
Second quarter and
half year results
2020
targovax

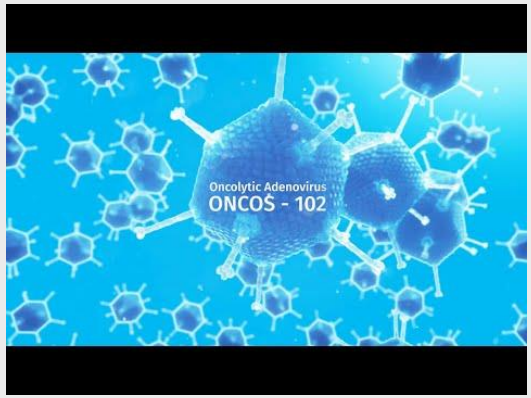
About Targovax

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. Targovax's lead product candidate, ONCOS-102, is a genetically modified oncolytic adenovirus, which has been engineered to selectively infect cancer cells and activate the immune system to fight the cancer.

ONCOS-102 is currently being tested in mesothelioma, melanoma, ovarian and colorectal cancer and has already shown promising clinical results both as monotherapy and in combination with chemotherapy, and a checkpoint inhibitor.

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 an online presentation 20 August at 10:00 CET.

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

Upcoming conferences

2 Sep:	Pareto Nordic Healthcare conference, virtual
15 Sep:	RAS-targeted drug discovery summit, virtual
6 Oct:	IO Summit, virtual

Upcoming data milestones

2H2020:	ONCOS-102 phase I/II trial in unresectable malignant pleural mesothelioma *– Updated survival data*
2H2020:	ONCOS-102 phase I trial in checkpoint inhibitor refractory advanced melanoma *– Clinical and immune activation data*

Financial Calendar 2020

5 Nov 2020:	Third Quarter presentation
11 Mar 2021:	Fourth Quarter presentation

First Half 2020 highlights

Data

- Announced encouraging clinical and immune data in mesothelioma combining ONCOS-102 and chemotherapy demonstrating that ONCOS-102 activates the patients' immune system far more extensively than chemotherapy
- Presented interim data from safety lead-in cohort in the ovarian and colorectal (peritoneal metastasis) trial at ASCO
- Presented pre-clinical data from Next Generation ONCOS at AACR
- Completed enrollment in the melanoma trial

Collaborations

- Entered into a collaboration with Merck to test ONCOS-102 in combination with Keytruda and chemotherapy in mesothelioma
- Entered into a collaboration with Leidos to equip ONCOS viruses with genetic elements encoding for small peptides with checkpoint inhibitor functionality
- Entered into an option agreement with IOVaxis Therapeutics for a TG mutant RAS vaccine license agreement in Greater China and Singapore
- Entered into a collaboration to develop mutant RAS neoantigen coating of ONCOS viruses using Valo Therapeutic's PeptiCRAd technology
- Entered into a collaboration with Oblique Therapeutics to target mutant RAS cancers by combining both companies' technology platforms

Corporate

- Completed a private placement, raising NOK 101 million (USD 11.2 million)
- Announced election of Damian Marron as Chairman of the Board
- Appointed Dr Victor Levitsky, MD, PhD as CSO

Key Figures

Amounts in NOK thousands	2Q 2020	2Q 2019	1H 2020	1H 2019	FY 2019
Total operating revenues	272	6	590	12	2 251
Total operating expenses	-29 985	-44 622	-59 579	-84 253	-152 524
Operating profit/loss	-29 713	-44 616	-58 989	-84 242	-150 273
Net financial items	-3 649	-955	-371	-2 428	2 422
Income tax	71	81	147	163	321
Net profit/loss	-33 291	-45 489	-59 214	-86 506	-147 529
Basic and diluted EPS (NOK/share)	-0.55	-0.72	-0.36	-1.49	-2.43
Net change in cash	-33 824	30 005	31 036	-16 264	-80 760
Cash and cash equivalents start of period	135 289	104 919	70 429	151 189	151 189
Cash and cash equivalents end of period	101 465	134 924	101 465	134 924	70 429

CEO statement

Targovax had a highly productive second quarter this year. Most importantly, we reported 12-month immune and efficacy data for ONCOS-102 in mesothelioma, our lead indication, in combination with standard of care chemotherapy (SoC). Based on the promising findings so far, we have started preparations for a subsequent randomized phase II trial where we will add a checkpoint inhibitor to the ONCOS-102 and chemotherapy combination. We are very pleased to have secured a clinical collaboration agreement with Merck for this trial, who will provide Keytruda® and valuable scientific and clinical support for the trial. Additionally, three new innovative collaborations, of which two of them were RAS collaborations, were signed during the quarter, indicating a high interest in Targovax.

Clinical trials update

The highlight of the quarter was clearly immune activation and 12-month data from our phase I/II trial, adding ONCOS-102 to chemotherapy in first and later line mesothelioma treatment. In total, 31 patients were treated in the trial, with 20 patients in the experimental group receiving the ONCOS-102 and chemo combination, and 11 patients in a control group receiving chemo only. We reported 6-months data in the first quarter and the patients have now completed their 12-month follow-up in June.

The median Progression Free Survival (mPFS) for ONCOS-102 treated first line patients was 8.9 months, which compares favorably to SoC historical controls of 5.7-7.3 months. mPFS for the control group first line patients treated with SoC chemotherapy only was 7.6 months. Although it is still early to conclude on overall survival, the 12-month survival rate of 64% in the first line ONCOS-102 treated patients versus 50% in the first line control group, is encouraging.

A fundamental challenge in cancer and immuno-oncology is that the patients' own immunological defense against the cancer is no longer functioning adequately. The underlying causes behind this dysfunction are complex, but usually relate to a suppressive tumor microenvironment and low infiltration of cytotoxic T-cells, which prevents the immune system from recognizing and eliminating the cancer cells. Importantly, ONCOS-102 can deal with these challenges directly:

In the 12-month mesothelioma data we observed profound innate and adaptive immune activation in the ONCOS-102 treated patients compared to the control group (consisting of chemotherapy alone), which is associated with better clinical outcome. This immune activation features:

- an increase in intra-tumoral cytotoxic T-cells;
- upregulation of adaptive immunity and cytotoxicity related gene expression; and
- other proof that ONCOS-102 stimulates a favorable remodeling of the tumor microenvironment

These data clearly demonstrate the immune activation achieved with ONCOS-102 far exceeds what is achieved by chemotherapy alone. This suggests that patients whose immune systems have been activated in this way may be more likely to respond to treatment with an anti-PD1/L1 antagonist, thereby providing strong scientific rationale for the combination of ONCOS-102 and checkpoint inhibition in first line mesothelioma.

Keytruda is the market leading checkpoint inhibitor and was our preferred choice for such a combination trial and so we are very pleased to have secured Merck as collaboration partner for our planned combination mesothelioma trial. The trial, named KOSMOS, will test a combination of ONCOS-102, Keytruda and chemotherapy as first line treatment, and is planned to start recruiting patients first half of next year. In addition to supply, Merck will also provide valuable scientific advice on trial design, execution and data analysis.

The combination trial with AstraZeneca's anti-PD-L1 checkpoint inhibitor Imfinzi in ovarian and colorectal cancer (peritoneal malignancies) is also progressing well. In May, interim phase I clinical data were presented at ASCO's virtual conference. It is too early in this trial to interpret the clinical data, but we are happy to see clinical responses in these very sick patients with hard-to-treat cancers. The ASCO data also show that immune activation and clinical activity is dose dependent. Patient recruitment was impacted at the beginning of the Covid-19 pandemic, however all five hospitals active in the trial are now recruiting.

Mutant RAS update

Based on our experience and data from vaccination with mutant RAS peptides (TG01), Targovax remains confident that mutant RAS is an important immunotherapeutic cancer target. Consequently, we continue to seek academic and commercial partnerships to bring immunological targeting of mutRAS forward. We do this in two ways, by a) looking for cost effective collaborations to test the TG mutRAS cancer vaccine, and b) initiating innovative collaborations to capitalize on our mutRAS expertise and IP, ideally leveraging our ONCOS platform as a delivery tool. In the first quarter we saw examples of both types of collaborations, as we sold an option to IOVaxis Therapeutics to develop and commercialize the TG mutant RAS vaccine in Greater China, and entered into pre-clinical collaborations with Valo Therapeutics to target a pre-clinical proof-of-concept using their PeptiCRAd technology to coat ONCOS-102 with our mutant RAS peptides.

In the second quarter we teamed up with the Swedish biotech company Oblique Therapeutics – with the aim of merging their technology platform, named Abiprot, with ONCOS. Oblique has developed a unique, proprietary antibody-based methodology to target intra-cellular targets such as mutant RAS. Delivering antibodies into cells is, however, a challenge and in this collaboration, we endeavor to express Abiprot antibodies from genetic elements encoded in an adapted ONCOS-virus as a vector. The agreement encompasses exploration of technical feasibility as well as in vitro and in vivo anti-cancer activity of the combination, initially focusing on mutant RAS as the target. If successful, this would provide a first-in-class oncolytic virus candidate directly targeting RAS.

Other pipeline initiatives

In addition to mutRAS, there is a world of exciting targets we can envisage for a next generation of ONCOS viruses. We have previously reported first results from preclinical testing of our next generation of proprietary adenoviruses, the ONCOS-200-series. The new viruses have the same adenovirus 5/3 chimeric backbone as ONCOS-102, but whereas ONCOS-102 uses GM-CSF as a single transgene to enhance immune activation, the new viruses have double transgenes with different and novel modalities.

In the second quarter we were very happy to announce a collaboration to develop novel viruses with the large US corporation Leidos and its division Explorations in Global Health. Leidos has developed a unique portfolio of peptides, named Microtide™, that act as dual immune checkpoint inhibitors. The simple structure and small size of Microtide peptides make them well-suited for delivery through incorporation of respective genetic elements into DNA vector such as an adenovirus, and therefore we expect that the ONCOS virus backbone will be an effective Microtide delivery system. If successful, this could potentially sidestep the need to combine ONCOS with ordinary checkpoint inhibitors and serve as a platform where additional functionality can be built in to stimulate multiple complementary anti-tumor mechanisms.

People update

During the quarter we added more intellectual firepower to the team as Dr Victor Levitsky joined as Chief Scientific Officer (CSO). Victor brings broad and deep oncology experience from academia, big pharma, and biotech. With his background as both oncologist and virologist, he is already providing important scientific leadership to Targovax.

In April, the shareholders elected Damian Marron as the new Chairman of the Board. Damian has been the CEO of several biotech companies and served on multiple biotech boards and brings extensive strategic, corporate and life science business experience to Targovax. We are proud to have attracted strong profiles like Victor and Damian to the company, and I am confident they will be instrumental in shaping the future of Targovax.

Øystein Soug
CEO Targovax Group

Pipeline and newsflow

Product candidate	Preclinical	Phase I	Phase II	Collaborator*	Next expected event
ONCOS-102	**Mesothelioma** Combination w/ pemetrexed/cisplatin			MERCK	**2H 2020** Updated survival data
	Melanoma Combination w/Keytruda				**2H 2020** Clinical and immune activation data
	Ovarian and colorectal Combination w/Imfinzi			CANCER RESEARCH INSTITUTE, AstraZeneca	*Update by collaborator*
	Prostate Combination w/DCvac			sotio	*Update by collaborator*
ONCOS-200 series	**Next Gen viruses**			leidos	Updates at conferences
Novel mutRAS concepts				VALO, OBLIQUE THERAPEUTICS	

ONCOS-102 clinical development programs

Mesothelioma

- Randomized phase I/II open label trial
- 31 patients with unresectable malignant pleural mesothelioma, 1st and 2nd line
- Intra-tumoral ONCOS-102 in combination with standard of care chemotherapy (pemetrexed / cisplatin)
- End-points: safety of the combination treatment, immune activation and clinical response (ORR, PFS and OS)
- Conducted at four sites in Spain and France
- All patients have completed the treatment phase, and are in follow-up
- Most recent read-out: 12-month data
  - Encouraging mPFS of 8,9 months in first line patients treated with ONCOS-102
  - Unprecedented innate and adaptive immune activation in this population far exceeding that achieved with chemotherapy alone
  - Strong association between immune activation and clinical outcome
  - First line mesothelioma remains the focus for next phase of development

Melanoma

- 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 12 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

Ovarian and colorectal 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 histologically confirmed epithelial ovarian cancer or metastatic colorectal cancer and have failed prior standard therapies
- ONCOS-102 intraperitoneally administered 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: safety lead-in presented at ASCO 2020
  - Dose Escalation part presented showing clinical activity as well as immune activation, and acceptable safety profile with no dose limiting toxicities (DLTs) observed

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

* All assets unencumbered

Next generation ONCOS viruses

Three new ONCOS viruses with double transgenes have been cloned and validated in vitro and are now being tested in vivo.

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:

1. A 24bp deletion in the E1A region to ensure selective replication in actively dividing cells (eg. cancer cells)
2. 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. 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.

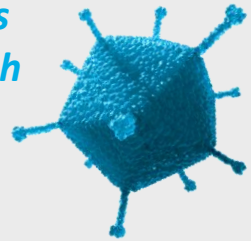
Data from a pre-clinical study with next-generation ONCOS-200 series viruses with novel anti-cancer double-transgenes were presented at the American Association for Cancer Research (AACR) Virtual Annual Meeting in June 2020. The pre-clinical in vitro and in vivo findings demonstrated that both ONCOS-210 & ONCOS-212 have anti-cancer properties and that the double transgenes act synergistically. The encouraging preclinical findings will be further investigated to elucidate transgene functionality and mode of action.

In June 2020, Targovax entered into a collaboration agreement with the Explorations in Global Health (ExGloH) Division of Leidos to evaluate the potential of using ONCOS oncolytic adenoviruses as a vector to encode Microtide™ checkpoint inhibitor peptides as gene sequences. This combination is promising since checkpoint inhibition complements oncolytic virotherapy by blocking the tumor's main defense mechanism against the anti-tumor immune response generated by the oncolytic virus.

ExGloH has developed a unique, proprietary portfolio of microbially-derived peptides, called MicrotideTM, that act as immune checkpoint inhibitors. The simple structure and small size of Microtide™ peptides make them well-suited for delivery by DNA vectors, and the parties will explore whether this capability can be extended to ONCOS viruses. If successful, this could potentially circumvent the need to combine ONCOS with classical systemically delivered checkpoint inhibitors.

Under the agreement, Leidos and Targovax will investigate the technical feasibility, in vitro and in vivo immune modulatory, and anti-cancer properties of encoding Microtide™ checkpoint peptides in the ONCOS adenovirus backbone. If successful, the combined ONCOS and Microtide™ constructs may serve as a platform where additional functionality can be built in to stimulate multiple complementary anti-tumor mechanisms.

"Next generation ONCOS-200 series viruses have double transgenes with distinct modes of action"



Mutant RAS platform

Two new RAS collaborations were signed during the quarter.

The mutant RAS program is based on our shared neoantigen vaccine targeting mutant RAS cancers. Oncogenic RAS mutations are the key genetic driver behind many cancers and therefore considered a central target in oncology drug development. A 32-patient phase I/II clinical trial evaluating TG01 in resected pancreatic cancer in combination with standard of care chemotherapy (gemcitabine) reported 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. These data were corroborated by broad and lasting immune responses in vaccinated patients, and some examples of clearance of residual mutant RAS cancer cells after surgery. The Company has attained Orphan Drug Designation (ODD) for TG01 in pancreatic cancer in both US and Europe.

Targovax is actively working to create shareholder value from the TG technology through collaborations and partnerships. Consistent with this approach, in January 2020, Targovax and IOVaxis Therapeutics entered into an option agreement for an exclusive license to develop and commercialize the TG01 and TG02 vaccines in Greater China and Singapore. The intention is that IOVaxis will exercise the option to license TG upon the first regulatory approval to start a clinical trial in the territory. For this right, IOVaxis has paid Targovax an option fee of USD 250.000, and will pay an additional USD 3 million up-front fee when the option is exercised into an exclusive license. The total development and commercial milestones in the deal are worth up USD 100 million, in addition to tiered royalties on sales up to the mid-teens. Moreover, in 2019, Targovax granted Zelluna Immunotherapy a non-exclusive license to intellectual property relating to mutant

RAS T-cell receptor technology. The potential value of this freedom-to-operate license amounts to NOK 100m (USD 12m) in milestones and annual fees.

In April 2020, Targovax and Valo Therapeutics entered into a research collaboration to evaluate Valo's PeptiCRAd technology as a tool to coat ONCOS oncolytic adenoviruses with Targovax's TG mutant RAS peptides. Valo's PeptiCRAd technology has been developed to coat oncolytic viruses with tumor antigen peptides for enhanced immune activation and local delivery of antigens directly into the tumor site in order to stimulate an enhanced immune response to mutant RAS. With this collaboration, Targovax and Valo will test whether PeptiCRAd coating of ONCOS-102 adenovirus with TG mutant RAS peptides can generate enhanced systemic CD4+ and CD8+ T-cell responses against mutant RAS, and specifically direct these T-cells to the tumor site. If successful, this collaboration has the potential to generate a truly unique, first-in-class, mutant RAS-targeting oncolytic virus concept that could be brought forward into clinical development.

In June 2020, Targovax entered into a collaboration agreement with Oblique Therapeutics to evaluate the potential of using ONCOS oncolytic adenoviruses as a vector to encode and deliver Abiprot antibodies against hard-to-reach intra-cellular targets. Oblique has developed a unique, proprietary methodology to identify epitopes on targets that have previously proven difficult to address with antibodies. This approach can be extended to intra-cellular targets such as mutant RAS, however, delivering antibodies into cells remains a major obstacle. Targovax and Oblique anticipate that expression of Abiprot antibodies against such targets using ONCOS as a vector can overcome this challenge and boost the specificity and power of the anti-tumor response. Under the agreement the parties will jointly explore the technical feasibility and in vitro and in vivo functionality and anti-cancer activity of the ONCOS-Abiprot combination, initially focusing on mutant RAS as the target. If successful, this would provide a first-in-class oncolytic virus candidate directly targeting RAS and demonstrate proof-of-concept for ONCOS-Abiprot as a new technology platform.

IPR / Market exclusivity

Targovax owns a broad patent portfolio which is designed to protect its pipeline and includes different families of patents and patent applications covering product candidates in development, 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.

Preclinical development of ONCOS-102

Targovax has conducted several *in vivo* studies of ONCOS-102 in mesothelioma and melanoma mouse models to investigate the mode of action and assess the efficacy for the clinical combination strategies in these indications. Data have been published at scientific conferences and in leading, peer reviewed journals.

In a mesothelioma mouse model, it has been demonstrated that ONCOS-102 acts synergistically with chemotherapy to reduce tumor volume and drive tumor specific immune responses (Kuryk et al, 2018, JMV):

- Chemotherapy alone did not reduce tumor volume in the selected mouse model
- ONCOS-102 alone reduced tumor volume by 56%
- ONCOS-102 + chemotherapy reduced tumor volume by 75% relative to chemotherapy alone and by 33% relative to ONCOS-102 alone
- ONCOS-102 induced a mesothelin specific anti-tumor CD8+ T-cell response

Similarly, it has been shown that ONCOS-102 and PD-1 checkpoint inhibition (Keytruda) act synergistically in a humanized melanoma mouse model, driving both tumor volume reduction and anti-tumor T-cell immunity (Kuryk et al. Oncoimmunology 2018):

- Keytruda alone did not reduce tumor volume in the selected mouse model
- ONCOS-102 reduced tumor volume by 51%
- ONCOS-102 + Keytruda reduced tumor volume by up to 69%
- ONCOS-102+ Keytruda induced an abscopal effect, validating the proposed mode of action that ONCOS-102 can generate systemic anti-tumor immune responses (Kuryk et al. JMV 2019)

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

Dr Victor Levitsky was appointed Chief Scientific Officer in May. He will play a leading role in driving research strategy and pipeline expansions, particularly the scientific and mechanistic aspects of early clinical work. Dr Levitsky is a seasoned internationally recognized expert in immunology, oncology, T-cell immunotherapy, and immuno-oncology with in-depth knowledge of preclinical, translational, and early stage clinical drug development. He brings extensive experience in pre-clinical drug development of protein-based biologics and small molecules. Dr Levitsky is a medical doctor with a PhD in Virology and post-doctoral training in tumor biology at Karolinska Institute, Sweden. He spent the first 20 years of his career as an academic research scientist, including Associate Professor positions at the Karolinska Institute in Sweden and the Johns Hopkins University School of Medicine in the US. Before joining Targovax Dr Levitsky served as Tumor Immunology Leader and Senior Principal Scientist with Roche in Zurich, and his most recent position has been VP, Head of Oncology Research at Molecular Partners, Zurich, Switzerland.

As per 20 August 2020:

Name	Position
Øystein Soug	CEO
Magnus Jäderberg	CMO
Torbjørn Furuseth	CFO
Erik Digman Wiklund	CBO
Victor Levitsky	CSO
Kirsi Hellström	Head of CMC
Ingunn Munch Lindvig	VP Regulatory Affairs

Board of Directors

Mr Damian Marron was elected as Chairperson of the Board at the Company's Annual General Meeting 29 April 2020. Mr Damian Marron is an experienced non-executive director, corporate advisor and life science executive with a successful track record of value creation through public and venture capital financing, portfolio planning, M&A, licensing agreements as well as R&D collaborations, both as an executive and in advisory roles. He has notably specialized in immuno-oncology, cell therapy, and orphan diseases. Mr Marron is currently Non-Executive Chair of the Board at Imophoron Ltd and Non-Executive Director at Bone Therapeutics and Resolys Bio. He is also Head of Biopharma with Treehill Partners, a global pure-play healthcare advisory firm. Mr Marron has formerly been Chair of the Board of PepGen Ltd and the CEO at Agalimmune Ltd, TxCell SA, Cytheris SA, and Trophos SA.

As per 20 August 2020:

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

Damian Marron (Chairperson), Catherine A. Wheeler, Johan Christenson, Robert Burns, Bente-Lill Romøren, Per Samuelsson, Diane Mellett and Eva-Lotta Allan.

Financial review

In January 2020, Targovax successfully completed a private placement, raising gross proceeds of approximately NOK 101 million (USD 11.2 million), through the allocation of 12,627,684 new shares at a subscription price of NOK 8.00 per share. The Private Placement took place through an accelerated book building process after close of market on 22 January 2020.The Private Placement attracted strong interest from existing shareholders and new institutional investors, both in Norway, Sweden, UK and the US and the book was covered multiple times.

Results second quarter 2020

Operating expenses amounted to NOK 30 million (NOK 44 million) in the second quarter. The operating expenses are reported net of governmental grants which amounted to NOK 0 million in the period (NOK 1 million). The net loss amounted to NOK 33 million in the second quarter 2020 (NOK 46 million).

Results first half 2020

In the first half of 2020 Targovax had no core business revenue.

Operating expenses amounted to NOK 60 million (NOK 84 million) in the first half 2020. The operating expenses are reported net of governmental grants which amounted to NOK 1 million in the period (NOK 3 million). The net loss amounted to NOK 59 million in the first half 2020 (NOK 87 million).

Financial position and cash flow

Cash and cash equivalents were NOK 101 million at the end of the second quarter 2020 compared to NOK 135 million at the end of first quarter 2020 and NOK 70 million at the end of fourth quarter 2019.

Net cash flow from operating activities during the second quarter 2020 was negative by NOK 30 million compared to negative NOK 36 million in the second quarter 2019 and NOK 32 million in fourth quarter 2019.

Net cash flow from operating activities during the first half 2020 was negative by NOK 66 million compared to negative NOK 81 million in the first half 2019.

By the end of the period, total outstanding interest-bearing debt amounted to EUR 7 million, all to Business Finland.

Share information

By August 10, there were 76,087,492 shares outstanding, distributed between 5,425shareholders. The 20 largest shareholders controlled 47.0% of the shares.

During Q2 2020, Targovax shares traded in the NOK 5.37 – 9.06 range. During the quarter, approx. 30.2 million shares were traded, with an aggregate trading value of NOK 229 million.

The closing price on 30 June 2020 was NOK 7.06 per share, corresponding to a market value of NOK 537 million.

The estimated share ownership situation on 10 August 2020:

	Estimated	
Shareholder	Shares million	Ownership
HealthCap	12.4	16.3 %
RadForsk	4.4	5.8 %
Nordea	4.3	5.7 %
Fjarde AP-Fonden	3.0	3.9 %
Thorendahl Invest	1.5	2.0 %
Danske Bank (nom.)	1.2	1.5 %
Bækkelaget Holding	1.1	1.5 %
Morgan Stanley	1.1	1.5 %
Sundt AS	1.0	1.3 %
MP Pensjon	1.0	1.3 %
10 largest shareholders	**31.1**	**40.8 %**
Other shareholders (5 415)	45.0	59.2%
Total shareholders	**76.1**	**100.0 %**

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 2019 as well as in the recent prospectus, both available at www.targovax.com. Targovax is running clinical trials at several hospitals both in Europe and the US. As earlier reported, Targovax management is following the COVID-19 outbreak situation closely and is continuously monitoring whether any potential challenges arise. Currently there are no significant implications to our core operations due to the Corona pandemic.

Outlook

Looking towards the second half of 2020, we expect that ongoing trials will continue to provide clinical immune activation and efficacy results to further strengthen the ONCOS-102 data. In parallel, we will also enter the next phase of development, spearheaded by the KOSMOS trial in collaboration with Merck. We are also at the same time building a portfolio of early stage collaborations to capitalize on our mutRAS knowhow and the versatility of the ONCOS platform that can enrich the future R&D pipeline with highly innovative molecules and scientific approaches. This combination of entering later stage ONCOS-102 clinical development, the proprietary ONCOS-200 virus series and portfolio of exploratory R&D collaborations provides a wide horizon with multiple avenues to value creation.

Responsibility statement

We confirm, to the best of our knowledge that the financial statements for the period 1 January to 30 June 2020 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, 19 August 2020

The Board of Directors of Targovax ASA

Damian Marron
Chairperson of the Board

Per Samuelsson
Board Member

Bente-Lill Romøren
Board Member

Catherine A. Wheeler
Board Member

Johan Christenson
Board Member

Robert Burns
Board Member

Eva-Lotta Allan
Board Member

Diane Mellett
Board Member

Øystein Soug
CEO

Second quarter and first half results 2020

Condensed consolidated statement of profit and loss

Amounts in NOK thousands except per share data	*Note*	Unaudited 2Q 2020	Unaudited 2Q 2019	Unaudited 1H 2020	Unaudited 1H 2019	FY 2019
Other revenues		272	6	590	12	2 251
Total revenue		**272**	**6**	**590**	**12**	**2 251**
External R&D expenses	*3,4*	-14 084	-22 012	-27 483	-41 425	-80 286
Payroll and related expenses	*5,11*	-11 024	-17 511	-22 327	-31 129	-50 103
Other operating expenses	*3,4*	-3 916	-4 068	-7 745	-9 636	-18 109
Depreciation, amortizations and write downs		-960	-1 031	-2 025	-2 064	-4 026
Total operating expenses		**-29 985**	**-44 622**	**-59 579**	**-84 253**	**-152 524**
Operating profit/ loss (-)		-29 713	-44 616	-58 989	-84 242	**-150 273**
Finance income		-2 010	344	1 511	828	3 698
Finance expense		-1 639	-1 299	-1 883	-3 256	-1 275
Net finance income/ expense (-)		**-3 649**	**-955**	**-371**	**-2 428**	**2 422**
Loss before income tax		**-33 362**	**-45 571**	**-59 361**	**-86 670**	**-147 850**
Income tax income/ expense (-)		71	81	147	163	321
Loss for the period		**-33 291**	**-45 489**	**-59 214**	**-86 506**	**-147 529**
Earnings/ loss (-) per share						
Basic and dilutive earnings/loss (-) per share	*10*	**-0.44**	**-0.72**	**-0.80**	**-1.49**	**-2.43**

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

Amounts in NOK thousands	Unaudited 2Q 2020	Unaudited 2Q 2019	Unaudited 1H 2020	Unaudited 1H 2019	FY 2019
Income/ loss (-) for the period	-33 291	-45 489	-59 214	-86 506	-147 529
Items that may be reclassified to profit or loss:					
Exchange differences arising from the translation of foreign operations	-16 088	196	28 068	-6 854	-2 703
Total comprehensive income/ loss (-) for the period	**-49 379**	**-45 294**	**-31 145**	**-93 361**	**-150 232**

Condensed consolidated statement of financial position

Amounts in NOK thousands	*Note*	Unaudited 30.06.2020	Unaudited 30.06.2019	31.12.2019
ASSETS				
Intangible assets	*6*	406 088	360 759	367 083
Property, plant, and equipment		648	858	726
Right-of-use asset		3 351	5 000	3 241
Total non-current assets		**410 087**	**366 617**	**371 050**
Receivables		13 340	18 518	15 429
Cash and cash equivalents		101 465	134 924	70 429
Total current assets		**114 805**	**153 442**	**85 857**
TOTAL ASSETS		**524 892**	**520 060**	**456 907**

Amounts in NOK thousands	*Note*	Unaudited 30.06.2020	Unaudited 30.06.2019	31.12.2019
EQUITY AND LIABILITIES				
Shareholders' equity				
Share capital	*9*	7 609	6 338	6 338
Share premium reserve		978 757	886 912	886 899
Other reserves		49 777	46 031	46 885
Retained earnings		-729 224	-608 987	-670 010
Translation differences		54 911	22 692	26 843
Total equity		**361 829**	**352 985**	**296 955**
Non-current liabilities				
Interest-bearing liabilities	*7*	56 686	44 403	50 441
Deferred tax		64 711	57 996	58 822
Lease liabilities		1 552	1 253	-
Total non-current liabilities		**122 949**	**103 652**	**115 085**
Current liabilities				
Interest-bearing liabilities	*7*	4 980	9 127	-
Short-term lease liabilities		1 838	3 846	3 241
Accounts payable and other current liabilities		3 940	6 501	11 136
Accrued public charges		3 580	2 909	3 911
Other short-term liabilities		25 776	41 040	32 402
Total current liabilities		**40 115**	**63 422**	**50 690**
TOTAL EQUITY AND LIABILITY		**524 892**	**520 060**	**456 907**

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
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	9	1 066	73 585	-	-	-	74 651
Transaction costs - Private Placement		-	-7 803	-	-	-	-7 803
Share issuance, employee share options & RSU's	*9*	10	-	-	-	-	-10
Recognition of share-based payments & RSU's	11	-	-	4 792	-	-	4 792
Balance at 30 June 2019		**6 338**	**886 912**	**46 031**	**22 692**	**-608 987**	**352 985**
Loss for the period		-	-	-	-	-61 023	-61 023
Exchange differences arising from the translation of foreign operations		-	-	-	4 151	-	4 151
Other comprehensive income/loss, net of tax		-	-	-	-	-	-
Total comprehensive income for the period		**-**	**-**	**-**	**4 151**	**-61 023**	**-56 872**
Transaction costs - Private Placement & Subsequent offering		-	15	-	-	-	-15
Share issuance, employee share options & RSU's	*9*	-	-28	-	-	-	-28
Recognition of share-based payments & RSU's	*11*	-	-	854	-	-	854
Balance at 31 December 2019		**6 338**	**886 899**	**46 885**	**26 843**	**-670 010**	**296 955**
Loss for the period		-	-	-	-	-59 214	-59 214
Exchange differences arising from the translation of foreign operations		-	-	-	28 068	-	28 068
Other comprehensive income/loss, net of tax		-	-	-	-	-	-
Total comprehensive income for the period		**-**	**-**	**-**	**28 068**	**-59 214**	**-31 145**
Issue of ordinary shares - Capital increase - Private Placement & Subsequent offering	*9*	1 263	99 759	-	-	-	101 021
Transaction costs - Private Placement & Subsequent offering		-	-7 884	-	-	-	-7 884
Share issuance, employee share options & RSU's	*9*	8	-16	-	-	-	-9
Recognition of share-based payments & RSU's	*11*	-	-	2 892	-	-	2 892
Balance at 30 June 2020		**7 609**	**978 757**	**49 777**	**54 911**	**-729 224**	**361 829**

Condensed consolidated statement of cash flow

Amounts in NOK thousands	*Note*	Unaudited 2Q 2020	Unaudited 2Q 2019	Unaudited 1H 2020	Unaudited 1H 2019	FY 2019
Cash flow from operating activities						
Loss before income tax		-33 362	-45 571	-59 361	-86 670	-147 850
Adjustments for:						
Finance income		2 010	-344	-1 511	-828	-3 698
Finance expense		1 639	1 299	1 883	3 256	1 275
Interest received		379	344	196	828	1 524
Other finance expense		65	-116	-224	-167	-25
Share option & RSU expense	*11*	1 409	2 079	2 892	4 792	5 646
Depreciation		960	1 031	2 025	2 064	4 026
Proceeds from the Private Placement not received		-	-73 654	-	-	-
Change in receivables		1 528	72 959	2 089	-3 198	-108
Change in other current liabilities		-4 945	5 974	-14 356	-621	-3 307
Net cash flow from/(used in) operating activities		**-30 316**	**-36 000**	**-66 369**	**-80 545**	**-142 517**
Cash flow from investing activities						
Purchases of property, plant, and equipment (PPE)		-	-134	-	-134	-134
Net cash received from/(paid in) investing activities		**-**	**-134**	**-**	**-134**	**-134**
Cash flow from financing activities						
Loan from Business Finland		-	-	5 555	-	-
Interest paid	*7*	-	-	-225	-222	-627
Repayment of lease liabilities		-969	-1 021	-1 965	-2 049	-4 061
Share issue expense - Private Placement & subsequent offering		-	-7 206	-7 884	-7 347	-7 788
Proceeds from Private Placement and subsequent offering		-	74 651	101 021	74 651	74 651
Proceeds from exercise of options & RSU's		-	-18	-9	-18	-18
Net cash generated from financing activities		**-969**	**66 406**	**96 493**	**-65 014**	**62 156**
Net increase/(decrease) in cash and cash equivalents		**-31 285**	**30 272**	**30 124**	**-15 665**	**-80 495**
Net exchange gain/loss on cash and cash equivalents		-2 539	-267	913	-599	-265
Cash and cash equivalents at beginning of period		**135 289**	**104 919**	**70 429**	**151 189**	**151 189**
Cash and cash equivalents at end of period		**101 465**	**134 924**	**101 465**	**134 924**	**70 429**

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 Vollsveien 19, 1366 Lysaker, Norway.

The condensed interim financial information is unaudited. These financial statements were approved for issue by the Board of Directors on 19 August 2020.

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 2019 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 2020 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 2020.

2.3 Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries. As at 30 June 2020, Targovax OY, located in Helsinki, Finland, and Targovax Solutions LLC, located in Delaware, USA are 100% owned and controlled subsidiaries. Targovax Solutions LLC was liquidated in second quarter 2020.

2.4 Going concern

As a result of the Private Placement in the first quarter 2020 and the current liquidity situation, Targovax's Directors expect that the Group has available financial resources sufficient for the next twelve months as of 30 June 2020. 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 2020		2Q 2019		1H 2020		1H 2019		FY 2019	
Amounts in NOK thousands	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	14 084	14 084	22 012	22 012	27 483	27 483	41 425	41 425	80 286	80 286
Payroll and related expenses	11 024	5 660	17 511	9 054	22 327	11 462	31 129	15 961	50 103	25 951
Other operating expenses	3 916	(416)	4 068	134	7 745	26	9 636	240	18 109	442
Depreciation, amortizations and write downs	960	-	1 031	-	2 025	-	2 064	-	4 026	-
Total operating expenses	**29 985**	**19 328**	**44 622**	**31 200**	**59 579**	**38 971**	**84 253**	**57 626**	**152 524**	**106 679**

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 2020	2Q 2019	1H 2020	1H 2019	FY 2019
External R&D expenses	-65	1 159	1 343	2 262	3 334
Payroll and related expenses	8	192	12	409	592
Other operating expenses	-	18	0	29	38
Total grants	**-57**	**1 369**	**1 356**	**2 700**	**3 964**

R&D projects have been approved for SkatteFUNN through 2020. For the second quarter 2020, the Group has recognized NOK -0.06 million and NOK 0.008 million as cost reduction in External R&D expenses and Payroll and related expenses.

See note 8 Government grants in the Annual Report 2019 for more information about grants.

5. Payroll and related expenses

Total payroll and related expenses for the Group are:

Amounts in NOK thousands	2Q 2020	2Q 2019	1H 2020	1H 2019	FY 2019
Salaries and bonus	7 920	8 509	16 329	17 512	31 628
Employer's national insurance contributions	1 125	1 092	2 009	2 209	4 910
Share-based compensation [1)]	1 409	2 078	2 892	4 792	5 646
Pension expenses – defined contribution plan	423	494	870	971	1 915
Restructuring costs [2)]	-119	5 446	-150	5 446	5 448
Other	274	84	388	608	1 147
Governmental grants	-8	-192	-12	-409	-592
Total payroll and related expenses	**11 024**	**17 511**	**22 327**	**31 129**	**50 103**

1) Share-based compensation has no cash effect.

2) Following the decision in 2019 to fully focus on the ONCOS platform, the number of employees has been reduced. The total provision for restructuring costs of NOK 5.4 million per 31 December 2019 was reduced by NOK 0,15 million as per 30 June 2020.

	30.06.2020	30.06.2019	31.12.2019
Number of employees calculated on a full-time basis as at end of period	19,5	25,4	20.0
Number of employees as at end of period	20	26	20

6. Intangible assets

As of 30 June 2020, the recognized intangible assets in the Group amounts to NOK 406 million. This is an increase from NOK 367 million as of 31 December 2019, 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 2019 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 Group has received three R&D loans, for the commercialization of ONCOS-102 from Business Finland under loan agreements dated September 2010, February 2012 and December 2013, respectively, in the total outstanding amount of NOK 62.3 million (EUR 6.3 million) as of 31 December 2019. The Group received an additional NOK 5.6 million (EUR 0,6 million) to one of the existing loans from Business Finland during the first quarter of 2020, hence outstanding loan as per 30 June 2020 is NOK 75,0 million (EUR 6,9 million). The loan's interest rate is assessed to be 7% lower than comparable market rates, hence NOK 1.4 million was recognized as a government grant recorded as a reduction to External R&D expenses in first quarter 2020.

NOK 5.0 million (EUR 0.5 million) of the total debt NOK 75,0 million (EUR 6.9 million) was short-term as per 30 June 2020. The Group will apply for an extension of the repayment-free period on the short-term loan.

Amortized interests are charged to financial expenses, amounting to NOK 1.3 million in first half of 2020 and NOK 2.2 million during full year 2019.

No new Business Finland loans have been awarded during the year 2020.

The table below shows a reconciliation of the opening balances for the liabilities arising from financing activities:

Changes in liabilities arising from financing activities *(Amounts in NOK thousands)*	Interest-bearing liabilities Business Finland loans
Interest-bearing liabilities 1 January 2019	**53 059**
Cash flow from financing activities	-
Exchange differences	-397
Additions to existing loans	-
Change to loan repayment schedules	-5 861
Other transactions without cash settlement	3 640
Interest-bearing liabilities 31 December 2019	**50 441**
Cash flow from financing activities	-
Exchange differences	4 913
Additions to existing loans	5 555
Change to loan repayment schedules	-
Other transactions without cash settlement	757
Interest-bearing liabilities 30 June 2020	**61 666**

See note 21 Interest-bearing debt in the Annual Report 2019 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 are assessed to approximate fair value.

	1H 2020		1H 2019		FY 2019	
Amounts in NOK thousands	Carrying amounts	Fair value	Carrying amounts	Fair value	Carrying amounts	Fair value
Receivables	13 340	13 340	18 518	18 518	15 429	15 429
Cash and cash equivalents	101 465	101 465	134 924	134 924	70 429	70 429
Total financial assets	**114 805**	**114 805**	**153 442**	**153 442**	**85 857**	**85 857**
Interest-bearing borrowings	61 666	61 666	53 529	53 529	50 441	50 441
Lease liabilities	3 390	3 390	5 099	5 099	3 241	3 241
Accounts payable and other current liabilities	3 940	3 940	6 501	6 501	11 136	11 136
Total financial liabilities	**68 996**	**68 996**	**65 129**	**65 129**	**64 818**	**64 818**

The tables below analyze 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 2020:

Amounts in NOK thousands	Level 1	Level 2	Level 3	Total
Interest-bearing borrowings	-	-	61 666	61 666
Total financial instruments at fair value	**-**	**-**	**61 666**	**61 666**

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 31 December 2019:

Amounts in NOK thousands	Level 1	Level 2	Level 3	Total
Interest-bearing borrowings	-	-	50 441	50 441
Total financial instruments at fair value	**-**	**-**	**50 441**	**50 441**

9. Share capital and number of shares

In January 2020, Targovax successfully completed a private placement, raising gross proceeds of approximately NOK 101 million (USD 11.2 million), through the allocation of 12,627,684 new shares at a subscription price of NOK 8.00 per share. The Private Placement took place through an accelerated book building process after close of market on 22 January 2020.The Private Placement attracted strong interest from existing shareholders and new institutional investors, both in Norway, Sweden, UK and the US and the book was covered multiple times.

The Private Placement and the issuance of the New Shares was resolved by the Company's board of directors (the "Board") at a board meeting held on 22 January 2020, based on the authorization granted at the Company's annual general meeting held on 30 April 2019.

Share capital as at 30 June 2020 is NOK 7 608 749.2 (31 December 2019: NOK 6 338 361.3) comprising 76 087 492 ordinary shares at nominal value NOK 0.10 (31 December 2019: 63 383 613 at NOK 0.10). All shares carry equal voting rights.

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

	2Q 2020	2Q 2019	1H 2020	1H 2019	FY 2019
Ordinary shares at beginning of period	76 087 492	63 138 421	63 383 613	52 616 448	52 616 448
Share issuance - Private Placement	-	142 457	12 627 684	10 664 430	10 664 430
Share issuance, employee share options and RSUs	-	102 735	76 195	102 735	102 735
Ordinary shares at end of period	**76 087 492**	**63 383 613**	**76 087 492**	**63 383 613**	63 383 613

The 20 largest shareholders are as follows at 30 June 2020:

Shareholder	# shares	%
HealthCap	12 405 584	16.3 %
Radiumhospitalets Forskningsstiftelse	4 427 255	5.8 %
Fjärde AP-fonden	3 000 000	3.9 %
VPF Nordea Kapital	1 808 448	2.4 %
VPF Nordea Avkastning	1 669 274	2.2 %
Nordnet Livsforsikring AS	1 557 108	2.0 %
Thorendahl Invest AS	1 500 000	2.0 %
Nordnet Bank AB	1 352 032	1.8 %
Danske Bank AS	1 175 470	1.5 %
Morgan Stanley & Co. International	1 131 380	1.5 %
Bækkelaget Holding AS	1 075 000	1.4 %
Sundt AS	960 000	1.3 %
MP Pensjon PK	956 977	1.3 %
Verdipapirfondet Nordea Norge Plus	851 203	1.1 %
J.P. Morgan Bank Luxembourg S.A.	830 000	1.1 %
Prieta AS	720 000	0.9 %
Tor Westerheim	502 192	0.7 %
Danske Bank AS	460 836	0.6 %
Saxo Bank A/S	447 958	0.6 %
The Bank of New York Mellon SA/NV	414 701	0.5 %
20 largest shareholders	37 245 418	49.0 %
Other shareholders (5 493)	38 842 074	51.0 %
Total shareholders	76 087 492	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 2020:

Name	Position	No. of shares outstanding at 30 June 2020
Key management:		
Øystein Soug[1)]	Chief Executive Officer	200 000
Magnus Jäderberg	Chief Medical Officer	20 000
Torbjørn Furuseth	Chief Financial Officer	15 000
Ingunn Munch Lindvig	VP, Regulatory Affairs	10 000
Total no. of shares owned by key management of the Group		**245 000**
Board of directors:		
Robert Burns	Board member	86 020
Eva-Lotta Coulter	Board member	51 368
Patrick Vink	Former chairperson of the Board	44 286
Diane Mellett	Board member	44 149
Bente-Lill Romøren	Board member	10 928
Total no. of shares owned by the Board of Directors of the Group		**236 751**

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

Amounts in NOK thousand	2Q 2020	2Q 2019	1H 2020	1H 2019	FY 2019
Loss for the period	-33 291	-45 489	-59 214	-86 506	-147 529
Average number of outstanding shares during the period	76 087	63 198	74 107	58 111	60 769
Earnings/ loss (-) per share - basic and diluted	**-0.44**	**-0.72**	**-0.80**	**-1.49**	**-2.43**

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 2019 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 in 2019 and 2020 the Board has resolved to issue new options to employees of the Company. In 2019 a total of 861 000 options for shares in the Company have been distributed amongst the current members of the key management and a total of 1490 000 options for shares in the Company have been distributed amongst other employees. In 2020 a total of 275 000 options for shares in the Company have been distributed amongst the current members of the key management and a total of 100 000 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 second quarter and first half 2020 was NOK 1.2 million and 2.4 million. For the same period in 2019 it was NOK 1.9 million and NOK 4.2 million, and NOK 4.6 million for the full year 2019.

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 2020 and 2019 is estimated at average of 57.55% and 67.95 based on the volatility of comparable listed companies. The volume weighted average interest rate applied to the share options grants in 2020 and 2019 is 0.18% and 1.25%.

The following table shows the changes in outstanding options in 2020 and 2019:

	1H 2020		FY 2019	
	No. of options	Weighted avg.exercise price (NOK)	No. of options	Weighted avg.exercise price (NOK)
Outstanding at 1 January	6 028 642	15.26	4 252 304	19.61
Granted during the period	375 000	8.65	2 351 000	6.97
Exercised during the period	-	-	-	-
Forfeited during the period	-242 522	7.35	-574 662	13.57
Expired during the period	-126 418	20.97	-	-
Outstanding no. of options at end of period	**6 034 702**	**15.04**	**6 028 642**	**15.26**

The following table shows the exercised, granted and outstanding options for shares to Key Management of the Group at 30 June 2020:

		Share Options			
Name	Position	Granted 1H 2020	Outstanding 30.06.2020	Granted FY 2019	Outstanding 31.12.2019
Key management:					
Øystein Soug	Chief Executive Officer	-	1 310 000	300 000	1 310 000
Magnus Jäderberg	Chief Medical Officer	-	930 000	170 000	930 000
Erik Digman Wiklund	Chief Business Officer	-	560 000	260 000	560 000
Torbjørn Furuseth	Chief Financial Officer	-	430 000	230 000	430 000
Victor Levitsky	Chief Scientific Officer	250 000	250 000	-	-
Ingunn Munch Lindvig	VP Regulatory Affairs	-	117 000	117 000	117 000
Kirsi Hellstöm	Head of CMC	25 000	101 000	122 000	175 500
Total option for shares to key management of the Group		**275 000**	**3 698 000**	**1 134 000**	**3 423 000**
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 2020 to 19 August 2020 no new options for shares have been granted to Key Management of the Group.

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 RUs, 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 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 Annual General Meeting 29 April 2020 decided to remunerate the Board of Directors for the period between the AGM 2020 to the AGM 2021 with a combination of cash and Restricted Stock Units (RSUs), hence at the 29 April 2020, additional 95 491 RSU's were granted to the Board of Directors.

The expensed RSUs in second quarter and first half 2020 was NOK 0,2 million and NOK 0.5 million. For the same period in 2019 it was NOK 0,2 million and NOK 0,5 million, and NOK 1,1 million for the full year 2019. A total of 287 356 RSUs was outstanding at 30 June 2020.

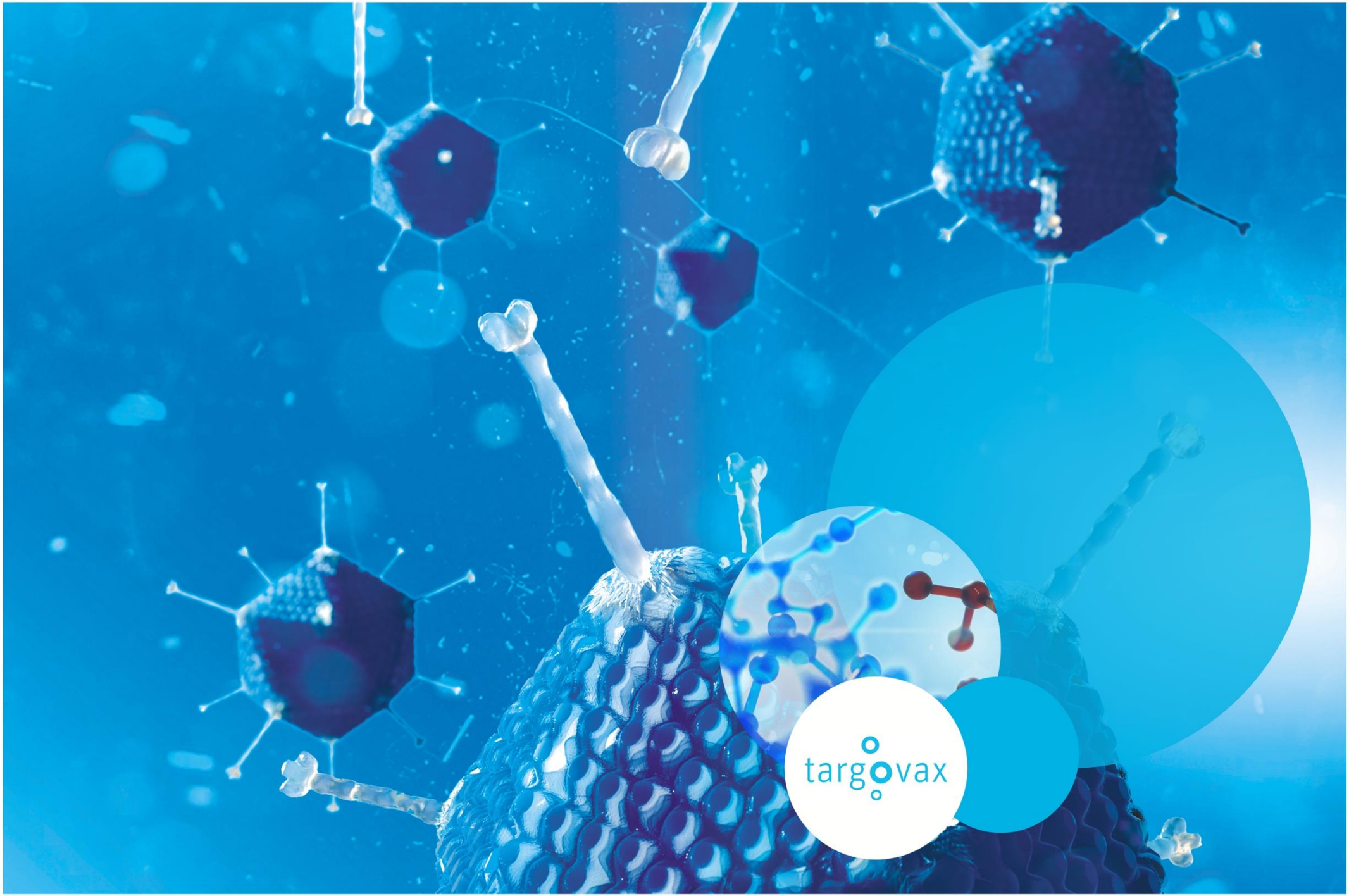
The following table shows the changes in outstanding RSUs in 2020 and 2019:

	1H 2020		FY 2019	
	No. of options	Weighted avg.exercise price (NOK)	No. of options	Weighted avg.exercise price (NOK)
Outstanding at 1 January	268 060	0.10	200 428	0.10
Granted during the period	95 491	0.10	170 367	0.10
Exercised during the period	-76 195	0.10	-102 735	-
Forfeited during the period	-	-	-	0.10
Expired during the period	-	-	-	-
Outstanding no. of RSUs at end of period	**287 356**	**0.10**	**268 060**	**0.10**

The following table shows the exercised, granted and outstanding RSUs to Board of Directors of the Group at 30 June 2020:

		RSUs			
Name	Position	Outstanding 31.12.2019	Granted 1H 2020	Exercised 1H 2020	Outstanding 30.06.2020
Board of Directors:					
Damian Marron	Chairperson of the Board	-	24 485	-	24 485
Robert Burns	Board member	45 747	42 604		88 351
Bente-Lill Romøren	Board member	30 113	-	-5 464	24 649
Diane Mellett	Board member	47 743	14 201	-26 445	35 499
Eva-Lotta Allan	Board member	15 249	14 201		29 450
Catherine A. Wheeler	Board member	6 049	-		6 049
Total Restricted Stock Units to Board of Directors of the Group		**123 159**	**95 491**	**-31 909**	**208 483**

From 1 July 2020 to 19 August 2020 no RSUs have been granted to the Board of Directors.


targovax