

About Targovax

Activating the patient's immune system to fight cancer

Targovax (OSE:TRVX) is a clinical stage immuno-oncology company developing oncolytic viruses 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 activates the immune system to generate tumor-specific immune responses. In a phase I monotherapy trial, ONCOS-102 induced both local and systemic innate and adaptive immune activation, with associated clinical benefit. In an ongoing phase I trial, patients who have progressed on anti-PD1 checkpoint inhibitors and treated with ONCOS-102 in combination with Keytruda, demonstrated responses in three of nine patients (33% ORR) including one complete response. ONCOS-102's lead indication is mesothelioma, where the virus is currently being tested in a randomized phase I/II trial expected to report around new year 2019-20.

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



Second quarter presentation

Targovax management will hold a presentation for investors, analysts and press 22 August at 10:00 CET at Hotel Continental, Oslo.

The presentation will be webcast live and can be accessed here and at www.targovax.com.

Upcoming conferences

5 Sep: Pareto, Stockholm, Sweden

11-13 Nov: BIO-Europe, Hamburg, Germany

20-21 Nov: Jefferies Healthcare Conference, London, UK

Upcoming data milestones

2H2019: Next-generation ONCOS – new viruses

- First pre-clinical data

~ New Year: ONCOS-102 phase lb/II trial in unresectable

malignant pleural mesothelioma
- Six month ORR and immune data

1H2020: ONCOS-102 phase I trial in checkpoint inhibitor

refractory advanced melanoma

- Part 2 data

Financial Calendar 2019

7 November 2019: Third quarter presentation

14 February 2020: Fourth quarter presentation

First half 2019 highlights

- The last patient entered into the ONCOS-102 trial in mesothelioma. Recruitment was completed with 31 patients. Six-month randomized overall response rate (ORR) and immune data are expected around New Year 2019-20
- The first patients entered into part 2 of the ONCOS-102 trial in checkpoint inhibitor refractory advanced melanoma, where the dosing is increased from three to twelve injections
- The Journal of Medical Virology published a Targovax paper named "Abscopal effect when combining oncolytic adenovirus and checkpoint inhibitor in a humanized NOG mouse model of melanoma"
- Targovax filed patents on three next generation ONCOS oncolytic viruses
- Targovax announced its decision to fully focus the company's resources and efforts on the ONCOS platform
- Targovax successfully completed a Private Placement (PP) in March, raising gross proceeds of NOK 74m, with a subsequent repair share issue raising gross proceeds of NOK 1m

Post-period highlights

- In July, Targovax announced data from part 1 of the ONCOS-102 trial in checkpoint inhibitor refractory advanced melanoma, showing validated clinical responses in three out of nine patients (33% ORR) and immune activation in all nine patients
- In July, the dose escalation part of the phase I/II trial of ONCOS-102 in combination with the checkpoint inhibitor Imfinzi in patients with advanced peritoneal malignancies was completed, and the expansion part of the trial opened for patient enrollment

Key Figures

Amounts in NOK thousands	2Q 2019	2Q 2018	1H 2019	1H 2018	FY 2018
Total operating revenues	6	9	12	15	27
Total operating expenses	-44 622	-36 656	-84 253	-70 174	-146 127
Operating profit/loss	-44 616	-36 647	-84 242	-70 159	-146 100
Net financial items	-955	-483	-2 428	-1 768	-1 249
Income tax	86	82	163	165	334
Net profit/loss	-45 656	-37 048	-86 506	-71 762	-147 015
Basic and diluted EPS (NOK/share)	-0.72	-0.70	-1,49	-1,36	-2.79
Net change in cash	30 005	-28 489	-16 264	-60 873	-110 384
Cash and cash equivalents start of period	104 919	229 188	151 189	261 573	261 573
Cash and cash equivalents end	134 924	200 700	134 924	200 700	151 189

CEO statement



In May, we made the important decision to fully focus our resources on advancing the ONCOS oncolytic virus platform. Oncolytic viruses are increasingly recognized as an important future class of immune activators, and Targovax is well positioned as one of the leaders in this rapidly evolving field. Maintaining that position require speed and agility. We have four ongoing combination trials with ONCOS-102, and the key studies will generate data in the next six to twelve months. Our main focus going forward will be to deliver these data points and solidify Targovax position as a leader in the oncolytic virus space.

Clinical trials update

Most recently, we reported data from part 1 of our trial in checkpoint inhibitor resistant melanoma. In this trial, we are testing ONCOS-102 immune activation in patients with disease progression on treatment with the checkpoint inhibitor Keytruda. If ONCOS-102 can induce these treatment resistant tumors to respond to the checkpoint inhibitor Keytruda, it will mean more patients can benefit from checkpoint inhibitors, for a longer period of time, and expand the arsenal of treatment options available to physicians trying to combat the most aggressive and resistant forms of melanoma.

Indeed, three of the nine patients in part 1 of the trial responded to the ONCOS-102 and subsequent Keytruda treatment and had significant reduction in tumor burden. One of these three patients had a complete response, which means all visible signs of the melanoma disappeared. Such deep responses are rarely seen in this patient population, and very encouraging for the potential of ONCOS-102.

We are now enrolling patients into part 2 of the trial, where we increase the dosing from three to twelve ONCOS-102 injections. Given the encouraging results in part 1, we are very optimistic that the expanded dosing regimen will generate more and stronger responses. We expect to report data from part 2 of the trial during the first half of 2020.

We are also testing immune activation of ONCOS-102 in a combination trial with AstraZeneca's checkpoint inhibitor Imfinzi. In this trial, we treat patients with ovarian and colorectal cancer that has spread to the peritoneum, the inner lining of the abdomen. This trial is financed and run by Cancer Research Institute and Ludwig Cancer Research, and Targovax participates by providing ONCOS-102. The safety and dose escalation cohorts of the trial is now completed without any concerns, and patient recruitment into the experimental part of the trial started in June. The trial is running at multiple top centers in the US, with strong recruitment.

Another important milestone in Q2 was the completion of enrollment of our ONCOS-102 trial in mesothelioma, which closed for recruitment at 31 patients. The six-month immune activation and response data will be available around new year. This is our primary target indication for an approval and launch of ONCOS-102, and the data will be important in determining the safety, efficacy and design of future trials. We have already started the preparation for a follow-up trial in mesothelioma, which is generating strong interest from key opinion leaders and world leading investigators.

Strategy update

The decision to fully focus our resources on the ONCOS platform was necessary and to the best for our shareholders. We have a leading position among oncolytic viruses and want to maintain this position. The 3-year survival data of TG01 in adjuvant treatment of pancreatic cancer showed signals of clinical efficacy in line with the 2-year data set. The natural next step in this indication is to continue with a larger randomized clinical trial within the current standard of care setting. Such a program, however, will be costly and the best way to create value for shareholders and potentially improved therapies for patients is to bring the TG platform forward through partnerships.

In this regard, we have already established two external partnerships. The first was the license agreement with Zelluna for development of RAS targeting T-cell receptors (TCRs), with a potential total value of up to NOK 100m. The second is the collaboration agreement with the Parker Institute and the Cancer Research Institute to include TG in future combination trials in metastatic pancreatic cancer. The trial has not been initiated and we are in dialogue with the Parker Institute.

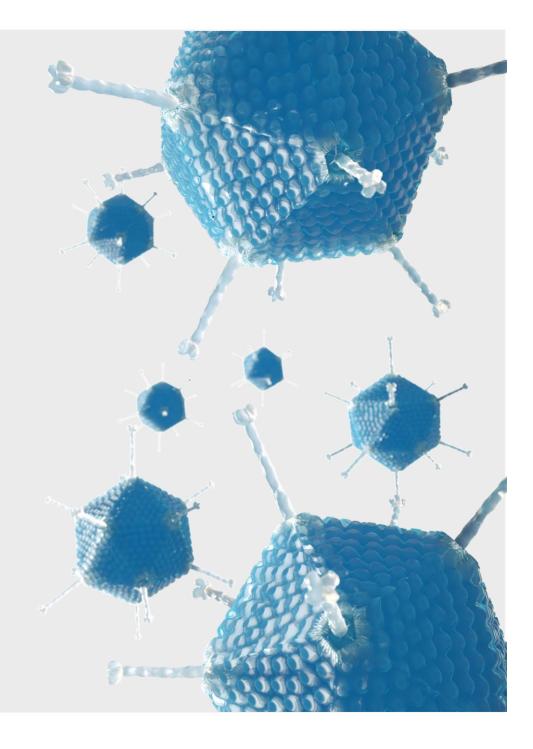
Changes in the organization

Following the decision to fully focus on the ONCOS platform, it was natural to restructure the organization. Some senior employees have chosen to leave Targovax, and the total number of employees has been reduced by 25 percent. Priorities that lead to redundancies are always painful, but the Board and I are convinced that we now have the optimal organization in place to execute on the ONCOS platform going forward.

Looking forward

We now look to the second half of 2019 and 2020 with great enthusiasm. Our ongoing trials will provide clinical immune activation and efficacy data that we have worked very hard over many years to generate. With solid results in these trials, Targovax will enter the next phase of development from a strong position and start building the ONCOS clinical program beyond the ongoing trials and eventually towards registrational trials.

Øystein Soug, CEO



ONCOS-102 clinical development program

Candidate	Preclinical	Phase I	Phase II	Phase III	Next expected event
	Mesothelioma				New year 2019-20
ONCOS-102	Melanoma				1H 2020
UNCUS-102	Peritoneal metastasis				Update by collaborator
	Prostate cancer				Update by collaborator
Next-gen ONCOS	3 new viruses				2H 2019

Mesothelioma

- Randomized phase I/II open label trial
- 31 patients in 1st line and 2nd line 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 six months
- Conducted at four sites in Spain and France
- The enrollment has completed, data readouts are expected around New Year
- Most recent read-out: six-patient safety lead-in cohort reported in April 2018
 - First safety review passed with no concerns
 - 50% disease control rate
 - 100% innate immune activation
 - Tumor T-cell infiltration in 3/4 patients with available biopsy material
 - De novo tumor-specific T-cells

Melanoma

- o Open-label, single arm phase I trial
- Up to 21 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 six months and survival rates
- Conducted at three US sites: Memorial Sloan Kettering (NY), Fox Chase Cancer Center (PA), and University of Maryland (MA)
- Part 2 of the trial is enrolling patients, where safety and efficacy of a more intensive treatment regimen of twelve ONCOS-102 injections will be evaluated
- Most recent read-out: nine patients in part
 1 who received only three ONCOS-102
 injections reported in July 2019
 - One complete response and two partial responses (33% ORR)
 - Innate and adaptive immune activation observed in all patients

Peritoneal metastasis

- Collaboration with US-based Cancer Research Institute (CRI) and Ludwig Cancer Research (Ludwig, trial sponsor) and AstraZeneca
- 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, metastasized to the lining of the abdominal cavity (peritoneum)
- Intraperitoneally administered ONCOS-102 in combination with Imfinzi (durvalumab, anti-PD-L1 antibody)
- End-points: safety, biologic and anti-tumor activity of the combination
- Conducted at five sites in US
- The expansion part has started
- Most recent read-out: the start of the expansion part reported in July 2019
 - All safety reviews during the dose escalation phase have been completed with no Dose Limiting Toxicities

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
- Conducted at one site in the Czech Republic
- First patient was dosed in July 2018

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)

In addition, it was also shown in the humanized melanoma mouse model that the ONCOS-102 and Keytruda combination can induce an abscopal effect. This is an important mechanistic finding, which validates *in vivo* that ONCOS-102 can generate systemic antitumor immune responses that lead to a reduction in the size of non-injected lesions. These data were published in the Journal of Medical Virology in June 2019.

These *in vivo* data demonstrate the mode of action and anti-tumor activity 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.

Next generation ONCOS viruses

The ONCOS platform is based on a versatile double-stranded DNA adenovirus serotype 5 backbone. The core construct includes two genetic modifications to enhance cancer specificity:

- A 24bp deletion in the E1A region to ensure selective replication in actively dividing cells
- Replacement of the serotype 5 to a serotype 3 fiber knob; this leads the virus to primarily infect via the DSG2 and CD46 receptors, which are typically upregulated on cancer cells

In addition, the ONCOS backbone can carry transgenes that can be delivered to tumors by local expression in infected host cells. The transgene inserted into Targovax lead clinical product ONCOS-102 is GM-CSF, which stimulates tumor antigen processing by antigen presenting cells (APCs). In the second generation ONCOS viruses, Targovax has been able to increase the DNA payload capacity of the backbone to include two transgenes. Three new ONCOS viruses with double transgenes have been cloned and validated *in vitro* and are now being tested *in vivo*. Patent applications for these novel constructs were filed in April 2019.

Our aim during the remainder of 2019 is to develop preclinical data from the next generation ONCOS viruses and later select one or more candidates to subsequently bring forward into clinical testing.

"Next generation ONCOS viruses have double transgenes and distinct mode of actions"

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, supporting a rapid path to commercialization and ensuring up to ten years of market protection from the date of market approval in any of these indications.

TG mutant RAS vaccine

The TG platform consists of neoantigen cancer vaccines targeting mutant RAS cancers RAS mutations are known to drive cancer and are a central target in oncology. The 32-patient phase I/II clinical trial evaluating TG01 in resected pancreatic cancer in combination with standard of care chemotherapy (gemcitabine) reported three-year median overall survival of 33.3 months and 38% three-year survival rate in May 2019. The median overall survival compares favorably to the ESPAC4 historical control trial of gemcitabine monotherapy, which reported median overall survival from surgery of 27.6 months. The Company has attained Orphan Drug Designation (ODD) for TG01 in pancreatic cancer.

The Company has decided to not pursue this opportunity on a stand-alone basis but will rather seek other ways to create shareholder value from the TG technology, e.g. partnerships or out-licensing. In March 2019, Targovax granted Zelluna Immunotherapy a license to intellectual property relating to mutant RAS T-cell receptor technology. Targovax has also entered into an agreement with The Parker Institute for Cancer Immunotherapy (PICI) and the Cancer Research Institute (CRI) for a research collaboration with Targovax's TG mutant RAS vaccine. Under the agreement, Targovax will be responsible for TG supply in a potential future trial.

Experienced team

Targovax has a strong senior management team with a versatile range of backgrounds from successful biotechs and major global pharmaceutical companies, as well as management consulting.

Management team

As per 22 August 2019

Name	Position
Øystein Soug	CEO
Magnus Jäderberg	СМО
Torbjørn Furuseth	CFO
Erik Digman Wiklund	СВО
Sissel Vågen	Head of QA
Kristiina Hyvärinen	Director, QC Viral Products
Anne-Sophie Møller	Head of Clinical Science
Ingunn Munch Lindvig	VP Regulatory Affairs

Board of Directors

As per 22 August 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

Following the Private Placement in March, a subsequent repair share issue in second quarter raised gross proceeds of NOK 1 million. Proceeds from both the Private Placement and the subsequent offering were received by Targovax in second quarter 2019.

Results second quarter 2019

In the second guarter of 2019 Targovax had no core business revenue.

Operating expenses amounted to NOK 45m (NOK 37m) in the second 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 46m in the second quarter 2019 (NOK 37m). The operating expenses in the quarter were higher than previous quarters due to higher external R&D cost, and accounting of the restructuring costs.

Results first half 2019

In the first half of 2019 Targovax had no core business revenue.

Operating expenses amounted to NOK 84m (NOK 70m) in the first half 2019. The operating expenses are reported net of governmental grants which amounted to NOK 3m in the period (NOK 3m). The net loss amounted to NOK 87m in the first half 2019 (NOK 72m).

Financial position and cash flow

Cash and cash equivalents were NOK 135m at the end of the second quarter 2019 compared to NOK 151m at the end of 2018 and NOK 201m at the end of second quarter 2018.

Net cash flow from operating activities during the second quarter 2019 was negative by NOK 36m compared to negative NOK 29m in the second quarter 2018 and NOK 45m in first quarter 2019.

Net cash flow from operating activities during the first half 2019 was negative by NOK 81m compared to negative NOK 60m in the first half 2018.

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

By 14 August 2019, there were 63,383,613 shares outstanding, distributed between 4,351 shareholders. The 20 largest shareholders-controlled 47.4% of the shares.

During Q2 2019, Targovax shares traded in the NOK 4.30 - 7.00 range. During the quarter, some 15.3 million shares were traded, with an aggregate trading value of NOK 91 million.

The closing price on 30 June 2019 was NOK 6.18 per share, corresponding to a market value of NOK 392 million.

The estimated share ownership situation on 14 August 2019:

	Estimated					
Shareholder	Shares million	Ownership				
	40.4	40.00/				
HealthCap	12,4	19,6 %				
RadForsk	4,4	7,0 %				
Nordea	3,6	5,6 %				
KLP	1,5	2,4 %				
Thorendahl Invest	1,4	2,2 %				
Danske Bank (nom.)	0,9	1,4 %				
Prieta	0,7	1,1 %				
Timmuno	0,7	1,1 %				
J.P. Morgan Bank	0,7	1,1 %				
Sundt	0,7	1,0 %				
10 largest shareholders	26.8	42.3 %				
Other shareholders (4 341)	36.6	57.7%				
Total shareholders	63.4	100.0 %				

Subsequent events

Encouraging results from part 1 of the ONCOS-102 and Keytruda combination trial in anti-PD1 refractory melanoma was presented in July.

The expansion part in the phase I/II trial with ONCOS-102 in combination with durvalumab in patients with advanced peritoneal malignancies started in July.

Risks and uncertainties

The Company's business is exposed to a number of general operational and financial risks which have been explained in Targovax's annual report 2018 as well as in the recent prospectus, both available at www.targovax.com.

Outlook

There is broad excitement in the industry for the potential of oncolytic viruses as a novel class of immune activators to potentiate the efficacy of other treatments, such as checkpoint inhibitors. With the ONCOS platform, Targovax has a solid adenovirus platform to carve out a strong position in this emerging class of immune activators. With several upcoming oncolytic virus trial read-outs from both Targovax and others over the next year, we expect the excitement in the industry to grow even stronger.

We have already seen encouraging clinical activity of ONCOS-102. The ongoing combination trials are set to produce several important data points in the coming year, which have the potential to solidify ONCOS-102's position as one of the most clinically advanced and promising oncolvtic viruses. As we are nearing the completion of some of our trials, we have started to prepare for the next trials. With this in mind, we are in discussions with pharmaceutical and biotech companies regarding future collaborations on combination opportunities.

Given the industry excitement for oncolytic viruses and strong ONCOS-102 data, we have made the decision to prioritize and focus our resources exclusively on advancing the ONCOS platform with full force. However, we continue to believe in RAS as a crucial anticancer target, and that the TG mutant RAS vaccine platform holds promise as an immunological approach to deal with this target. We will continue to seek both commercial and academic partnering opportunities to bring the TG platform forward, such as through the collaboration agreement with the Parker Institute for Cancer Immunotherapy and Cancer Research Institute agreement.

Responsibility statement

We confirm, to the best of our knowledge that the financial statements for the period 1 January to 30 June 2019 have been prepared in accordance with current applicable accounting standards, and give a true and fair view of the assets, liabilities, financial position and profit or loss of the entity and the group taken as a whole. We also confirm that the Board of Directors' Report includes a true and fair view of the development and performance of the business and the position of the entity and the group, together with a description of the principal risks and uncertainties facing the entity and the group.

Oslo, 21 August 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

Second quarter and first half results 2019

Condensed consolidated statement of profit and loss

Amounts in NOK thousands except per share data	Note	Unaudited 2Q 2019	Unaudited 2Q 2018	Unaudited 1H 2019	Unaudited 1H 2018	FY 2018
Other revenues		6	9	12	15	27
Total revenue		6	6	12	15	27
External R&D expenses	3,4	-22 012	-14 485	-41 425	-25 698	-64 006
Payroll and related expenses	5,11	-17 511	-14 792	-31 129	-30 459	-56 433
Other operating expenses	3,4	-5 098	-7 379	-11 699	-14 016	-25 688
Total operating expenses		-44 622	-36 656	-84 253	-70 174	-146 127
Operating profit/ loss (-)		-44 616	-36 647	-84 242	-70 159	-146 100
Finance income		344	515	828	1 067	3 068
Finance expense		-1 299	-998	-3 256	-2 835	-4 317
Net finance income/ expense (-)		-955	-483	-2 428	-1 768	-1 249
Loss before income tax		-45 571	-37 130	-86 670	-71 927	-147 349
Income tax income/ expense (-)		-86	82	163	165	334
Loss for the period		-45 656	-37 048	-86 506	-71 762	-147 015
Earnings/ loss (-) per share						
Basic and dilutive earnings/loss (-) per share	10	-0.72	-0.70	-1.49	-1.36	-2.79

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

Amounts in NOK thousands except per share data	Unaudited 2Q 2019	Unaudited 2Q 2018	Unaudited 1H 2019	Unaudited 1H 2018	FY 2018
Income/ loss (-) for the period Items that may be reclassified to profit or loss:	-45 656	-37 048	-86 506	-71 762	-147 015
Exchange differences arising from the translation of foreign operations Total comprehensive income/ loss (-) for the period	196 -45 461	-3 596 -40 644	-6 854 -93 361	-9 261 -81 023	2 620 -144 395



Condensed consolidated statement of financial position

Amounts in NOK thousands	Note	Unaudited 30.06.2019	Unaudited 30.06.2018	31.12.2018
400570				
ASSETS				
Intangible assets	6	360 759	353 998	370 240
Property, plant, and equipment		858	993	889
Right-of-use asset		5 000	-	-
Total non-current assets		366 617	354 990	371 128
Receivables		18 518	16 292	15 320
Cash and cash equivalents		134 924	200 700	151 189
Total current assets		153 442	216 992	166 509
TOTAL ASSETS		520 060	571 982	537 637



Share premium reserve 886 912 821 161 821 131 Other reserves 46 031 37 130 41 238 Retained earnings -608 987 -447 228 -522 481 Translation differences 22 692 17 665 29 546 Total equity 352 985 433 989 374 696 Non-current liabilities Interest-bearing liabilities 7 44 403 48 918 43 933 Deferred tax 57 996 57 271 59 632 Lease liabilities 1 253 - Total non-current liabilities 103 652 106 189 103 565 Current liabilities 3 846 - - Accounts payable and other current liabilities 6 501 4 247 12 372 Accrued public charges 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Amounts in NOK thousands	Note	Unaudited 30.06.2019	Unaudited 30.06.2018	31.12.2018
Shareholders' equity Share capital 9 6 338 5 261 5 262 Share premium reserve 886 912 821 161 821 131 Other reserves 46 031 37 130 41 238 Retained earnings -608 987 -447 228 -522 481 Translation differences 22 692 17 665 29 546 Total equity 352 985 433 989 374 696 Non-current liabilities Interest-bearing liabilities 7 44 403 48 918 43 933 Deferred tax 57 996 57 271 59 632 Lease liabilities 1 253 - - Total non-current liabilities 103 652 106 189 103 565 Current liabilities 7 9 127 - 9 127 Short-term lease liabilities 7 9 127 - 9 127 Short-term lease liabilities 3 846 - - Accounts payable and other 6 501 4 247 12 372 Current liabilities 2 909					
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Share premium reserve 886 912 821 161 821 131 Other reserves 46 031 37 130 41 238 Retained earnings -608 987 -447 228 -522 481 Translation differences 22 692 17 665 29 546 Total equity 352 985 433 989 374 696 Non-current liabilities 1 44 403 48 918 43 933 Deferred tax 57 996 57 271 59 632 Lease liabilities 1 253 - Total non-current liabilities 103 652 106 189 103 565 Current liabilities 3 846 - - - Accounts payable and other current liabilities 6 501 4 247 12 372 Accrued public charges 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Shareholders' equity				
Other reserves 46 031 37 130 41 238 Retained earnings -608 987 -447 228 -522 481 Translation differences 22 692 17 665 29 546 Total equity 352 985 433 989 374 696 Non-current liabilities 100 44 403 48 918 43 933 Deferred tax 57 996 57 271 59 632 Lease liabilities 1 253 - Total non-current liabilities 103 652 106 189 103 565 Current liabilities 7 9 127 - 9 127 Short-term lease liabilities 3 846 - - Accounts payable and other current liabilities 6 501 4 247 12 372 Accrued public charges 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Share capital	9	6 338	5 261	5 262
Retained earnings -608 987 -447 228 -522 481 Translation differences 22 692 17 665 29 546 Total equity 352 985 433 989 374 696 Non-current liabilities 1 44 403 48 918 43 933 Deferred tax 57 996 57 271 59 632 Lease liabilities 1 253 - - Total non-current liabilities 103 652 106 189 103 565 Current liabilities 7 9 127 - 9 127 Short-term lease liabilities 3 846 - - Accounts payable and other current liabilities 6 501 4 247 12 372 Other short-term liabilities 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Share premium reserve		886 912	821 161	821 131
Translation differences 22 692 17 665 29 546 Total equity 352 985 433 989 374 696 Non-current liabilities Interest-bearing liabilities 7 44 403 48 918 43 933 Deferred tax 57 996 57 271 59 632 Lease liabilities 1 253 - Total non-current liabilities 103 652 106 189 103 565 Current liabilities 7 9 127 - 9 127 Short-term lease liabilities 3 846 - - 9 127 Accounts payable and other current liabilities 6 501 4 247 12 372 Other short-term liabilities 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Other reserves		46 031	37 130	41 239
Non-current liabilities 7 44 403 48 918 43 933 Deferred tax 57 996 57 271 59 632 Lease liabilities 1 253 - Total non-current liabilities 103 652 106 189 103 565 Current liabilities 7 9 127 - 9 127 Short-term lease liabilities 3 846 - - - Accounts payable and other current liabilities 6 501 4 247 12 372 Cher short-term liabilities 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Retained earnings		-608 987	-447 228	-522 481
Non-current liabilities Interest-bearing liabilities 7 44 403 48 918 43 933 Deferred tax 57 996 57 271 59 632 Lease liabilities 1 253 - Total non-current liabilities 103 652 106 189 103 565 Current liabilities 7 9 127 - 9 127 Short-term lease liabilities 3 846 - - - Accounts payable and other current liabilities 6 501 4 247 12 372 Other short-term liabilities 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Translation differences		22 692	17 665	29 546
Interest-bearing liabilities 7	Total equity		352 985	433 989	374 696
Deferred tax 57 996 57 271 59 632 Lease liabilities 1 253	Non-current liabilities				
Lease liabilities 1 253 Total non-current liabilities 103 652 106 189 103 565 Current liabilities 7 9 127 - 9 127 Short-term lease liabilities 3 846 - - - Accounts payable and other current liabilities 6 501 4 247 12 372 Accrued public charges 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Interest-bearing liabilities	7	44 403	48 918	43 933
Total non-current liabilities 103 652 106 189 103 565 Current liabilities Interest-bearing liabilities 7 9 127 - 9 127 Short-term lease liabilities 3 846 - - - - Accounts payable and other current liabilities 6 501 4 247 12 372 - 12 372 Accrued public charges 2 909 1 893 3 370 - 3 4 508 - <td>Deferred tax</td> <td></td> <td>57 996</td> <td>57 271</td> <td>59 632</td>	Deferred tax		57 996	57 271	59 632
Current liabilities Interest-bearing liabilities 7 9 127 - 9 127 Short-term lease liabilities 3 846 - - - Accounts payable and other current liabilities 6 501 4 247 12 372 Accrued public charges 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Lease liabilities		1 253		-
Interest-bearing liabilities 7 9 127 - 9 127 Short-term lease liabilities 3 846 - - Accounts payable and other current liabilities 6 501 4 247 12 372 Accrued public charges 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Total non-current liabilities		103 652	106 189	103 565
Short-term lease liabilities 3 846 - - Accounts payable and other current liabilities 6 501 4 247 12 372 Accrued public charges 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Current liabilities				
Accounts payable and other current liabilities 6 501 4 247 12 372 Accrued public charges 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Interest-bearing liabilities	7	9 127	-	9 127
current liabilities Accrued public charges 2 909 1 893 3 370 Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377	Short-term lease liabilities		3 846	-	-
Other short-term liabilities 41 040 25 664 34 508 Total current liabilities 63 422 31 804 59 377			6 501	4 247	12 372
Total current liabilities 63 422 31 804 59 377	Accrued public charges		2 909	1 893	3 370
	Other short-term liabilities		41 040	25 664	34 508
TOTAL EQUITY AND LIABILITY 520 060 571 982 537 637	Total current liabilities		63 422	31 804	59 377
	TOTAL EQUITY AND LIABIL	ITY	520 060	571 982	537 637

Condensed consolidated statement of changes in equity

Amounts in NOK thousands	Note	Share capital	Share premium	Other reserves	Translation differences	Retained earnings (Accumulated losses)	Total equity
Throughte in the Careacanae	71010	оарна	promidin	10001100	dinordinodo	(, todamaiated ledese)	
Balance at 31 December 2017		5 261	821 161	29 276	26 926	-375 466	507 158
Loss for the period		-	-	-	-	-71 762	-71 762
Exchange differences arising from the translation of foreign operations		-	-	-	-9 261	-	-9 261
Other comprehensive income/loss, net of tax		-	-	-	-	-	-
Total comprehensive income for the period		-	-	-	-9 261	-71 762	-81 023
Recognition of share-based payments & RSU's	11	-	-	7 854	-	-	7 854
Balance at 30 June 2018		5 261	821 161	37 130	17 665	-447 228	433 989
Loss for the period		-	-	-	-	-75 252	-75 252
Exchange differences arising from the translation of foreign operations		-	-	-	11 880	-	11 880
Other comprehensive income/loss, net of tax		-	-	-	-	-	-
Total comprehensive income for the period		-	-	-	11 880	-75 252	-63 372
Share issuance, employee share options & RSU's	9	1	-30	-	-	-	-30
Recognition of share-based payments & RSU's	11	-	-	4 109	-	-	4 109
Balance at 31 December 2018		5 262	821 131	41 239	29 546	-522 481	374 696
Loss for the period		-	-	-	-	-86 506	-86 506
Exchange differences arising from the translation of foreign operations		-	-	-	-6 854	-	-6 854
Other comprehensive income/loss, net of tax		-	-	-	-	-	-
Total comprehensive income for the period					-6 854	-86 506	-93 361
Issue of ordinary shares - Capital increase - Private Placement & Subsequent offering	9	1 066	73 585	-	-	-	74 651
Transaction costs - Private Placement & Subsequent offering		-	-7 803	-	-	-	-7 803
Share issuance, employee share options & RSU's	9	10	-	-	-	-	
Recognition of share-based payments & RSU's	11	-	-	4 792		-	4 802
Balance at 30 June 2019		6 338	886 912	46 031	22 692	-608 987	352 985

Condensed consolidated statement of cash flow

Amounts in NOK thousands	Note	Unaudited 2Q 2019	Unaudited 2Q 2018	Unaudited 1H 2019	Unaudited 1H 2018	FY 2018
Cash flow from operating activities						
Loss before income tax		-45 571	-37 130	-86 670	-71 927	-147 349
Adjustments for:						
Finance income		-344	-515	-828	-1 067	-3 068
Finance expense		1 299	998	3 256	2 835	4 317
Interest received		344		828	5	1 554
Other finance expense		-116	-39	-167	-57	-88
Share option & RSU expense	11	2 079	3 693	4 792	7 854	11 963
Depreciation		1 031	77	2 064	153	308
Change in receivables		695	-1 894	-3 198	-1 672	-700
Change in other current liabilities		5 974	6 108	-621	3 646	21 496
Net cash flow from/(used in) operating activities		-36 000	-28 701	-80 545	-60 229	-111 568
Cash flow from investing activities						
Purchases of property, plant, and equipment (PPE)		-134		-134		
Net cash received from/(paid in) investing activities		-134	-	-134	-	
Cash flow from financing activities						
Interest paid	7			-222	-220	-607
Repayment of lease liabilities		-1 021		-2 049		
Share issue expense - Private Placement & subsequent offering		-7206		-7 347		
Proceeds from Private Placement and subsequent offering		74 651		74 651		-30
Proceeds from exercise of options & RSU's		-18		-18		-30
Net cash generated from financing activities		66 406	-	65 014	-220	-637
Net increase/(decrease) in cash and cash equivalents		30 272	-28 701	-15 665	-60 449	-112 204
Net exchange gain/loss on cash and cash equivalents		-267	-212	-599	-424	1 820
Cash and cash equivalents at beginning of period		104 919	229 188	151 189	261 573	261 573
Cash and cash equivalents at end of period		134 924	200 700	134 924	200 700	151 189

Notes

1. General information

Targovax ASA ("the Company") and its subsidiaries (together the Group) is a clinical stage immuno-oncology company developing oncolytic viruses 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.

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 21 August 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 2018 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 vet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 30 June 2019 reporting period 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 2019.

2.3 Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries. As at 30 June 2019, 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 in the first quarter 2019 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 30 June 2019. 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:

	2Q 2	2019	2Q	2018	1H	2019	1H 2	018	FY	2018
Amounts in NOK thousands	Total o	f which R&D	Total	of which R&D	Total	of which R&D	Total of v	vhich R&D	Total	of which R&D
External R&D expenses	22 012	22 012	14 485	14 485	41 425	41 425	25 698	25 698	64 006	64 006
Payroll and related expenses	17 511	9 054	14 792	8 241	31 129	15 961	30 459	16 340	56 433	30 210
Other operating expenses	5 098	134	7 379	345	11 699	240	14 016	568	25 688	941
Total operating expenses	44 622	31 200	36 656	23 071	84 253	57 626	70 174	42 605	146 127	95 157

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 year 2018.

4. Government grants

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

Amounts in NOK thousands	2Q 2019	2Q 2018	1H 2019	1H 2018	FY 2018
External R&D expenses	1 159	1 302	2 262	1 891	4 077
Payroll and related expenses	192	388	409	748	1 105
Other operating expenses	18	44	29	66	80
Total grants	1 369	1 734	2 700	2 705	5 263

R&D projects have been approved for SkatteFUNN through 2019 and 2020. For the second quarter and first half of 2019, the Group has recognized NOK 1.4m and NOK 2.7m 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 2018 for more information about grants.

5. Payroll and related expenses

Total payroll and related expenses for the Group are:

Amounts in NOK thousands	2Q 2019	2Q 2018	1H 2019	1H 2018	FY 2018
Salaries and bonus	8 509	9 724	17 512	19 779	37 547
Employer's national insurance contributions	1 092	1 065	2 209	2 255	4 723
Share-based compensation 1)	2 078	3 693	4 792	7 854	11 963
Pension expenses – defined contribution plan	494	567	971	1 045	2 028
Restructuring costs ²⁾	5 446	-	5 446	-	-
Other	84	131	608	274	1 279
Governmental grants	-192	-388	-409	-748	-1 105
Total payroll and related expenses	17 511	14 792	31 129	30 459	56 433

¹⁾ Share-based compensation has no cash effect.

²⁾ Following the decision to fully focus on the ONCOS platform, the number of employees will be reduced. Restructuring costs of NOK 5.4m has been accrued per 30th June 2019.

	30.06.2019	30.06 2018	31.12 2018
Number of employees calculated on a full-time basis as at end of period	25.4	27.7	25.6
Number of employees as at end of period	26	28	26

6. Intangible assets

As of 30 June 2019, the recognized intangible assets in the Group amounts to NOK 361m. This is a decrease from NOK 370m as of 31 December 2018, 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 2018 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 30 June 2019. EUR 917 400 of the total debt is short-term as per 30 June 2019. The Group is applying for an extension of the repayment-free period.

Amortized interests are charged to financial expenses, amounting to NOK 1.8m and NOK 1.8m during the first half of 2019 and 2018, NOK 3.6m during full year 2018.

No new Business Finland loans have been awarded during first half 2019.

See note 21 Interest-bearing debt in the Annual Report 2018 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.

	1F	1 2019	11	H 2018	FY 2	.018
Amounts in NOK thousands	Carrying amounts	Fair value	Carrying amounts	Fair value	Carrying amounts	Fair value
Right-of-use assets	5 000	5 000	-	-	-	-
Receivables	18 518	18 518	16 292	16 292	15 320	15 320
Cash and cash equivalents	134 924	134 924	200 700	200 700	151 189	151 189
Total financial assets	158 443	158 443	216 992	216 992	166 509	166 509
Interest-bearing borrowings	53 529	53 529	48 918	48 918	53 059	53 059
Lease liabilities	5 099	5 099			-	-
Accounts payable and other current liabilities	6 501	6 501	4 247	4 247	12 372	12 372
Accrued public charges	2 909	2 909	1 893	1 893	3 370	3 370
Other short-term liabilities	41 040	41 040	25 664	25 664	34 508	34 508
Total financial liabilities	109 078	109 078	80 722	80 722	103 309	103 309

The tables below analyse 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 30 June 2019:

Amounts in NOK thousands	Level 1	Level 2	Level 3	Total
Interest-bearing borrowings	-	-	53 529	53 529
Total financial instruments at fair value	-	-	53 529	53 529

As at 30 June 2018:

Amounts in NOK thousands	Level 1	Level 2	Level 3	Total
Interest-bearing borrowings	-	-	48 918	48 918
Total financial instruments at fair value	-	-	48 918	48 918

As at 31 December 2018:

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

9. Share capital and number of shares

In March 2019, Targovax announced that a Private Placement had been successfully completed, raising gross proceeds of approximately NOK 74 million (USD 9 million) through the allocation of 10,521,973 new shares (the "New Shares") at a subscription price of NOK 7.0 per share. The Private Placement took place through an accelerated book building process after close of market on 21 March 2019. The Private Placement attracted strong interest from existing shareholders and new institutional investors, both in Norway and the US. The transaction was approved by the General Assembly on 30 April 2019. A subsequent offering in second quarter 2019 raised gross proceeds of NOK 1 million. Proceeds from both the Private Placement and the subsequent offering were received by Targovax in second guarter 2019.

Share capital as at 30 June 2019 is 6 338 361.3 (31 December 2018: 5 261 644.8) comprising 63 383 613 ordinary shares at nominal value NOK 0.10 (31 December 2018: 52 616 448 at NOK 0.10). All shares carry equal voting rights.

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

Amounts in NOK thousands	2Q 2019	2Q 2018	1H 2019	1H 2018	FY 2018
Ordinary shares at beginning of period	63 138 421	52 609 867	52 616 448	52 609 867	52 609 867
Share issuance - Private Placement	142 457	-	10 664 430	-	-
Share issuance, employee share options and RSUs	102 735	-	102 735	-	6 581
Ordinary shares at end of period	63 383 613	52 609 867	63 383 613	52 609 867	52 616 448

The 20 largest shareholders are as follows at 30 June 2019:

Shareholder	# shares	%
HealthCap	12 405 584	19.6 %
Radiumhospitalets Forskningsstiftelse	4 427 255	7.0 %
Nordnet Livsforsikring AS	1 756 870	2.8 %
Nordnet Bank AB	1 616 044	2.6 %
VPF Nordea Kapital	1 538 448	2.4 %
Thorendahl Invest AS	1 365 000	2.2 %
VPF Nordea Avkastning	1 344 274	2.1 %
KLP AksjeNorge	846 275	1.3 %
Danske Bank AS	841 848	1.3 %
Prieta AS	720 000	1.1 %
Verdipapirfondet Nordea Norge Plus	686 203	1.1 %
J.P. Morgan Bank Luxembourg S.A.	670 000	1.1 %
Timmuno AS	661 710	1.0 %
Sundt AS	650 000	1.0 %
Kommunal Landspensjonskasse	645 464	1.0 %
MP Pensjon PK	564 286	0.9 %
Yngve Supun Lillesund	394 215	0.6 %
Avanza Bank AB	336 667	0.5 %
Arne Hellestø AS	306 302	0.5 %
The Bank of New York Mellon SA/NV	304 076	0.5 %
20 largest shareholders	32 080 521	50.8 %
Other shareholders (4 252)	31 057 900	49.2 %
Total shareholders	63 138 421	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 30 June 2019:

		No. of shares outstanding at 30
Name	Position	June 2019
Key management:		
Øystein Soug ¹⁾	Chief Executive Officer	190 000
Magnus Jäderberg	Chief Medical Officer	20 000
Total no. of shares owner	210 000	
Board of directors:		
Robert Burns	Board member	64 928
Total no. of shares owned by the Board of Directors of the Group		

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

Earnings/ loss (-) per share - basic and	-0.72	-0.70	-1.49	-1.36	-2.79
Average number of outstanding shares	63 198	52 610	58 111	52 610	52 612
Loss for the period	-45 656	-37 048	-86 506	-71 762	-147 015
Amounts in NOK thousand	2Q 2019	2Q 2018	TH 2019	1H 2018	FY 2018
Amounts in NOK thousand	2Q 2019	2Q 2018	1H 2019	1H 2018	EV 2019

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

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 half of 2019 a total of 600 000 options for shares in the Company have been distributed amongst the current members of the key management and a total of 364 000 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 half and second quarter 2019 was NOK 4.2m and NOK 1,9m. For the same period in 2018 it was NOK 7.2m and NOK 3.4m, and NOK 10.6m for the full year 2018.

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 2019 is estimated at average of 71.58%, based on the volatility of comparable listed companies. The volume weighted average interest rate applied to the share options grants in 2019 is 1.18%.

The following table shows the changes in outstanding options in 2019 and 2018:

		1H 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	964 000	7.71	1 429 000	
Exercised during the period	-	-	-	-
Forfeited during the period	-35 524	12,24	-449 582	17.83
Expired during the period	-	-	-193 748	22.63
Outstanding no. of options at end of period	5 180 780	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 30 June 2019:

		Share C	ptions		
Position	Granted 1H 2019	Outstanding 30.06.2019	Granted FY 2018	Outstanding 31.12.2018	
Chief Executive Officer	150 000	1 160 000	220 000	1 010 000	
Chief Medical Officer	80 000	840 000	100 000	760 000	
Chief Business Officer	130 000	430 000	150 000	300 000	
Chief Financial Officer	100 000	300 000	200 000	200 000	
	460 000	2 730 000	670 000	2 270 000	
Board member	-	21 235	-	21 235	
roup	-	21 235	-	21 235	
	Chief Executive Officer Chief Medical Officer Chief Business Officer Chief Financial Officer	Chief Executive Officer 150 000 Chief Medical Officer 80 000 Chief Business Officer 130 000 Chief Financial Officer 100 000 460 000	Chief Executive Officer	Position	

From 30 June 2019 to 21 August 2019 no new options for shares 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 nontransferrable 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 2019-2020 have been set out in the minutes from the Annual General Meeting 30 April 2019. The Annual General Meeting 30 April 2019 decided to remunerate the Board of Directors for the period between the AGM 2019 to the AGM 2020 with a combination of cash and Restricted Stock Units (RSUs), hence at the 30 April 2019, additional 170,367 RSU's were granted to the Board of Directors.

The expensed RSUs in first half 2019 and 2018 was NOK 0.5m and NOK 0.7m, and 1,4m during full year 2018. A total of 268 060 RSUs was outstanding at 30 June 2019.

The following table shows the exercised, granted and outstanding RSUs to Board of Directors of the Group at 30 June 2019:

	Position	RSU's			
Name		Outstanding 31.12.2018	Granted 1H 2019	Exercised 1H 2019	Outstanding 30.06.2019
Board of Directors:					
Eva-Lotta Allan	Board member	51 368	15 249	-51 368	15 249
Diane Mellett	Board member	50 198	15 249	-17 704	47 743
Patrick Vink	Chairperson of the Board	44 286	78 873	0	123 159
Robert Burns	Board member	28 199	45 747	-28 199	45 747
Bente-Lill Romøren	Board member	20 328	15 249	-5 464	30 113
Catherine A. Wheeler	Board member	6 049	0	0	6 049
Total Restricted Stock Units to	Board of Directors of the Group	200 428	170 367	-102 735	268 060

From 1 July 2019 to 21 August 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 has applied the standard from its mandatory adoption date of 1 January 2019. The Group has applied 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 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 has recognized right-of-use assets of NOK 7.0 million on 1 January 2019 and lease liabilities of NOK 7.0 million.

The Group's operating profit/loss has increased by NOK 0.1 million and net profit after tax has decreased by NOK 0.1 million for the first half 2019 as a result of adopting the new rules.

Operating cash flows has increased, and financing cash flows has decreased by NOK 1.0 million in 2g 2019 and NOK 2.0 million in first half 2019 as repayment of the principal portion of the lease liabilities will be classified as cash flows from financing activities.

The impact on the date of initial application is further presented below:

Amounts in NOK thousands			
Reconciliation of lease commitments to	01.01.2019		
Non-cancellable operating lease commitm	ents at 31 Decer	mhar 2018	5 994
+ Extension options reasonably certain to	1 764		
,			
- Practical expedient related to short-term	-98		
- Practical expedient related to low-value	-158		
- Discounting using the incremental borro	-496		
Lease liabilities recognized at initial ap	7 005		
The weighted average incremental borrow	8%		
Right-of-use assets recognized at initia	7 005		
Impact of the initial application of IFRS 16: Amounts in NOK thousands	01.01.2019	Effects from IFRS 16	31.12.2018
ASSETS			
Intangible assets	370 240		370 240
Property, plant, and equipment	889		889
Right-of-use assets	7 005	7 005	
Total non-current assets	378 134	7 005	371 128
Receivables	15 320		15 320
Cash and cash equivalents	151 189		151 189
Casii and Casii equivalents	131 109		151 169

166 509

544 643

166 509

537 637

Total current assets

TOTAL ASSETS

Amounts in NOK thousands	01.01.2019	Effects from IFRS 16	31.12.2018
EQUITY AND LIABILITIES			
Shareholders' equity			
Share capital	5 262		5 262
Share premium reserve	821 131		821 131
Other reserves	41 239		41 239
Retained earnings	-522 481		-522 481
Translation differences	29 546		29 546
Total equity	374 696	-	374 696
Non-current liabilities			
Interest-bearing liabilities	43 933		43 933
Deferred tax	59 632		59 632
Lease liabilities	7 005	7 005	
Total non-current liabilities	110 570	7 005	103 565
Current liabilities			
Interest-bearing liabilities	9 127		9 127
Accounts payable and other current liabilities	12 372		12 372
Accrued public charges	3 370		3 370
Other short-term liabilities	34 508		34 508
Total current liabilities	59 377	-	59 377
TOTAL EQUITY AND LIABILITIES	544 643	7 005	537 637

13. Subsequent events

Post-period highlights

In July, Targovax announced data from part 1 of the ONCOS-102 trial in checkpoint inhibitor refractory advanced melanoma, showing validated clinical responses in three out of nine patients (33% ORR) and immune activation in all nine patients.

In July, the dose escalation part of the phase I/II trial of ONCOS-102 in combination with the checkpoint inhibitor Imfinzi in patients with advanced peritoneal malignancies was completed, and the expansion part of the trial opened for patient enrollment.

