in resected pancreatic cancer. A next generation product candidate, TG02 is currently tested in a phase I trial in colorectal cancer, both as monotherapy and in combination with Keytruda (an anti-PD1 check point inhibitor).

Please visit www.targovax.com for more information.

Upcoming events

- 17-20 March:** Roth Annual conference, Orange County, USA
- 18-22 March:** Immuno-Oncology Summit Europe, London, UK
- 25-27 March:** BioEurope, Vienna, Austria

Upcoming milestones

- 1H2019:** ONCOS-102 phase I trial in checkpoint inhibitor refractory advanced melanoma
– *ORR and immune data first cohort*
- 1H2019:** TG02 phase I trial in colorectal cancer
– *Immune activation and mechanistic data (TG monotherapy cohort)*
- 1H2019:** TG01 phase I/II trial in resected pancreatic cancer
– *3-year survival data*

Financial Calendar 2019

- 9 April:** Annual General Meeting
- 9 May:** First quarter report and presentations
- 22 August:** Second quarter report and presentation
- 7 November:** Third quarter report and presentation

Fourth quarter highlights

Further progress made across the ONCOS program, and further strengthening of the TG01 data set in resected pancreatic cancer

- In October, the Company reported the full data set from the TG01 trial in resected pancreatic cancer. The trial showed six months improvement in median overall survival (mOS) data over comparable historical control trials and RAS-specific immune activation in 94% of patients
- In October, the Company hosted a Key Opinion Leader Symposium on oncolytic viruses in New York City, with speakers from Memorial Sloan Kettering Cancer Centre presenting an overview of the oncolytic virus space and encouraging interim data from the ONCOS-102 trial in CPI refractory advanced melanoma

Post-period highlights

- In January 2019, Targovax announced that the European Patent Office has granted a European Patent which protects Targovax' mutant-RAS specific neoantigen peptides, mutant RAS specific T-cells and vaccines TG01 and TG02, for the treatment of cancer in combination with chemotherapies. This extends Intellectual property (IP) protection of TG01 and TG02 into 2034
- In February 2019, Targovax announced that the first patient has been treated in the dose expansion cohort of the ONCOS-102 trial in melanoma

Key Figures

<i>Amounts in NOK thousands</i>	4Q 2018	4Q 2017	FY 2018	FY 2017
Total operating revenues	6	5	27	37
Total operating expenses	-42 248	-32 450	-146 127	-119 963
Operating profit/loss	-42 242	-32 445	-146 100	-119 926
Net financial items	1 434	-103	-1 249	-2 347
Income tax	86	87	334	328
Net profit/loss	-40 723	-32 461	-147 015	-121 945
Basic and diluted EPS (NOK/share)	-0.77	-0.62	-2.79	-2.58
Net change in cash	-22 026	-24 195	-110 384	89 944
Cash and cash equivalents start of period	173 215	285 768	261 573	171 629
Cash and cash equivalents end of period	151 189	261 573	151 189	261 573



Øystein Soug, CEO

“2018 was the year when we really started to see data read-outs from our two immune activator programs. ONCOS showed the first signs of efficacy in combination trials with both check-point inhibitors and chemotherapy. TG became the first therapeutic cancer vaccine to clinically demonstrate T-cell activation towards a driver mutation, mutant RAS, combined with a clear signal of survival benefit in resected pancreatic cancer patients. We now look forward towards 2019 and 2020 as we continue to progress our clinical program and unlock the full potential of both of these platforms.”

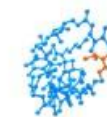
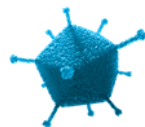
Clinical development program overview

Platform	Product candidate	Preclinical	Phase I	Phase II	Phase III	Last event	Next expected event
ONCOS oncolytic adenovirus	ONCOS-102	Mesothelioma Comb. w/ pemetrexed/cisplatin				Phase Ib safety lead-in cohort, incl. immune activation and ORR data (6 pts)	1H 2020 Randomized ORR data 30 pts
		Melanoma Comb. w/Keytruda®				ORR and immune activation (6 pts), 1/6 CR	1H 2019 ORR and immune data first cohort
		Peritoneal metastases ¹ Collab: Ludwig, CRI & AZ Comb. w/Imfinzi®				First dose escalation cohort safety review (4 pts)	Update by collaborator, expected 2019
		Prostate Collab: Sotio Comb. w/DCVAC				First patient dosed	Update by collaborator, expected 2019
	Next-gen ONCOS	3 viruses undisclosed				Virus construct cloning and <i>in vitro</i> validation	2H 2019 Pre-clinical data
TG neo- antigen cancer vaccine	TG01	Pancreatic cancer Comb. w/gemcitabine				mOS 33.4 months Demonstrated mutant RAS- specific immune activation	1H 2019 3-year survival data
	TG02	Colorectal cancer Proof-of-mechanism Comb. w/Keytruda®				First safety review, incl. immune activation data (3 pts)	1H 2019 Immune activation and mechanistic data (mono)
	TG02	CPI synergy TG + PD-1					2H 2019 Pre-clinical data

¹ Patients with advanced peritoneal disease, who have failed prior standard chemotherapy and have histologically confirmed platinum-resistant or refractory epithelial ovarian or colorectal cancer

CPI – Checkpoint inhibitor

■ Ongoing collaborator sponsored trials



Mesothelioma

- Randomized phase II open label trial
- 30 1st line and 2nd line patients with unresectable malignant pleural mesothelioma
- Intra-tumoral ONCOS-102 in combination with standard of care, pemetrexed / cisplatin
- End-points: safety of the combination treatment, immune activation and overall response rates (ORR) at 6 months
- The trial is being conducted at four sites in Spain and France
- Most recent read-out: 6-patient safety lead-in cohort reported in April 2018
 - First safety review passed with no concerns
 - 50% disease control rate (DCR)
 - 100% innate immune activation
 - Tumor T-cell infiltration in 3/4 patients with available biopsy material
 - *De novo* tumor-specific T-cells

Peritoneal disease

- Collaboration with US-based Cancer Research Institute (CRI) and Ludwig Cancer Research (Ludwig, trial sponsor)
- Non-randomized, open-label, multi-center phase I/II trial
- Up to 78 patients who have failed prior standard chemotherapy and have histologically confirmed platinum-resistant or refractory epithelial ovarian or colorectal cancer
- Intraperitoneally administered ONCOS-102 in combination with Imfinzi (durvalumab, anti-PD-L1 antibody), in advanced peritoneal disease
- End-points: safety, biologic and anti-tumor activity of the combination
- The trial is being conducted at five sites in US
- Most recent read-out: First 4 patients reported in July 2018
 - First safety review passed with no concerns

Melanoma

- Open-label, single arm phase I trial
- 9+12 patients (two dose cohorts) with advanced CPI refractory melanoma
- Intra-tumoral ONCOS-102 in combination with Keytruda (pembrolizumab)
- End-points: safety of the combination treatment, immune activation, overall response rates (ORR) at 6 months and survival rates
- The trial is being conducted at three US sites: Memorial Sloan Kettering (NY), Fox Chase Cancer Center (PA), and University of Maryland (MA)
- Most recent read-out: First 6 patients reported in October 2018
 - First safety review passed with no concerns
 - 1 patient with complete response (CR)
 - Innate immune activation in all 6 patients
 - Increased tumor T-cell infiltration in 3/4 evaluable patients

Prostate Cancer

- Collaboration with the Czech biotech company Sotio, which is sponsoring the trial
- Open label, single-arm phase I/II trial
- Up to 15 patients with advanced metastatic castration-resistant prostate cancer
- Intra-tumoral ONCOS-102 in combination with Sotio's dendritic cell therapy DCVAC/PCa
- End-points: safety and tolerability of the combination
- The trial is being conducted at one site in the Czech Republic
- First patient was dosed in July 2018

Pancreatic Cancer (TG01)

- Phase I/II trial
- 32 patients recruited: two cohorts of 19 and 13 patients respectively, with resected adenocarcinoma of the pancreas
- Intradermal TG01 in combination with gemcitabine (standard of care at time of the trial start)
- End-points: clinical benefit of the combination
- The trial was conducted in the UK and Norway
- Full data read-out:
 - Median overall survival: 33.4 vs. 27.6 months in ESPAC4 trial for gemcitabine alone (from time of surgery)
 - First cohort: 33.1 months
 - Second cohort: median not yet reached
 - Median disease-free survival: 16.1 vs. 13.1 months in ESPAC4 trial for gemcitabine alone (from time of surgery)
 - First cohort 13.9 months
 - Second cohort 19.5 months

Colorectal Cancer (TG02)

- Open label, non-randomized, phase Ib exploratory trial
- 6 + up to 6 patients (two independent parts) with local primary and recurrent colorectal cancer scheduled to have surgery
- Intradermal TG02, first as monotherapy and then in combination with Keytruda (pembrolizumab), an anti-PD1 checkpoint inhibitor (CPI)
- End-points: to determine safety and immune activation
- The trial is being conducted at five sites in Australia and New Zealand
- Most recent read-out, early exploratory clinical results indicate that:
 - TG02 induced immune activation in patients, including evidence of activated tumor-infiltrating T-cells
 - Increased PD-1 expression was observed in both circulating and tumor-infiltrating T-cells

Operational review

During the period Targovax continued to progress its clinical programs, both through its own clinical trials and through collaborations.

Targovax's strategy is to apply its immunotherapeutic platforms in multiple cancer indications. The Company intends to retain the option to bring products to market directly or to partner with pharmaceutical companies.

Clinical development programs

ONCOS-102 in mesothelioma

Mesothelioma is the path-to-market indication for ONCOS-102. Data from six patients in the safety lead-in cohort of the ongoing randomized 30 patient phase I/II trial were reported in 2018. Interim analysis of these first six patients show 3/6 (50%) disease control rate (DCR) with stable disease (SD) in two patients and partial response (PR) in one patient. In addition, early immune activation was assessed for a subset of the patients. Systemic release of several pro-inflammatory cytokines was observed (6/6 patients analyzed), demonstrating that the treatment triggers an innate immune response. Also, there was an increase in the relative level of tumor infiltrating cytotoxic CD8+ T-cells (3/4 patients with pre- and post-treatment biopsies analyzed), indicating an activation of the adaptive immune system in the lesions as well as suggesting that the treatment triggers changes in the tumor microenvironment. These data indicate that the treatment of ONCOS-102 in combination with chemotherapy induces relevant immune activation in patients. The interim clinical benefit rate is encouraging, and we are currently recruiting the last patients to the randomized part of the trial.

ONCOS-102 in checkpoint inhibitor refractory melanoma

In September 2018, Targovax announced promising interim clinical response results from the open-label ONCOS-102 phase I trial in advanced melanoma patients who have become refractory to prior checkpoint inhibitor treatment and are then treated with ONCOS-102 in combination with Keytruda. This followed an earlier announcement of results from the trial that indicated ONCOS-102 had elicited immune activation in patients consistent with the proposed mechanism of action. The results from the first six patients were presented by Dr. Shoushtari, a medical oncologist at Memorial Sloan Kettering Cancer Center and the principal investigator of the trial, at a Key Opinion Leader event hosted by Targovax in New York City on 11 October 2018.

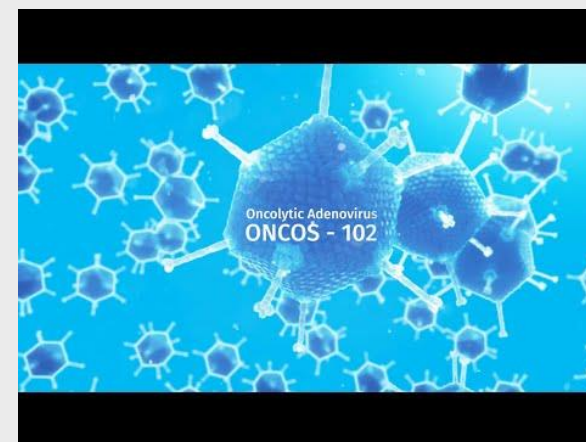
The interim clinical response data showed that one out of the first six patients had a complete response. Importantly, despite prior treatment with the checkpoint inhibitors Yervoy and Keytruda, this patient's disease had progressed before being recruited into the Targovax trial. Examination of samples from this patient confirmed a strong innate immune response, followed by a large increase in tumor infiltrating T-cells (TILs). Most importantly, these TILs displayed a specific adaptive T-cell response to known tumor antigens. These observations confirm that the combination of ONCOS-102 and Keytruda can induce immune responses in treatment refractory patients, with an associated clinical benefit.

In addition, further analysis of 4 of the 6 patients showed that:

- It was possible to induce a strong innate immune response in 3 of these 4 previously CPI refractory patients (one being the complete responder)
- Substantial T-cell penetration was seen in 2 of these 4 previously CPI refractory patients compared to baseline (one being the complete responder)
- In 1 of the 2 patients displaying substantially increased TILs, it was possible to identify TILs in a non-injected lesion, confirming that the immune activation initiated at the injection site was able to cause TIL activity in a distal lesion.

These observations are consistent with the projected mechanism of action of the ONCOS-102/Keytruda combination treatment. Consequently, Targovax and the investigators are now planning to expand the number of patients in the trial and increase the number of ONCOS-102 injections each patient receives.

To learn more about ONCOS-102's mechanism of action, watch our latest video which is available either by clicking on the image to the right or via our website.



TG01 in pancreatic cancer

In May 2018, Targovax reported encouraging median overall survival (mOS) of 33.4 months for the full 32 patients included in the phase I/II trial TG01, in combination with gemcitabine in resected adenocarcinoma of the pancreas. Within the study, the first cohort consisted of 19 patients, receiving TG01 injections, before, during and after adjuvant chemotherapy treatment, whilst the second cohort of 13 patients received TG01 injections before and after adjuvant chemotherapy. It is notable that the second cohort had not yet reached mOS. Earlier, Targovax has reported data from the first patient cohort showing 2-year survival rate of 68% (13/19 patients) and mOS of 33.1 months, as well as 2-year survival rate of 77% (10/13 patients) in the second patient cohort.

The expanded data set for the trial, reported in October 2018, showed improved median disease-free survival (DFS) compared to historical controls of gemcitabine monotherapy. The median DFS for all 32 patients was 16.1 months. The first cohort had a median DFS of 13.9 months and the second cohort with an optimized dosing regimen had a median DFS of 19.5 months.

Targovax is encouraged to see an excellent safety profile of TG01 in resected pancreas, over 90% immune activation and signal of efficacy compared to historical control. Following these results, Targovax has had incoming interest from collaborative cancer networks to participate in further trials, each of which is likely to be a combination trial. The Company is pursuing these opportunities actively. Additionally, following the encouraging TG01 results, Targovax is currently planning to conduct a further proof-of-concept trial in combination with PD-1/L1 blockade in a suitable patient population. In addition, pre-clinical studies are being run to characterize the mechanism of action and the postulated synergy in combination with CPIs.

TG02 in colorectal cancer

TG02 is the second-generation pipeline candidate from the TG mutRAS (mutated RAS) neoantigen vaccine platform, which is currently being tested in colorectal cancer with assessment of safety and immune markers.

Early exploratory clinical results indicate that TG02 induces immune responses in patients including evidence of activated tumor-infiltrating T-cells. In addition, PD-1 expression was observed in both circulating and tumor-infiltrating T-cells. This further strengthens the rationale for combining TG02 with a PD-1 checkpoint inhibitor. Based on these initial safety and immune activation findings, the Company and investigators have decided to move the trial into the second cohort in which TG02 will be combined with the checkpoint inhibitor Keytruda.

Clinical trials with collaboration partners

Through our collaborations with Cancer Research Institute and Ludwig Cancer Research in peritoneal disease, and Sotio in prostate cancer, Targovax leverages its own clinical development expertise with access to leading external networks. In these collaboration trials, Targovax has retained all commercial rights to its products.

Preclinical development

Targovax has conducted *in vivo* studies of ONCOS-102 in mesothelioma and melanoma mouse models to validate the scientific rationale for the clinical combination strategies in these indications. Data were published in leading, peer reviewed publications, the Journal of Medical Virology and Cancer Gene Therapy.

In an immunodeficient mesothelioma mouse model, it was shown that ONCOS-102 acts synergistically to reduce tumor volume with the chemotherapy combination of pemetrexed and cisplatin (Pem/Cis), which is the current standard of care in malignant pleural mesothelioma. We have also demonstrated that ONCOS-102 induced CD8+ T-cells specific to the tumor associated antigen (TAA) mesothelin, which is typically overexpressed in mesothelioma, as well as many other forms of cancer (Kuryk et al, 2018, JMV).

- Pem/Cis alone did not reduce tumor volume
- ONCOS-102 alone reduced tumor volume by 56%
- ONCOS-102 + Pem/Cis reduced tumor volume by 75% relative to Pem/Cis alone and by 33% relative to ONCOS-102 alone
- ONCOS-102 induced a mesothelin specific T-cell response (ELISPOT analysis)

The efficacy of the combination of ONCOS-102 and PD-1 checkpoint inhibition (Keytruda, two different doses) has been assessed in a humanized melanoma mouse model, which showed a synergistic anti-tumor effect of ONCOS-102 and PD-1 blockade:

- Keytruda alone at both doses did not reduce tumor volume
- ONCOS-102 reduced tumor volume by 51%
- ONCOS-102 + Keytruda reduced volume by 61% (lower dose) and 69 % (higher dose)

These *in vivo* data demonstrate the efficacy of ONCOS-102 as a single agent, as well as the potential to act synergistically with both chemotherapy and checkpoint blockade, and thus underpin the scientific rationale for the ongoing mesothelioma and melanoma clinical trials.

IPR / Market protection

Targovax owns a broad patent portfolio which is designed to protect its pipeline and includes different families of patents and patent applications covering product candidates in development, and relevant combination therapies. This patent portfolio also covers potential future product candidates. The Company continuously works to strengthen its patent portfolio.

The Company has attained Orphan Drug Designation (ODD) in the EU and US for the use of ONCOS-102 in mesothelioma, ovarian cancer, and soft tissue sarcoma, ensuring up to 10 years of market protection from the date of market approval in any of these indications. The use of TG01 in pancreatic cancer has been granted ODD in the EU and US. In November 2016, Targovax was granted a European patent for ONCOS-102, following the award of a similar US patent in June 2016. These patents expire in 2029.

In September 2017, Targovax was granted a US patent for its mutRAS neoantigen platform that protects the therapeutic cancer vaccine candidates TG01 and TG02 for the treatment of cancer in combination with anti-metabolite chemotherapy. This patent expires in 2035. US and European patents were granted in October 2017 and June 2018 respectively that protects Targovax's mutRAS specific neoantigen vaccine candidate TG02 as a composition of matter to stimulate the immune system of cancer patients with RAS-mutated tumors. These patents expire in 2034 and 2033, respectively.

Experienced team

Targovax has an experienced senior management team with a strong range of backgrounds from successful biotech and global pharmaceutical companies, as well as extensive experience from management consulting.

Management team

As per 13 February 2019

Name	Position
Øystein Soug	CEO
Magnus Jäderberg	CMO
Torbjørn Furuseth	CFO
Erik Digman Wiklund	CBO
Anne-Kirsti Aksnes	VP Clinical
Berit Iversen	VP CMC

Board of Directors

As per 13 February 2019

The Board of Directors consists of seasoned professionals with a broad range of complementary competencies:

From left: Catherine A. Wheeler, Johan Christenson, Robert Burns, Patrick Vink, Bente-Lill Romøren, Per Samuelsson, Diane Mellett and Eva-Lotta Allan.



Financial review

Results fourth quarter 2018

In the fourth quarter 2018 and 2017 Targovax had no core business revenue.

Operating expenses amounted to NOK 42m (NOK 32m) in the quarter. The operating expenses are reported net of governmental grants which amounted to NOK 1m in the period (NOK 2m). The net loss amounted to NOK 41m in the fourth quarter 2018 (NOK 32m).

Full year results 2018

Operating expenses amounted to NOK 146m (NOK 120m) during this period.

The operating expenses are presented net of governmental grants. The grants during the full year 2018 amounted to NOK 5m (NOK 6m).

The net loss for the period amounted to NOK 147m (NOK 122m).

Financial position and cash flow

Cash and cash equivalents were NOK 151m at the end of the fourth quarter 2018 compared to NOK 173m at the end of third quarter 2018 and NOK 262m at the end of fourth quarter 2017.

Net cash flow from operating activities during the fourth quarter was negative by NOK 25m compared to negative NOK 27m in the third quarter 2018 and NOK 24m in fourth quarter 2017.

By the end of the period, total outstanding interest-bearing debt amounted to EUR 6m, all to Business Finland. The Finnish trade promotion organization and the Finnish Funding Agency for Technology and Innovation (TEKES) united as Business Finland in 2018.

Share information

In July 2016, Targovax shares were listed on the Oslo Axess exchange under the ticker TRVX. In March 2017 Targovax moved its share listing from Oslo Axess to Oslo Børs, the main board at the Oslo Stock Exchange. By 1 February 2019, there were 52,616,448 shares outstanding, distributed between 3,976 shareholders. The 20 largest shareholders-controlled 54.9% of the shares.

During Q4 2018, Targovax shares traded in the NOK 7.30 – 12.20 range. During the quarter, some 11,2 million shares were traded, with an aggregate trading value of NOK 100million.

The closing price on 31 December 2018 was NOK 6.99 per share, corresponding to a market value of NOK 362 million.

The estimated share ownership situation on 1 February 2019:

Shareholder	Estimated	
	Shares million	Ownership
HealthCap	12.4	23.6 %
RadForsk	4.4	8.4 %
Nordea	4.1	7.8 %
KLP	1.6	3.1 %
Thorendahl Invest	1.2	2.3 %
Danske Bank (nom.)	0.8	1.6 %
Prieta	0.7	1.4 %
Timmuno	0.7	1.3 %
Sundt	0.5	1.0 %
Meyerløkka	0.3	0.6 %
10 largest shareholders	26.8	50.9 %
Other shareholders (3 966)	25.8	49.1%
Total shareholders	52.6	100.0 %

Subsequent events

In January 2019, Targovax announced that the European Patent Office has granted a European Patent which protects Targovax' mutant-RAS specific neoantigen peptides, mutant RAS specific T-cells and vaccines TG01 and TG02, for the treatment of cancer in combination with chemotherapies. This extends IP protection of TG01 and TG02 into 2034.

In February 2019, Targovax announced that the first patient has been treated in the dose expansion cohort of the ONCOS-102 trial in melanoma.

Risks and uncertainty factors for the fourth quarter 2018

The Company's business is exposed to a number of general operational and financial risks which have been explained in Targovax's annual report 2017 as well as in the recent prospectus, both available at www.targovax.com.

Outlook

There is much excitement in the industry for the potential of oncolytic viruses and with our ONCOS platform we have the potential to become a key player in this market. We keep in frequent contact with a number of pharmaceutical and biotech companies regarding, inter alia, collaborations on trials and supply of combination products. We have four ongoing clinical trials for our ONCOS-102 program, which delivered encouraging data during the year and we expect several meaningful data read-outs over the next 12-18 months.

We remain confident in the potential of the TG neoantigen vaccine platform to treat mutant RAS cancers as shown by the encouraging results from the TG01 trial in resected pancreatic cancer. We are in active discussions with a number of collaborative groups who have expressed interest in sponsoring pancreatic cancer combination trials. We are also excited by the potential of TG02, our second-generation pipeline candidate from the TG platform, which is currently being tested in a phase Ib exploratory trial in colorectal cancer.

We enter 2019 with optimism and look forward to providing further updates on our clinical progress.

Oslo, 13 February 2019

The Board of Directors of Targovax ASA

Patrick Vink
Chairperson of the Board

Catherine A. Wheeler
Board Member

Eva-Lotta Allan
Board Member

Per Samuelsson
Board Member

Johan Christenson
Board Member

Diane Mellett
Board Member

Bente-Lill Romøren
Board Member

Robert Burns
Board Member

Øystein Soug
CEO

Fourth quarter and full year results 2018

Condensed consolidated statement of profit and loss

<i>Amounts in NOK thousands except per share data</i>	<i>Note</i>	Unaudited 4Q 2018	Unaudited 4Q 2017	Unaudited FY 2018	FY 2017
Other revenues		6	5	27	37
Total revenue		6	5	27	37
External R&D expenses	3,4	-21 001	-12 210	-64 006	-45 571
Payroll and related expenses	5,11	-14 338	-13 045	-56 433	-48 278
Other operating expenses	3,4	-6 909	-7 195	-25 688	-26 114
Total operating expenses		-42 248	-32 450	-146 127	-119 963
Operating profit/ loss (-)		-42 242	-32 445	-146 100	-119 926
Finance income		1 702	753	3 068	1 654
Finance expense		-269	-856	-4 317	-4 001
Net finance income/ expense (-)		1 434	-103	-1 249	-2 347
Loss before income tax		-40 808	-32 548	-147 349	-122 273
Income tax income/ expense (-)		86	87	334	328
Loss for the period		-40 723	-32 461	-147 015	-121 945
Earnings/ loss (-) per share					
Basic and dilutive earnings/loss (-) per share	10	-0.77	-0.62	-2.79	-2.58

Consolidated statement of other comprehensive income/ loss (-), net of income tax

<i>Amounts in NOK thousands except per share data</i>	4Q 2018	4Q 2017	FY 2018	FY 2017
Income/ loss (-) for the period	-40 723	-32 461	-147 015	-121 945
Items that may be reclassified to profit or loss:				
Exchange differences arising from the translation of foreign operations	13 027	11 760	2 620	21 308
Total comprehensive income/ loss (-) for the period	-27 696	-20 701	-144 395	-100 638



Condensed consolidated statement of financial position

<i>Amounts in NOK thousands</i>	<i>Note</i>	Unaudited 31.12.2018	31.12.2017
ASSETS			
Intangible assets	6	370 240	366 250
Property, plant, and equipment		889	1 165
Total non-current assets		371 128	367 414
Receivables		15 320	14 620
Cash and cash equivalents		151 189	261 573
Total current assets		166 509	276 193
TOTAL ASSETS		537 637	643 608

<i>Amounts in NOK thousands</i>	<i>Note</i>	Unaudited 31.12.2018	31.12.2017
EQUITY AND LIABILITIES			
Shareholders' equity			
Share capital	9	5 262	5 261
Share premium reserve		821 131	821 161
Other reserves		41 239	29 276
Retained earnings		-522 481	-375 466
Translation differences		29 546	26 926
Total equity		374 696	507 158
Non-current liabilities			
Interest-bearing liabilities	7	43 933	48 806
Deferred tax		59 632	59 350
Total non-current liabilities		103 565	108 156
Current liabilities			
Interest-bearing liabilities	7	9 127	
Accounts payable and other current liabilities		12 372	7 601
Accrued public charges		3 370	3 018
Other short-term liabilities		34 508	17 676
Total current liabilities		59 377	28 294
TOTAL EQUITY AND LIABILITY		537 637	643 608

Condensed consolidated statement of changes in equity

<i>Amounts in NOK thousands</i>	<i>Note</i>	Share capital	Share premium	Other reserves	Translation differences	Retained earnings (Accumulated losses)	Total equity
Balance at 31 December 2016		4 219	627 796	17 055	5 618	-253 521	401 168
Loss for the period						-121 945	-121 945
Exchange differences arising from the translation of foreign operations		-	-	-	21 308	-	21 308
Other comprehensive income/loss, net of tax		-	-	-	-	-	-
Total comprehensive income for the period					21 308	-121 945	-100 638
Issue of ordinary shares - Capital increase - Private Placement and repair offering	9	1 032	205 433				206 465
Transaction costs - Private Placement and repair offering			-12 256				-12 256
Share issuance, employee share options & RSU's	9	10	189	-	-	-	198
Recognition of share-based payments & RSU's	11	-		12 220	-	-	12 220
Balance at 31 December 2017		5 261	821 161	29 276	26 926	-375 466	507 158
Loss for the period						-147 015	-147 015
Exchange differences arising from the translation of foreign operations		-	-	-	2 620	-	2 620
Other comprehensive income/loss, net of tax		-	-	-	-	-	-
Total comprehensive income for the period					2 620	-147 015	-144 395
Share issuance, employee share options & RSU's	9	1	-30	-	-	-	-30
Recognition of share-based payments & RSU's	11	-		11 963	-	-	11 963
Balance at 31 December 2018		5 262	821 131	41 239	29 546	-522 481	374 696

Condensed consolidated statement of cash flow

Amounts in NOK thousands	Note	Unaudited 4Q 2018	Unaudited 4Q 2017	Unaudited FY 2018	FY 2017
Cash flow from operating activities					
Loss before income tax		-40 808	-32 548	-147 349	-122 273
Adjustments for:					
Finance income		-1 702	2 046	-3 068	-1 654
Finance expense		269	-1 942	4 317	4 001
Interest received		1 179	1 366	1 554	1 366
Other finance expense		10	-28	-88	-93
Share option & RSU expense	11	2 461	3 343	11 963	12 220
Depreciation		78	75	308	296
Change in receivables		4 538	1 288	-700	-417
Change in other current liabilities		9 448	2 235	21 496	-919
Net cash flow from/(used in) operating activities		-24 528	-24 165	-111 568	-107 472
Cash flow from investing activities					
Purchases of property, plant, and equipment (PPE)					-56
Net cash received from/(paid in) investing activities		-	-	-	-56
Cash flow from financing activities					
Loan from Business Finland (TEKES)	7				2 992
Interest paid	7	-211	-201	-607	-579
Share issue expense - Private Placement and repair offering			-20		-12 256
Proceeds from issuance of shares - Private Placement and repair offering					206 465
Proceeds from exercise of options & RSU's		-1		-30	198
Net cash generated from financing activities		-212	-221	-637	196 820
Net increase/(decrease) in cash and cash equivalents		-24 740	-24 386	-112 204	89 292
Net exchange gain/loss on cash and cash equivalents		2 713	191	1 820	651
Cash and cash equivalents at beginning of period		173 215	285 768	261 573	171 629
Cash and cash equivalents at end of period		151 189	261 573	151 189	261 573

Notes

1. General information

Targovax ASA ("the Company") and its subsidiaries (together the Group) is a clinical stage immuno-oncology company dedicated to the development of targeted immunotherapy treatments for cancer patients.

The Group is targeting complementary approaches to cancer immunotherapy: a cancer vaccine platform developed for patients with RAS-mutated cancers and an immunotherapy platform based on engineered oncolytic viruses armed with potent immune-stimulating transgenes for patients with solid tumors. Both treatment approaches harness the patient's own immune system to fight cancer.

The Company is a limited public liability company incorporated and domiciled in Norway and listed on the Oslo Stock Exchange in Norway. The address of the registered office is Lilleakerveien 2C, 0283 Oslo, Norway.

The condensed interim financial information is unaudited. These financial statements were approved for issue by the Board of Directors on 13 February 2019.

2. Accounting principles

The interim condensed consolidated financial statements for the Group are prepared using the same accounting principles and calculation methods as used for the statutory, annual financial statements 2017 for Targovax ASA.

The accounting principles used have been consistently applied in all periods presented, unless otherwise stated.

Amounts are in thousand Norwegian kroner unless stated otherwise. The Groups presentation currency is NOK (Norwegian kroner). This is also the parent company's functional currency.

2.1 Basis of preparation

The quarterly financial statements of the Group have been prepared in accordance with IAS 34 Interim Financial Reporting, as adopted by the EU.

2.2 Standards and interpretations in issue but not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2018 reporting periods and have not been early adopted by the Group. These new standards and interpretations is assessed to be of no material impact for the Group in 2018.

2.3 Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries. As at 31 December 2018, Targovax OY, located in Helsinki, Finland, and Targovax Solutions LLC, located in Delaware, USA are 100% owned and controlled subsidiaries.

2.4 Going concern

As a result of the private placement and the subsequent offering in the third quarter 2017 and the current liquidity situation, Targovax's Directors expect that the Group has available financial resources sufficient for all planned activities in the next twelve months as of 31 December 2018. The Group therefore continues to adopt the going concern basis in preparing its consolidated financial statements.

3. Research and development expenses

The Group is developing new products. Uncertainties related to the regulatory approval process and results from ongoing clinical trials generally indicate that the criteria for asset recognition is not met until the time when marketing authorization is obtained from relevant regulatory authorities.

The following research and development expenditures have been expensed:

<i>Amounts in NOK thousands</i>	4Q 2018		4Q 2017		FY 2018		FY 2017	
	Total	of which R&D	Total	of which R&D	Total	of which R&D	Total	of which R&D
External R&D expenses	21 001	21 001	12 210	12 210	64 006	64 006	45 571	45 571
Payroll and related expenses	14 338	7 632	13 045	7 284	56 433	30 210	48 278	25 727
Other operating expenses	6 909	176	7 195	347	25 688	941	26 114	1 217
Total operating expenses	42 248	28 809	32 450	19 840	146 127	95 157	119 963	72 515

The model for calculation of the R&D share of Payroll and related expenses was changed during fourth quarter 2018. This results in changes in the R&D share of Payroll and related expenses for comparative periods throughout the years 2018 and 2017.

4. Government grants

Government grants have been recognized in profit or loss as a reduction of the related expense with the following amounts:

<i>Amounts in NOK thousands</i>	4Q 2018	4Q 2017	FY 2018	FY 2017
External R&D expenses	1 005	1 239	4 077	4 387
Payroll and related expenses	184	444	1 105	1 261
Other operating expenses	6	43	80	124
Total grants	1 195	1 726	5 263	5 772

R&D projects have been approved for SkatteFUNN and other grants through 2019. For the fourth quarter and full year 2018, the Group has recognized NOK 1.2m and NOK 5.3m as cost reduction in External R&D expenses, Payroll and related expenses and Other operating expenses.

See note 8 Government grants in the Annual Report 2017 for more information about grants.

5. Payroll and related expenses

Total payroll and related expenses for the Group are:

<i>Amounts in NOK thousands</i>	4Q 2018	4Q 2017	FY 2018	FY 2017
Salaries and bonus	9 575	8 300	37 547	30 043
Employer's national insurance contributions	1 358	1 090	4 723	4 277
Share-based compensation ¹⁾	2 461	3 343	11 963	12 220
Pension expenses – defined contribution plan	441	490	2 028	1 982
Other	687	265	1 279	1 016
Governmental grants	-184	-444	-1 105	-1 261
Total payroll and related expenses	14 338	13 045	56 433	48 278

1) Share-based compensation has no cash effect.

Number of employees calculated on a full-time basis as at end of period	25,6	26,7
Number of employees as at end of period	26	27

6. Intangible assets

As of 31 December 2018, the recognized intangible assets in the Group amounts to NOK 370m. This is an increase from NOK 366m as of 31 December 2017, due to NOK/EUR foreign exchange fluctuations. The intangible assets are derived from the acquisition of Oncos Therapeutics OY, which was completed in July 2015 and related to the development of ONCOS-102.

Intangible assets are tested for impairment at least annually, or when there are indications of impairment.

The impairment test is based on an approach of discounted cash flows. The valuation is sensitive to several assumptions and uncertainties, and the result from the valuation is thus limited to ensure sufficient certainty for the recognized amount in the financial statement and should not be considered as a complete valuation of the full potential of ONCOS-102.

For more information see Note 15 Intangible assets and impairment test in the 2017 Annual Report.

7. Interest bearing debt

Business Finland is a publicly financed funding agency that finances research and development activities for young innovative companies in Finland. The Finnish trade promotion organization and the Finnish Funding Agency for Technology and Innovation (TEKES) united as Business Finland in 2018.

The Group has received three R&D loans, for the commercialization of ONCOS-102 from Business Finland under loan agreements dated September 2010, January 2012 and December 2013, respectively, in the total outstanding amount of EUR 6 316 600 as of 31 December 2018. EUR 917 400 of the total debt is short-term as per 31 December 2018. The Group is applying for an extension of the repayment-free period.

Amortized interests are charged to financial expenses, amounting to NOK 0.9m and NOK 3.6m during the fourth quarter and full year 2018, NOK 0.9 and NOK 3.3 for the respective periods in 2017.

No new Business Finland loans have been awarded during 2018.

See note 21 Interest-bearing debt in the Annual Report 2017 for more information about the Business Finland loans.

8. Fair value of financial instruments

The carrying value of receivables, cash and cash equivalents, borrowings and other short-term payables and accrued liabilities are assessed to approximate fair value.

<i>Amounts in NOK thousands</i>	FY 2018		FY 2017	
	Carrying amounts	Fair value	Carrying amounts	Fair value
Receivables	15 320	15 320	14 620	14 620
Cash and cash equivalents	151 189	151 189	261 573	261 573
Total financial assets	166 509	166 509	276 193	276 193
Interest-bearing borrowings	53 059	53 059	48 806	48 806
Accounts payable and other current liabilities	12 372	12 372	7 601	7 601
Accrued public charges	3 370	3 370	3 018	3 018
Other short-term liabilities	34 508	34 508	17 676	17 676
Total financial liabilities	103 309	103 309	77 100	77 100

The tables below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

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

As at 31 December 2018:

<i>Amounts in NOK thousands</i>	Level 1	Level 2	Level 3	Total
Interest-bearing borrowings	-	-	53 059	53 059
Total financial instruments at fair value	-	-	53 059	53 059

As at 31 December 2017:

<i>Amounts in NOK thousands</i>	Level 1	Level 2	Level 3	Total
Interest-bearing borrowings	-	-	48 806	48 806
Total financial instruments at fair value	-	-	48 806	48 806

9. Share capital and number of shares

Share capital as at 31 December 2018 is 5 261 644.8 (31 December 2017: 5 260 986,7) comprising 52 616 448 ordinary shares at nominal value NOK 0.10 (31 December 2017: 52 609 867 at NOK 0.10). All shares carry equal voting rights.

The movement in the number of shares during the period was as follows:

<i>Amounts in NOK thousands</i>	4Q 2018	4Q 2017	FY 2018	FY 2017
Ordinary shares at beginning of period	52 616 448	52 609 867	52 609 867	42 190 800
Share issuance - private placement and repair offering	-	-	-	10 323 268
Share issuance, employee share options and RSUs	-	-	6 581	95 799
Ordinary shares at end of period	52 616 448	52 609 867	52 616 448	52 609 867

The 20 largest shareholders are as follows at 31 December 2018:

Shareholder	# shares	%
HealthCap	12 405 584	23.6 %
Radiumhospitalets Forskningsstiftelse	4 427 255	8.4 %
VPF Nordea Kapital	1 490 338	2.8 %
VPF Nordea Avkastning	1 296 164	2.5 %
Nordnet Bank AB	1 190 434	2.3 %
Nordnet Livsforsikring AS	1 187 446	2.3 %
Thorendahl Invest AS	1 150 000	2.2 %
Verdipapirfondet KLP AksjeNorge	966 275	1.8 %
Danske Bank AS	826 643	1.6 %
Prieta AS	720 000	1.4 %
Verdipapirfondet Nordea Norge Plus	686 203	1.3 %
Kommunal Landspensjonskasse	675 464	1.3 %
Timmuno AS	661 580	1.3 %
Nordea 1 SICAV	658 925	1.3 %
Sundt AS	500 000	1.0 %
Avanza Bank AB	284 985	0.5 %
Meyerløkka AS	275 000	0.5 %
Citigroup Global Markets Inc.	269 603	0.5 %
NHO - P667AK	257 780	0.5 %
Lillesund	250 297	0.5 %
20 largest shareholders	30 179 976	57.4 %
Other shareholders (3 978)	22 436 472	42.6 %
Total shareholders	52 616 448	100.0 %

Shareholdings Key Management

The following table provides the total number of shares owned by the key management of the Group and member of the Board of Directors, including close associates, as of 31 December 2018:

Name	Position	No. of shares outstanding at 31 December 2018
Key management:		
Øystein Soug ¹⁾	Chief Executive Officer	115 000
Berit Iversen	VP, CMC	20 087
Magnus Jäderberg	Chief Medical Officer	20 000
Anne-Kirsti Aksnes	VP, Clinical Development	12 000
Total no. of shares owned by key management of the Group		167 087
Board of directors:		
Robert Burns	Board member	64 928
Total no. of shares owned by the Board of Directors of the Group		64 928

1) The shares are held through Abakus Invest AS.

Other holdings of shares in the company related to the Board of Directors:

Johan Christenson and Per Samuelsson, both Members of the Board, are partners at HealthCap

10. Earnings per share

<i>Amounts in NOK thousand</i>	4Q 2018	4Q 2017	FY 2018	FY 2017
Loss for the period	-40 723	-32 461	-147 015	-121 945
Average number of outstanding shares during the period	52 612	52 610	52 612	47 254
Earnings/ loss (-) per share - basic and diluted	-0.77	-0.62	-2.79	-2.58

Share options issued have a potential dilutive effect on earnings per share. No dilutive effect has been recognized as potential ordinary shares only shall be treated as dilutive if their conversion to ordinary shares would decrease earnings per share or increase loss per share from continuing operations. As the Group is currently loss-making, an increase in the average number of shares would have anti-dilutive effects.

11. Share-based compensation

Share options

The Group operates an equity-settled, share-based compensation plan, under which the entity receives services from employees as consideration for equity instruments (options) in Targovax ASA.

At the Annual General Meeting in April 2018 the Board was authorized to increase the Group's share capital in connection with share incentive arrangements by up to 10% of the Share capital.

On the basis of the approval by the Annual General Meeting the Board has resolved to issue new options to employees of the Company.

In 2018 a total of 800 000 options for shares in the Company have been distributed amongst the current members of the key management and a total of 629 000 options for shares in the Company have been distributed amongst other employees and former key management. 28 500 options for shares have been distributed amongst other employees during fourth quarter of 2018. Each option, when exercised, will give the right to acquire one share in the Company. The options are granted without consideration.

Pursuant to the general vesting schedule, 25% of the options will vest 12 months after the day of grant (as long as the option holder is still employed). Thereafter, 1/36 of the remaining options will vest each month (as long as the option holder is still employed), with the first 1/36 vesting 13 months after the day of grant. The exercise price is equal to the volume weighted average trading price of the shares of the Company on Oslo Stock Exchange on the date of the grant. Options that have not been exercised will lapse 7 years after the date of grant.

The amount of expensed share options in fourth quarter and full year 2018 was NOK 2.1m and NOK 10.6m.

Fair value of the options has been calculated at grant date. The fair value of the options was calculated using the Black-Scholes model. The expected volatility for options issued in 2018 is estimated at average of 76.66%, based on the volatility of comparable listed companies. The volume weighted average interest rate applied to the share options grants in 2018 is 1.11%.

The following table shows the changes in outstanding options in 2018 and 2017:

	FY 2018		FY 2017	
	No. of options	Weighted avg.exercise price (NOK)	No. of options	Weighted avg.exercise price (NOK)
Outstanding at 1 January	3 466 634	21.06	2 513 170	20.93
Granted during the period	1 429 000	15.95	1 277 000	21.53
Exercised during the period	-	-	-34 004	5.65
Forfeited during the period	-449 582	17.83	-75 000	20.42
Expired during the period	-193 748	22.63	-214 532	25.00
Outstanding no. of options at end of period	4 252 304	19.61	3 466 634	21.06

The following table shows the exercised, granted and outstanding options for shares to Key Management of the Group at 31 December 2018:

					Options		
Name	Position	Granted FY 2018	Forfeited FY 2018	Outstanding 31.12.2018	Exercised FY 2017	Granted FY 2017	Outstanding 31.12.2017
Key management:							
Øystein Soug	Chief Executive Officer	220 000	-	1 010 000	-	250 000	790 000
Magnus Jäderberg	Chief Medical Officer	100 000	-	760 000	-	150 000	660 000
Anne Kirsti Aksnes	VP, Clinical Development	70 000	-	353 000	-	130 000	283 000
Erik Digman Wiklund	Chief Business Officer	150 000	-	300 000	-	150 000	150 000
Torbjørn Furuseth	Chief Financial Officer	200 000	-	200 000	-	-	-
Berit Iversen	VP, CMC	60 000	-	195 000	-25 000	70 000	135 000
Total option for shares to key management of the Group		800 000	-	2 818 000	-25 000	750 000	2 018 000
Board of directors:							
Robert Burns	Board member	-	-	21 235	-	-	21 235
Total option for shares to the Board of Directors of the Group		-	-	21 235	-	-	21 235

From 1 January 2019 to 13 February 2018 600 000 new options for shares have been granted to Key Management and 349 000 option for shares have been granted to other employees, see Note 13. Subsequent events.

Restricted Stock Units

The Board of directors may choose to receive their remuneration, or parts thereof, in the form of restricted stock units (RSUs). If the Board members choose to receive the Board remuneration in RSUs they must choose to either (i) receive 100% of the compensation in RSUs, (ii) receive 1/3 of the compensation in cash and 2/3 in RSUs, or (iii) receive 2/3 of the compensation in cash and 1/3 in RSUs.

The number of RSUs to be granted to the members of the Board of Directors is calculated as the NOK amount of the RSU opted portion of total compensation to the Board member, divided by the market price of the Targovax ASA share. The market price is calculated as the volume weighted average share price the 10 trading days prior to the grant date. The RSUs will be non-transferrable and each RSU will give the right and obligation to acquire shares in Targovax ASA (at nominal value) subject to satisfaction of the applicable vesting conditions. When the RSUs have vested, the participant must during the following three-year period select when to take delivery of the shares.

The total compensation to each member of the Board of Directors for the period between the AGM 2018-2019 have been set out in the minutes from the Annual General Meeting 11 April 2018. The Annual General Meeting 11 April 2018 decided to remunerate the Board of Directors for the period between the AGM 2018 to the AGM 2019 with a combination of cash and Restricted Stock Units (RSUs), hence at the 11 April 2018, additional 87,598 RSU's were granted to the Board of Directors.

The expensed RSUs in fourth quarter and full year 2018 was NOK 0.3m and NOK 1.4m. A total of 200 428 RSUs was outstanding at 31 December 2018.

The following table shows the exercised, granted and outstanding RSUs to Board of Directors of the Group at 31 December 2018:

		RSUs		
Name	Position	Outstanding 31.12.2017	Granted 11.04.18	Outstanding 31.12.2018
Board of Directors:				
Eva-Lotta Allan	Board member	33 220	18 148	51 368
Diane Mellett	Board member	44 149	6 049	50 198
Patrick Vink	Chairperson of the Board	11 131	33 155	44 286
Robert Burns	Board member	10 051	18 148	28 199
Bente-Lill Romøren	Board member	14 279	6 049	20 328
Catherine A. Wheeler	Board member	-	6 049	6 049
Total Restricted Stock Units to Board of Directors of the Group		112 830	87 598	200 428

From 1 January 2019 to 13 February 2019 no RSUs have been granted to Board of Directors.

12. Implementation of IFRS 16 “Leases”

IFRS 16 was issued in January 2016. It will result in almost all leases being recognized on the balance sheet by lessees, as the distinction between operating and finance leases is removed. Under the new standard, an asset (the right to use the leased item) and a financial liability to pay rentals are recognized. The only exceptions are short-term (less than 12 months) and low-value leases.

The Group will apply the standard from its mandatory adoption date of 1 January 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.

The Group has made a preliminary analysis where the Group has non-cancellable operating lease commitments of NOK 7.8 million at 1 January 2019. Of these commitments, NOK 0.10 million relate to short-term leases and NOK 0.2 million relate to low value leases which will both be recognized on a straight-line basis as expense in profit or loss.

For the remaining lease commitments, the Group expects to recognize right-of-use assets of approximately NOK 7.0 million on 1 January 2019 and lease liabilities of NOK 7.0 million (after adjustments for prepayments and accrued lease payments recognized as at 31 December 2018).

The Group expects that operating profit/loss increase by approximately NOK 0.3 million and net profit after tax will decrease by approximately NOK 0.1 million for 2019 as a result of adopting the new rules.

Operating cash flows will increase, and financing cash flows decrease by approximately NOK 4.1 million as repayment of the principal portion of the lease liabilities will be classified as cash flows from financing activities.”

13. Subsequent events

Post-period highlights

In January 2019, Targovax announced that the European Patent Office has granted a European Patent which protects Targovax' mutant-RAS specific neoantigen peptides, mutant RAS specific T-cells and vaccines TG01 and TG02, for the treatment of cancer in combination with chemotherapies. This extends IP protection of TG01 and TG02 into 2034.

In February 2019, Targovax announced that the first patient has been treated in the dose expansion cohort of the ONCOS-102 trial in melanoma.

Share options

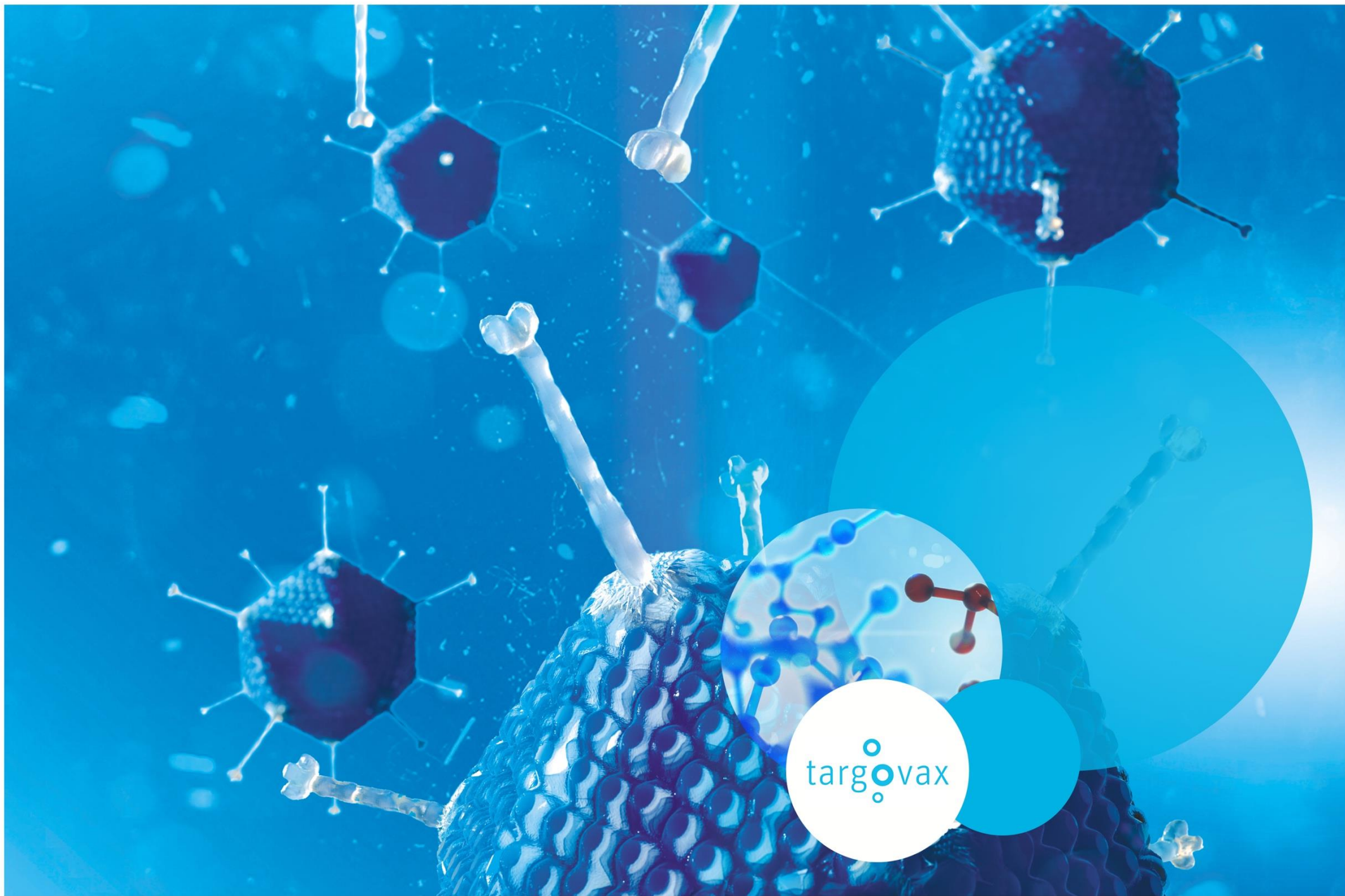
On the basis of the approval by the Annual General Meeting in April 2018 the Board has resolved to issue further 949,000 new options to employees of the Company. From 1 January 2019 to 13 February 2019 a total of 600,000 options for shares of the Company were distributed amongst the members of the key management and a total of 349,000 options for shares of the Company were distributed amongst other employees.

The following table shows the changes in outstanding options at 13 February 2019 and 31 December 2018:

	1 Jan-13 Feb 2019		FY 2018	
	No. of options	Weighted avg.exercise price (NOK)	No. of options	Weighted avg.exercise price (NOK)
Outstanding at 1 January	4 252 304	19.61	3 466 634	21.06
Granted during the period	949 000	7.74	1 429 000	15.95
Exercised during the period	-	-	-	-
Forfeited during the period	-	-	-449 582	17.83
Expired during the period	-	-	-193 748	22.63
Outstanding no. of options at end of period	5 201 304	17.45	4 252 304	19.61

The following table shows the exercised, granted and outstanding options for shares to Key Management of the Group at 13 February 2019:

		Options		
Name	Position	Outstanding 31.12.2018	Granted 02.01.2019	Outstanding 13.02.2019
Key management:				
Øystein Soug	Chief Executive Officer	1 010 000	150 000	1 160 000
Magnus Jäderberg	Chief Medical Officer	760 000	80 000	840 000
Anne Kirsti Aksnes	VP, Clinical Development	353 000	70 000	423 000
Erik Digman Wiklund	Chief Business Officer	300 000	130 000	430 000
Torbjørn Furuseth	Chief Financial Officer	200 000	100 000	300 000
Berit Iversen	VP, CMC	195 000	70 000	265 000
Total option for shares to key management of the Group		2 818 000	600 000	3 418 000
Board of directors:				
Robert Burns	Board member	21 235	-	21 235
Total option for shares to the Board of Directors of the Group		21 235	-	21 235



targovax