

The background is a vibrant blue with various microscopic and molecular imagery. In the upper right, there's a large, detailed virus particle with a textured surface and several long, thin spikes extending from it. In the lower right, another virus particle is shown, appearing to be budding or attached to a larger, textured surface. On the left side, there are several circular insets: one showing a molecular structure with blue and red spheres connected by lines, and another showing a similar structure with a different arrangement of spheres. The overall aesthetic is scientific and high-tech.

Second quarter and
first half year results

2018

targovax

About Targovax

Activating the patient's immune system to fight cancer

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

Targovax's lead product candidate, ONCOS-102, is a genetically modified oncolytic adenovirus, which has been engineered to selectively infect and replicate in cancer cells. It is used as a therapeutic cancer vaccine and has been shown to activate the immune system to generate tumor-specific immune responses. In phase I trials, ONCOS-102 induced both local and systemic innate and adaptive immune activation, which has been associated with clinical benefit. ONCOS-102's lead indication is mesothelioma, where the virus is currently being tested in a randomized phase II trial, with a phase Ib safety lead-in cohort. Another trial, in advanced melanoma, is expected to produce important proof of concept data for checkpoint inhibitor refractory patients within the next 6-12 months.

Targovax is also developing a neo-antigen cancer vaccine targeting tumors that express mutated forms of RAS - mutations known to drive cancer. The TG vaccine program has shown a signal of efficacy in a 32-patient trial with TG01 in resected pancreatic cancer. A next generation product candidate, TG02 is currently tested as monotherapy and will also be tested in combination with Keytruda® (an anti-PD1 Checkpoint inhibitor, CPI).

Upcoming events

11 September: Presentation at Cell & Gene Therapy Europe, London, UK

18 October: BIA UK Bioscience Forum 2018, London, UK

5 November: Bio-Europe, Copenhagen, Denmark

14 November: Presentation at Neoantigen Summit, Boston, US

5 December: Presentation at Oncolytic Virotherapy Summit, Boston, US

Upcoming milestones

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

Financial Calendar 2018

1 November 2018: Third quarter report and presentation

14 February 2019: Fourth quarter report and presentation

Second quarter and first half highlights

Encouraging data highlighting significant potential of oncolytic viruses, increasing focus on ONCOS

- 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
- 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
- In May, an early signal of efficacy was reported from the ONCOS-102 phase I/II trial in mesothelioma, with activity observed in three out of six patients in the safety lead-in cohort. The trial has now entered the randomized phase II part, enrolling 24 more patients
- In May, survival data was reported from the 32-patient phase I/II clinical trial evaluating TG01 in resected pancreatic cancer in combination with gemcitabine chemotherapy. Median overall survival for the patients vaccinated with TG01 was 33.4 months, compared with 27.6 months for gemcitabine alone reported in the ESPAC4 trial
- In June, the Company updated its business strategy, strengthening the development focus on the ONCOS oncolytic virus program, with ONCOS-102 as the lead product candidate
- In June, Targovax was granted a product patent in the EU for TG02, the 2nd generation product from the mutant-RAS neoantigen vaccine platform
- In April, Dr. Catherine A. Wheeler was elected as a new member of the Board of Directors

Post-period highlights

- In July, Ludwig Cancer Research and CRI announced the completion of the safety evaluation for the first dose cohort in the phase I/II trial of ONCOS-102 in combination with MedImmune's checkpoint inhibitor Imfinzi[®] (durvalumab)
- In July, Targovax and SOTIO announced that the first patient was dosed in the phase I/II combination trial of ONCOS-102 with DCVAC, a dendritic cell immune-therapy

Key Figures

| <i>Amounts in NOK thousand</i> | 2Q 2018 | 2Q 2017 | FY 2017 |
|---|----------------|---------|----------|
| Total operating revenues | 9 | 6 | 37 |
| Total operating expenses | -36 656 | -33 844 | -119 963 |
| Operating profit/loss | -36 647 | -33 838 | -119 926 |
| Net financial items | -483 | -185 | -2 347 |
| Income tax | 82 | 82 | 328 |
| Net profit/loss | -37 048 | -33 941 | -121 945 |
| <hr/> | | | |
| Basic and diluted EPS (NOK/share) | -0.70 | -0.80 | -2.58 |
| <hr/> | | | |
| Net change in cash | -28 489 | -31 675 | 89 944 |
| Cash and cash equivalents start of period | 229 188 | 147 497 | 171 629 |
| Cash and cash equivalents end of period | 200 700 | 115 821 | 261 573 |



“ It has been an exciting first half of 2018 for the oncolytic virus field. Clinical data, both from Targovax and others, have reinforced the scientific foundation of oncolytic viruses as an important class of immune activators. Oncolytic virus therapies have been further highlighted by recent deal activity in the space. Therefore, it is natural for Targovax to strengthen its efforts on the ONCOS program. We look forward to several upcoming data read-outs within the next year. We continue to see potential in the TG neo-antigen cancer vaccine to treat mutant RAS cancers, and are working closely with our scientific advisors to devise an updated strategy for how to best create value for both patients and shareholders. We aim to announce a revised development plan for the TG program during the autumn.”

Øystein Soug,
CEO

Clinical development program overview

| Platform | Product candidate | Preclinical | Phase I | Phase II | Phase III | Last event | Next expected event | |
|----------|---------------------------------------|--|---------|----------|-----------|------------|--|---|
| ONCOS | ONCOS-102 oncolytic adenovirus | Mesothelioma Comb. w/ pemetrexed/cisplatin ¹ | ▶ | | | | Phase Ib safety lead-in cohort, incl. immune activation and ORR data (6 pts) | 1H 2020 Randomized ORR data 30 pts |
| | | Melanoma Comb. w/KEYTRUDA® | ▶ | | | | First safety review, incl. immune activation (4 pts) | 2H 2018 Interim immune and ORR data |
| | | Peritoneal cancers ^{2,3} Partner: Ludwig, CRI & AZ Comb. w/IMFINZI® | ▶ | | | | First dose escalation cohort safety review (4 pts) | <i>Update by partner, expected 2019</i> |
| | | Prostate ³ Partner: Sotio Comb. w/DCVAC | ▶ | | | | First patient dosed | <i>Update by partner, expected 2019</i> |
| | Next-gen ONCOS | 3 viruses undisclosed | ▶ | | | | Virus construct cloning and <i>in vitro</i> validation | 1H 2019 Target disclosure and <i>in vivo</i> data |
| TG | TG02 neo-antigen cancer vaccine | Colorectal cancer Proof-of-mechanism Comb. w/KEYTRUDA® | ▶ | | | | First safety review, incl. immune activation data (3 pts) | 1H 2019 Immune activation and mechanistic data |
| | TG01/02 neo-antigen cancer vaccine | CPI synergy TG + PD-1 | ▶ | | | | | 1H 2019 TG02 + PD-1 combination <i>in vivo</i> data |

¹ Current standard of care chemotherapy for patients with unresectable malignant pleural mesothelioma

² Patients with advanced peritoneal disease, who have failed prior standard chemotherapy and have histologically confirmed platinum-resistant or refractory epithelial ovarian or colorectal cancer

³ Partner sponsored trials

■ Ongoing partner sponsored trials

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.

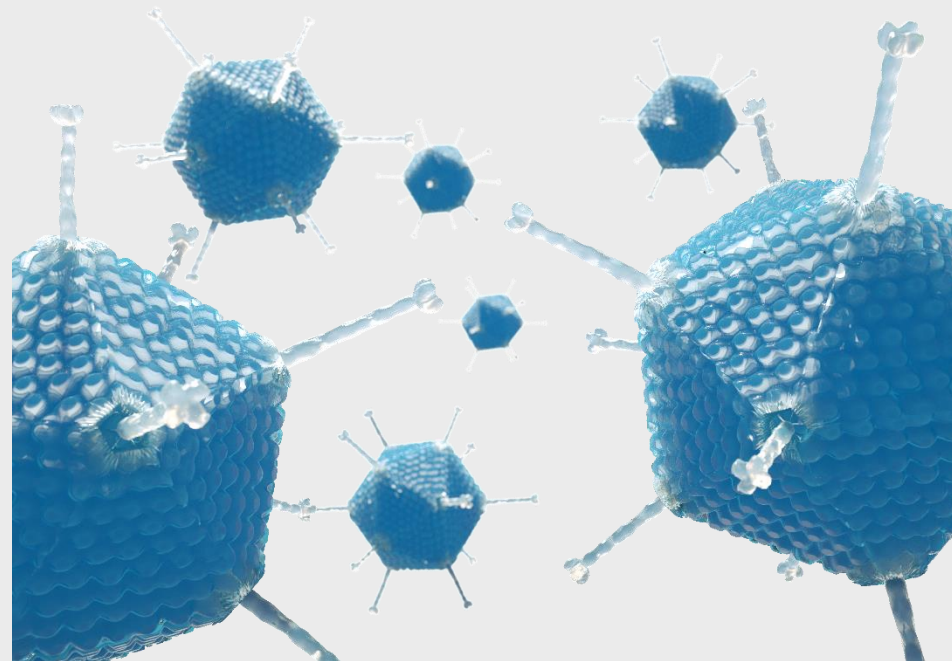
Clinical development programs

ONCOS-102 in mesothelioma

This trial is a randomized phase II open label trial with a phase Ib safety lead-in cohort (six patients) of ONCOS-102 and pemetrexed/cisplatin, the current standard of care chemotherapy in patients with unresectable malignant pleural mesothelioma. The trial has comprised six patients in a lead-in cohort (for safety evaluation of the combination) and is currently recruiting 24 additional patients in the randomized phase of the trial. The aim of the trial is to compare the clinical benefit of the combination treatment with standard of care chemotherapy.

In February 2018, Targovax announced the completion of the safety lead-in cohort, including preliminary immune activation data, of ONCOS-102 in combination with standard of care chemotherapy in mesothelioma. The independent Data and Safety Monitoring Board (DSMB) reviewed all six patients in the safety lead-in cohort and no safety concerns were raised. The DSMB recommended that the randomized part of the trial could be initiated, and recruitment of the further 24 patients is underway.

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, as expected, 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, as expected, 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 indicate 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 ONCOS-102 induced attack by the immune system.



ONCOS-102 – a genetically modified oncolytic adenovirus

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 ONCOS-102 and Keytruda® (pembrolizumab), an anti-PD1 checkpoint inhibitor (CPI), in patients with advanced or unresectable melanoma whose tumors have continued to grow following prior CPI therapy. The trial is being conducted at Memorial Sloan Kettering Cancer Center in New York and at Fox Chase Cancer Center in Philadelphia. The aim of the trial is to investigate whether these refractory patients will respond to re-challenge with a CPI following treatment 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 were observed in all four patients. Importantly, 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.

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®. More extensive clinical results from the sequential virus and CPI combination treatment are expected later in 2018 and during 2019.

TG01 in pancreatic cancer

In May 2018, Targovax completed the 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 enrolled a total of 32 patients, split in two patient cohorts receiving different dosing regimens. Median overall survival (mOS) for the two combined cohorts was 33.4 months. The first cohort consisted of 19 patients, receiving TG01 injections, before, during and after adjuvant chemotherapy treatment. In February 2017, two-year survival rate of 68% (13/19 patients) and mOS of 33.1 months was reported for this cohort. The second cohort consisted of 13 patients on a reduced dosing regimen, with TG01 injections before and after, but not during, chemotherapy treatment. Two-year survival rate in the second cohort was 77% (10/13 patients) and mOS had not yet been reached at the time of analysis.

Targovax strongly believes in the potential of the TG platform to treat mutant RAS cancers, and is encouraged by the signal of efficacy seen in this study. However, data presented at the American Society of Clinical Oncology (ASCO) annual meeting on June 1-5 2018 fundamentally changed the development preconditions for the TG program in resected pancreatic cancer. Data from independent trials testing the chemotherapy combination Folfirinox as adjuvant therapy for treating patients with resected pancreatic cancer, demonstrated an improvement in median overall survival of up to two years compared to the current standard of care (gemcitabine and capecitabine) and is expected to be quickly adopted as a new standard of care. Before these new Folfirinox results were published, the Company had planned to combine TG01 with the current standard of care (gemcitabine and capecitabine) in the next phase of TG01's development. Although the Company is confident that TG01 will be active in combination with any chemotherapy, the new Folfirinox median survival benchmark of close to five years means that such a combination trial is not practically feasible for Targovax, as it would take a considerable time to reach an endpoint. In light of this, Targovax is working with its clinical advisors to reevaluate the development plans for TG and devise a strategy for how to best create value for both patients and shareholders with continued TG development. A revised development strategy for the TG program will be presented during the autumn.

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 CPI, in patients with local primary and recurrent colorectal cancer scheduled to have surgery. The first safety review was conducted with no reported issues.

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

Targovax is collaborating with US-based Ludwig Cancer Research (Ludwig) and the Cancer Research Institute (CRI) on immunotherapy clinical development. The first clinical trial initiated as part of this collaboration is a non-randomized, open-label, phase I/II trial which is exploring the combination of ONCOS-102 with MedImmune's checkpoint inhibitor Imfinzi® (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 Imfinzi®. The trial is a multi-center program at leading academic centers in the US and is sponsored by Ludwig on behalf of the CRI as well as being supported financially by CRI.

In July 2018, Ludwig Cancer Research and CRI announced continuance of the phase I/II trial after completing the safety evaluation for the first dose cohort (4 patients) in the dose escalation phase of the study.

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. In July 2018, Targovax and SOTIO announced that the first patient was dosed in this phase I/II combination trial.

Through these collaborations, Targovax leverages its own clinical development expertise with access to leading external networks. Targovax has retained all commercial rights to its products.

Preclinical development

Targovax has conducted *in vivo* studies of ONCOS-102 in mesothelioma and melanoma mouse models to back up the scientific rationale for the clinical combination strategies in these indications.

In a 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 percent
- ONCOS-102 + Pem/Cis reduced tumor volume by 75 percent 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 percent
- ONCOS-102 + Keytruda® reduced volume by 61 percent (lower dose) and 69 percent (higher dose)

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

IPR / Market protection

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

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

In September 2017, Targovax was granted a US patent for its mutRAS neo-antigen platform that protects the therapeutic cancer vaccine candidates TG01 and TG02 for the treatment of cancer in combination with anti-metabolite chemotherapy. This patent expires in 2035. US and European patents were granted in October 2017 and June 2018 respectively that protects Targovax's mutRAS specific 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 2034 and 2033, respectively.

Experienced team

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

Management team

As per 30 June 2018

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

Board of Directors

As per 30 June 2018

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 second quarter 2018

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

Operating expenses amounted to NOK 37m (NOK 34m) in the quarter. The operating expenses are reported net of governmental grants which amounted to NOK 2m in the

period (NOK 1m). The net loss amounted to NOK 37m in the second quarter 2018 (NOK 34m).

Results first half 2018

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

Operating expenses amounted to NOK 70m during the first half of 2018, compared to NOK 61m in the first half of 2017.

The net loss for the half year amounted to NOK 72m (NOK 61m).

Financial position and cash flow

Net cash was NOK 201m at the end of the second quarter 2018 compared to NOK 229m at the end of first quarter 2018 and NOK 116m at the end of second quarter 2017.

Net cash flow from operating activities during the second quarter was negative by NOK 29m compared to negative NOK 32m in the first quarter 2018 and NOK 32m in second quarter 2017.

By the end of the period, total outstanding interest-bearing debt amounted to EUR 6m 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 8 August 2018, there were 52,609,867 shares outstanding, distributed between 4,129 shareholders. The 20 largest shareholders controlled 56 percent of the shares.

During Q2 2018, Targovax shares traded in the NOK 10.60 - 18.00 range. During the quarter, some 14 million shares were traded, with an aggregate trading value of NOK 204m.

The closing price on 30 June 2018 was NOK 10.60 per share, corresponding to a market value of NOK 558 million.

The estimated share ownership situation on 08 August 2018:

| Shareholder | Estimated | |
|--------------------------------|-------------|----------------|
| | Shares mill | Ownership |
| HealthCap | 12,4 | 23,6 % |
| Nordea | 4,6 | 8,7 % |
| RadForsk | 4,4 | 8,4 % |
| KLP | 2,1 | 3,9 % |
| Statoil | 1,0 | 1,9 % |
| Thorendahl Invest | 0,8 | 1,6 % |
| Danske Bank (nom.) | 0,7 | 1,4 % |
| Timmuno | 0,7 | 1,4 % |
| Prieta | 0,5 | 1,0 % |
| Sundt | 0,4 | 0,8 % |
| Yngve S. Lillesund | 0,3 | 0,5 % |
| 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 Zwilgmeyer | 0,2 | 0,3 % |
| Rolf Arne Olsen | 0,2 | 0,3 % |
| Nicolai Juul Roberg | 0,2 | 0,3 % |
| 20 largest shareholders | 29,7 | 56,4 % |
| Other shareholders (4 109) | 22,9 | 43,6% |
| Total shareholders | 52,6 | 100,0 % |

Subsequent events

In July 2018, Ludwig and CRI announced continuance of the phase I/II clinical trial to evaluate the combination of ONCOS-102 with Imfinzi® for advanced ovarian and colorectal cancers. The trial has completed enrollment and the safety evaluation for the first dose cohort and will move to the second and third dose cohort before ultimately enrolling up to 78 adult patients in a multi-center program at leading academic centers on the US east coast.

In July, Targovax and SOTIO announced that the first patient was dosed in the phase I/II combination trial of ONCOS-102 with DCVAC, a dendritic cell immune-therapy.

Risks and uncertainty factors for the second quarter 2018

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

Outlook

In the last year there has been a plethora of clinical data released from multiple external studies highlighting the potential of oncolytic viruses as an important class of immune activating agents that can boost the effect of other treatments along with an increase in M&A and partnering deals by global pharmaceutical companies for these products.

Targovax is encouraged by the current clinical data for its ONCOS program. Targovax aims to strengthen and accelerate the development of ONCOS-102.

We expect multiple important data read-outs for ONCOS-102 over the next 12 months. In melanoma, Targovax's upcoming data readouts may constitute proof of concept in checkpoint inhibitor refractory patients. This along with additional data read-outs, including partnered trials, will guide future development decisions for the oncolytic virus platform

We are working closely with our clinical advisors to update the development plans for TG and devise a strategy for how to best create value for both patients and shareholders. A revised and optimized development strategy for the TG program will be presented during the autumn.

Responsibility statement

We confirm, to the best of our knowledge that the financial statements for the period 1 January to 30 June 2018 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, 22 August 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

Second quarter and first half year results 2018

Condensed consolidated statement of profit and loss

| <i>Amounts in NOK thousands except per share data</i> | <i>Note</i> | Unaudited 2Q 2018 | Unaudited 2Q 2017 | Unaudited 1H 2018 | Unaudited 1H 2017 | FY 2017 |
|---|-------------|----------------------|----------------------|----------------------|----------------------|-----------------|
| Other revenues | | 9 | 6 | 15 | 11 | 37 |
| Total revenue | | 9 | 6 | 15 | 11 | 37 |
| External R&D expenses | 3,4 | -14 485 | -13 962 | -25 698 | -22 754 | -45 571 |
| Payroll and related expenses | 5,11 | -14 792 | -12 555 | -30 459 | -23 662 | -48 278 |
| Other operating expenses | 3,4 | -7 379 | -7 327 | -14 016 | -14 506 | -26 114 |
| Total operating expenses | | -36 656 | -33 844 | -70 174 | -60 922 | -119 963 |
| Operating profit/ loss (-) | | -36 647 | -33 838 | -70 159 | -60 911 | -119 926 |
| Finance income | | 515 | 830 | 1 067 | 1 356 | 1 654 |
| Finance expense | | -998 | -1 014 | -2 835 | -1 921 | -4 001 |
| Net finance income/ expense (-) | | -483 | -185 | -1 768 | -565 | -2 347 |
| Loss before income tax | | -37 130 | -34 023 | -71 927 | -61 476 | -122 273 |
| Income tax income/ expense (-) | | 82 | 82 | 165 | 157 | 328 |
| Loss for the period | | -37 048 | -33 941 | -71 762 | -61 319 | -121 945 |
| Earnings/ loss (-) per share | | | | | | |
| Basic and dilutive earnings/loss (-) per share | 10 | -0.70 | -0.80 | -1.36 | -1.45 | -2.58 |

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

| <i>Amounts in NOK thousands except per share data</i> | 2Q 2018 | 2Q 2017 | 1H 2018 | 1H 2017 | FY 2017 |
|---|----------------|----------------|----------------|----------------|-----------------|
| Income/ loss (-) for the period | -37 048 | -33 941 | -71 762 | -61 319 | -121 945 |
| Items that may be reclassified to profit or loss: | | | | | |
| Exchange differences arising from the translation of foreign operations | -3 596 | 11 427 | -9 261 | 14 259 | 21 308 |
| Total comprehensive income/ loss (-) for the period | -40 644 | -22 515 | -81 023 | -47 060 | -100 638 |



Condensed consolidated statement of financial position

| <i>Amounts in NOK thousands</i> | <i>Note</i> | Unaudited 30.06.2018 | Unaudited 30.06.2017 | 31.12.2017 | <i>Amounts in NOK thousands</i> | <i>Note</i> | Unaudited 30.06.2018 | Unaudited 30.06.2017 | 31.12.2017 |
|---------------------------------|-------------|-------------------------|-------------------------|----------------|--|-------------|-------------------------|-------------------------|----------------|
| ASSETS | | | | | EQUITY AND LIABILITIES | | | | |
| Intangible assets | 6 | 353 998 | 356 252 | 366 250 | Shareholders' equity | | | | |
| Property, plant, and equipment | | 993 | 1 277 | 1 165 | Share capital | 9 | 5 261 | 4 224 | 5 261 |
| Total non-current assets | | 354 990 | 357 529 | 367 414 | Share premium reserve | | 821 161 | 627 800 | 821 161 |
| Receivables | | 16 292 | 16 482 | 14 620 | Other reserves | | 37 130 | 22 361 | 29 276 |
| Cash and cash equivalents | | 200 700 | 115 821 | 261 573 | Retained earnings | | -447 228 | -314 840 | -375 466 |
| Total current assets | | 216 992 | 132 303 | 276 193 | Translation differences | | 17 665 | 19 878 | 26 926 |
| TOTAL ASSETS | | 571 982 | 489 832 | 643 608 | Total equity | | 433 989 | 359 423 | 507 158 |
| | | | | | Non-current liabilities | | | | |
| | | | | | Interest-bearing liabilities | 7 | 48 918 | 45 707 | 48 806 |
| | | | | | Deferred tax | | 57 271 | 57 956 | 59 350 |
| | | | | | Total non-current liabilities | | 106 189 | 103 662 | 108 156 |
| | | | | | Current liabilities | | | | |
| | | | | | Accounts payable and other current liabilities | | 4 247 | 8 223 | 7 601 |
| | | | | | Accrued public charges | | 1 893 | 3 025 | 3 018 |
| | | | | | Other short-term liabilities | | 25 664 | 15 499 | 17 676 |
| | | | | | Total current liabilities | | 31 804 | 26 747 | 28 294 |
| | | | | | TOTAL EQUITY AND LIABILITY | | 571 982 | 489 832 | 643 608 |

Condensed consolidated statement of changes in equity

| <i>Amounts in NOK thousands</i> | <i>Note</i> | Share capital | Share premium | Other reserves | Translation differences | Retained earnings (Accumulated losses) | Total equity |
|---|-------------|---------------|----------------|----------------|-------------------------|---|----------------|
| Balance at 31 December 2016 | | 4 219 | 627 796 | 17 055 | 5 618 | -253 521 | 401 168 |
| Loss for the period | | | | | | -61 319 | -61 319 |
| Exchange differences arising from the translation of foreign operations | | - | - | - | 14 259 | - | 14 259 |
| Other comprehensive income/loss, net of tax | | - | - | - | - | - | - |
| Total comprehensive income for the period | | | | | 14 259 | -61 319 | -47 060 |
| Share issuance, employee share options | 9 | 5 | 4 | - | - | - | 9 |
| Recognition of share-based payments & RSU's | 11 | - | - | 5 306 | - | - | 5 306 |
| Balance at 30 June 2017 | | 4 224 | 627 800 | 22 361 | 19 878 | -314 840 | 359 423 |
| Loss for the period | | | | | | -60 626 | -60 626 |
| Exchange differences arising from the translation of foreign operations | | - | - | - | 7 048 | - | 7 048 |
| Other comprehensive income/loss, net of tax | | - | - | - | - | - | - |
| Total comprehensive income for the period | | | | | 7 048 | -60 626 | -53 578 |
| 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 | 5 | 185 | - | - | - | 189 |
| Recognition of share-based payments & RSU's | 11 | - | - | 6 914 | - | - | 6 914 |
| 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 |
| Share issuance, employee share options | 9 | - | - | - | - | - | - |
| 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 |

Condensed consolidated statement of cash flow

| <i>Amounts in NOK thousands</i> | <i>Note</i> | Unaudited 2Q 2018 | Unaudited 2Q 2017 | Unaudited 1H 2018 | Unaudited 1H 2017 | FY 2017 |
|--|-------------|----------------------|----------------------|----------------------|----------------------|-----------------|
| Cash flow from operating activities | | | | | | |
| Loss before income tax | | -37 130 | -34 023 | -71 927 | -61 476 | -122 273 |
| <i>Adjustments for:</i> | | | | | | |
| Finance income | | -515 | 679 | -1 067 | -1 356 | -1 654 |
| Finance expense | | 998 | -494 | 2 835 | 1 921 | 4 001 |
| Interest received | | | | 5 | | 1 366 |
| Other finance expense | | -39 | -22 | -57 | -46 | -93 |
| Share option expense | 11 | 3 693 | 3 475 | 7 854 | 5 306 | 12 220 |
| Depreciation | | 77 | 75 | 153 | 146 | 296 |
| Change in receivables | | -1 894 | -1 510 | -1 672 | -2 278 | -417 |
| Change in other current liabilities | | 6 108 | -440 | 3 646 | -1 496 | -919 |
| Net cash flow from/(used in) operating activities | | -28 701 | -32 259 | -60 229 | -59 279 | -107 472 |
| Cash flow from investing activities | | | | | | |
| Purchases of property, plant, and equipment (PPE) | | | -56 | | -56 | -56 |
| Net cash received from/(paid in) investing activities | | - | -56 | - | -56 | -56 |
| Cash flow from financing activities | | | | | | |
| 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 | | | 35 | | 9 | 198 |
| Net cash generated from financing activities | | - | 35 | -220 | 2 794 | 196 820 |
| Net increase/(decrease) in cash and cash equivalents | | -28 701 | -32 280 | -60 449 | -56 541 | 89 292 |
| Net exchange gain/loss on cash and cash equivalents | | 212 | 605 | -424 | 733 | 651 |
| Cash and cash equivalents at beginning of period | | 229 188 | 147 497 | 261 573 | 171 629 | 171 629 |
| Cash and cash equivalents at end of period | | 200 700 | 115 821 | 200 700 | 115 821 | 261 573 |

Notes

1. General information

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

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

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

The condensed interim financial information is unaudited. These financial statements were approved for issue by the Board of Directors on 22 August 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 30 June 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 30 June 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 22 August 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> | 2Q 2018 | | 2Q 2017 | | 1H 2018 | | 1H 2017 | | FY 2017 | |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|
| | Total | of which R&D | Total | of which R&D | Total | of which R&D | Total | of which R&D | Total | of which R&D |
| External R&D expenses | 14 485 | 14 485 | 13 962 | 13 962 | 25 698 | 25 698 | 22 754 | 22 754 | 45 571 | 45 571 |
| Payroll and related expenses | 14 792 | 8 652 | 12 555 | 6 750 | 30 459 | 17 108 | 23 662 | 13 414 | 48 278 | 30 045 |
| Other operating expenses | 7 379 | 345 | 7 327 | 266 | 14 016 | 568 | 14 506 | 720 | 26 114 | 1 217 |
| Total operating expenses | 36 656 | 23 482 | 33 844 | 20 978 | 70 174 | 43 374 | 60 922 | 36 888 | 119 963 | 76 833 |

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> | 2Q 2018 | 2Q 2017 | 1H 2018 | 1H 2017 | FY 2017 |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|
| External R&D expenses | 1 302 | 862 | 1 891 | 2 462 | 4 387 |
| Payroll and related expenses | 388 | 250 | 748 | 640 | 1 261 |
| Other operating expenses | 44 | 15 | 66 | 79 | 124 |
| Total grants | 1 734 | 1 128 | 2 705 | 3 181 | 5 772 |

R&D projects have been approved for SkatteFUNN for the period 2011 through 2019. For the second quarter and first half of 2018, the Group has recognized NOK 1.7m and NOK 2.7m 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 half of 2018. The Group received 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> | 2Q 2018 | 2Q 2017 | 1H 2018 | 1H 2017 | FY 2017 |
|--|---------------|---------------|---------------|---------------|---------------|
| Salaries and bonus | 9 724 | 7 679 | 19 779 | 15 334 | 30 043 |
| Employer's national insurance contributions | 1 065 | 713 | 2 255 | 2 075 | 4 277 |
| Share-based compensation ¹⁾ | 3 693 | 3 475 | 7 854 | 5 306 | 12 220 |
| Pension expenses – defined contribution plan | 567 | 502 | 1 045 | 1 001 | 1 982 |
| Other | 131 | 436 | 274 | 586 | 1 016 |
| Governmental grants | -388 | -250 | -748 | -640 | -1 261 |
| Total payroll and related expenses | 14 792 | 12 555 | 30 459 | 23 662 | 48 278 |

1) Share-based compensation has no cash effect.

| | | | |
|---|------|------|------|
| Number of employees calculated on a full-time basis as at end of period | 27,7 | 27,7 | 26,7 |
| Number of employees as at end of period | 28 | 28 | 27 |

6. Intangible assets

As of 30 June 2018, the recognized intangible assets in the Group amounts to NOK 354m. 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 30 June 2018.

Amortized interests are charged to financial expenses, amounting to NOK 0.9m and NOK 1.8m during the second quarter and first half of 2018, NOK 0.8 and NOK 1.6 for the respective periods in 2017 and NOK 3.3m during full year 2017.

No new TEKES loans have been awarded during first half 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> | 1H 2018 | | 1H 2017 | | FY 2017 | |
|--|------------------|----------------|------------------|----------------|------------------|----------------|
| | Carrying amounts | Fair value | Carrying amounts | Fair value | Carrying amounts | Fair value |
| Receivables | 16 292 | 16 292 | 16 482 | 16 482 | 14 620 | 14 620 |
| Cash and cash equivalents | 200 700 | 200 700 | 115 821 | 115 821 | 261 573 | 261 573 |
| Total financial assets | 216 992 | 216 992 | 132 303 | 132 303 | 276 193 | 276 193 |
| Interest-bearing borrowings | 48 918 | 48 918 | 45 707 | 45 707 | 48 806 | 48 806 |
| Accounts payable and other current liabilities | 4 247 | 4 247 | 8 223 | 8 223 | 7 601 | 7 601 |
| Accrued public charges | 1 893 | 1 893 | 3 025 | 3 025 | 3 018 | 3 018 |
| Other short-term liabilities | 25 664 | 25 664 | 15 499 | 15 499 | 17 676 | 17 676 |
| Total financial liabilities | 80 722 | 80 722 | 72 453 | 72 453 | 77 100 | 77 100 |

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

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

As at 30 June 2018:

| <i>Amounts in NOK thousands</i> | 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 30 June 2017:

| <i>Amounts in NOK thousands</i> | Level 1 | Level 2 | Level 3 | Total |
|--|----------|----------|---------------|---------------|
| Interest-bearing borrowings | - | - | 45 707 | 45 707 |
| Total financial instruments at fair value | - | - | 45 707 | 45 707 |

As at 31 December 2017:

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

9. Share capital and number of shares

Share capital as at 30 June 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> | 2Q 2018 | 2Q 2017 | 1H 2018 | 1H 2017 | FY 2017 |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
| Ordinary shares at beginning of period | 52 609 867 | 42 199 719 | 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 | - | 41 394 | - | 50 313 | 95 799 |
| Ordinary shares at end of period | 52 609 867 | 42 241 113 | 52 609 867 | 42 241 113 | 52 609 867 |

The 20 largest shareholders are as follows at 30 June 2018:

| Shareholder | # shares | % |
|---------------------------------------|-------------------|----------------|
| HealthCap | 12 405 584 | 23.6 % |
| Radiumhospitalets Forskningsstiftelse | 4 427 255 | 8.4 % |
| VPF Nordea Kapital | 1 667 288 | 3.2 % |
| VPF Nordea Avkastning | 1 473 115 | 2.8 % |
| Nordnet Livsforsikring AS | 1 405 402 | 2.7 % |
| Verdipapirfondet KLP AksjeNorge | 1 026 337 | 2.0 % |
| Thorendahl Invest AS | 1 000 000 | 1.9 % |
| Nordnet Bank AB | 945 572 | 1.8 % |
| Danske Bank AS | 821 936 | 1.6 % |
| Verdipapirfondet Nordea Norge Plus | 789 503 | 1.5 % |
| Timmuno AS | 724 650 | 1.4 % |
| Prieta AS | 720 000 | 1.4 % |
| Kommunal Landspensjonskasse | 715 506 | 1.4 % |
| Nordea 1 SICAV | 670 000 | 1.3 % |
| Sundt AS | 500 000 | 1.0 % |
| Statoil Pensjon | 382 171 | 0.7 % |
| KLP AksjeNorge Indeks | 322 931 | 0.6 % |
| Avanza Bank AB | 283 071 | 0.5 % |
| Citigroup Global Markets Inc. | 269 603 | 0.5 % |
| Meyerløkka AS | 263 000 | 0.5 % |
| 20 largest shareholders | 30 812 924 | 58.6 % |
| Other shareholders (4 130) | 21 796 943 | 41.4 % |
| Total shareholders | 52 609 867 | 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 2018:

| Name | Position | No. of shares outstanding at 30 June 2018 |
|---|--------------------------|---|
| Key management: | | |
| Øystein Soug | Chief Executive Officer | 109 598 ¹⁾ |
| 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 |
| Total no. of shares owned by key management of the Group | | 167 985 |
| Board of directors: | | |
| Robert Burns | Board member | 64 928 |
| Total no. of shares owned by the Board of Directors of the Group | | 64 928 |

1) The shares are held through Abakus Invest AS.

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

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

10. Earnings per share

| <i>Amounts in NOK thousand</i> | Q2 2018 | Q2 2017 | 1H 2018 | 1H 2017 | FY 2017 |
|---|--------------|--------------|--------------|--------------|--------------|
| Loss for the period | -37 048 | -33 941 | -71 762 | -61 319 | -121 945 |
| Average number of outstanding shares during the period | 52 610 | 42 202 | 52 610 | 42 198 | 47 254 |
| Earnings/ loss (-) per share - basic and diluted | -0.70 | -0.80 | -1.36 | -1.45 | -2.58 |

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

11. Share-based compensation

Share options

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

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

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

In first half 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. No options for shares have been distributed during second quarter of 2018.

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 2018 was NOK 7.2m and NOK 3.4m.

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 71.72%, based on the volatility of comparable listed companies. The volume weighted average interest rate applied to the share options grants in 2018 is 0.99%

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

| | 1H 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 during the period | - | - | -75 000 | 20.42 |
| Expired during the period | -193 748 | 22.63 | -214 532 | 25.00 |
| Outstanding no. of options at end of period | 4 473 386 | 19.92 | 3 466 634 | 21.06 |

The following table shows the exercised, granted and outstanding options for shares to Key Management of the Group at 30 June 2018:

| Name | Position | Options | | | | |
|---|--------------------------|--------------------|---------------------------|----------------------|--------------------|---------------------------|
| | | Granted 1H 2018 | Outstanding 30.06.2018 | Exercised FY 2017 | Granted FY 2017 | Outstanding 31.12.2017 |
| Key management: | | | | | | |
| Øystein Soug | Chief Executive Officer | 220 000 | 1 010 000 | | 250 000 | 790 000 |
| Magnus Jäderberg | Chief Medical Officer | 100 000 | 760 000 | | 150 000 | 660 000 |
| Anne Kirsti Aksnes | VP, Clinical Development | 70 000 | 353 000 | | 130 000 | 283 000 |
| Erik Digman Wiklund | Chief 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 |
| Total option for shares to key management of the Group | | 890 000 | 3 011 000 | -25 000 | 800 000 | 2 121 000 |
| Board of directors: | | | | | | |
| Robert Burns | Board member | - | 21 235 | - | - | 21 235 |
| Total option for shares to the Board of Directors of the Group | | - | 21 235 | - | - | 21 235 |

From 1 July 2018 to 22 August 2018 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 non-transferrable and each RSU will give the right and obligation to acquire shares in Targovax ASA (at nominal value) subject to satisfaction of the applicable vesting conditions. When the RSUs have vested, the participant must during the following three-year period select when to take delivery of the shares.

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

The expensed RSUs in second quarter and first half of 2018 was NOK 0.3m and NOK 0.7m. A total of 207 009 RSUs was outstanding at 30 June 2018, of which 200 428 RSUs were outstanding to the current Board of Directors of the Group at 30 June 2018.

The following table shows the exercised, granted and outstanding RSUs to Board of Directors of the Group at 30 June 2018:

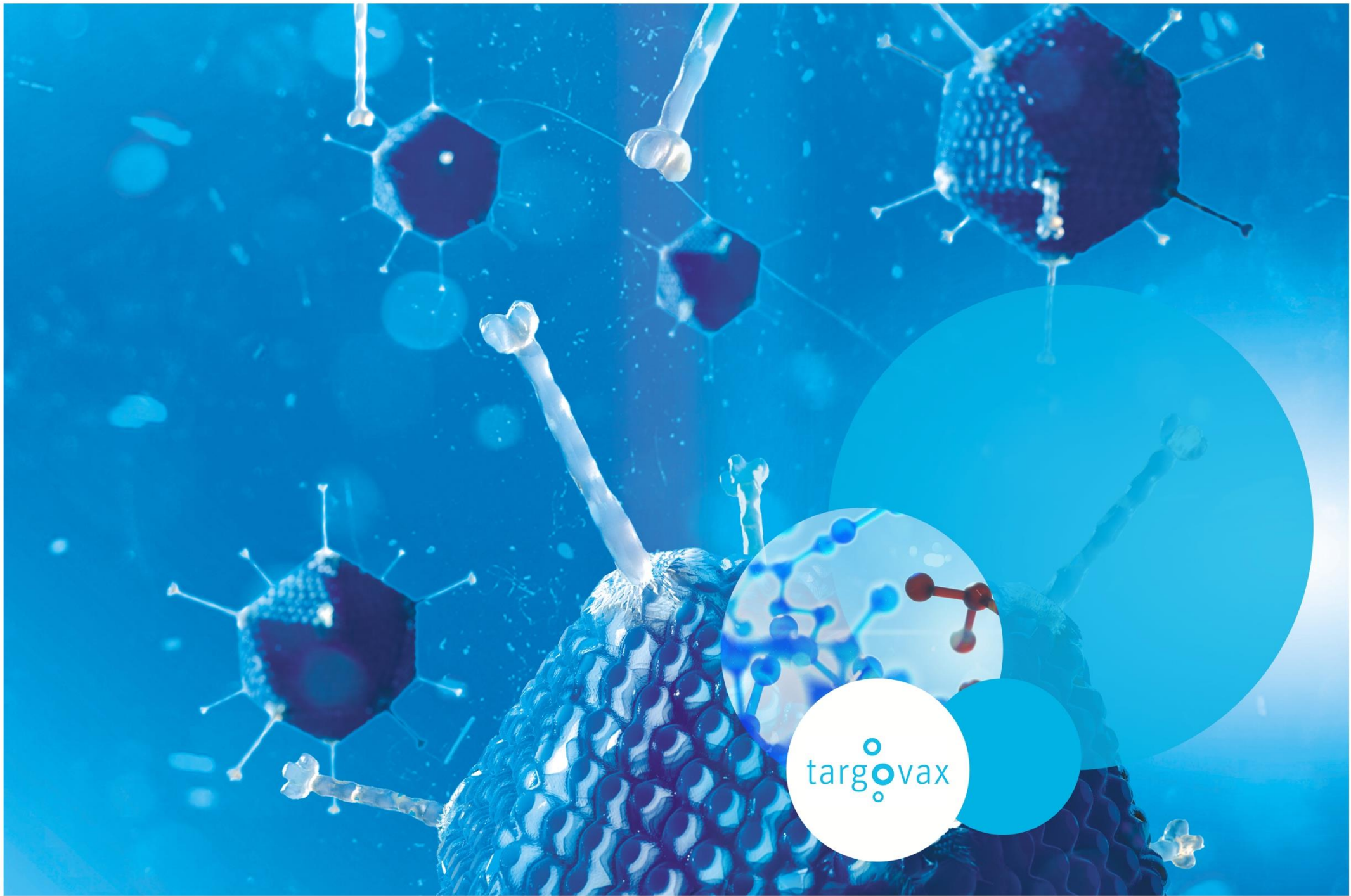
| Name | Position | RSUs | | |
|--|--------------------------|------------------------|------------------|------------------------|
| | | Outstanding 31.12.2017 | Granted 11.04.18 | Outstanding 30.06.2018 |
| Board of Directors: | | | | |
| Eva-Lotta Allan | Board member | 33 220 | 18 148 | 51 368 |
| Diane Mellett | Board member | 44 149 | 6 049 | 50 198 |
| Patrick Vink | Chairperson of the Board | 11 131 | 33 155 | 44 286 |
| Robert Burns | Board member | 10 051 | 18 148 | 28 199 |
| Bente-Lill Romøren | Board member | 14 279 | 6 049 | 20 328 |
| Catherine A. Wheeler | Board member | | 6 049 | 6 049 |
| Total Restricted Stock Units to Board of Directors of the Group | | 112 830 | 87 598 | 200 428 |

From 1 July 2018 to 22 August 2018 no RSUs have been granted to Board of Directors.

12. Subsequent events

In July, Ludwig Cancer Research and CRI announced the completion of the safety evaluation for the first dose cohort in the phase I/II trial of ONCOS-102 in combination with MedImmune's checkpoint inhibitor Imfinzi® (durvalumab).

In July, Targovax and SOTIO announced that the first patient was dosed in the phase I/II combination trial of ONCOS-102 with DCVAC.



targovax