

First quarter results

2018



# About Targovax

## Arming the patient's immune system to fight cancer

Targovax (OSE:TRVX) is a clinical stage company focused on developing and commercializing novel immuno-oncology therapies to target, primarily, treatment-resistant solid tumors. Immuno-oncology is currently one of the fastest growing therapeutic fields in medicine.

**The Company's development pipeline is based on two novel proprietary platforms:**

**The first platform, ONCOS**, uses oncolytic viruses as potential multi-target, neo-antigen, therapeutic cancer vaccines. ONCOS uses an adenovirus that has been engineered to be an immune activator that selectively targets cancer cells. In phase I trials it has demonstrated immune activation at lesional level which was associated with clinical benefit. In an ongoing phase I trial in advanced melanoma we expect important proof of concept data in the treatment of checkpoint inhibitor refractory patients.

**The second platform, TG**, is neo-antigen cancer vaccine approach designed to specifically treat tumors that express mutated forms of a protein called RAS. Mutations to the RAS protein are common in many cancers and are known to drive aggressive disease progression and treatment resistance of such cancers. There is a high unmet medical need for therapies that are effective against tumors that express these mutations. The TG platform's therapeutic potential stems from its ability to enable the patient's immune system to identify and destroy tumors bearing any RAS mutations. In early 2017, key proof of concept data for the TG platform from a clinical trial of TG01 in resected pancreatic cancer patients showed encouraging overall survival and is part of our guidance in the future clinical development of this platform.

Targovax's development pipeline has three novel therapeutic candidates in clinical development covering six indications.

Both platforms are protected by an extensive portfolio of IP and know-how and have the potential to yield multiple product candidates in a cost-effective manner. Additionally, Targovax has other products in earlier stages of development.

## Upcoming events

**16 May:** Presentation at BioEquity Europe 2018, Ghent, Belgium

**23 May:** Presentation at ABGSC Cancer Seminar, Stockholm, Sweden

**28 May:** Presentation at Redeye Pre-ASCO Seminar, Stockholm, Sweden

## Upcoming milestones

**1H2018:** TG01 phase I/II trial in resected pancreatic cancer  
– survival data

**2H2018:** ONCOS-102 phase I trial in checkpoint inhibitor refractory melanoma  
– interim data

## Financial Calendar 2018

**23 August:** Second quarter and half year report and presentation

**1 November:** Third quarter report and presentation

# First quarter highlights

**A solid start to 2018, with several important data read-outs on both platforms expected through the year**

## Research and development

- In January, Targovax announced that ONCOS-102 generated immune activation at both the systemic and lesional levels in checkpoint inhibitor (CPI) refractory melanoma in four out of the first four patients treated
- After the encouraging safety and immune activation data, a new site in Philadelphia was opened to recruit patients into the melanoma trial
- In February, Targovax announced that the safety lead-in part of its ONCOS-102 trial in unresectable, malignant, pleural mesothelioma was completed without any safety concerns, and that ONCOS-102 generates early immune activation in treated patients. The safety review committee recommended that the trial continues, and recruitment into the randomized part has now started.

## Corporate

- In January, Dr. Michael Bogenstätter took up his role as Chief Business Officer of Targovax

## Post-period highlights

- In April, Dr. Catherine A. Wheeler was elected as a new member of the Board of Directors
- In May, early signal of efficacy was reported in the ONCOS-102 trial in mesothelioma trial, with clinical response observed in three out of six patients

## Key Figures

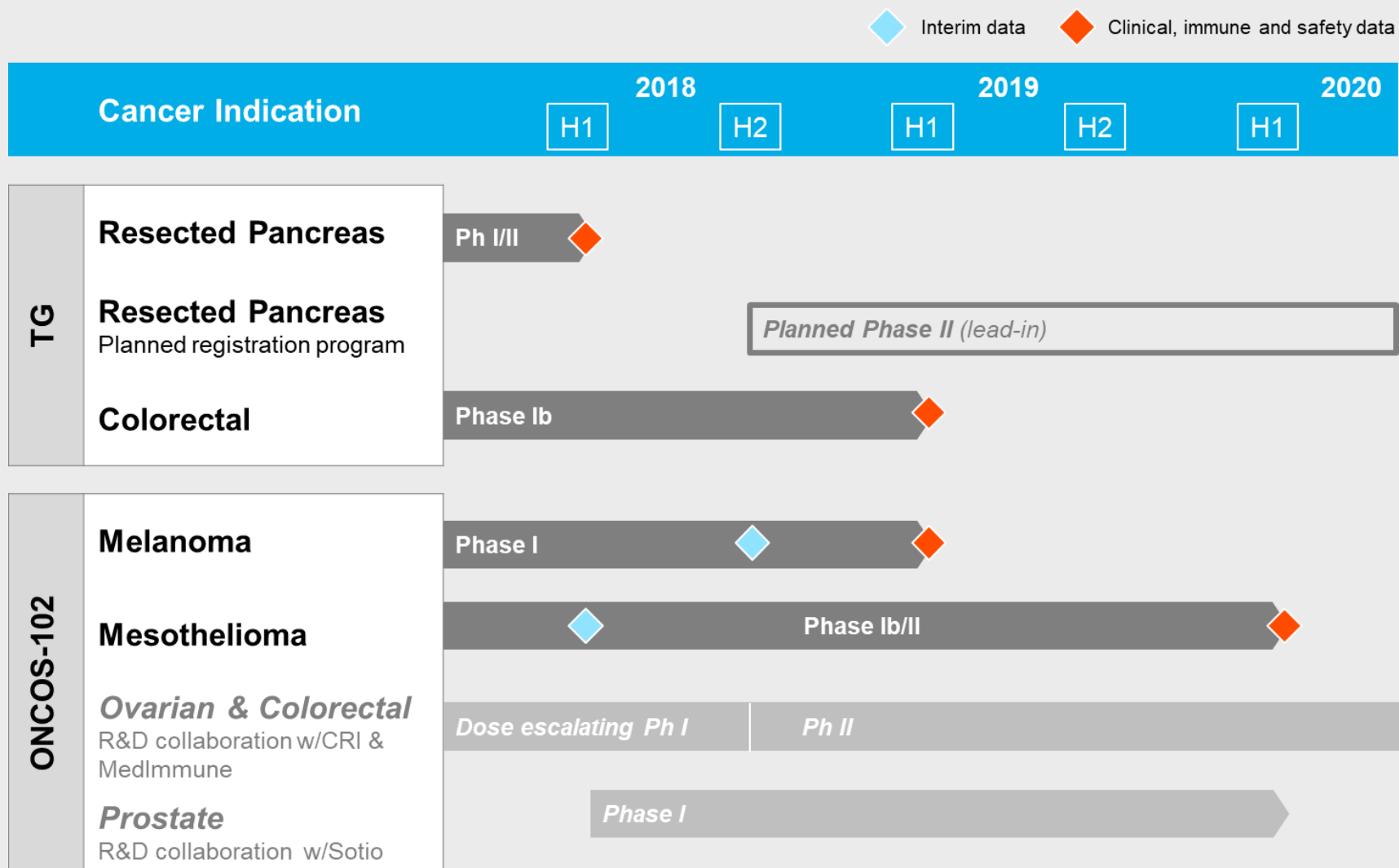
<i>Amounts in NOK thousand</i>	<b>1Q 2018</b>	1Q 2017	FY 2017
Total operating revenues	<b>6</b>	6	37
Total operating expenses	<b>-33 518</b>	-27 078	-119 963
Operating profit/loss	<b>-33 512</b>	-27 073	-119 926
Net financial items	<b>-1 285</b>	-381	-2 347
Income tax	<b>83</b>	75	328
Net profit/loss	<b>-34 714</b>	-27 378	-121 945
Basic and diluted EPS (NOK/share)	<b>-0.66</b>	-0.65	-2.58
Net change in cash	<b>-32 384</b>	-24 133	89 944
Cash and cash equivalents start of period	<b>261 573</b>	171 629	171 629
Cash and cash equivalents end of period	<b>229 188</b>	147 497	261 573



“The first quarter of 2018 has yielded further encouraging data generated from studies on candidates emanating from both our platforms. We continue to believe our prospects are great for 2018, and expect to further demonstrate the potential of our two immuno-oncology platforms during the remainder of the year.”

**Øystein Soug,**  
CEO

## Clinical development program overview





## Operational review

During the period Targovax continued development of its product candidates, both through its own clinical trials and through collaborations.

Targovax's strategy is to apply its two immunotherapeutic platforms in multiple oncology 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 checkpoint inhibitor refractory melanoma

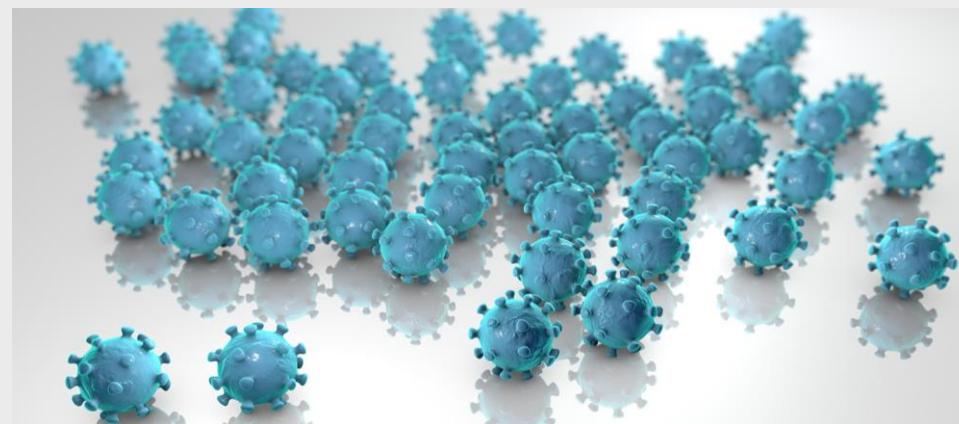
This trial is an open-label phase I combination trial exploring safety and immune activation as well as clinical response of sequential treatment with ONCOS-102 and Keytruda® (pembrolizumab), an anti-PD1 monoclonal antibody, in patients with advanced or unresectable melanoma whose tumors have continued to grow following prior checkpoint inhibitor (CPI) therapy. The trial is being conducted at Fox Chase Cancer Center in Philadelphia, and at Memorial Sloan Kettering Cancer Center in New York, one of the world's leading clinical research sites in the field of immuno-oncology. The aim of the trial is to investigate whether these refractory patients will respond to re-challenge with a CPI following priming with ONCOS-102.

The clinical trial will include 12 patients with refractory melanoma. Early safety and immune activation data for the first four patients were announced in December 2017 and the beginning of January 2018. The initial planned safety review passed with no reported issues, and both innate and adaptive immune activation was observed in all four patients. In addition, all four patients displayed an increase in PD-1 expression in their circulating T-cells, suggesting that their immune systems have been reactivated in such a fashion as to enhance their likelihood of responding to re-challenge with CPI therapy. More extensive clinical results from the sequential virus and CPI combination treatment are expected in the second half of 2018.

In January 2018, Targovax announced that ONCOS-102 generates immune activation in CPI refractory melanoma patients. This is the first time ONCOS-102 has been used therapeutically in melanoma patients and also the first time the virus has been administered to CPI refractory melanoma patients. Early systemic immune activation was indicated by:

- Increase of several pro-inflammatory cytokines
- Increase of the relative level of cytotoxic CD8+ T-cells
- Increase of PD-1 expression on CD8+ T-cells

These data indicate that ONCOS-102 may induce both an innate and adaptive immune activation in CPI refractory patients. In addition, increased PD-1 expression on the surface of CD8+ T-cells after ONCOS-102 treatment suggests that the tumors may be susceptible to re-challenge with KEYTRUDA®.



### ONCOS-102 in mesothelioma

This trial is a randomized phase Ib open label trial with a safety lead-in of ONCOS-102 and pemetrexed/cisplatin, the current standard of care chemotherapy in patients with unresectable malignant pleural mesothelioma. The trial is planned to include six patients in a lead-in cohort (for safety evaluation of the combination) and a further approximately 24 patients in the randomized part of the trial to compare the clinical benefit of the combination treatment of ONCOS-102 with standard of care chemotherapy. The safety cohort has now been fully enrolled and the initial planned safety review passed with no reported issues.

In February, Targovax announced the completion of the safety lead-in cohort and preliminary immune activation data in the phase I/II trial of ONCOS-102 in mesothelioma in combination with standard of care chemotherapy. The independent Data and Safety Monitoring Board (DSMB) reviewed all six patients in the safety lead-in cohort of the trial. No concerns were raised and the DSMB recommended that the randomized part of the trial could be initiated and this has triggered recruitment of a further 24 patients.

In addition, early immune activation was assessed for a subset of the patients. Systemic release of several pro-inflammatory cytokines was observed (3/3 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 (2/2 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. Importantly, these data suggest that the treatment of ONCOS-102 in combination with chemotherapy induces both innate and adaptive immune activation in patients. This would be consistent with the tumors becoming susceptible to an attack by the immune system.

## **TG01 in pancreatic cancer**

Targovax has an ongoing open label, phase I/II clinical trial with TG01, GM-CSF, and gemcitabine (chemotherapy) as adjuvant therapy for treating patients with resected adenocarcinoma of the pancreas. The trial is structured as a first cohort of 19 patients and a second cohort of 13 patients on a modified vaccination schedule. The primary objective of the trial is an assessment of safety and immune activation while the secondary objective is treatment efficacy including overall survival at two years. The recruitment to this trial was completed in May 2016 and the patients are currently being monitored for 24 months.

## **Encouraging top line two-year survival data from TG01 clinical trial**

In February 2017, Targovax announced encouraging top line two-year survival data from the first cohort of this trial. Data from this patient cohort showed that 68 percent of evaluated patients (13/19) were still alive after two years if survival is counted from time of resection (which occurred on average two months prior to first treatment) or 12/19 if counted from time of first treatment. These results represent key milestones for Targovax and will trigger the next step of clinical development.

## **TG01 second cohort – one-year survival rate and safety data**

In October 2017, Targovax reported one-year survival rate for the second cohort, which was found to be in line with the one-year data from the first cohort. 100 percent of patients (13/13) were alive one year after surgery with TG01/GM-CSF generating an immune response in 85 percent of patients (11/13). These results further strengthen the safety profile of TG01 and add valuable understanding that will enable us to optimize the dosing regimen in this indication. The two-year survival data read-out for this second cohort is expected in the first half of 2018.

## **TG02 in colorectal cancer**

TG02 is the second-generation pipeline candidate from the TG mutRAS (mutated RAS) neo-antigen vaccine platform and is currently being tested in colorectal cancer. This is an open label, non-randomized, phase Ib exploratory trial to determine safety and anti-tumor immune activation using TG02, first as monotherapy, then in combination with a checkpoint inhibitor, in patients with locally recurring rectal cancer scheduled to have

surgery.

The first patient was enrolled in April 2017 and the initial planned safety review was passed with no reported issues.

Early exploratory clinical results indicate that TG02 induces immune responses in patients including evidence of activated tumor-infiltrating T-cells when compared to historical controls. 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 will discuss the appropriate timing for switching into the combination part of the trial in which TG02 will be combined with the checkpoint inhibitor Keytruda®.

## **Clinical trials with collaboration partners**

In late 2015, Targovax entered into an agreement with US-based Ludwig Cancer Research (LCR) and the Cancer Research Institute (CRI).

The first clinical trial initiated as part of this collaboration is a non-randomized, open-label, phase I/II trial which will explore the combination of ONCOS-102 with MedImmune's checkpoint inhibitor durvalumab, an anti-PD-L1 antibody. MedImmune is the global biologics research and development arm of AstraZeneca plc. The trial will recruit up to 78 patients with advanced peritoneal disease who have failed prior standard chemotherapy and have histologically confirmed platinum-resistant or refractory epithelial ovarian or colorectal cancer.

The objectives of the trial include an assessment of safety, clinical efficacy, and immunological activity of ONCOS-102 in combination with durvalumab. The trial was initiated in the third quarter of 2017 and is being conducted in the USA and sponsored by LCR on behalf of the CRI as well as being supported financially by CRI.

Targovax also has an ongoing clinical collaboration with the Czech biotech company Sotio. The objective of the Sotio collaboration is to study the safety and tolerability of ONCOS-102 when combining Targovax's oncolytic virus and Sotio's dendritic cell therapy DCVAC/PCa in prostate cancer patients. Sotio is supporting this trial financially.

Through these collaborations, Targovax is able to leverage its own clinical development expertise with access to leading external networks, in collaborations where Targovax has retained all commercial rights to its products.

## Preclinical development

A study of the efficacy of the combination of ONCOS-102 and two different doses of KEYTRUDA® in a melanoma mouse model has been performed showing synergistic anti-tumor effects of ONCOS-102 and KEYTRUDA®:

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

These trial data support the scientific rationale for the ongoing melanoma clinical trial of ONCOS-102 in combination with KEYTRUDA®.

## IPR / Market exclusivity

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. 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 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 Orphan Drug Designation 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 neo-antigen platform that protects the therapeutic cancer vaccine candidates TG01 and TG02 for the treatment of cancer in combination with anti-metabolite chemotherapy. In October, a US patent was granted that protects Targovax's mutRAS specific neo-antigen vaccine candidate TG02 as a composition of matter to stimulate the immune system of cancer patients with RAS-mutated tumors. These patents expire in 2035 and 2034, 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

Name	Position
Øystein Soug	CEO
Magnus Jäderberg	CMO
Erik Digman Wiklund	CFO
Michael Bogenstätter	CBO
Anne-Kirsti Aksnes	VP Clinical
Tina Madsen	VP QA
Berit Iversen	VP CMC

## CBO appointed

In January, Michael Bogenstätter was appointed Chief Business Officer of Targovax. Michael joins Targovax with 25 years' experience in biotech and big pharma. During this time he has held senior business development and strategy positions with Sanofi, Novartis, and MSD. Michael has also worked as a consultant with The Boston Consulting Group and, most recently, has acted as an independent corporate and business development advisor to some of the world's top pharmaceutical and biotechnology companies.

## Board of Directors

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

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

## Financial review

### Results first quarter 2018

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

Operating expenses amounted to NOK 34m (NOK 27m) 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 35m in the first quarter 2018 (NOK 27m).

### Financial position and cash flow

Net cash was NOK 229m at the end of the first quarter 2018 compared to NOK 262m at the end of fourth quarter 2017 and NOK 147m at the end of first quarter 2017.

Net cash flow from operating activities during the first quarter was negative by NOK 32m compared to negative NOK 26m in the fourth quarter 2017 and NOK 27m in first quarter 2017.

By the end of the period, total outstanding interest-bearing debt amounted to EUR 6.3m all to TEKES, the Finnish Funding Agency for Technology and Innovation.

## 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 19 April 2018, there were 52,609,867 shares outstanding, distributed between 4,158 shareholders. The 20 largest shareholders controlled 58 percent of the shares.

During Q1 2018, Targovax shares traded in the NOK 14.36 - 21.30 range. During the quarter, some 12 million shares were traded, with an aggregate trading value of NOK 214m.

The closing price on 31 March 2018 was NOK 14.36 per share, corresponding to a market value of NOK 755 million.

## The estimated share ownership situation on 19 April 2018:

Shareholder	Estimated	
	Shares mill	Ownership
HealthCap	12,4	23,6 %
Nordea	4,7	8,9 %
RadForsk	4,4	8,4 %
KLP	2,1	4,0 %
Statoil	1,2	2,3 %
Thorendahl Invest	1,0	1,9 %
Danske Bank (nom.)	0,8	1,6 %
Timmuno	0,7	1,4 %
Prieta	0,7	1,4 %
Sundt	0,5	1,0 %
Yngve S. Lillesund	0,3	0,7 %
NHO - P665AK	0,3	0,5 %
DNB	0,2	0,4 %
Tobech Invest	0,2	0,4 %
Istvan Molnar	0,2	0,4 %
Danske Bank (nom.)	0,2	0,4 %
Spar Kapital Investor	0,2	0,3 %
Peter Kenneth Zwiilmeyer	0,2	0,3 %
Rolf Arne Olsen	0,1	0,3 %
Scott Paul Tønnessen	0,1	0,3 %
<b>20 largest shareholders</b>	<b>30,6</b>	<b>58,3 %</b>
Other shareholders (4 138)	22,0	41,7 %
<b>Total shareholders</b>	<b>52,6</b>	<b>100,0 %</b>



## Subsequent events

In April, Dr. Catherine A. Wheeler was elected new member of the Board at the annual general meeting. She has a substantial career in pharmaceutical and biotech companies gained over a 20-year period, inter alia as a Chief Medical Officer. Dr. Wheeler is Board Certified in Internal Medicine with sub-specialties in Hematology and Medical Oncology. She is also an experienced drug developer with a strong scientific focus and demonstrated leadership ability. In her previous roles Dr. Wheeler has had significant interaction with the FDA and worked on a number of Phase I-III global oncology programs.

In May, Targovax announced early signal of efficacy in ONCOS-102 trial in mesothelioma. Overall response rate has been evaluated for all six patients in the safety cohort after six months. Three out of the six patients (50%) responded, with one patient showing a partial response and two patients showing stable disease, according to the Response Evaluation Criteria In Solid Tumors guidelines, RECIST 1.1. Based on this early signal of efficacy, and the previous DSMB recommendation in February, recruitment into the randomized part of the trial is now underway. The trial will include 30 patients when fully recruited, with 20 patients in the experimental group (including the safety cohort) and 10 patients in the control group.

## Risks and uncertainty factors for the first 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](http://www.targovax.com).

## Outlook

As previously commented, the next twelve months is expected to be exciting for Targovax. In addition to the clinical data produced in this quarter, we expect multiple important data read-outs from both the ongoing ONCOS and the TG programs. We believe the ONCOS and TG platforms represent complementary approaches to treating a range of different cancer indications.

In the coming months we particularly look forward to reporting final two-year survival from the TG01 trial in 32 patients with resected pancreatic cancer. Based on these data, Targovax aims to start a controlled trial which has the potential to become the registrational trial for this indication. This trial could start already during 2018.

There will also be further data read-outs from the ongoing ONCOS-102 trials during the next year. In melanoma, Targovax's 2018 data may constitute proof of concept in checkpoint inhibitor refractory patients. These further ONCOS data read-outs during the next 12 - 15 months, including partnered trials, will guide future development decisions for the oncolytic virus platform.

Oslo, 2 May 2018

### 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

# First quarter accounts 2018

## Condensed consolidated statement of profit and loss

<i>Amounts in NOK thousands except per share data</i>	<i>Note</i>	Unaudited 1Q 2018	Unaudited 1Q 2017	FY 2017
Other revenues		6	6	37
<b>Total revenue</b>		<b>6</b>	<b>6</b>	<b>37</b>
External R&D expenses	3,4	-11 213	-8 792	-45 571
Payroll and related expenses	5,11	-15 667	-11 107	-48 278
Other operating expenses	3,4	-6 638	-7 179	-26 114
<b>Total operating expenses</b>		<b>-33 518</b>	<b>-27 078</b>	<b>-119 963</b>
<b>Operating profit/ loss (-)</b>		<b>-33 512</b>	<b>-27 073</b>	<b>-119 926</b>
Finance income		552	526	1 654
Finance expense		-1 837	-907	-4 001
<b>Net finance income/ expense (-)</b>		<b>-1 285</b>	<b>-381</b>	<b>-2 347</b>
<b>Loss before income tax</b>		<b>-34 797</b>	<b>-27 453</b>	<b>-122 273</b>
Income tax income/ expense (-)		83	75	328
<b>Loss for the period</b>		<b>-34 714</b>	<b>-27 378</b>	<b>-121 945</b>
<b>Earnings/ loss (-) per share</b>				
Basic and dilutive earnings/loss (-) per share	10	-0.66	-0.65	-2.58

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

<i>Amounts in NOK thousands except per share data</i>	1Q 2018	1Q 2017	FY 2017
Income/ loss (-) for the period	-34 714	-27 378	-121 945
Items that may be reclassified to profit or loss:			
Exchange differences arising from the translation of foreign operations	-5 665	2 833	21 308
<b>Total comprehensive income/ loss (-) for the period</b>	<b>-40 379</b>	<b>-24 545</b>	<b>-100 638</b>
<b>Total comprehensive income/ loss (-) for the period attributable to owners</b>	<b>-40 379</b>	<b>-24 545</b>	<b>-100 638</b>



## Condensed consolidated statement of financial position

<i>Amounts in NOK thousands</i>	<i>Note</i>	Unaudited 31.03.2018	Unaudited 31.03.2017	31.12.2017
<b>ASSETS</b>				
Intangible assets	6	358 873	341 258	366 250
Property, plant, and equipment		1 075	1 244	1 165
<b>Total non-current assets</b>		<b>359 948</b>	<b>342 502</b>	<b>367 414</b>
Receivables		14 399	14 972	14 620
Cash and cash equivalents		229 188	147 497	261 573
<b>Total current assets</b>		<b>243 587</b>	<b>162 469</b>	<b>276 193</b>
<b>TOTAL ASSETS</b>		<b>603 535</b>	<b>504 971</b>	<b>643 608</b>

<i>Amounts in NOK thousands</i>	<i>Note</i>	Unaudited 31.03.2018	Unaudited 31.03.2017	31.12.2017
<b>EQUITY AND LIABILITIES</b>				
<b>Shareholders' equity</b>				
Share capital	9	5 261	4 220	5 261
Share premium reserve		821 161	627 769	821 161
Other reserves		33 437	18 886	29 276
Retained earnings		-410 181	-280 899	-375 466
Translation differences		21 261	8 451	26 926
<b>Total equity</b>		<b>470 940</b>	<b>378 428</b>	<b>507 158</b>
<b>Non-current liabilities</b>				
Interest-bearing liabilities	7	48 697	42 960	48 806
Deferred tax		58 114	55 681	59 350
<b>Total non-current liabilities</b>		<b>106 811</b>	<b>98 642</b>	<b>108 156</b>
<b>Current liabilities</b>				
Accounts payable and other current liabilities		4 812	5 346	7 601
Accrued public charges		1 708	3 044	3 018
Other short-term liabilities		19 263	19 511	17 676
<b>Total current liabilities</b>		<b>25 784</b>	<b>27 902</b>	<b>28 294</b>
<b>TOTAL EQUITY AND LIABILITY</b>		<b>603 535</b>	<b>504 971</b>	<b>643 608</b>

## 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
<b>Balance at 31 December 2016</b>		<b>4 219</b>	<b>627 796</b>	<b>17 055</b>	<b>5 618</b>	<b>-253 521</b>	<b>401 168</b>
Loss for the period						-27 378	-27 378
Exchange differences arising from the translation of foreign operations					2 833		2 833
Other comprehensive income/loss, net of tax							-
<b>Total comprehensive income for the period</b>					<b>2 833</b>	<b>-27 378</b>	<b>-24 545</b>
Share issuance, employee share options	9	1	-27				-26
Recognition of share-based payments & RSU's	11			1 831			1 831
<b>Balance at 31 March 2017</b>		<b>4 220</b>	<b>627 769</b>	<b>18 886</b>	<b>8 451</b>	<b>-280 899</b>	<b>378 428</b>
Loss for the period						-94 567	-94 567
Exchange differences arising from the translation of foreign operations					18 475		18 475
Other comprehensive income/loss, net of tax							-
<b>Total comprehensive income for the period</b>					<b>18 475</b>	<b>-94 567</b>	<b>-76 092</b>
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	9	9	216				224
Recognition of share-based payments & RSU's	11			10 389			10 389
<b>Balance at 31 December 2017</b>		<b>5 261</b>	<b>821 161</b>	<b>29 276</b>	<b>26 925</b>	<b>-375 466</b>	<b>507 158</b>
Loss for the period						-34 714	-34 714
Exchange differences arising from the translation of foreign operations					-5 665		-5 665
Other comprehensive income/loss, net of tax					-		-
<b>Total comprehensive income for the period</b>					<b>-5 665</b>	<b>-34 714</b>	<b>-40 379</b>
Share issuance, employee share options	9						-
Recognition of share-based payments & RSU's	11			4 161			4 161
<b>Balance at 31 March 2018</b>		<b>5 261</b>	<b>821 161</b>	<b>33 437</b>	<b>21 261</b>	<b>-410 181</b>	<b>470 940</b>



## Condensed consolidated statement of cash flow

Amounts in NOK thousands	Note	Unaudited 1Q 2018	Unaudited 1Q 2017	FY 2017
<b>Cash flow from operating activities</b>				
Loss before income tax		-34 797	-27 453	-122 273
Adjustments for:				
Finance income		-552	-526	-1 654
Finance expense		1 837	907	4 001
Interest received		5		1 366
Other finance expense		-19	-24	-93
Share option expense	11	4 161	1 831	12 220
Depreciation		76	70	296
Change in receivables		222	-769	-417
Change in other current liabilities		-2 462	-1 056	-919
<b>Net cash flow from/(used in) operating activities</b>		<b>-31 528</b>	<b>-27 020</b>	<b>-107 472</b>
<b>Cash flow from investing activities</b>				
Purchases of property, plant, and equipment (PPE)				-56
<b>Net cash received from/(paid in) investing activities</b>				<b>-56</b>
<b>Cash flow from financing activities</b>				
Loan from TEKES	7		2 992	2 992
Interest paid	7	-220	-207	-579
Share issue expense - Private Placement and repair offering				-12 256
Proceeds from issuance of shares - Private Placement and repair offering				206 465
Proceeds from exercise of options			-26	198
<b>Net cash generated from financing activities</b>		<b>-220</b>	<b>2 759</b>	<b>196 820</b>
<b>Net increase/(decrease) in cash and cash equivalents</b>		<b>-31 748</b>	<b>-24 261</b>	<b>89 292</b>
Net exchange gain/loss on cash and cash equivalents		-637	128	651
<b>Cash and cash equivalents at beginning of period</b>		<b>261 573</b>	<b>171 629</b>	<b>171 629</b>
<b>Cash and cash equivalents at end of period</b>		<b>229 188</b>	<b>147 497</b>	<b>261 573</b>

# 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 2 May 2018.

## 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 March 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 March 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 2 May 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>	1Q 2018		1Q 2017		FY 2017	
	Total	of which R&D	Total	of which R&D	Total	of which R&D
External R&D expenses	11 213	11 213	8 792	8 792	45 571	45 571
Payroll and related expenses	15 667	8 456	11 107	6 664	48 278	30 045
Other operating expenses	6 638	223	7 179	454	26 114	1 217
<b>Total operating expenses</b>	<b>33 518</b>	<b>19 892</b>	<b>27 078</b>	<b>15 910</b>	<b>119 963</b>	<b>76 833</b>

## 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>	1Q 2018	1Q 2017	FY 2017
External R&D expenses	589	1 600	4 387
Payroll and related expenses	361	390	1 261
Other operating expenses	21	64	124
<b>Total grants</b>	<b>971</b>	<b>2 053</b>	<b>5 772</b>

R&D projects have been approved for SkatteFUNN for the period 2011 through 2019. For the first quarter 2018, the Group has recognized NOK 1.0m as cost reduction in External R&D expenses, Payroll and related expenses and Other operating expenses.

No additional TEKES loans have been received during the first quarter of 2018. The Group received an additional EUR 327 307 to one of the existing TEKES loans during the first quarter of 2017. The loan's interest rate is assessed to be 7% lower than comparable market rates, hence NOK 0.9m was recognized as a government grant recorded as a reduction to External R&D expenses in first quarter 2017.

## 5. Payroll and related expenses

Total payroll and related expenses for the Group are:

<i>Amounts in NOK thousands</i>	1Q 2018	1Q 2017	FY 2017
Salaries and bonus	10 055	7 655	30 043
Employer's national insurance contributions	1 190	1 362	4 277
Share-based compensation <sup>1)</sup>	4 161	1 831	12 220
Pension expenses – defined contribution plan	479	499	1 982
Other	142	150	1 016
Governmental grants	-361	-390	-1 261
<b>Total payroll and related expenses</b>	<b>15 667</b>	<b>11 107</b>	<b>48 278</b>

1) Share-based compensation has no cash effect.

Number of employees calculated on a full-time basis	27.7	25.0	26.7
Number of employees as at end of period	28	26	27

## 6. Intangible assets

As of 31 March 2018, the recognized intangible assets in the Group amounts to NOK 359m. This is a decrease 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 combined with a hypothetical out-licensing royalty. 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 (TEKES)

TEKES is a publicly financed funding agency that finances research and development activities for young innovative companies in Finland.

The Group has received three R&D loans, for the commercialization of ONCOS-102 from TEKES 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 March 2018.

Amortized interests are charged to financial expenses, amounting to NOK 0.9m and NOK 0.7m during the first quarter of 2018 and 2017, NOK 3.3m during full year 2017.

No new TEKES loans have been awarded during first quarter 2018.

See note 21 Interest-bearing debt in the Annual Report 2017 for more information about the TEKES 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>	1Q 2018		1Q 2017		FY 2017	
	Carrying amounts	Fair value	Carrying amounts	Fair value	Carrying amounts	Fair value
Receivables	14 399	14 399	14 972	14 972	14 620	14 620
Cash and cash equivalents	229 188	229 188	147 497	147 497	261 573	261 573
<b>Total financial assets</b>	<b>243 587</b>	<b>243 587</b>	<b>162 469</b>	<b>162 469</b>	<b>276 193</b>	<b>276 193</b>
Interest-bearing borrowings	48 697	48 697	42 960	42 960	48 806	48 806
Accounts payable and other current liabilities	4 812	4 812	5 346	5 346	7 601	7 601
Accrued public charges	1 708	1 708	3 044	3 044	3 018	3 018
Other short-term liabilities	19 263	19 263	19 511	19 511	17 676	17 676
<b>Total financial liabilities</b>	<b>74 481</b>	<b>74 481</b>	<b>70 862</b>	<b>70 862</b>	<b>77 100</b>	<b>77 100</b>

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 March 2018:

<i>Amounts in NOK thousands</i>	Level 1	Level 2	Level 3	Total
Interest-bearing borrowings	-	-	48 697	48 697
<b>Total financial instruments at fair value</b>	<b>-</b>	<b>-</b>	<b>48 697</b>	<b>48 697</b>

As at 31 March 2017:

<i>Amounts in NOK thousands</i>	Level 1	Level 2	Level 3	Total
Interest-bearing borrowings	-	-	42 960	42 960
<b>Total financial instruments at fair value</b>	<b>-</b>	<b>-</b>	<b>42 960</b>	<b>42 960</b>

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
<b>Total financial instruments at fair value</b>	<b>-</b>	<b>-</b>	<b>48 806</b>	<b>48 806</b>

## 9. Share capital and number of shares

Share capital as at 31 March 2018 is 5 260 986.7 (31 December 2017: 5 260 986,7) comprising 52 609 867 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>	1Q 2018	1Q 2017	FY 2017
Ordinary shares at beginning of period	52 609 867	42 190 800	42 190 800
Share issuance - private placement and repair offering	-	-	10 323 268
Share issuance, employee share options and RSUs	-	8 919	95 799
<b>Ordinary shares at end of period</b>	<b>52 609 867</b>	<b>42 199 719</b>	<b>52 609 867</b>

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

Shareholder	# shares	%
HealthCap	12 220 652	23.2 %
Radiumhospitalets Forskningsstiftelse	4 427 255	8.4 %
VPF Nordea Kapital	1 750 754	3.3 %
VPF Nordea Avkastning	1 556 582	3.0 %
Nordnet Livsforsikring AS	1 548 141	2.9 %
Verdipapirfondet KLP AksjeNorge	1 108 559	2.1 %
Thorendahl Invest AS	1 000 000	1.9 %
Statoil Pensjon	855 171	1.6 %
Nordnet Bank AB	833 972	1.6 %
Danske Bank AS	808 316	1.5 %
Kommunal Landspensjonskasse	779 956	1.5 %
Timmuno AS	724 650	1.4 %
Prieta AS	720 000	1.4 %
Verdipapirfondet Nordea Norge Plus	712 903	1.4 %
Nordea 1 SICAV	670 000	1.3 %
Sundt AS	500 000	1.0 %
Lillesund	330 000	0.6 %
KLP AksjeNorge Indeks	320 848	0.6 %
Avanza Bank AB	295 505	0.6 %
Euroclear Bank S.A./N.V.	280 400	0.5 %
<b>20 largest shareholders</b>	<b>31 443 664</b>	<b>59.8 %</b>
Other shareholders (4 171)	21 166 203	40.2 %
<b>Total shareholders</b>	<b>52 609 867</b>	<b>100.0 %</b>

## 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 March 2018:

Name	Position	No. of shares outstanding at 31 March 2018
<b>Key management:</b>		
Øystein Soug	Chief Executive Officer	109 598 <sup>1)</sup>
Berit Iversen	VP, CMC	20 087
Magnus Jäderberg	Chief Medical Officer	20 000
Anne-Kirsti Aksnes	VP, Clinical Development	12 000
Tina Madsen	VP, Quality Assurance	6 300
<b>Total no. of shares owned by key management of the Group</b>		<b>167 985</b>
<b>Board of directors:</b>		
Robert Burns	Board member	64 928
<b>Total no. of shares owned by the Board of Directors of the Group</b>		<b>64 928</b>

1) The shares are held through Abakus Invest AS.

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

Jonas Einarsson, Member of the Board, is CEO in the Radium Hospital Research Foundation

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

## 10. Earnings per share

<i>Amounts in NOK thousand</i>	Q1 2018	Q1 2017	FY 2017
Loss for the period	-34 714	-27 378	-121 945
Average number of outstanding shares during the period	52 610	42 195	47 254
<b>Earnings/ loss (-) per share - basic and diluted</b>	<b>-0.66</b>	<b>-0.65</b>	<b>-2.58</b>

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 2017 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 first quarter 2018 a total of 890 000 options for shares in the Company have been distributed amongst the current members of the executive management and a total of 310 500 options for shares in the Company have been distributed amongst other employees. 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 first quarter 2018 was NOK 3.8 million.

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 76.96%, based on the volatility of comparable listed companies. The volume weighted average interest rate applied to the share options grants in 2018 is 1.062%

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

	1Q 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	1 200 500	17.08	1 277 000	21.53
Exercised during the period	-	-	-34 004	5.65
Forfeited	-	-	-75 000	20.42
Expired	-	-	-214 532	25.00
<b>Outstanding no. of options at end of period</b>	<b>4 667 134</b>	<b>20.03</b>	<b>3 466 634</b>	<b>21.06</b>

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

Name	Position	Options				
		Granted 1Q 2018	Outstanding 31.03.2018	Exercised FY 2017	Granted FY 2017	Outstanding 31.12.2017
<b>Key management:</b>						
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 Financial Officer	150 000	300 000		150 000	150 000
Michael Bogenstätter	Chief Business Officer	230 000	230 000		-	-
Berit Iversen	VP, CMC	60 000	195 000	-25 000	70 000	135 000
Tina Madsen	VP, Quality Assurance	60 000	163 000		50 000	103 000
<b>Total option for shares to key management of the Group</b>		<b>890 000</b>	<b>3 011 000</b>	<b>-25 000</b>	<b>800 000</b>	<b>2 121 000</b>
<b>Board of directors:</b>						
Robert Burns	Board member	-	21 235	-	-	21 235
<b>Total option for shares to the Board of Directors of the Group</b>		<b>-</b>	<b>21 235</b>	<b>-</b>	<b>-</b>	<b>21 235</b>

From 1 April 2018 to 2 May 2018 no new share options have been granted to Key Management.



## 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 2017-2018 have been set out in the minutes from the Annual General Meeting 5 April 2017.

At the Annual General Meeting at 5 April 2017, 43 554 RSUs at market price NOK 23.88 were granted to the Board of Directors. An additional 11 131 RSUs at market price NOK 14.62 were granted to the elected Chairperson of the Board at 30 November 2017.

The expensed RSUs in first quarter 2018 was NOK 0.3 million. A total of 119 411 RSUs was outstanding at 31 March 2018, of which 112 830 RSUs were outstanding to the current Board of Directors of the Group at 31 March 2018.

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

Name	Position	RSUs			
		Outstanding 31.03.2018	Exercised FY 2017	Granted FY 2017	Outstanding 31.12.2017
<b>Board of Directors:</b>					
Diane Mellett	Board member	44 149	-	10 051	44 149
Eva-Lotta Allan	Board member	33 220	-	10 051	33 220
Bente-Lill Romøren	Board member	14 279	-	3 350	14 279
Patrick Vink	Chairperson of the Board	11 131	-	11 131	11 131
Robert Burns	Board member	10 051	-40 984	10 051	10 051
<b>Total Restricted Stock Units to Board of Directors of the Group</b>		<b>112 830</b>	<b>-40 984</b>	<b>44 634</b>	<b>112 830</b>

From 1 April 2018 to 2 May 2018 RSUs have been granted to Board of Directors, see Note 12 Subsequent events.

## 12. Subsequent events

### Restricted Stock Units

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. A total of 200 428 RSU's were outstanding at 2 May 2018.

The following table shows the outstanding and granted RSU's to Board of Directors of the Group at 2 May 2018:

Name	Position	RSUs		
		Outstanding 31.03.2018	Granted 01.04.18 – 02.05 2018	Outstanding 02.05.2018
<b>Board of Directors:</b>				
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
<b>Total Restricted Stock Units to Board of Directors of the Group</b>		<b>112 830</b>	<b>87 598</b>	<b>200 428</b>

### New Board member

At the AGM 2018, Dr. Catherine A. Wheeler was elected as a new member of the Board of Directors. She has a substantial career in pharmaceutical and biotech companies gained over a 20-year period, inter alia as a Chief Medical Officer. Dr. Wheeler replaces Jonas Einarsson as a member of the Board of Directors.

### Signal of efficacy in ONCOS-102 in mesothelioma

In May, Targovax announced early signal of efficacy in ONCOS-102 trial in mesothelioma. Overall response rate has been evaluated for all six patients in the safety cohort after six months. Three out of the six patients (50%) responded, with one patient showing a partial response and two patients showing stable disease, according to the Response Evaluation Criteria In Solid Tumors guidelines, RECIST 1.1. Based on this early signal of efficacy, and the previous DSMB recommendation in February, recruitment into the randomized part of the trial is now underway. The trial will include 30 patients when fully recruited, with 20 patients in the experimental group (including the safety cohort) and 10 patients in the control group.

