# Annual Report 2018

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# 4SC IN 2018

## About 4SC

4SC is a clinical-stage biopharmaceutical company developing small-molecule drugs that target key indications in cancer with high unmet medical need.

4SC's pipeline is protected by a comprehensive portfolio of patents and currently comprises three key drug candidates in various stages of development: resminostat, domatinostat (4SC-202) and 4SC-208.

4SC aims to generate future growth and enhance its enterprise value by entering into partnerships with pharmaceutical and biotech companies and/or the eventual marketing and sales of approved drugs in select territories by 4SC itself.

4SC is headquartered in Planegg-Martinsried near Munich, Germany. The Company had 47 employees as of 31 December 2018 and is listed on the Prime Standard of the Frankfurt Stock Exchange (FSE Prime Standard: VSC; ISIN: DE000A14KL72).

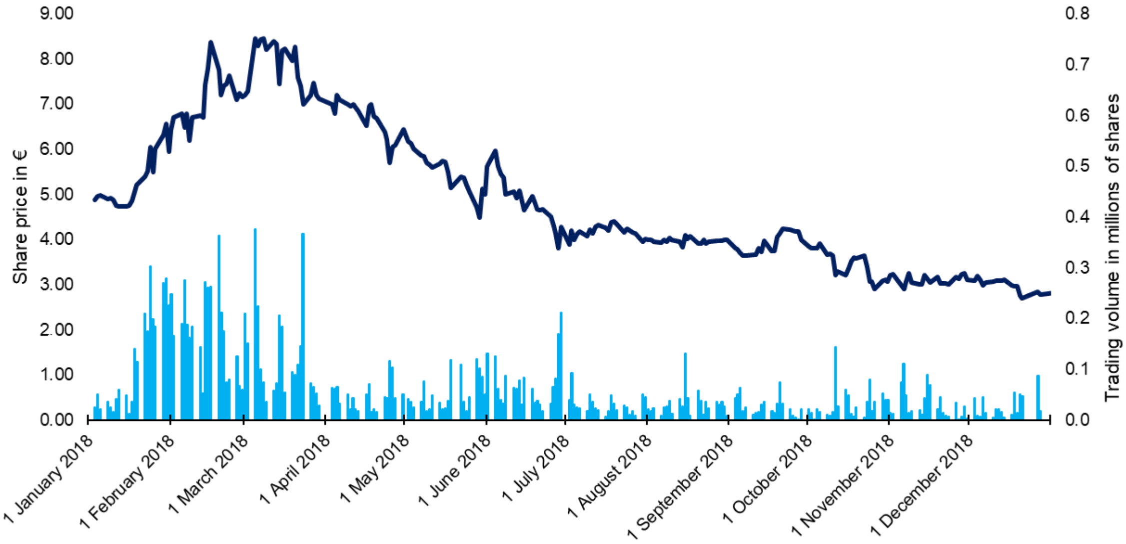
## Highlights in 2018

2018 marked a year of significant progress for 4SC. More detail about the information summarized below can be found in respective press releases and in section 1 “Course of business and outlook” starting on page 8.

- Recruited two third of patients for pivotal RESMAIN study of resminostat in cutaneous T-cell lymphoma (CTCL).
- Completed second dose cohort of Phase Ib/II study SENSITIZE of domatinostat in combination with pembrolizumab in melanoma with positive safety outcome.
- Strengthened patent protection for Hedgehog/GLI signaling inhibitor 4SC-208 in the U.S., China, Japan, Singapore, Australia and New Zealand.
- Received milestone payments from partnering agreements.

### 4SC SHARE PRICE (LHS) AND TRADING VOLUME (RHS)

2018, XETRA closing prices, trading volume data on all German exchanges combined (XETRA, German regional exchanges, Tradegate, Quotrix)



# REPORT OF THE SUPERVISORY BOARD

## Dear Shareholders,
## Ladies and Gentlemen,

In the financial year 2018, 4SC AG continued to drive forward the clinical development of its drug candidates resminostat and domatinostat, with the ongoing clinical trials being particularly noteworthy. The pivotal RESMAIN study with resminostat as maintenance therapy in advanced-stage CTCL recruited patients continuously, enabling it to enroll more than 100 patients by the end of the year. For the Phase Ib/II SENSITIZE trial, initiated in 2017, and which evaluates domatinostat in combination with the checkpoint inhibitor pembrolizumab in advanced-stage, checkpoint blockade refractory/non-responding melanoma, the first two of three dose cohorts were completed and evaluated by the Safety Review Committee, in each case receiving a positive safety assessment.

In the 2018 financial year, the Management Board and Supervisory Boards of 4SC AG again focused on the Company's continuing development. The Supervisory Board duly performed its duties in accordance with the law, the Company's Articles of Association and its rules of procedure. In particular, the Supervisory Board continuously monitored the work of the Management Board and advised it on the management and strategic development of the Company and on significant decisions. In the report that follows, the Supervisory Board expands on the focal points of its activities.

### CLOSE COOPERATION WITH THE MANAGEMENT BOARD

The Supervisory and Management Boards enjoyed a close working relationship and frequently exchanged information and opinions. The Management Board regularly submitted written and oral reports to the Supervisory Board on the Company's business performance. Accordingly, the Supervisory Board was always informed well in advance concerning all signifycant decisions faced by the Company. In each Supervisory Board meeting, the Management Board reported on the Company's current performance as well as on existing risks and opportunities. The Management Board also provided information about any deviations from plans and targets. Where individual items of business or actions proposed by the Management Board required consent, the Supervisory Board adopted the necessary resolutions. The Management Board used monthly written financial reports, phone calls and emails to keep the Supervisory Board informed outside of scheduled meetings. The Chairman of the Supervisory Board regularly exchanged information with the Management Board and when necessary, resolutions were adopted by written procedure.

### MEETINGS OF THE SUPERVISORY BOARD IN 2018

The Supervisory Board convened a total of five regular in-person meetings in the 2018 financial year. In its meetings, the Supervisory Board addressed the Company's strategy and positioning, including the international environment, and in addition, the strategic assessment of the development pipeline and its continued financing was another key point of discussion in all meetings.

### OTHER TOPICS OF THE SUPERVISORY BOARD MEETINGS

The first Supervisory Board meeting of the year on 13 March 2018 focused on adopting and approving the 4SC AG annual financial statements in accordance with German (HGB) and international (IFRS) accounting standards. The Management Board also reported on the status of development of resminostat, domatinostat and 4SC-208. The collaboration with Yakult Honsha Co., Ltd. (Yakult Honsha) and the addition of Yakult Honsha and Japanese patients to the RESMAIN trial was also discussed.

In the meeting on 16 May 2018, the Supervisory Board focused on the strategy of 4SC and its long-term objectives. The Management Board also informed the Supervisory Board on the progress of the RESMAIN and SENSITIZE clinical trials.

The third Supervisory Board meeting on 19 July 2018 concentrated on the development status of the 4SC programs, activities regarding business development, investor relations, as well as financing options.

At the fourth meeting on 10 October 2018, the Management Board provided a status update for the clinical trials and financing options were also discussed again.

The fifth and final Supervisory Board meeting on 13 December 2018 focused on the Management Board's review of 2018 and on the operational outlook for 2019. Other items on the agenda included the Audit Committee's report on the upcoming annual financial statements and budget issues, as well as the adoption of the budget through 2021. At this meeting, the Supervisory Board also decided to extend the director's contract with Jason Loveridge, Ph.D., until 31 December 2021. The Supervisory Board also received additional training on various topics, including corporate governance, from an external law firm during this meeting.

## MEETINGS OF THE COMMITTEES IN 2018 – FOCAL TOPICS OF COMMITTEE WORK

In order to further increase the efficiency of its work, the Supervisory Board of 4SC AG established three committees:

The Audit Committee met twice in person and five times via conference call in the reporting year, and on some occasions in the presence of the auditor.

In sessions held by the Audit Committee, its members primarily discussed accounting issues, the annual financial statements, the quarterly reporting and the budgeting. In each case, the current figures and developments were discussed with the Management Board prior to publication. Another key agenda item for meetings was the mid- to long-term financing of the business.

The R&D Committee met five times in person. In addition, the committee Chairperson and members regularly exchanged views with the Management Board outside these meetings and over the phone.

The R&D Committee supported 4SC researchers and management regarding strategy and implementation of the pivotal RESMAIN study of resminostat. As regards domatinostat, the focus was on supporting the implementation of the Phase Ib/II SENSIZITE study, preparing the planned investigator-initiated Phase Ib/II EMERGE study, and preparing the planned, potentially pivotal trial, in Merkel-cell carcinoma.

The Human Resources Committee did not meet outside of Supervisory Board meetings in the 2018 financial year. However, the members of the committee frequently exchanged views during the year by phone, by email and when Supervisory Board meetings were held.

The Human Resources Committee discussed the extension of the contract of Jason Loveridge, Ph.D. and its specifics, and submitted a proposal to the full Supervisory Board to adopt a resolution to extend the Director's contract. The Human Resources Committee also discussed the new stock option plan for employees and the Management Board, and the variable remuneration for the Management Board.

The work of the committees was supplemented with numerous telephone calls among committee members and bilateral discussions between the Management Board and the respective committee Chairperson and the Chairman of the Supervisory Board. The Chairpersons of the committees regularly reported to the plenary Supervisory Board at its meetings on matters that had only been discussed in the committees.

In the 2018 financial year, all Supervisory Board members attended more than half of the sessions of the Supervisory Board and the committees of which they were a member. Supervisory Board members who were unable to attend a Supervisory Board or committee meeting were subsequently informed comprehensively of the matters discussed in the respective meeting.

## MANAGEMENT BOARD UND SUPERVISORY BOARD

Jason Loveridge, Ph.D., has been managing 4SC AG as sole member of the Management Board since 1 January 2017.

The composition of the Supervisory Board remained unchanged in the reporting period. The term of office of all Supervisory Board members will end at the close of the Annual General Meeting to formally approve the actions for financial year 2018.

## APPROVED ANNUAL FINANCIAL STATEMENTS FOR 2018

The Annual General Meeting of 4SC AG on 17 May 2018 elected Baker Tilly GmbH & Co. Wirtschaftsprüfungsgesellschaft (Baker Tilly), Munich, Germany, to serve as the auditor of the annual financial statements for the 2018 financial year. Baker Tilly and its responsible senior financial auditor Siegfried Hund were first appointed auditors for the 2013 financial year. The auditing firm audited the single-entity financial statements of 4SC AG prepared in accordance with requirements of the German Commercial Code (Handelsgesetzbuch, HGB) and the separate financial statements prepared in accordance with the International Financial Reporting Standards (IFRS), as well as the combined management report, issuing an unqualified Auditors' Report. The financial statements, the combined management report and the audit reports were available to all members of the Supervisory Board in due time ahead of the meeting held on 12 March 2019. The Audit Committee discussed details of the single-entity and separate financial statements and the combined management report with the auditor and Management Board in advance during three meetings (on 29 January 2019, on 21 February 2019 and at one meeting held on 12 March 2019 immediately prior to the financials meeting of the Supervisory Board). The entire Supervisory Board was also briefed in the course of its meeting held on 12 March 2019. During this meeting, the Supervisory Board also discussed and examined the financial statements and the combined management report. The assessments made by the Management Board as contained in the combined management report were consistent with those previously communicated in its reports to the Supervisory Board and with the Supervisory Board's own assessments. The auditor reported to the Audit Committee and the members of the Supervisory Board on the key findings of the audit including the key audit matters and was also available to answer further questions. After this thorough examination, the Supervisory Board accepted the recommendation of the Audit Committee and raised no objections to the financial statements and the combined management report, which in the view of the Supervisory Board comply with all legal requirements. Therefore, the Supervisory Board agreed with the auditor's findings on the audit of the annual financial statements, and on 12 March 2019 approved the annual financial statements as prepared by the Management Board. The annual financial statements of 4SC AG in accordance with the HGB are thereby adopted.

## CORPORATE GOVERNANCE AT 4SC

The Supervisory Board again addressed in detail the current priorities of the German Corporate Governance Code (GCGC) during the 2018 financial year. The Management Board and the Supervisory Board take the recommendations of this Code very seriously, and the Company is completely compliant barring a few minor exceptions. In the most recent Declaration of Compliance dated 15 February 2019, the Management Board and the Supervisory Board therefore stated that the Company has complied, currently complies, and in the future aims to comply with the recommendations of the GCGC, as amended, with the exceptions listed in the Declaration.

The efficiency review carried out in 2017 had shown that the Supervisory Board works effectively. Since the Supervisory Board has decided to routinely review its efficiency every two years, the next review will therefore be performed in 2019.

For more information, also with regard to the details of the Declaration of Compliance, please refer to "Corporate Governance" in the "Investors & Media" section of the Company's website at www.4SC.com. This section also contains the current Declaration of Compliance.

## CONFLICTS OF INTEREST AND THEIR HANDLING

The question of potential conflicts of interest of the members of the Supervisory Board was reviewed in every Supervisory Board meeting. No conflicts of interest arose in the financial year 2018.

The Supervisory Board thanks the Management Board and all employees for their excellent contribution and their high level of commitment in 2018.

Planegg-Martinsried, March 2019

Clemens Doppler, Ph.D.
Chairperson of the Supervisory Board

## THE SUPERVISORY BOARD OF 4SC AND ITS COMMITTEES SINCE 1 APRIL 2017

| | Supervisory Board | Audit Committee | Human Resources Committee | R&D Committee |
|---|---|---|---|---|
| Clemens Doppler, Ph.D. | C | M | C | |
| Joerg von Petrikowsky | VC | C | M | |
| Irina Antonijevic, M.D., Ph.D. | M | | | C |
| Helmut Jeggle | M | | | |
| Prof. Helga Rübsamen-Schaeff, Ph.D. | M | | M | M |
| Manfred Rüdiger, Ph.D. | M | M | | M |

C = Chairperson; VC = Vice Chairperson; M = Member

# COMBINED MANAGEMENT REPORT

# 1 Course of business and outlook

The following paragraphs contain forecasts and expectations regarding future developments. Actual results might differ substantially from these estimates of likely developments if uncertainties were to arise or if the assumptions underlying the forecasts turn out to be incorrect.

## 1.1 BUSINESS ACTIVITIES AND STRATEGY

4SC is a clinical-stage biopharmaceutical company developing small-molecule drugs that target key indications in cancer with high unmet medical need. 4SC's goal is to advance its own drug development programs in order to increase the value of the Company as a whole. In addition, 4SC enters into valuable partnerships with pharmaceutical and biotechnology companies for the further development or commercialization of its drug candidates. 4SC aims to eventually market and sell its approved drugs in select territories.

4SC's core product pipeline currently comprises three small-molecule compounds that are in various stages of development and have major economic potential:

- Resminostat is 4SC's most advanced drug in terms of development and is currently being evaluated in the pivotal RESMAIN study in advanced-stage CTCL and in a Phase II study in biliary tract cancer conducted by 4SC's Japanese partner Yakult Honsha.
- Domatinostat is currently being investigated in combination with different checkpoint inhibitors in advanced-stage melanoma (Phase Ib/II study SENSITIZE) and advanced-stage gastrointestinal cancer (investigator-sponsored Phase II study EMERGE).
- 4SC-208 is in preclinical development.

In addition, 4SC aims to continue to secure the licensing or sale of non-core assets in order to ensure further development of these drug candidates and to achieve an earlier inflow of non-dilutive funds while exploiting the development programs' value creation potential over the long term.

## 1.2 SIGNIFICANT EVENTS RELATED TO 4SC'S RESEARCH AND DEVELOPMENT ACTIVITIES

### 1.2.1 RESMINOSTAT

Resminostat is an orally administered class I, IIb and IV histone deacetylase (HDAC) inhibitor that potentially offers an approach to treating different kinds of cancer. Resminostat demonstrated that it is well tolerated and can inhibit tumor growth and proliferation, cause tumor regression, and strengthen the body's immune response to cancer.

#### Pivotal RESMAIN study in CTCL on track

In 2016, 4SC started the pivotal RESMAIN study – a randomized, double-blind, placebo-controlled clinical Phase II study of resminostat in CTCL.

The RESMAIN study is focused on patients with advanced-stage CTCL. Such patients suffer from painful and itchy skin lesions resulting in disfigurement and a severely impaired quality of life. None of the current therapeutic options achieve sustainable clinical benefit, with most patients progressing within six months (on average). Resminostat is being evaluated as a maintenance treatment – prolonging the period patients are stable and not progressing combined with a beneficial decrease of disease-related itching.

In January 2018, the Data Safety Monitoring Board, an independent committee of clinical and drug safety experts, evaluated data from the first 50 patients treated in the study and observed no safety issues. The committee recommended continuation without modification of the study protocol.

At the end of March 2018, Yakult Honsha, 4SC's development partner in Japan, elected to join the RESMAIN study – triggering a milestone payment to 4SC. Yakult Honsha enrolled the first patients in Japan in early April 2018. RESMAIN is now being conducted in more than 50 study centers across 11 European countries and in Japan. By November 2018, two thirds of the expected number of patients required to unblind the study were enrolled.

4SC expects to see top-line results in H1 2020. If the study results are positive, 4SC plans to submit applications for marketing approval of resminostat in CTCL in Europe and potentially the U.S. and Yakult Honsha will submit in Japan. If approved, resminostat would be the first HDAC inhibitor approved for CTCL in Europe and the first and only drug approved for maintenance therapy in this indication in either Europe, Japan or the U.S.

#### Phase II study in biliary tract cancer initiated

In April 2018, Yakult Honsha initiated a randomized, double-blind, placebo-controlled, multi-center Phase II study evaluating the combination of resminostat and

S-1 chemotherapy versus S-1 chemotherapy plus placebo as second-line treatment in 100 Japanese patients with unresectable or recurrent biliary tract cancer.

The study is based on a positive Phase I clinical study which was completed in September 2017.

S-1 is a chemotherapy combination drug which is approved for the treatment of several solid tumor types including biliary tract cancer in Asia. The main goal of the study is to prolong progression free survival (PFS) and secondary objectives include efficacy and safety parameters. Final results are expected to be available by mid-2020.

### 1.2.2 DOMATINOSTAT

Domatinostat is an orally administered small molecule class I selective HDAC inhibitor. It strengthens the body's own anti-tumor immune response, influences the tumor and tumor microenvironment making the tumor more visible to the immune system and facilitates the infiltration of immune cells into the tumor.

Domatinostat has been investigated in a Phase I study in 24 heavily pretreated patients with several types of advanced hematologic cancers and was well tolerated. Positive signs of anti-tumor efficacy were also observed; with one complete remission (28 months) and one partial responder (8 months).

#### Domatinostat in combination with checkpoint inhibitors

4SC initiated the Phase Ib/II study SENSITIZE of domatinostat in combination with the anti-PD-1 checkpoint inhibitor pembrolizumab in patients with advanced-stage melanoma. In November 2017, the first patient was enrolled in the study's first dose cohort and in December 2018 enrollment of the second dose cohort of patients into the study was completed. The Safety Review Committee consisting of clinical and drug safety experts evaluated the safety data from the first and second dose cohort respectively and recommended continuation of the study.

In August 2018, the U.S. Food and Drug Administration (FDA) approved 4SC's Investigational New Drug (IND) application for domatinostat in melanoma. The SENSITIZE study is expected to complete in H1 2019.

In a second Phase II study EMERGE, since January 2019, domatinostat is tested in combination with another checkpoint inhibitor, the anti-PD-L1 antibody avelumab, for treating microsatellite-stable gastrointestinal tumors. Such tumors are largely unresponsive to checkpoint inhibition. The investigator-sponsored study is conducted by Prof. David Cunningham, MD FRCP FMedSci, Head of the Gastrointestinal and Lymphoma Unit and Director of Clinical Research at The Royal Marsden NHS Foundation Trust, London, UK. 4SC expects safety data in Q2 2019 and early efficacy data in H2 2019.

These two studies – SENSITIZE and EMERGE – are designed to serve several purposes:

- Together they provide safety data for domatinostat in combination with the two main classes of checkpoint inhibitors, anti-PD-1 and anti-PD-L1,
- Potentially provide evidence to support the efficacy of domatinostat in checkpoint inhibitor refractory/non-responding patients in a major immunogenic tumor indication (melanoma) or in a historically checkpoint inhibitor non-responsive major indication (microsatellite-stable gastrointestinal cancer),
- Provide sufficient data to initiate a potentially pivotal clinical trial with domatinostat in combination with a checkpoint inhibitor as soon as possible in the aggressive skin cancer Merkel-cell carcinoma.

#### Evaluation of further combination partners

In April 2018, 4SC presented a poster with preclinical data supporting double and triple combinations of domatinostat and checkpoint inhibitors and, in September 2018, a collaborator of 4SC presented an additional poster with preclinical data supporting the combination of domatinostat with chemotherapy in cancer. Based on these promising preclinical results, 4SC is currently evaluating further clinical studies of domatinostat in additional and different combinations.

### 1.2.3 4SC-208

In January 2018, 4SC was granted composition of matter patents in further geographic regions for a group of molecules including 4SC-208, an orally-available hedgehog/GLI signaling inhibitor. The patents provide 4SC with market exclusivity until 2033 in the U.S. as well as in China, Japan, Singapore, Australia and New Zealand.

4SC-208 is currently being evaluated in preclinical cancer models in order to better define the development pathway for the drug candidate.

### 1.2.4 OUT-LICENSED PROGRAMS

In October 2018, 4SC received a single digit million Euro milestone payment from Guangzhou LingSheng Pharma Tech Co., Ltd (Link Health). Under the 2016 agreement, Link Health received from 4SC the exclusive licensing rights for the development, regulatory submission and marketing of the cancer therapeutic candidate 4SC-205 in China, Hong Kong, Taiwan and Macao and is responsible for performing and financing the clinical development of 4SC-205 in these territories.

4SC continues to explore partnering opportunities in line with its strategy to monetize non-core assets.

## 1.3 SIGNIFICANT CORPORATE EVENTS

In 2018, there were no significant corporate events.

## 1.4 MACROECONOMIC DEVELOPMENT

In its forecast issued in January 2019, the International Monetary Fund projected a rise in global growth of 3.7% for 2018 (2017: 3.8%). But compared to 2017, the industrialized economies registered a slight downturn of economic growth to 2.3% (2017: 2.4%).

Overall, the euro zone economy grew by 1.8% in the reporting year (2017: 2.4%). Germany's growth rate decreased to 1.5% from 2.5% in the previous year. In the U.S., the growth rate experienced a significant upturn to 2.9% (2017: 2.2%).

Growth in emerging markets and developing economies in 2018 was 4.6% (2017: 4.7%). The persistently above-average growth in China slowed down from 6.9% in 2017 to 6.6%, while growth in India expanded to 7.3% (2017: 6.7%).

### 1.4.1 DEVELOPMENTS IN THE PHARMA AND BIOTECHNOLOGY INDUSTRY

New science set the tone for the drug industry in 2018. It can be credited for a wave of investment as well as significant progress towards translating long-standing technology into actual products.

Notable developments in 2018 include the approval of the first RNA interference therapeutic, the uneven advance of the gene-editing tool CRISPR, a renewed interest in oncolytic viruses for oncology, and real momentum in developing gene therapies for a wide swath of orphan diseases. Similar to recent years in the cancer space, immuno-oncology combination treatments were increasingly considered worthy of investigation and many new clinical trials were initiated.

The FDA approved 59 new molecular entities in 2018, surpassing a total of 46 approvals in 2017. Approvals of Orphan drugs shot up to 32 in total, exceeding the total number of approvals for all but eight of the past 26 years. About a third of these Orphan drug approvals were for cancer, which is important given 4SC's focus on orphan cancer indications such as CTCL and Merkel-cell carcinoma.

### 1.4.2 CUTANEOUS T-CELL LYMPHOMA (CTCL)

To the best of 4SC's knowledge, resminostat remains the only drug candidate being developed as maintenance therapy in CTCL.

However, in CTCL patients with progressive disease, two major drug approvals were granted in 2018:

- In January 2018, the European Medicines Agency (EMA) extended the use of brentuximab vedotin (ADCETRIS®, an antibody-drug conjugate from Seattle Genetics, Inc.) for the treatment of adults with CD30-positive CTCL following at least one prior systemic therapy, and
- In November 2018, the approval by U.S. FDA and EMA (EU) of mogamulizumab (POTELIGEO®, an antibody from Kyowa Hakko Kirin Co., Ltd.) for the intravenous treatment of adult patients with relapsed or refractory mycosis fungoides or Sézary syndrome.

### 1.4.3 FINANCIALS

An analysis of licensing trends over the past seven years using EvaluatePharma data shows that oncology remains the most attractive sector for investors. Between 2010 and the first half of 2018 almost US-$18 billion was invested in up-front payments for cancer treatments, outstripping other therapies by at least a factor of three. Additionally, as pharma companies continue to skip M&A in favor of licensing, competition for novel oncology assets is increasing, which drives valuations upward and accelerates the number of deals done at earlier stages of development.

According to GlobalData Deals Database, in 2018 a total of 56 acquisitions were announced and/or completed involving companies in the oncology (therapeutics) area for a total announced value of about US-$128 billion, whilst 221 partnership and/or licensing deals were completed involving companies with immuno-oncology assets. In the 57 cases where the deal value was made public, investment totaled approximately US-$40 billion.

Finally, according to GlobalData Deal Database, 66 IPOs were completed in 2018 in the pharma sector (raising US-$7,346 million). A total of 29 were performed by companies with an oncology focus raising US-$3,690 million in equity capital.

## 1.5 4SC SHARES AND THE CAPITAL MARKETS

In the 2018 financial year, 4SC´s shares underperformed the two most relevant sector indexes, the NASDAQ Biotechnology and the DAXsubsector Biotechnology. 4SC´s shares climbed from €4.96 at the end of 2017 to a year-high of €8.45 at 5 March 2018, significantly outperforming both indices. However, from this point forward, 4SC's shares recorded a disproportionately strong fall in value to €2.79 at the year-end falling 44% in value over the 2018 financial year. In the same period the NASDAQ Biotechnology lost 9% in value whilst the DAXsubsector Biotechnology increased by 15%.

The average daily trading volume of 4SC shares across all German stock exchanges, including Tradegate and Quotrix, was 64,748 shares compared to 88,864 in 2017. The share of stocks in the free float – as defined by Deutsche Börse AG – was 32.9% as of 31 December 2018, compared with 35.6% at the end of 2017.

In June and July, 2018; LifeSci Capital LLC, New York, USA, and Stifel Nicolaus Europe Limited, London, UK respectively initiated research coverage on 4SC.

## RESEARCH

| Institute | Place | Analyst | Date of publication | Share price one day ahead of publication (in €) | Target price per share (in €) | Analyst recommendation |
|---|---|---|---|---|---|---|
| goetzpartners | London, United Kingdom | Chris Redhead, Ph.D. | 31 Jan 2018 | 5.05 | 7.50 | Outperform |
| Edison Investment Research | London, United Kingdom | Jonas Peciulis, Ph.D. | 9 Feb 2018 | 6.28 | 11.30 | - |
| Edison Investment Research | London, United Kingdom | Jonas Peciulis, Ph.D., Alice Nettleton | 28 Mar 2018 | 7.47 | 11.40 | - |
| goetzpartners | London, United Kingdom | Chris Redhead, Ph.D. | 5 Apr 2018 | 6.80 | 10.00 | Outperform |
| Edison Investment Research | London, United Kingdom | Jonas Peciulis, Ph.D., Alice Nettleton | 3 May 2018 | 6.10 | 11.40 | - |
| LifeSci Capital | New York, USA | Sam Slutsky | 29 Jun 2018 | 3.81 | - | - |
| LifeSci Capital | New York, USA | Sam Slutsky | 3 Jul 2018 | 3.90 | - | - |
| Stifel Nicolaus Europe | London, United Kingdom | Max Herrmann, James Mainwaring | 6 Jul 2018 | 4.17 | 6.45 | Buy |
| goetzpartners | London, United Kingdom | Chris Redhead, Ph.D. | 16 Jul 2018 | 4.32 | 10.00 | Outperform |
| goetzpartners | London, United Kingdom | Chris Redhead, Ph.D. | 9 Aug 2018 | 4.01 | 10.00 | Outperform |
| LifeSci Capital | New York, USA | Sam Slutsky | 9 Aug 2018 | 4.04 | | |
| Edison Investment Research | London, United Kingdom | Jonas Peciulis, Ph.D., Alice Nettleton | 17 Aug 2018 | 4.02 | 11.70 | - |

## SHAREHOLDER STRUCTURE

| (As estimated by management, in percent) | 31 Dec 2018 | 31 Dec 2017 |
|---|---|---|
| Santo Holding (Deutschland) | 37.5 | 37.5 |
| ATS Beteiligungsverwaltung | 20.9 | 20.9 |
| First Capital Partner | 6.0 | 6.0 |
| Wellington Partners | 4.5 | 4.5 |
| Other | 31.1 | 31.1 |
| **Total** | **100.0** | **100.0** |

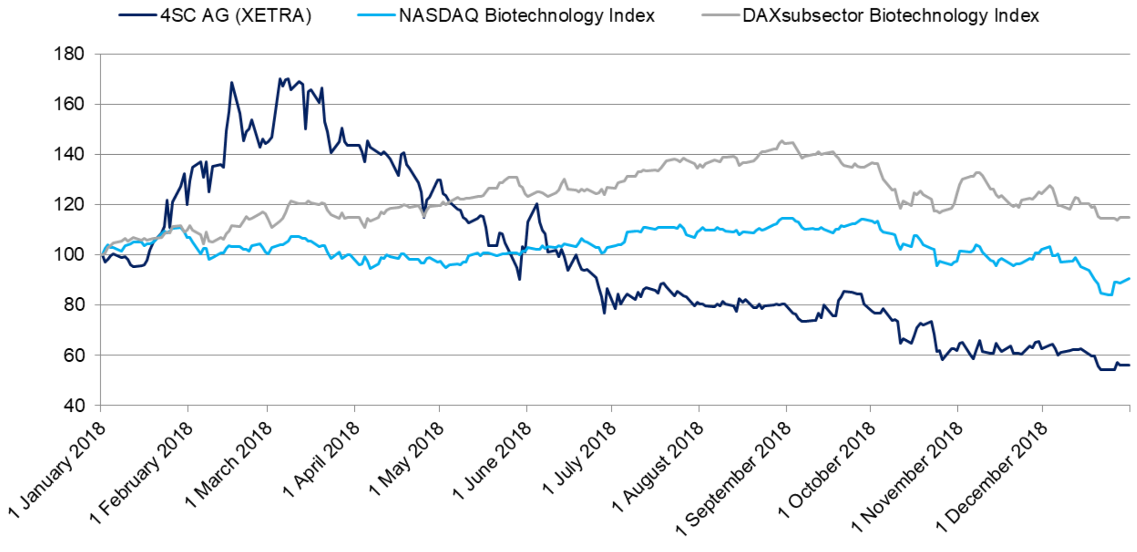
## KEY FIGURES FOR 4SC SHARES

As of 31 December 2018

| | |
|---|---|
| Securities identification number (SIN) | A14KL7 |
| International securities identification number (ISIN) | DE000A14KL72 |
| Stock exchange symbol | VSC |
| Type of shares | Bearer shares |
| Number of shares | 30,648,513 |
| Market segment | Prime Standard |
| Marketplace | XETRA and all other German stock exchanges |
| Designated sponsor | Oddo Seydler Bank AG |
| First day of trading | 15 December 2005 |
| Earnings per share (basic and diluted; in €) | -0.58 |
| Free float as defined by Deutsche Börse AG | 32.9% |
| Annual high (XETRA; in €) | 8.45 |
| Annual low (XETRA; in €) | 2.69 |
| Closing price on reporting date (XETRA; in €) | 2.79 |
| Daily trading volume (all trading venues, annual average) | 64,748 |

## SHARE PRICE OF 4SC AG VS. BIOTECHNOLOGY INDEXES

2018, beginning of the year = 100%



# 2 Results of operations, financial position and net assets

4SC herein reports figures for both the 2018 and 2017 financial years.

## 2.1 RESULTS OF OPERATIONS

### 2.1.1 REVENUE

Revenue decreased slightly to €4,173 thousand in financial year 2018, down 1% from the previous year (2017: €4,197 thousand). In the reporting year, revenues mainly consisted of milestones in connection with 4SC's development partnerships and services for partners. The revenue comprised milestones reached by Yakult Honsha and Link Health (2018: €4,000 thousand; 2017: €2,850 thousand) and services for the partners Link Health, Yakult Honsha, AG (BioNTech) and Maruho Co., Ltd. (Maruho) for a total of €173 thousand (2017: €355 thousand).

### 2.1.2 OPERATING EXPENSES

Operating expenses, comprising the cost of sales, distribution costs, research and development costs and administrative costs, rose to €21,730 thousand in 2018 (2017: €15,192 thousand). Operating expenses were 43% above levels seen in the previous year as a result of 4SC's expanded clinical studies.

The decrease in the cost of sales by 40% (2018: €343 thousand; 2017: €574 thousand) was mainly due to a commission in connection with the achievement of a milestone payment from the cooperation partnership with Yakult Honsha. Additional costs include patent costs and external services.

Research and development costs continue to account for the majority of expenses, which rose significantly by 59% year-on-year to €18,263 thousand in 2018 (2017: €11,475 thousand). This increase largely stems from outsourced services in connection with the ongoing RESMAIN study of resminostat in CTCL and the SENSITIZE study of domatinostat in patients with melanoma.

Administrative costs amounted to €2,716 thousand in the 2018 financial year, down 3% year-on-year (2017: €2,792 thousand). This decrease is mainly attributable to lower personnel costs in 2018.

Distribution costs, which consist of the costs incurred in business development and corporate communications and investor relations, increased by 16% in 2018 due to higher personnel costs as a result of the newly established Employee Stock Option Programs (ESOP) in 2018. These amounted to €408 thousand (2017: €351 thousand).

Other operating income decreased to €3 thousand (2017: €59 thousand).

### 2.1.3 OPERATING PROFIT/LOSS

Similar revenues as compared to 2017, but higher operating costs, increased 4SC's operating loss by 61% in 2018 to €17,554 thousand (2017: €-10,936 thousand).

### 2.1.4 NET FINANCE INCOME/LOSS

Net finance income reduced year-on-year to €-11 thousand in 2018 (2017: €9 thousand).

### 2.1.5 TAXES

In the reporting period, 4SC incurred expenses of €94 thousand from current income taxes in the form of a non-creditable, deductible Chinese withholding tax (2017: €33 thousand).

### 2.1.6 NET LOSS

The net loss rose by 61% to €17,659 thousand in 2018 (2017: €10,960 thousand).

### 2.1.7 EARNINGS PER SHARE

Due to a higher net loss for the period, the loss per share increased to €0.58 in the 2018 financial year (2017: loss of €0.45).

## 2.2 NET ASSETS

### 2.2.1 NON-CURRENT ASSETS

Non-current assets fell from €6,365 thousand as of 31 December 2017 to €5,645 thousand as of 31 December 2018. This decrease is due in particular to depreciation and amortization.

At €4,955 thousand, intangible assets continued to be the largest non-current asset item (31 December 2017: €5,694 thousand), followed by property, plant and equipment at €589 thousand (31 December 2017: €570 thousand).

### 2.2.2 CURRENT ASSETS

The reduction in current assets to €25,611 thousand as of 31 December 2018 (31 December 2017: €41,548 thousand) resulted primarily from the reduction in cash and cash equivalents to €25,036 thousand (31 December 2017: €41,327 thousand), due to operating costs.

### 2.2.3 EQUITY

The decrease in equity from €44,693 thousand as of 31 December 2017 to €28,452 thousand as of 31 December 2018 is mainly due to the net loss for the period which increased to €177,476 thousand as of 31 December 2018 (31 December 2017: €160,310 thousand).

As a result, the equity ratio decreased by 2.3 percentage points from 93.3% as of 31 December 2017 to 91.0% as of 31 December 2018.

### 2.2.4 CURRENT AND NON-CURRENT LIABILITIES

Non-current liabilities were down 82% to €82 thousand as of 31 December 2018 (31 December 2017: €461 thousand). The other non-current liabilities amounting to €60 thousand as of 31 December 2018 (31 December 2017: €45 thousand), consisted primarily of bonus accruals. The deferred revenue items reported in the previous year (31 December 2017: €394 thousand) in connection with the concluded partnership with Link Health were reclassified directly to loss carryforwards due to the (first-time) application of IFRS 15.

Current liabilities decreased by 1% to €2,722 thousand (31 December 2017: €2,759 thousand). These consist of other liabilities of €1,602 thousand (31 December 2017: €1,584 thousand). Current liabilities also include trade accounts payable in the amount of €1,120 thousand (31 December 2017: €1,175 thousand).

### 2.2.5 TOTAL ASSETS/TOTAL EQUITY AND LIABILITIES

Total assets/total equity and liabilities decreased to €31,256 thousand as of 31 December 2018 (31 December 2017: €47,913 thousand), mainly as a result of the accumulated deficit.

## 2.3 FINANCIAL POSITIONS

### 2.3.1 CASH FLOWS FROM OPERATING ACTIVITIES

€-16,162 thousand was used for operating activities in the 2018 financial year. The difference compared with the pre-tax loss of €17,565 thousand resulted in particular from non-cash expense items such as straight-line depreciation and amortization and ESOP, on the income side and a reduction in the other current assets. In the 2017 prior-year period, cash flows from operating activities came to €-8,541 thousand, with a pre-tax loss of €10,927 thousand.

### 2.3.2 CASH FLOWS FROM INVESTING ACTIVITIES

Cash outflows from investing activities in the financial year 2018 amounted to €121 thousand (2017: cash outflow of €133 thousand). The sale of current assets generated a cash inflow of €1 thousand (2017: cash inflow of €39 thousand). In addition, the Company invested €2 thousand (2017: €4 thousand) in intangible assets and €120 thousand (2017: €168 thousand) in property, plant and equipment.

### 2.3.3 CASH FLOWS FROM FINANCING ACTIVITIES

The negative cash flows of €-8 thousand from financing activities (2017: €39,953 thousand) in the reporting period resulted from the capital increase completed in July 2017.

### 2.3.4 CASH AND CASH EQUIVALENTS

As of 31 December 2018, the Company had cash and cash equivalents totaling €25,036 thousand (31 December 2017: €41,327 thousand). The average monthly outflow of cash from operating activities was €1,357 thousand in 2018 (2017: €723 thousand).

## 2.4 OVERALL ASSESSMENT OF ECONOMIC POSITION

Revenues remained at around the same level as in the previous year due to one-time payments of milestones. Expenses for the ongoing RESMAIN study of resminostat in CTCL and SENSITIZE study of domatinostat in patients with melanoma increased by 59% compared to the previous year. The net loss in 2018 increased overall by a total of 61% year-on-year. The Company had sufficient liquidity at all times during the 2018 financial year. The financing of ongoing development programs was not in jeopardy at any time. The BREXIT had not had or does not have an impact on the results of operations, financial positions and net assets of 4SC.

4SC's economic development in the 2019 financial year continued as planned up until finalization of the combined management report.

# 3 Employees

As of 31 December 2018, 4SC AG had 47 employees, including the Management Board (31 December 2017: 48). The average number of employees in 2018 was 46, a decrease of 2% on the previous year (2017: 47).

The share of female employees slightly decreased year-on-year, reaching 66% as of 31 December 2018 (31 December 2017: 67%). As of the 31 December 2018 reporting date, 32% (31 December 2017: 31%) of 4SC's workforce were working part-time. Including part-time employees and employees on parental leave, the Company had 42 full-time equivalents (FTEs) at the end of 2018 (31 December 2017: 43 FTEs). Of these FTEs, 74% (31 December 2017: 71%) worked in research and development, and 26% (31 December 2017: 29%) in business development, administration and IT. The Company currently has no trainees.

Staff costs increased to €5,083 thousand in the 2018 financial year (2017: €4,475 thousand), including €933 thousand (2017: €427 thousand) arising from non-cash expenses for stock option plans.

| In head count | 31 December 2018 | 31 December 2017 |
|---|---|---|
| Research & Development | 34 | 34 |
| Business Development, Administration, IT | 13 | 14 |
| **Total** | **47** | **48** |

# 4 Financial and non-financial key performance indicators

## 4.1 INTERNAL MANAGEMENT SYSTEM AND FINANCIAL KEY PERFORMANCE INDICATORS

4SC uses a uniform reporting and planning system from which it derives financial and non-financial key performance indicators that are continuously monitored. 4SC's principal financial control variables are its liquidity status and operating expenses, particularly expenses incurred for research and development activities.

Factors such as available liquidity, milestone payments and working capital all influence the course of 4SC's business. For this reason, systematic cash management is pivotal for 4SC. One key financial indicator is the average monthly cash burn rate. The ratio of cash funds to the planned average cash burn rate per month allows the estimation of the period the cash balance/funds are expected to suffice.

4SC's management system also includes performance indicators for development activities, including: patient-related indicators such as clinical findings regarding the safety, tolerance and efficacy of the drug candidates being developed. 4SC measures the efficiency and success of these processes using, for example, such parameters as "observance of schedules and budgets" and "success of clinical studies". Key performance indicators are used for purposes of optimal planning, management and control of business development.

## 4.2 NON-FINANCIAL KEY PERFORMANCE INDICATORS

### 4.2.1 INTELLECTUAL PROPERTY RIGHTS

A strong intellectual property portfolio is crucial for value creation in a company focused on drug development. It enhances the competitive position of the development programs on route to marketability and supports commercialization once market entry is achieved. 4SC's patent management activities aim to optimize the company's existing patent portfolio over the reporting period.

As of the close of 2018, 4SC's portfolio comprised 265 issued patents (31 December 2017: 328) and 111 patent applications were pending at year end (31 December 2017: 125). The change in the number of patents resulted mainly from the transfer of rights in the patents from 4SC's TLR drug candidates to its licensee BioNTech which leaves BioNTech's obligetions to pay royalties unchanged.

For resminostat, the Company held a total of 156 issued patents at the end of 2018, including 63 composition-of-matter patents in all of the world's major pharmaceutical markets. Additional patents and patent applications cover the mesylate salt (used in resminostat's pharmaceutical formulation), the manufacturing process and specific medical uses and combinations of resminostat.

4SC also held an extensive portfolio of 77 issued patents, including 61 composition-of-matter patents, for domatinostat in the world's major markets. Newly filed and presently unpublished applications cover specific medical uses and combinations of domatinostat.

At the end of 2018, the patent prosecution for 4SC-208 had progressed further and several national patents were granted to the already granted U.S. patent, including patents in Japan and China.

Besides its patents, 4SC also owns rights to strategically important trademarks, including word marks and word/picture marks.

Overall, 4SC's extensive portfolio of intellectual property rights illustrates the Company's innovative strength, which is further bolstered by a forward-looking patent strategy for the development and commercialization of its drug candidates.

### 4.2.2 CORPORATE RESPONSIBILITY AND SUSTAINABILITY

#### Employee safety and environmental protection

4SC places high value on ensuring the maximum possible safety of its employees and on protecting the environment. Appropriate measures are therefore continuously implemented, reviewed and optimized in all processes.

The occupational health and safety committee serves as a core instrument to fulfill these tasks. It is comprised of a safety officer, a biological safety officer, an external Company medical officer and a safety specialist. The occupational health and safety committee assists 4SC's management in all aspects of occupational safety, occupational healthcare, the safe handling of hazardous substances and biomaterials, as well as compliance with legal requirements.

The regular risk assessments required by the German Occupational Health and Safety Act are conducted by the responsible supervisor or laboratory manager, aided by the Company's own occupational safety professional. The risk assessment and the psychological stress risk assessment were regularly updated during the last years. Furthermore, all employees of 4SC receive annual general training on occupational safety and all laboratory employees receive training on the handling of hazardous substances and genetically modified organisms in accordance with applicable hazardous substance regulations. All new members of staff also receive safety training, which is tailored to their place of work – laboratory or office.

Alongside these personnel and organizational measures, the technical and structural requirements for the handling, storage and transport of hazardous substances and biomaterials are meticulously observed. These include the provision of personal protective equipment, effective fire safety mechanisms, biological safety areas and systems for laboratory facilities. All relevant mechanisms and apparatus have received the prescribed regulatory permits and are inspected and serviced on a regular basis.

4SC's waste disposal concept aims to help protect the environment. The professional and environmentally compatible disposal of hazardous waste is carried out by a specialist company.

Due to the systematic implementation and observance of occupational safety measures, no notifiable incidents occurred in the reporting year.

#### Ethical responsibility

In order to develop new drugs, among other things 4SC relies on data derived from animal testing. This serves both to achieve the requisite goals in scientific terms and to satisfy statutory requirements. However, the Company is committed to reducing tests involving animals to the minimum and replace them to the extent possible with alternatives, such as cell culture testing.

4SC commissions carefully selected contract research organizations (CROs) to perform animal studies and clinical studies on people. In this context, 4SC places particular emphasis on compliance with official requirements as well as ethical and scientific quality standards.

### 4.2.3 PROCUREMENT

Procurement, logistics processes and warehousing at 4SC are organized and handled by the accounting department. These processes are defined and fixed. Coordination between accounting and development departments ensures that all processes – from obtaining orders to paying the invoice – run smoothly and cost-efficiently.

The Company has a broad supplier base in order to ensure, where possible, that it is not dependent on any one supplier. The required goods are generally sourced based on quality, pricing and availability. Despite a decrease in purchasing volume, delivery terms and prices with several suppliers were maintained in the reporting year due to intensive negotiations. 4SC cooperates with various service providers, for example in pharmacology, toxicology, metabolism, analytics, production, clinical development, pharmacovigilance and statistics. The selection of partners is contingent on the specific requirements of the given project. In addition to quality, observance of deadlines and price, the key selection criteria are experience and references in the respective field and the applicable regulatory parameters.

### 4.2.4 QUALITY ASSURANCE

The preclinical and clinical development of new drugs requires the observance of the very highest standards of safety and quality. This practice aims to reduce the risks to the safety of humans, animals and the environment while also minimizing threats to 4SC's economic position. The head of 4SC's Quality Unit reports to the CEO and works closely with him to coordinate all of the actions to be taken.

In light of the above, 4SC has installed a quality management system according to "GxP" guidelines. The abbreviation GxP is an umbrella term referring to guidelines that codify quality standards used in an industry. Such guidelines include Good Laboratory Practice (GLP), Good Clinical Practice (GCP) and Good Manufacturing Practice (GMP). This quality management system ensures that internal processes, workflows and Company policies can be formulated and monitored in accordance with national and international law, resolutions, directives and statutory orders.

4SC's quality assurance work also includes devising an annual audit program. This involves taking a risk-based approach to determining which of the external companies and service providers to which 4SC contracts work – such as CROs or contract manufacturers (for producing active pharmaceutical ingredients and investigational medicinal products) – are to be audited for compliance with the required quality standards in the course of ongoing work to achieve an optimum level of quality, data integrity and safety, especially for volunteers and patients in clinical trials.

# 5 Report of expected development

The following paragraphs contain forecasts and expectations regarding future developments. Actual results might differ substantially from these estimates of likely developments if uncertainties were to arise or if the assumptions underlying the forecasts turn out to be incorrect.

### 5.1 MACROECONOMIC AND SECTOR DEVELOPMENT

New science set the tone for the drug industry in 2018. Cutting-edge science led to therapeutic breakthroughs and a flood of new investment. In total, venture capital firms invested a record US-$16.8bn in private drug developers globally in 2018, although signs of cooling began to appear in Q4.

For the biotech sector in 2019, industry information service BioCentury reports that investors are holding a relatively bleak outlook, with enough reason to worry from the last three months in 2018, which saw biotech enter a bear market. The fourth quarter 2018 was the third worst performance for biotech sector indexes on a percentage basis since 2002, as illustrated by a 21% fall in the NASDAQ Biotechnology Index.

Biotech initial public offerings in 2018 hit a recent record, although signs in late 2018 suggested that it was getting harder for companies to go public.

In 2018, the EMA recommended 84 medicines for marketing authorization in the EU, after approving 92 in 2017. According to BioCentury, the FDA ended 2018 with a record of 59 new molecular entity approvals, up from 46 in 2017. In 2019, the FDA signaled it planned to hire at least 50 new clinical reviewers tasked specifically with assessing cell and gene therapies to prepare for what the agency describes as a surge of cutting-edge products currently entering early development. From the end of 2019 going forward, the agency expects to receive at least 200 IND applications annually from companies looking to begin clinical testing.

### 5.2 COMPANY OUTLOOK

4SC's future development plans are included in Section 1.1 "Business activities and strategy" starting on page 8.

### 5.3 FINANCIAL FORECAST

4SC's cash balance/funds were €25,036 thousand on 31 December 2018. The average monthly operating cash burn rate in 2018 was €1,357 thousand, which is within the €1,300 to €1,500 thousand forecast in the previous Q3 announcement.

Taking into account the current financial planning and the intended operating activities, the Management Board estimates that current funds should be sufficient to finance 4SC for the next twelve months. For 2019, 4SC is expecting an average monthly use of cash from operations of between €1,400 thousand and €1,600 thousand. For 2019, 4SC expects the net loss to be similar to 2018. 4SC is expecting to report similar annual net losses, with almost identical functional cost allocations in the short to medium term future as well.

# 6 Report on opportunities and risks

### 6.1 RISK MANAGEMENT SYSTEM

#### 6.1.1 4SC'S RISK MANAGEMENT AND INTERNAL CONTROL SYSTEM

4SC pursues active, systematic risk management to eliminate risks with suitable measures or to minimize remaining risks. The business risks of 4SC mainly relate to the development of drugs, the protection of intellectual property, cooperation with partners and the provision of sufficient medium- and long-term capital. These risks must be reviewed continually and, if appropriate, addressed to preserve the Company's economic potential.

As early as 2002, 4SC implemented a comprehensive computer-aided risk management system in compliance with the German Control and Transparency in Business Act (Gesetz zur Kontrolle und Transparenz im Unternehmensbereich, KonTraG). This system is an important part of its corporate management and monitoring.

Following a defined process, the responsible person of each different business unit identifies, analyzes and assesses individual risks with regard to the following criteria: probability of occurrence, potential loss, time period to which the risks relate, and the existing and planned countermeasures. At regular intervals, these responsible persons inform 4SC's risk management officer, who in turn informs the Management Board of the status of these risks. Risks with the potential to endanger the Company's existence as a going concern are required to be reported immediately. Based on this, the Management Board and the Supervisory Board decide how the Company should handle the identified risks.

4SC's internal control system was set up to supplement the risk management system. It ensures monitoring of the Company's activities by employing various rules such as signatory powers, controlled specification and verification documents, policies, standard operating procedures (SOPs), work instructions, the two-person integrity principle, spot checks, self-inspections, employee training and emergency planning.

The application of these rules is obligatory for all operating units. 4SC's quality management activities are based on specifications containing the requirements for the product on offer or instructions for tasks to be carried out. Verification documents are used to record the achieved results or provide objective proof of activities carried out.

Signatory powers define which employees are authorized to sign orders and invoices, the principle of dual control applies. These are assigned depending on the amount of the order or invoice, whether it was budgeted and whether the signatory is a project employee or project manager or a Management Board member. In 4SC's view, this approach ensures that payment instructions are only executed if compliant with the provisions mentioned above.

The development programs are discussed in detail at regular meetings under the direction of the Chief Development Officer (CDO). These meetings ensure close coordination between the development teams and senior management. At the meetings, advances in the Company's key preclinical and clinical development programs are presented and discussed.

### 6.1.2 RISK MANAGEMENT AND INTERNAL CONTROL SYSTEM IN THE FINANCIAL REPORTING PROCESS

In terms of 4SC's financial reporting process, the internal control and risk management system ensures that accounting is consistent and conducted in accordance with statutory rules and generally accepted accounting principles as well IFRSs. It includes work instructions, compliance with the two-person integrity principle, spot checks and emergency planning. Continual training for the financial team contributes substantially to ensuring that all statutory requirements relating to 4SC are implemented securely and competently. The controls for ensuring the regularity and reliability of 4SC's financial reporting process primarily constitute automated checks as well as manual checks. In addition, the key financial indicators are discussed and analyzed regularly with the operating units.

4SC's controlling system rests on four pillars: planning, prevention, monitoring and reporting. 4SC prepares three-year budget plans for internal steering and controlling purposes, taking the overall strategic plan into account. The necessary data required for steering and controlling is furnished to the Management Board every month based on both these plans and the current actual figures. There are also quarterly reports on the development of business, progress in development programs, activities in human resources, corporate communications and investor relations, business development as well as on intellectual property and non-financial key performance indicators. These management tools allow the Management Board to identify, assess and address opportunities and risks adequately. These reports are also made available to the Supervisory Board.

The IFRS financial statements are prepared in accordance with the rules and regulations. The manageable size of the bookkeeping team helps ensure consistent presentation. Specific access rules are defined in the ERP system. Any changes in these rights are subject to approval by the Management Board. This ensures the security of all postings and the respective separation of functions in the system as a whole. The quality of 4SC's financial reporting has been validated through an audit conducted by the German Financial Reporting Enforcement Panel (DPR e.V.) for the 2015 financial year, which confirmed the Company's accounting correctness.

## 6.2 4SC'S EXPOSURE TO RISK

4SC is exposed to different individual and interactive risks. Should these risks manifest themselves, either individually or together with other risks or other circumstances, this may severely compromise or prevent 4SC's business activities, its achievement of key corporate goals and/or its ability to refinance itself, as well as adversely affecting the Company's results of operations, financial position and net assets and/or share price to a significant degree. In a worst-case scenario, this could lead to a situation where the Company is forced into liquidation or file for insolvency due to illiquidity.

### 6.2.1 SECTOR SPECIFIC RISKS

#### Competition

The defining characteristics of the biotech industry are rapid technology redundancy and long development times requiring substantial investment in development to achieve marketable products. 4SC is exposed to the risk that new technologies could appear on the market that could be used to successfully develop new products in the indications addressed by the Company faster or less expensively, and thus also possibly to bring them to market sooner or prevent registration of 4SC's products in whole or in part. 4SC assumes it operates in an environment of increasing competition.

Furthermore, there is a risk that regulators may approve competitors' products in the same indications ahead of those of 4SC, whether this is due to their superior efficacy or tolerability. As a result, the products that 4SC is developing and or plans to license might not be approved at all or only to a limited extent or might fail to gain a sufficiently strong or extended market position. This could make it impossible for 4SC to enter into licensing partnerships for its proprietary compounds or cause a cooperation or licensing partner to fail in its efforts to advance or market these in a way that makes sense economically. As a result, 4SC might not generate any milestone payments or royalties in future under existing or planned licensing agreements with pharmaceutical and biotech companies.

#### Product development (general)

The success of 4SC depends on the success of its drug development programs and as a product-focused biotechnology company, 4SC is therefore exposed to drug development risks.

Typical risks include, but are not limited to, the following:

- Discontinuation of development of individual products due to ineffectiveness, severe or intolerable side effects or problems with formulation or production.
- Lack of competitiveness of products due to better therapy approaches of the competition.
- External service providers become insolvent, which could result in either a delay in development or in relevant data not being usable or lost.

- External service providers are unable to meet the quality requirements applicable to an ongoing project.
- The responsible authorities do not grant the requisite approvals at all or only with restrictions or after a delay.

The Company currently has several low molecular weight compounds for treating cancer, which are in preclinical and clinical development stages. The risks arising from dependence on a small number of compounds can be reduced by maintaining a diversified product pipeline, although all products cannot be weighted equally in terms of their value. Although the study results available to date indicate that the compounds that are currently in the Company's clinical development pipeline are safe to use and well-tolerated, 4SC cannot rule out that in ongoing or pending clinical studies they may turn out not to be sufficiently efficacious in treating patients, or side effects may emerge which are relevant to safety. This is also true for findings from clinical trials being conducted by the Company's license partners. Any negative or unclear findings from their clinical studies could have a similar effect for 4SC as corresponding findings from the Company's own clinical studies. Such findings might delay the development of a compound or cause its development to be terminated, which could have a negative impact on 4SC's operations, financial position, net assets or its stock exchange valuation.

#### Trends in healthcare policy

In the medium to long term, the pharma and biotech industry is dependent to a certain degree on trends in national and international healthcare systems. It remains the aim of most countries healthcare policies to increase quality but lower healthcare costs. Increasingly restrictive regulatory and reimbursement conditions could have an adverse effect on expected drug prices and thus impact revenue from drug sales and royalties.

The difficult economic conditions in many healthcare systems mean that healthcare policy has a growing influence on the remuneration of new drugs, and indirectly on the business rationale of companies seeking regulatory approval, which could have an adverse effect on the industry overall. Furthermore, health insurance funds and government institutions are increasing pressure to reduce prices for medication. The benefit of medications is being measured through complex tools and regulations, which is increasing the administrative burden and cost and making it more difficult to obtain regulatory approval. The German federal government, for example, expects such measures to continue to deliver significant cost savings and/or quality improvements in the healthcare sector. Among others, this means that in the future pharmaceutical companies will no longer be able to set their own prices and this may have an adverse effect on the remuneration structure and profitability of individual compounds. It could therefore become financially unattractive for pharmaceutical companies to pursue product approval in certain markets. In addition, this may even prevent products from being approved for commercialization at all due to tougher approval conditions.

#### Administrative proceedings

The business operations of 4SC are subject to extensive legal regulations and controls. The development and marketing of new products can be hampered by administrative proceedings over which the Company has only limited control. For instance, 4SC requires approval from regulatory authorities to carry out clinical studies and to operate its own facilities for carrying out its development work. The loss, expiry or withdrawal of such approval can lead to delays or cancellation of 4SC's projects.

### 6.2.2 RISKS ARISING FROM THE COMPANY'S BUSINESS ACTIVITIES

#### Development and licensing partnerships

4SC specializes in developing innovative low molecular weight anti-cancer drugs. Achieving profitability and securing independent financing requires 4SC to generate corresponding sales revenue, and or revenues from upfront payments, milestone payments or royalties under license agreements with pharmaceutical and biotech companies. Revenue generated to date is not yet sufficient for this purpose. In light of this, and also considering the future need to incur large development expenses, the Company is likely to continue to post negative operating results for the foreseeable future. In order to become profitable in the short to medium term, 4SC has to enter into suitable agreements with the pharmaceutical industry or other biotechnology companies. The development of the respective products could be delayed and/or result in lower revenue and thus reduce the product's value if 4SC fails to gain such partners or if it can only do so on unfavorable terms. Any delay in negotiations concerning development and licensing deals with respect to the Company's proprietary drug programs also presents a risk. If 4SC were to be dependent on a partnership – not yet finalized – for further clinical development of a product, this could delay clinical development. The same is true for the receipt of upfront payments, which the Company aims for at the start of such partnerships. This in turn would adversely affect the financial and liquidity planning of the Company.

Furthermore, should a new or existing cooperation or licensing partner fail in its attempts to progress, to license or to market a compound, this could result in

4SC failing to receive milestone payments or royalties under this partnership, and possibly in the partnership being discontinued. Moreover, possible clinical studies planned by 4SC itself for the same compound could be hampered or prevented entirely, and the overall value of the product could be impaired significantly with corresponding negative consequences for 4SC's financial and liquidity planning, refinancing and/or share price. Profitability, which the Company plans to achieve in the medium term, could be delayed further or even forestalled entirely.

#### Marketing risks

4SC does not yet possess distribution or marketing infrastructure. To date, the Company must cooperate with other entities to market its drug candidates after approval and since it can only exert limited influence on these companies, 4SC's revenue also depends on the performance of its partners. 4SC will generally participate in the revenue generated from its products through license fees and payments contingent on reaching previously defined targets (milestone payments) or eventually through royalties on sales. The Company's net assets, financial position and results of operations might be negatively affected to a material extent if the Company fails to close the requisite distribution and marketing cooperation agreements on reasonable terms or if such cooperation agreements do not bring about the expected success. The same is true when cooperation agreements are terminated prematurely, options are not exercised, or individual terms and conditions in existing contracts are amended. A decision by 4SC to establish its own distribution and marketing organization in certain regions could entail a substantial expenditure in terms of money and time. The establishment of such entities can also run into unforeseen difficulties or fail altogether. In turn, this could delay the market launch of the Company's products, which could have a significantly negative effect on the Company's net assets, financial position and results of operations.

#### Cooperation partners

4SC currently generates most of its revenue from agreements with a few cooperation partners. In the 2018 financial year, the partnerships with: Yakult Honsha (Japan) and Link Health (China) together contributed 98% of revenue. If one or more of these important partnerships were to be terminated, if payments were not made, or if planned new partnerships did not materialize, this could adversely affect 4SC's revenue and earnings.

#### Patents and trademarks

Proprietary technologies and developments are protected by 4SC through industrial property rights as well as through comprehensive patenting and licensing strategies. However, it cannot be ruled out that third parties may object to patent applications made by 4SC during the patent approval process or even challenge the validity of patents. It can also not be ruled out that 4SC may become involved in patent disputes with third parties. Any legal ruling against 4SC's patents could impede the Company's continued development. Even imminent or actual proceedings could have a material adverse effect on the Company's economic situation and market capitalization, although no such objections are known to 4SC at this time.

### 6.2.3 RISKS ARISING FROM PRODUCT DEVELOPMENT

#### Collaboration with external development service providers

4SC currently does not own or operate any facilities to manufacture pharmaceutical products, the Company therefore depends on subcontractors (Contract Manufacturing Organizations). 4SC's dependence on such external suppliers and manufacturers exposes it to risks.

In particular, this concerns timely and sufficient deliveries in terms of quantity and quality as well as compliance with governmental requirements and quality assurance standards. The occurrence of this risk could result in the postponement or termination of ongoing clinical studies or in the postponement or cancellation of individual clinical studies with the attendant consequences for the development of the respective drugs.

4SC is also dependent on CROs in connection with preclinical and clinical development. Any failure on the part of a cooperation partner in question to exercise due care could jeopardize the development of 4SC's compounds and possibly even cause the respective study to be discontinued. Moreover, the CROs must fulfill governmental requirements and quality assurance standards that 4SC can only influence to a limited degree even though the CROs are carefully selected and regularly monitored and audited.

#### Patient recruitment

Another significant risk for drug development is the necessity to recruit a sufficient number of suitable subjects or patients for clinical studies. This can encounter delays, given the complex medical circumstances that surround clinical studies. In addition, clinical study centers might, for numerous reasons, be unable to recruit a sufficiently large number of patients for the clinical study in question or generate evaluable data. In turn, this could jeopardize the studies' timeline and execution and result in delays. To push forward with the studies, 4SC might thus be forced to include additional clinical centers in the ongoing studies, which in turn would involve significant additional costs.

### 6.2.4 CAPITAL MARKET RISKS

#### Additional financing

4SC will continue to require a large amount of capital if it is to realize its corporate and development goals. Meeting this need requires the Company to generate enough revenue from licenses or cooperation deals. However, if product development costs exceed such income – as is the case at current – and the Company's reserves no longer suffice, the Company would have to raise additional funds in the form of equity or borrowings. In this regard, there is no guarantee that 4SC will be able to raise such funds on time, in the amount required, at economically viable conditions, or at all. This could prevent the Company from making important investments, particularly in product development. Furthermore, 4SC could be forced to stop developing one or more products and therefore shrink its product pipeline. This could weaken the Company's competitive position and negatively affect 4SC's net assets, financial position and results of operations.

4SC's cash balance/funds were at €25,036 thousand on 31 December 2018. Based on current financial planning, the Management Board estimates that these funds will be sufficient to finance the company probably for at least another twelve months. Due to unpredictable events 4SC can be forced to rely on prematurely raising additional funds on the capital markets. In this connection, planned corporate actions might partly fail, or fail entirely. Should the Company have no access to additional funding this could impede or entirely prevent it from continuing as a going concern and result in the insolvency of 4SC AG. If the Company raises additional capital by issuing new shares, existing shareholders could see a significant dilution of their shareholding.

#### Influence by a few principal shareholders

As defined by Section 21 of the German Securities Trading Act (Wertpapierhandelsgesetz, WpHG) in conjunction with Section 25 of the WpHG, 4SC has four principal shareholders which have exceeded notification thresholds at time this combined management report has been prepared. Together, these shareholders hold approximately 70% of the share capital and voting rights. Certain principal shareholders taken together could control resolutions passed by Annual General Meetings when other shareholders are present in fewer numbers and thus, regardless of the voting behavior of the remaining shareholders, decisively influence material decisions taken by 4SC. This in turn could influence the possibility of influencing 4SC's future business transactions as well as the future composition of the Supervisory Board and thus, indirectly, the Management Board. On account of the comparatively low liquidity of 4SC's shares traded on the stock exchange, future sales of shares by the principal shareholders on a large scale over the stock exchange could also have a material adverse effect on the price of 4SC shares which in turn would reflect negatively on the Company's market capitalization.

### 6.2.5 FINANCIAL RISKS AND BALANCE

#### Cash investments

As a rule, the Company invests available free cash in a way that generates interest if possible. All of these funds are invested safely in overnight and term deposits that entail only minor liquidity and default risks. Transactions with international partners where contractual payment terms are made in a currency other than the Euro entail a currency risk. For this purpose, 4SC does not engage in hedging transactions but instead also endeavors to settle its own obligations in foreign currencies, primarily U.S. dollars, British pounds and Swiss francs.

#### Notice of loss pursuant to Section 92(1) German Stock Cooperation Act (Aktiengesetz, AktG)

4SC is a company which has yet to achieve profitability and has posted operating losses in all of the past financial years. Given the scope of its research and development expenses, over time these losses have accumulated into large loss carryforwards. These loss carryforwards are offset against equity and could result in a loss amounting to half the Company's share capital under German commercial law – despite the share premium from the issued shares. In this case, Section 92(1) of the AktG requires the Company to immediately convene a General Meeting, as was the case in 2007 and 2013. Based on the internal planning, 4SC expects this to happen again in Q3 2019. The notice of loss in an ad-hoc disclosure and the holding of such a General Meeting will result in organizational and financial expenditures for 4SC and could have a negative impact on the price of its shares, among other items, because of the notice of loss.

#### Allowance of tax loss carryforwards

Pursuant to the last notifications received concerning the separate determination of residual loss carryforwards as of 31 December 2016, 4SC has corporate tax loss carryforwards of €169,428 thousand and trade tax loss carryforwards of €168,214 thousand. However, as a result of a tax audit completed in 2018, subject to review were waived for respectively corporate income tax loss carryforwards for €149,062 thousand and trade tax loss carryforwards for €148,077 thousand. This notification is subject to a review by the taxation authority. In the period since

31 December 2016, which to date has not been subject to a tax assessment, considerable additional losses were incurred. As a result, the loss carryforwards for corporate income tax are expected to increase to approximately €197,787 thousand and the loss carry-forwards for trade tax will likely rise to some €196,556 thousand as of 31 December 2018. The risks resulting from this are described in the second next paragraph.

Since the introduction of Section 8 (4) German Corporation Tax Act (Körperschaftssteuergesetz, KStG) with the Tax Reform Act 1990 of 26 July 1998, provisions have been in place to restrict the loss deduction of corporations. As of 1 January 2008, Section 8c KStG replaced the previous provisions. Following various amendments to Section 8c KStG, Section 8d KStG also introduced a further provision for a so-called continuation-linked loss carryforward with effect from 1 January 2016. This provision is intended to prevent the elimination of losses provided for in Section 8c KStG if the previous business operations are continued by the new shareholders.

In its decision of 29 March 2017, the Federal Constitutional Court declared the provisions of Section 8c KStG in the version 2008 to 2015 regarding an employment rate of between 25% and 50% unconstitutional. With regard to an employment rate of more than 50%, proceedings are pending before the Federal Fiscal Court. It is also unclear whether the new provisions of Section 8d KStG can influence the constitutionality of Section 8c KStG.

In recent years, 4SC has seen changes among its shareholders, capital increases and investments from new shareholders. Changes in ownership below certain thresholds do not have to be disclosed to the Company. Changes in the number and nature of shareholders are still possible in the future. To this extent, the prerequisites for a limitation of loss deduction in respect of a harmful change of shareholding may have occurred or may still occur. Uncertainty could arise as to whether, in the opinion of the tax authorities, the requirements for sufficient hidden reserves or the continuation of the loss-causing business operation are met.

It is possible in 4SC's view therefore, that tax authorities might adopt the position that existing loss carry-forwards may no longer be partially or fully offset against future profits.

The loss deduction restrictions could have a negative impact on the future after-tax result and thus on 4SC's equity. If the profitability limit is reached, this would lead to premature income tax payments and thus have a negative impact on the development of liquidity.

#### Risks in connection with the impairment losses on capitalized assets in the case of discontinuation of certain development programs

4SC's statement of financial position contains capitalized assets in the fixed assets item, for instance in the form of intangible assets and patents from acquired or transferred development programs, which are subject to an inherent risk of losing value. An impairment loss must be recognized if the regular impairment test reveals that there are objective indications of impairment which, in turn, arise from events that may have occurred after the initial measurement of the asset or if the termination of programs is resolved or the continued development of the programs no longer appears to be realistic due to a lack of funding. This would have a negative effect on the net assets, financial position and results of operations of 4SC because such impairment losses must be recognized in profit or loss.

### 6.2.6 ADMINISTRATIVE AND OTHER RISKS

#### Key personnel and holders of know-how

The success of 4SC largely depends on its senior management and qualified key scientific and technical personnel. Although competition for highly-skilled personnel in the biotechnology and pharmaceutical sector is very intense, 4SC has so far succeeded in filling the most important positions with suitable staff on reasonable employment terms. However, if the Company were to lose key managerial, scientific or technical personnel who could not be replaced adequately or could be replaced only after a considerable delay or by incurring substantial search and hiring costs, this could be detrimental to the Company's competitiveness and/or earnings situation.

#### Legal risks

In the course of its business activities, the Company is subject to a variety of risks relating to corporate law, capital market law, stock market law, labor and tax law, patent law and other types of law. In order to reduce these to a minimum and to additionally prevent the occurrence of legal errors, 4SC's management takes many of its decisions after consultation with experts in and outside of the Company, such as specialized lawyers.

#### Other risks

Other risks related to environmental protection, IT security, purchasing as well as general safety requirements are not deemed significant. Here, 4SC has taken organizational precautions in order to fulfill the requirements in question and control the internal processes.

### 6.2.7 OVERALL ASSESSMENT OF THE COMPANY'S EXPOSURE TO RISK

From today's perspective, aside from its liquidity risk, the Company perceives only a few factors that could jeopardize the existence of 4SC as a going concern in the 2019 financial year, taking all aforementioned risks into account. However, the value of individual products or 4SC's overall capital market valuation could be significantly adversely affected by negative clinical data from ongoing studies and/or unfulfilled expectations from partnerships. The Company's senior management is convinced that its opportunities outweigh the risks, especially for the further development and financing of drug candidates. Thanks to its pipeline, technical expertise and existing partnerships, 4SC believes it is well positioned overall.

The Management Board believes that the funds available at 31 December 2018, in connection with the currently projected expense and revenue planning, should be sufficient to finance the Company for the next twelve months. If the assumptions underlying current planning regarding the cash accruing to the Company from collaborations and partnerships and from potential financing deals do not materialize to a sufficient degree, there is a risk that the Company's financing could be insufficient in view of the Company's current cash reach. This would mean that the Company's continued existence would be at risk if additional equity or debt cannot be secured.

## 6.3 OPPORTUNITIES FOR 4SC

### 6.3.1 HDAC INHIBITORS AND IMMUNE PRIMING

HDAC inhibitors are able to modify the proteins that for example limit access to the DNA, but they do not change the genetic information itself (epigenetic modification). The capability of HDAC inhibitors to regulate the growth of cancer cells has opened up new treatment possibilities.

Combining HDAC inhibitors such as resminostat or domatinostat with immuno-oncology drugs and other therapeutic agents is especially promising. U.S. analysts MarketsandMarkets Research expect the Global Epigenetics Market to reach US-$1,605.7 Million by 2022 from US-$854.0 million in 2017, at a compound average growth rate of 13.5% from 2017 to 2022. Favorable government funding initiatives for epigenetics research, increasing research activities and the rising prevalence of cancer are the key factors driving market growth.

The Company's drug candidates can positively impact the activation and modulation of the immune system and the combination of epigenetic drugs – such as domatinostat – with immunotherapies is considered to be very promising.

To this end, the research team at 4SC has shown preclinically that domatinostat can work synergistically with immunotherapies to strengthen the endogenous immune response to cancer cells and modify cancer cells to make them more visible to the body's own immune system and more responsive to drug treatment.

### 6.3.2 COMBINATION THERAPIES – THE FUTURE FOR IMMUNO-ONCOLOGY

During the last few years, immunotherapy has become standard-of-care in many different solid tumor indications, particularly in more advanced-stage patients. While some patients respond successfully, the majority of patients progress and become either unresponsive or refractory to treatment with existing immunotherapy options such as checkpoint inhibitors. These patients currently have very few therapeutic options and comprise those with the greatest unmet medical need.

As a result, it is widely expected that multi-agent sequential and combination therapies will be the next wave in cancer treatment and in this regard the combined efficacy, safety and tolerability of such approaches will be critical differentiators for success. Based on the available data, 4SC believes that domatinostat's efficacy, favorable safety profile and flexible dosing schedule differentiate it from competing drugs and underpin a potential best-in-class position amongst HDAC inhibitors in oncology.

### 6.3.3 PROJECT-RELATED PROGRESS ENHANCES THE COMPANY'S ENTERPRISE VALUE

Several of 4SC's core drug candidates might reach important milestones in the short and medium term, which could have a positive impact on both the value of individual programs and the Company's aggregate value. This is true in particular if new clinical studies with compounds are started or such compounds successfully complete a study phase.

### 6.3.4 SINGLE DRUG CANDIDATES CAN GENERATE MULTIPLE PROGRAMS

4SC's research and development programs have shown that a single compound can have utility in different clinical indications. This has the benefit of enlarging the Company's product pipeline, as well as increasing the value of the respective project and reducing the overall risk at 4SC. One such example is resminostat, which is being evaluated by 4SC and its partner Yakult Honsha in clinical studies in two different indications: CTCL and biliary tract cancer.

#### 6.3.5 EXTERNAL PARTNERSHIPS AND LICENSING AGREEMENTS ENHANCE THE COMPANY'S ENTERPRISE VALUE

4SC continues to hold discussions with potential partners in the pharmaceutical industry, and increasingly, pharmaceutical companies are entering into cooperation and licensing partnerships for new drug candidates at earlier development stages and being structured with significant benefits to the biotech partner.

A number of factors contribute to this trend, including for example, the expiry of patents for existing products at larger companies.

4SC has benefited from this trend as seen by the licensing deals it has signed with: Yakult Honsha (for resminostat), Panoptes Pharma Ges.m.b.H (Panoptes, for PP-001), Maruho (for Kv1.3 inhibitors), Link Health (for 4SC-205) and BioNTech (for TLR drug candidates).

Such partnerships help to validate 4SC's programs, generate non-dilutive cash – from licensing revenue, upfront payments and milestone payments and royalties – and attest to the utility of the Company's business model.

#### 6.3.6 TAKEOVERS

In addition to the in-licensing of compounds, pharmaceutical and biotech companies are also increasingly interested in acquiring entire companies to obtain unencumbered access to promising compounds and technologies. This trend has been underscored by very lively M&A activity in this industry over recent years, where the premiums paid over such companies' current market capitalizations are usually significant.

#### 6.3.7 LICENSING REVENUE FROM PATENTS

4SC's broad and well-positioned patent portfolio can generate additional licensing revenue if other developers are forced to use such patent rights in order to advance their own projects. Granting the use of its patent rights would enable 4SC to generate licensing revenue and improve its net assets, financial position and results of operations.

#### 6.3.8 HUMAN RESOURCES

Since the biotechnology and pharmaceutical industry is very dependent on highly qualified personnel, employees are a critical asset for companies in this industry. 4SC believes that its success is to a large part attributable to its key personnel. Thus, retaining employees who have outstanding expertise and skills in the long term could have a positive impact on the Company's business.

Furthermore, employees with new ideas, expertise in key indication areas and knowledge of market access are essential in both drug development and marketing. 4SC sees itself as well positioned to attract key personnel.

# 7 Corporate Governance Report

4SC's Corporate Governance Report has been published on the Company's website www.4sc.com under "Corporate Governance" in the "Investors & Media" section. The following information can be found there:

- The Statement on Corporate Governance pursuant to Section 289f of the German Commercial Code (Handelsgesetzbuch, HGB), containing the Declaration of Compliance with the German Corporate Governance Code pursuant to section 161 German Stock Corporation Act (Aktiengesetz, AktG), as issued by the Management Board and the Supervisory Board. Further the Statement on Corporate Governance includes disclosures on corporate governance practices, and the statement also lists the working practices of the Management Board and the Supervisory Board, describes Committees, and provides information on the composition of the Management Board and the Supervisory Board.
- The Remuneration Report pursuant to Sections 289a (2) HGB, which is also included in section 9 (starting on page 62) of the notes to the financial statements.
- The Takeover-related Disclosures pursuant to Sections 289a (1) HGB, which are also included in section 6.9 (page 54) of the notes to the financial statements.

# 8 Course of business of 4SC AG (regarding the HGB single-entity financial statements)

The management report of 4SC AG for the 2018 financial year has been combined in accordance with Section 315(3) German Commercial Code (Handelsgesetzbuch, HGB) in conjunction with Section 298(2) HGB. In addition to the reporting on 4SC (IFRS), the development of 4SC AG is outlined. As a rule, the combined management report therefore also includes all mandatory components for 4SC AG.

4SC AG is headquartered in Planegg-Martinsried, Germany, where its operations are focused on the clinical development of new drug candidates. Management of the company is the responsibility of 4SC AG's Management Board, which among other things, defines the strategy, allocates resources such as investment funds and is responsible for managing the senior management team and finances of 4SC AG. The Management Board of 4SC AG also makes decisions about communication with the capital markets as well as with the company's main stakeholders, particularly shareholders and business partners.

4SC AG's economic environment is described in section 1 of the combined management report (starting on page 8). As of 31 December 2018, 4SC AG had 47 employees, including one Management Board member. The annual financial statements of 4SC AG have been prepared in accordance with the provisions of the HGB under consideration of the German Accounting Directive Implementation Act (Bilanzrichtinie-Umsetzungsgesetz, BilRUG) and the German Stock Corporation Act (Aktiengesetz, AktG).

## 8.1 RESULTS OF OPERATIONS OF 4SC AG (HGB)

### 8.1.1 REVENUE

4SC AG's revenue amounted to €4,272 thousand in the 2018 financial year, an increase of 62% compared with the previous year (2017: €2,630 thousand). Revenue comprised the proportional reversal of License revenue of €4,000 thousand that was generated (2017: €1,350 thousand) as a consequence of milestones reached by Yakult Honsha and Link Health and the deferred income recognized in connection with the partnership with Link Health initiated in 2016, respectively, totaling €99 thousand (2017: €992 thousand). Furthermore, services for partners Link Health, Yakult Honsha, BioNTech and Maruho amounted to a total of €173 thousand (2017: €228 thousand).

### 8.1.2 OTHER OPERATING INCOME

4SC AG's other operating income decreased by 7% to €292 thousand (2017: €313 thousand). This item primarily comprises income from investment grants of €283 thousand.

### 8.1.3 COST OF MATERIALS

The cost of materials, consisting entirely of expenses for purchased services in 2018 (2017: €245 thousand), fell by 30% to €172 thousand (2017: €247 thousand) and is associated with cost allocations to business partners.

### 8.1.4 STAFF COSTS

4SC AG's staff costs rose by 2% and amounted to €4,150 thousand (2017: €4,053 thousand).

### 8.1.5 AMORTIZATION AND WRITE-DOWNS OF INTANGIBLE FIXED ASSETS AND DEPRECIATION AND WRITE-DOWNS OF TANGIBLE FIXED ASSETS

Amortization and write-downs of intangible fixed assets and depreciation and write-downs of tangible fixed assets increased by 2% to €840 thousand (2017: €822 thousand).

### 8.1.6 OTHER OPERATING EXPENSES

4SC AG's other operating expenses rose by 52% to €15,941 thousand (2017: €10,485 thousand). The major items are third-party services provided by external and affiliated companies in connection with the RESMAIN and SENSITIZE studies, followed by legal and consulting costs, patent costs, occupancy costs, provisions, corporate communications and investor relations costs.

### 8.1.7 NET FINANCE INCOME/LOSS

4SC AG posted net finance income of € null, (2017: net finance income of €26 thousand). This is mainly attributable to a drop in interest income.

### 8.1.8 NET PROFIT/LOSS FOR THE YEAR

The developments described increased 4SC AG's net loss for the year by €5,181 thousand to €-16,634 thousand (2017: €-11,453 thousand). Together with the loss carried forward from the previous year in the amount of €163,530 thousand, the net accumulated losses thus amount to €180,164 thousand.

## 8.2 NET ASSETS OF 4SC AG (HGB)

### 8.2.1 FIXED ASSETS

4SC AG's fixed assets declined year-on-year to €5,656 thousand as of the reporting date (31 December 2017: €6,374 thousand). This reduction was mainly due to pro-rata depreciation and amortization of fixed assets and a low level of new investments.

### 8.2.2 CURRENT ASSETS

The reduction in current assets to €25,928 thousand at the close of the 2018 financial year (31 December 2017: €41,939 thousand) was primarily attributable to the ongoing cash burn for operating activities.

### 8.2.3 EQUITY

Equity was reduced by €16,634 thousand to €28,513 thousand as of 31 December 2018 (31 December 2017: €45,147 thousand) due to the net loss for the year.

The equity ratio decreased by 3.4 percentage points, from 93,2% as of 31 December 2017 to 89,8% as of 31 December 2018.

### 8.2.4 OTHER PROVISIONS

Other provisions increased by 13% to €1,620 thousand (31 December 2017: €1,434 thousand), largely due to the rise of outsourced scientific services.

### 8.2.5 LIABILITIES

Liabilities decreased by 11% to €1,633 thousand as of 31 December 2018 (31 December 2017: €1,841 thousand). Liabilities from deferred income items were attributable to the upfront payment made by Link Health in 2018 decreasing to €394 thousand (31 December 2017: €493 thousand) and the slightly decreased trade accounts payable amounting to €1,120 thousand (31 December 2017: €1,175 thousand), which consisted mainly of outsourced services.

### 8.2.6 TOTAL ASSETS / TOTAL EQUITY AND LIABILITIES

Total assets/total equity and liabilities of 4SC AG amounted to €31,766 thousand as of 31 December 2018, down 34% on the end-of-year figure for the previous year (31 December 2017: €48,422 thousand). The reduction is primarily attributable to the net loss incurred in 2018.

## 8.3 FINANCIAL POSITIONS OF 4SC AG (HGB)

### 8.3.1 CASH FLOWS FROM OPERATING ACTIVITIES

Cash outflows from operating activities in the financial year 2018 decreased to €16,162 thousand (2017: outflows of €19,306 thousand) mainly due to the net loss for the 2018 financial year.

### 8.3.2 CASH FLOWS FROM INVESTING ACTIVITIES

The cash outflows from investing activities in the financial year 2018 amounted to €121 thousand (2017: outflows of €133 thousand). The Company invested €120 thousand (2017: €168 thousand) in property, plant and equipment. Investments in intangible assets totaled €2 thousand (2017: €4 thousand).

### 8.3.3 CASH FLOWS FROM FINANCING ACTIVITIES

As a result of the successfully completed capital increase in the previous year, there were cash outflows from financing activities in the reporting year of €8 thousand (2017: cash inflows of €39,953 thousand).

### 8.3.4 FUNDS

Cash funds amounted to €25,036 thousand as of 31 December 2018 (31 December 2017: €41,317 thousand).

## 8.4 GENERAL STATEMENT REGARDING THE COMPANY'S POSITION

In 2018, two cooperation partners paid one-time licensing milestones. This was reduced by the ongoing costs of the RESMAIN study evaluating resminostat in CTCL and the SENSITIZE study assessing domatinostat in melanoma. Liquidity was sufficiently secured at all times during the 2018 fiscal year, so that the financing of the programs was not in jeopardy at any time. The operational development of 4SC AG continued to proceed according to plan in the 2018 financial year and up until the finalization of the combined management report in the 2019 financial year.

## 8.5 EVENTS AFTER THE REPORTING PERIOD

The events after the reporting period are described in section 11 (page 66) of the notes of 4SC.

## 8.6 RISKS AND OPPORTUNITIES

In general, 4SC AG shares similar risks to those described in section 6 (starting on page 18) of the combined management report. A description of the internal control system for 4SC AG required by

Section 289 (4) HGB is also provided in section 6 (starting on page 18).

## 8.7 REPORT ON EXPECTED DEVELOPMENTS (OUTLOOK)

Expectations concerning 4SC AG's continued performance in the next two years are similar to those described already in detail in the report on the course of business and outlook in section 1 (starting on page 8) and anticipated developments for 4SC in section 5 (page 17). 4SC AG aims to generate cash inflows and increasing revenue by forging alliances in the form of cooperation and licensing agreements for drug candidates. The planned increase, especially in research and development expenses, is predominantly due to the costs of performing the RESMAIN and SENSITIZE studies, and higher staff costs, particularly as a result of the strengthening of the clinical operations and CMC teams.

4SC AG had funds of €25,036 thousand at the end of the 2018 financial year. Based on the statements in 4SC's report on anticipated developments in section 5 (page 17), the financing of 4SC AG is ensured for the next twelve months. The Management Board of 4SC AG is careful to point out the risks associated with such a forecast and highlights that it may be necessary to raise further equity and/or borrowings to ensure the Company's continued existence in the longer term.

## 8.8 PUBLICATION

The annual financial statements of 4SC AG prepared in accordance with the provisions of the German Commercial Code and the German Stock Corporation Act and the combined management report are published in the electronic Federal Gazette.

Planegg-Martinsried, 11 March 2019

Jason Loveridge, Ph.D.
Sole Managing Director

# FINANCIAL REPORT

# IFRS FINANCIAL STATEMENTS

## FOR THE FINANCIAL YEAR FROM 1 JANUARY TO 31 DECEMBER 2018

### STATEMENT OF COMPREHENSIVE INCOME

| (In € 000's, unless stated otherwise) | Notes | 2018 | 2017 |
|---|---|---|---|
| Revenue | 3.1 (page 44) | 4,173 | 4,197 |
| Cost of sales | 3.3 (page 45) | -343 | -574 |
| **Gross profit** | | **3,830** | **3,623** |
| Distribution costs | 3.4 (page 46) | -408 | -351 |
| Research and development costs | 3.5 (page 46) | -18,263 | -11,475 |
| Administrative costs | 3.6 (page 47) | -2,716 | -2,792 |
| Other income | 3.7 (page 47) | 3 | 59 |
| **Operating profit/loss** | | **-17,554** | **-10,936** |
| Share in the profit of equity-accounted investments | 3.9 (page 48) | 0 | 0 |
| Finance income | 3.9 (page 48) | 5 | 19 |
| Finance costs | 3.9 (page 48) | -16 | -10 |
| **Net finance income/loss** | | **-11** | **9** |
| **Earnings before taxes** | | **-17,565** | **-10,927** |
| Income tax expense | 4 (page 48) | -94 | -33 |
| **Profit/loss for the period = Comprehensive income/loss** | | **-17,659** | **-10,960** |
| | | | |
| **Earnings per share (basic and diluted, in €)** | | **-0.58** | **-0.45** |

See the attached notes to the financial statements.

## STATEMENT OF FINANCIAL POSITIONS – ASSETS

| (In € 000's) | Notes | 31 Dec 2018 | 31 Dec 2017 |
|---|---|---|---|
| **Non-current assets** | | | |
| Intangible assets | 6.1 (page 50) | 4,955 | 5,694 |
| Property, plant and equipment | 6.2 (page 51) | 589 | 570 |
| Investments accounted for using the equity method | 6.3 (page 52) | 0 | 0 |
| Other investments | 6.4 (page 52) | 0 | 0 |
| Other financial assets | 6.8 (page 53) | 100 | 101 |
| Other assets | 6.8 (page 53) | 1 | 0 |
| **Total non-current assets** | | **5,645** | **6,365** |
| | | | |
| **Current assets** | | | |
| Trade accounts receivable | 6.5 (page 53) | 14 | 30 |
| Cash and cash equivalents | 6.6 (page 53) | 25,036 | 41,327 |
| Current income tax assets | 6.7 (page 53) | 12 | 23 |
| Other assets | 6.8 (page 53) | 549 | 168 |
| **Total current assets** | | **25,611** | **41,548** |
| | | | |
| **Total assets** | | **31,256** | **47,913** |

See the attached notes to the financial statements.

## STATEMENT OF FINANCIAL POSITIONS – EQUITY AND LIABILITIES

| (In € 000's) | Notes | 31 Dec 2018 | 31 Dec 2017 |
|---|---|---|---|
| **Equity** | | | |
| Subscribed capital | | 30,649 | 30,649 |
| Share premium | | 172,092 | 172,100 |
| Reserves | | 3,187 | 2,254 |
| Accumulated deficit | | -177,476 | -160,310 |
| **Total equity** | 6.9 (page 54) | **28,452** | **44,693** |
| | | | |
| **Non-current liabilities** | | | |
| Other liabilities | 6.11 (page 56) | 82 | 67 |
| Deferred income | 6.11 (page 56) | 0 | 394 |
| **Total non-current liabilities** | | **82** | **461** |
| | | | |
| **Current liabilities** | | | |
| Trade accounts payable | 6.10 (page 55) | 1,120 | 1,175 |
| Other financial liabilities | 6.11 (page 56) | 1,096 | 967 |
| Other liabilities | 6.11 (page 56) | 506 | 518 |
| Deferred income | 6.11 (page 56) | 0 | 99 |
| **Total current liabilities** | | **2,722** | **2,759** |
| | | | |
| **Total equity and liabilities** | | **31,256** | **47,913** |

See the attached notes to the financial statements.

## STATEMENT OF CASH FLOWS

| (In € 000's) | Notes | 2018 | 2017 |
|---|---|---|---|
| **Cash flows from operating activities** | | | |
| Earnings before taxes | | -17,565 | -10,927 |
| ***Adjustment for statement of comprehensive income items*** | | | |
| Depreciation, amortization and impairment losses | 3.8 (page 47) | 841 | 899 |
| Net finance income/loss | | 11 | -9 |
| Stock options | 8 (page 61) | 933 | 427 |
| Other non-cash items | | 493 | -25 |
| ***Changes in statement of financial position items*** | | | |
| Trade accounts receivable | | 16 | 65 |
| Current income tax assets | | 11 | -10 |
| Other assets | | -381 | 1,634 |
| Trade accounts payable | | -55 | 341 |
| Other liabilities | | 132 | 89 |
| Deferred income | | -493 | -992 |
| Interest received | | 5 | 4 |
| Interest paid | | -16 | -4 |
| Income taxes paid | | -94 | -33 |
| **Total cash flows from operating activities** | | **-16,162** | **-8,541** |
| | | | |
| **Cash flows from investing activities** | | | |
| Purchase of intangible assets | 6.1 (page 50) | -2 | -4 |
| Purchase of property, plant and equipment | 6.2 (page 51) | -120 | -168 |
| Proceeds from sales of property, plant and equipment | | 1 | 39 |
| **Total cash flows from investing activities** | | **-121** | **-133** |
| | | | |
| **Cash flows from financing activities** | | | |
| Payments to subscribed capital | | 0 | 11,682 |
| Payments to share premium | | -8 | 28,271 |
| **Total cash flows from financing activities** | | **-8** | **39,953** |
| | | | |
| **Net change in cash and cash equivalents** | | **-16,291** | **31,279** |
| + Cash and cash equivalents at the beginning of the period | | 41,327 | 10,048 |
| **= Cash and cash equivalents at the end of the period** | | **25,036** | **41,327** |

See the attached notes to the financial statements.
The statement of cash flows was prepared in accordance with the provisions of IAS 7.

## STATEMENT OF CHANGES IN EQUITY

| (In € 000's) | Subscribed capital | Share premium | Reserves: Reserves stock options | Reserves: Retained earnings | Accumulated deficit | Total |
|---|---|---|---|---|---|---|
| **Balance on 1 Jan 2017** | **18,967** | **143,829** | **1,760** | **67** | **-149,350** | **15,273** |
| Options issued (ESOP 2006/2008)* | | | -1 | | | -1 |
| Options issued (ESOP 2009/2009)* | | | -3 | | | -3 |
| Options issued (ESOP 2016/2016)* | | | 387 | | | 387 |
| Options issued (ESOP 2016/2017)* | | | 5 | | | 5 |
| Options issued (ESOP 2017/2017)* | | | 39 | | | 39 |
| Capital increase 11 Jul 2017 | 11,682 | 28,271 | | | | 39,953 |
| Comprehensive income/loss 2017 | | | | | -10,960 | -10,960 |
| *Profit/loss 2017* | | | | | *-10,960* | *-10,960* |
| **Balance on 31 Dec 2017** | **30,649** | **172,100** | **2,187** | **67** | **-160,310** | **44,693** |
| | | | | | | |
| **Balance on 1 Jan 2018 as reported 31 Dec 2017** | **30,649** | **172,100** | **2,187** | **67** | **-160,310** | **44,693** |
| Effect of initial application of IFRS 15 | | | | | 493 | 493 |
| **Balance on 1 Jan 2018** | **30,649** | **172,100** | **2,187** | **67** | **-159,817** | **45,186** |
| Options issued (ESOP 2016/2016)* | | | 417 | | | 417 |
| Options issued (ESOP 2016/2017)* | | | 80 | | | 80 |
| Options issued (ESOP 2016/2018)* | | | 118 | | | 118 |
| Options issued (ESOP 2017/2017)* | | | 289 | | | 289 |
| Options issued (ESOP 2017/2018)* | | | 29 | | | 29 |
| Expenses incurred for the capital increase 11 July 2017 | | -8 | | | | -8 |
| | | | | | | |
| Comprehensive income/loss 2018 | | | | | -17,659 | -17,659 |
| *Profit/loss 2018* | | | | | *-17,659* | *-17,659* |
| **Balance on 31 Dec 2018** | **30,649** | **172,092** | **3,120** | **67** | **-177,476** | **28,452** |

* ESOP: Employee Stock Option Program.
For more information on components and changes in equity, see note 6.9 (page 54).

# NOTES TO THE IFRS FINANCIAL STATEMENTS

## FOR THE FINANCIAL YEAR FROM 1 JANUARY TO 31 DECEMBER 2018

## 1 General disclosures

### 1.1 DISCLOSURES ABOUT THE COMPANY

4SC AG is headquartered at 82152 Planegg-Martinsried, Germany, Fraunhoferstrasse 22, and has been recorded in the Commercial Register of the Munich District Court under HRB no. 132917.

The business of 4SC AG focuses on the development of small-molecule drugs that target key indications in cancer with high unmet medical need. 4SC AG's goal is to advance its own drug development programs in order to increase the value of the Company as a whole. In addition, 4SC AG enters into valuable partnerships with pharmaceutical and biotechnology companies for the further development or commercialization of its drug candidates. 4SC AG aims to eventually market and sell its approved drugs in select territories.

4SC AG is authorized to engage in all transactions that are expedient to and foster the achievement of its corporate purpose. In this respect the Company is also permitted to found, acquire or obtain equity interests in and assume the management of other enterprises domestically and abroad, lease companies or business operations, enter into intercompany agreements, particularly profit transfer and control agreements, and establish branch offices and other outlets domestically and abroad.

The following company was also taken into account in these financial statements:

| Company / domicile | Measured as | Measured according to |
|---|---|---|
| Panoptes Pharma Ges.m.b.H., Vienna, Austria | Associate | IAS 28 |

### 1.2 RELEASE OF THE FINANCIAL STATEMENTS

The Management Board approved the financial statements for release on 11 March 2019. The Supervisory Board is authorized to revise the financial statements after approval by the Management Board.

## 2 Summary of significant accounting policies

### 2.1 BASIS OF PREPARATION

These financial statements were prepared pursuant to Section 325(2a) with regard to 315e of the German Commercial Code (Handelsgesetzbuch, HGB) and in accordance with the accounting principles of the International Financial Reporting Standards (IFRS) – as adopted by the EU – and pursuant to the requirements of the International Accounting Standards Board (IASB). The recommendations of the Standing Interpretations Committee (SIC) and the International

Financial Reporting Interpretations Committee (IFRIC) have been taken into account. All of the IFRSs and IFRICs adopted by the European Commission have been taken into account; IFRSs and IFRICs not yet adopted, however, have not yet been taken into account. New standards issued by the IASB and adopted by the European Commission are applied without exception starting in the financial year in which their application becomes mandatory.

Due to the factors laid out under 6.2.7 (page 24) in the combined management report, these financial statements were prepared on the assumption that the Company will continue operating as a going concern.

The financial year corresponds to the calendar year. The financial statements are prepared in euros. The degree of precision used in the presentation is thousands of euros (€000's). Differences may result from the rounding of exact figures.

The statement of the financial position is broken down into current and non-current assets and liabilities; the statement of comprehensive income has been prepared using the cost of sales method. Where items in the statement of financial position and in the statement of comprehensive income are summarized in the interests of clarity, this is explained in the consolidated notes.

4SC classifies assets and liabilities as current if they are expected to be liquidated or redeemed within twelve months following the reporting date, if they are held primarily for trading purposes, or if they constitute cash and cash equivalents.

## 2.2 EFFECTS OF THE APPLICATION OF NEW STANDARDS

### 2.2.1 INITIAL MANDATORY APPLICATION

The following standards amended or newly issued by the IASB must be applied to the financial statements for the period ended 31 December 2018 and affect the financial statements of 4SC as follows:

| Standard / interpretation* | Title | Effective date for annual periods beginning on | Adopted by the EU | Effects on 4SC** |
|---|---|---|---|---|
| IFRS 9 | Financial Instruments | 1 Jan 2018 | Yes | limited |
| IFRS 15 | Revenue from Contracts with Customers | 1 Jan 2018 | Yes | Yes |
| IFRS 2 (A) | Classification and Measurement of Share Based Payment Transactions | 1 Jan 2018 | Yes | None |
| IFRS 4 (A) | Application of IFRS 9 Financial Instruments and IFRS 4 Insurance Contracts | 1 Jan 2018 | Yes | None |
| IFRS 15 (A) | Clarifications on IFRS 15 | 1 Jan 2018 | Yes | None |
| IAS 40 (A) | Transfers of Investment Property | 1 Jan 2018 | Yes | None |
| Improvements IFRS 2014-2016 | Amendments to IFRS 1 and IAS 28 | 1 Jan 2018 | Yes | None |
| IFRIC 22 | Foreign Currency Transactions and Advance Consideration | 1 Jan 2018 | Yes | None |

* (A) Amendment to Standard.
** Standards marked “Yes” affect the consolidated financial statements of the Company. Standard with no material effects on the financial statements are marked “None”.

IFRS 9 – Financial Instruments covers the classification and measurement of financial assets and liabilities that have previously been accounted for under IAS 39. A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity (IAS 32.11). In accordance with IFRS 9.5.1.1, financial assets and liabilities are initially measured at fair value and financial assets and financial liabilities that are not measured at fair value through profit or loss are measured at fair value plus or minus transaction costs. Trade receivables are initially recognized at their transaction price according to IFRS 15, unless it contains a significant finance component (IFRS 9.5.1.3).

Financial assets are subsequently measured depending on their classification into measurement at amortized cost, fair value through profit or loss (FVTPL) or fair value through other comprehensive income (FVOCI). The classification is based on two criteria: the company’s business model for managing the assets and whether the instruments’ contractual cash flows represent solely payments of principal and interest (SPPI).

With regards to financial liabilities the basic accounting model under IAS 39 was not changed. The two measurement categories of fair value through profit or loss (FVTPL) and amortized cost continue to exist under IFRS 9. Initially, financial liabilities are recognized at fair value and in the case of loans and borrowings and payables, net of directly attributable transaction costs. The subsequent evaluation depends on their classification. Financial liabilities held for trading are measured at fair value through profit or loss. Financial liabilities not held for trading are measured at amortized cost.

The classification and measurement of IFRS 9 requirements do not have any significant impact.

IFRS 15, Revenue from Contracts with Customers. The core principle of IFRS 15 is to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services (IFRS 15.2). The transfer of goods and services is based on the concept of transfer of control to the customer. This may occur at a point in time or over time. According to this principle, IFRS 15 sets out a 5-step recognition model: Identifying the contract IFRS 15.9-16, identifying performance obligations IFRS 15.22-30, determining the transaction price IFRS 15.47-59, allocating the transaction price to performance obligations IFRS 15.73-86 and satisfaction of performance obligations (revenue recognition) IFRS 15.31-45.

In the course of initial application of IFRS 15, a modified retrospective application was chosen (IFRS 15.C3b) in which cumulative effects at the effective date of initial application are recognized in the opening balance of losses carried forward (IFRS 15.C7). The option to disregard a retrospective application of completed contracts was abandoned. As revenue recognition requires the individual evaluation of underlying contractual terms, existing contracts were reviewed on a case by case basis and judged to be completed.

In comparison to the former evaluation according to IAS 11 / IAS 18 adjustment requirements arose with regards to deferred revenue. At 1 January 2018 deferred income of €493 thousand was recorded for a license upfront payment of Link Health being recognized throughout the development period. This license remains substantially unchanged by 4SC AG during the license period compared to the point in time at granting and within IFRS 15, it is judged to provide the customer with a right to use the entity’s intellectual property as it exists at the point in time at which the license is granted (IFRS 15.B56b). Revenue is therefore to be recognized entirely at the point in time at which the license is granted to the customer. Consequently, the deferred revenue of €493 thousand was fully reversed in the accumulated deficit.

### 2.2.2 ACCOUNTING STANDARDS ISSUED, BUT NOT YET APPLIED

The IASB recently issued the following new or amended standards. However, since these standards are not required to be applied and have not yet been adopted by the EU in part, they were not applied to the financial statements for the period ended 31 December 2018. The new standards or amendments to existing standards must be applied in annual periods beginning on or after their effective date. They are not usually applied earlier, even though some standards permit this.

IFRS 16 introduces a uniform accounting model whereby leases are to be recognized in the lessee's balance sheet. A lessee captures a right of appreciation, which represents his right to use the underlying asset, and a liability arising from the lease, which is his obligation to lease payments. There are derogations for short-term leases and leases for low-value assets. The accounting at the lessor is comparable to the current standard – that is, the lessor continues to classify leases as finance or operating leases. IFRS 16 replaces the current guidelines on leases, including IAS 17 Leases, IFRIC 4 Determining Whether an Arrangement Contains a Lease, SIC-15 Operating Leases – Incentives, and SIC-27 Evaluating the Substance of Transactions in the Legal Form of a Lease.

IFRS 16 will initially be applied on 1 January 2019 using the modified retrospective approach. The cumulative effect of adopting IFRS 16 will therefore be recognized as an adjustment to the opening balance at 1 January 2019 with no restatement of comparative information (IFRS 16.C3). The definition of a lease on transition is also adopted. This means IFRS 16 will be applied to all contracts entered into before 1 January 2019 and identified as leases in accordance with IAS 17 and IFRIC 4. At the date of transition, it expected that a lease liability of around €2 million will have to be recognized as a liability, which is offset by a capitalized value in use of the same amount. Due to the straight-line depreciation of the right of use and the application of the effective interest rate to the lease liability, this results into a higher charge in the first years and to declining expenses towards the end of the term. However, no substantial effects on profit and loss are anticipated.

Moreover, some additional standards and interpretations have been issued which are not relevant to the financial statements from today’s perspective.

| Standard / interpretation* | Title | Effective date for annual periods beginning on** | Adopted by the EU | Effects on 4SC*** |
|---|---|---|---|---|
| IFRS 16 | Leases | 1 Jan 2019 | Yes | Yes |
| IFRS 17 | Insurance Contracts | 1 Jan 2022 | No | None |
| IFRS 9 (A) | Notice Agreements with negative compensation | 1 Jan 2019 | Yes | None |
| IFRS 10 and IAS 28 (A) | Sales or Contributions of Assets between an Investor and its Associate / Joint Venture | Delayed until further notice | No | None |
| Improvements IFRS 2015-2017 | Amendments to IFRS 3, IFRS 10, IAS 12 and IAS 23 | 1 Jan 2019 | No | None |
| IAS 19 (A) | Plan Amendment, Curtailment or Settlement | 1 Jan 2019 | No | None |
| IAS 28 (A) | Investments in Associates and Joint Ventures | 1 Jan 2019 | No | None |
| IFRIC 23 | Uncertainty over Income Tax Treatments | 1 Jan 2019 | Yes | None |

* (A) Amendment to Standard.
** For annual periods beginning on or after the date.
*** Standards marked "Yes" are considered likely to affect the financial statements and are currently being reviewed by the Company. No material effects on the financial statements are expected from those marked "None".

## 2.3 KEY ACCOUNTING POLICIES

The following accounting policies were of significance in preparing these financial statements. 4SC applied these accounting policies uniformly for similar transactions, other events and contingencies.

### 2.3.1 FOREIGN CURRENCY ITEMS

Foreign currency transactions are initially measured by using the spot exchange rate applicable at the respective transaction date (IAS 21.21). On each reporting date, monetary items in a foreign currency are translated at the closing rate in accordance with IAS 21.23. In contrast, non-monetary items that were measured in terms of historical cost in a foreign currency are translated using the exchange rate prevailing on the date of the transaction or loss in the period in which they arise in accordance with IAS 21.28. They are shown under net finance income/loss.

### 2.3.2 ESTIMATES AND JUDGEMENTS

The preparation of financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected. The assumptions and estimates principally relate to the assessment of the recoverability of the carrying amount of intangible assets, the determination of useful lives of material assets, recognition of liabilities and the measurement and recognition of provisions. Assumptions and estimates are based on premises derived from knowledge at the time.

The applied economic lives of non-current assets are based on estimates of the management. The company reviews the estimated economic useful lives of property, plant and equipment and intangible assets at the end of every financial year.

### 2.3.3 INTANGIBLE ASSETS

Intangible assets acquired are recognized in accordance with IAS 38. They are initially recognized at cost, if the recognition requirements of IAS 38.18 are met. Intangible assets are subsequently recognized at cost less accumulated amortization using the straight-line method or less impairment losses.

Research costs are expensed in the period incurred in accordance with IAS 38.54. Development costs are recognized if the criteria in accordance with IAS 38.57 are met. Given the risks existing until commercialization, 4SC does not fully meet the requirements of IAS 38.57 for recognizing internally generated intangible assets. Development costs are therefore also expensed in the period in which they are incurred. The useful lives of and depreciation methods applied to intangible assets are reviewed and adjusted as necessary at the end of each financial year. The development of the intangible assets is shown in the fixed assets table in note 6.1 "Intangible assets" (page 50).

### 2.3.4 PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is recognized at cost less cumulative depreciation using the straight-line method. The carrying amounts of property, plant and equipment are tested for impairment whenever there are indications that an asset's carrying amount may exceed its recoverable amount. IAS 36.6 defines recoverable amount as the higher of an asset's fair value less costs to sell and its value in use. The useful lives of and depreciation methods applied to property, plant and equipment are reviewed and adjusted as necessary at the end of each financial year.

Maintenance and repairs are expensed as incurred while replacements and improvements, if the item qualifies for recognition as an asset, are recognized. Gains resulting from the sale or retirement of fixed assets are recognized in other operating income, losses from the sale of retirement of fixed assets are recognized under the area of activity concerned.

In accordance with IAS 16.73, the development of property, plant and equipment is shown in the statement of changes in non-current assets under note 6.2 “Property, plant and equipment" (page 51).

### 2.3.5 ADVANCES PAID FOR PROPERTY, PLANT AND EQUIPMENT

Advances paid for property, plant and equipment are measured at cost. No depreciation is recognized because the depreciation generally only begins when the asset is ready for operation, and the fair value can thus be reliably determined. Upon completion, the item is reversed and reclassified to completed property, plant and equipment, as long as the cumulative recognition criteria of IAS 16.7 are fulfilled.

The development of advances paid for property, plant and equipment is shown in the statement of changes in non-current assets under note 6.2 “Property, plant and equipment" (page 51).

### 2.3.6 EQUITY INVESTMENTS

As of the reporting date, 4SC has equity interests in one company.

With the merger of 4SC AG and 4SC Discovery GmbH (4SC Discovery) in December 2017, the company Panoptes previously held by 4SC Discovery, is now a direct equity investment of 4SC AG and recognized as an associated company in accordance with IAS 28 as defined by the degree of influence 4SC AG has in it.

In early July 2013, 4SC Discovery sold the worldwide exclusive rights to its drug candidate PP-001 and its derivatives to Panoptes. This drug candidate will be developed by Panoptes for eye diseases but can also potentially be used in other indications – with the exception of inflammatory bowel disease and rheumatoid arthritis – for which 4SC Discovery (and now its rightful successor 4SC AG) retains the rights. In return, 4SC Discovery received a direct equity investment of 24.9% as well as claims to later performance-based milestone payments and royalties based on the sales revenue generated with the compound. In October 2015 and July 2018 financings at Panoptes, in which 4SC did not participate, diluted its interest to 20.1%. 4SC AG has no controlling influence on the company's business policy and is not represented on the company’s Advisory Board. The stake held in the entity is thus recognized as an associate using the equity method in accordance with IAS 28. The reporting date and accounting policies employed for similar business transactions and events are the same for 4SC AG and this associate. The carrying amount of the equity investment takes account of all risks as of the reporting date.

### 2.3.7 TRADE ACCOUNTS RECEIVABLE

Trade accounts receivable are recognized at the original invoiced amount less allowances for bad debts. These allowances for bad debts are based on the management's assessment of the recoverability of specific customer accounts receivable and are made insofar as there are objective indications that the amounts due will not be paid in full in accordance with the invoice terms originally agreed.

### 2.3.8 RECEIVABLES FROM ASSOCIATES

Accounts receivable from associates are recognized at cost less an allowance for bad debts. Cost either corresponds to the value of the consideration at the effective date or is measured at the amount in which reimbursement is expected.

Allowances for bad debts are based on the management's assessment of the recoverability of specific accounts receivable and are made insofar as there are objective indications that the amounts due will not be paid in full in accordance with the terms originally agreed.

### 2.3.9 OTHER FINANCIAL ASSETS

The other financial assets are financial instruments as defined by IFRS 9. Depending on the individual case, they are classified as follows:

- Financial assets at fair value through profit or loss
- Financial assets at fair value through other comprehensive income
- Financial assets at amortized cost

Classification of financial assets into measurement categories is made on initial recognition.

The business model as well as the SPPI conditions were assessed at 1 January 2018. Debt instruments such as trade receivables and other assets (rental deposit) are held to collect contractual cash flows and give rise to cash flows representing solely redemption and interest. According to IFRS 9 they are now classified at amortized cost (previously as loans and receivables). Financial assets at amortized cost are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired. The new impairment model is a forward-looking expected credit loss model (ECL). Currently there is no indication for any impairment of debt instruments categorized into amortized cost. Equity instruments such as the investment in Quiescence Technologies LCC (Quiescence), do not fulfil the SPPI test and are therefore classified at fair value through profit and loss (formerly “available-for-sale”). The investment in Panoptes is accounted for using the equity method according to IAS 28 and is therefore excluded from IFRS 9 (IFRS 9.2.1a).

With regard to equity instruments, a significant or long-term reduction of fair value is an objective indication of impairment. Such an impairment loss is expensed immediately.

In accordance with IAS 1.60, financial instruments are classified as non-current or current assets, depending on their remaining life as of the reporting date. Financial instruments with a remaining life of more than one year as of the reporting date are shown as other investments among non-current assets. Financial instruments with a remaining life on the reporting date of less than one year are shown as other financial assets among current assets, insofar as they do not meet the recognition criteria as defined by IFRS 7.7. Analogous to the financial instruments as defined by IFRS 9, fixed deposits that have a term of more than three months calculated from the date of acquisition are shown as other financial assets. If the other financial assets meet the recognition criteria as defined by IFRS 7.7, they are shown as cash equivalents.

### 2.3.10 OTHER ASSETS

Other assets comprise all receivables that are not shown as separate items in the statement of financial position. They are measured at an amount equivalent to the anticipated level of reimbursement.

### 2.3.11 CASH AND CASH EQUIVALENTS

Cash consists of cash on hand, bank balances and short-term time deposits. Cash equivalents comprise other short-term and highly liquid investments with a term of no more than three months calculated from the date of acquisition, which are subject only to insignificant fluctuations in value. Receivables are recognized at their nominal value.

### 2.3.12 STOCK OPTIONS

The accounting for stock options granted to employees and the Management Board is handled according to the guidelines of IFRS 2 Share-based Payment. Under IFRS 2, the Company is required to spread the estimated fair values of stock options and other benefits at the measurement date as remuneration cost over the period in which the employees provide the services associated with the grant of equity instruments.

### 2.3.13 TRADE ACCOUNTS PAYABLE / ACCOUNTS PAYABLE TO ASSOCIATES

Trade accounts payable and accounts payable to associates are current liabilities in accordance with IAS 1.60 and are accordingly carried at their settlement amount. They are derecognized when the underlying obligation has been discharged or expires.

### 2.3.14 PROVISIONS AND ACCRUALS

Provisions and accruals are recognized in accordance with IAS 37.14 whenever current legal or factual obligations exist arising from a historical event, an outflow of resources is probable, a reliable estimate of the obligation is possible and the measures in question are not expected to result in future inflows of economic benefits.

According to IAS 37.11, provisions can be distinguished from accruals because there is uncertainty about the timing or amount of the future expenditure required in settlement. Accruals are recognized accordingly as part of other liabilities, whereas provisions are reported separately.

Where a provision entails a range of possible outcomes, and each point in that range is as likely as any other, the mid-point of the range is used in accordance with IAS 37.39.

### 2.3.15 OTHER LIABILITIES

In addition to accruals, other liabilities also comprise all payment obligations of the Company that are not shown as separate items in the statement of financial position. They are carried at their settlement amount.

### 2.3.16 INCOME TAX

The actual tax liabilities arising from income taxes for the current and previous periods are to be recognized as liabilities pursuant to IAS 12.12 for the amounts as yet unpaid. In the event that the amount incurred and already paid for the current or previous period exceeds that owed for the period concerned, the difference is to be recognized as an asset. The refund claims or liabilities are measured at the amount corresponding to the expected level of refund from the tax authorities or payment to the tax authorities. The given amount is calculated on the basis of the tax rates and laws applicable as of the reporting date.

Deferred taxes are accounted for in the statement of financial position in accordance with IAS 12. They are recognized on the basis of temporary differences in the recognition of assets and liabilities between the IFRS financial statements and the tax accounts. To this end, those tax rates are used which apply on the reporting date or such future tax rates as have already been announced. Deferred tax assets on unused tax losses are carried as assets pursuant to IAS 12.34 in an amount corresponding to the resulting deferred tax liability if it is probable that a future taxable profit will be available in order to realize the claim. In accordance with IAS 1.56, deferred tax assets and liabilities must not be not shown as current assets and liabilities.

### 2.3.17 REVENUE RECOGNITION

The business model of 4SC is aimed at generating revenue from a combination of licensing agreements (depending on the nature of the given contract, could include upfront payments, milestone payments, cost reimbursements under a separate development cooperation agreement and royalties) and product sales.

According to IFRS 15, the licensing agreements are assessed applying the 5-step model. All license agreements are evaluated, whether the criteria of identification as a contract according to IFRS 15.9. are fulfilled. This includes the assessment of the contractual period in which the parties to the contract have present enforceable rights and obligations. It was generally concluded that 4SC acts as the principal in its revenue arrangements because it typically controls the goods or services before transferring them to the customer. At contract inception, the promised goods or services in the contracts to customers are assessed in order to identify performance obligations. A performance obligation is a promise to transfer to the customer a good or service that is distinct or a series of distinct goods or services (IFRS 15.22). If the grant of a license is bundled together with the rendering of services, it is evaluated whether these agreements comprise of more than one performance obligation.

Within existing license agreements, the granting of the license establishes a customer’s right to the intellectual property of 4SC (IFRS 15.B52) and is classified to be a separate performance obligation (IFRS 15.26i). For each promise to grant a license which is a separate performance obligation it needs to be determined, whether control is transferred to the customer either at a point in time or over time. If a contract with a customer contains more than one performance obligation the transaction price is allocated to each performance obligation on a relative-stand-alone selling price basis. The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer (IFRS 15.47) and comprises fixed amounts, variable amounts or both. If an agreement includes a variable component, the amount of consideration to which 4SC is entitled to in exchange for transferring goods or services to the customer is estimated.

Upfront payments are due as prepayments at the start of a given development cooperation. Revenue recognition requires an analysis of the overall circumstances and is therefore contingent on the content of each relevant contract. As the license agreements transfer a right to use the 4SC’s intellectual property as it exists at the point in time at which the license is granted, the performance obligation is satisfied at grant date (IFRS 15.B56b). Upfront payments are thus recognized as revenue at grant date.

Milestone payments are contingent upon the achievement of contractually stipulated targets. The attainment of these milestones depends largely on meeting specific requirements, so that the resulting revenue is only posted as such once contractual milestones have been fully achieved and, if previously agreed, confirmed by the business partner. Such variable considerations are estimated at contract inception based on the most likely amount of consideration expected from the transaction. They are constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognized will not occur when the associated uncertainty with the variable consideration is subsequently resolved (IFRS 15.56/57). Payment should then have been made within a period of a maximum of 30 days. The estimated transaction price is updated at each reporting date to reflect the current facts and circumstances. In case of termination clauses, the contractual period in which the parties to the contract have enforceable rights and obligations is taken into consideration.

Royalties are income from the sale of products pursuant to cooperation agreements. Royalties are recognized as revenue as of the date upon which the cooperation generates subsequent external sales that result in royalties to 4SC (IFRS 15.B63).

Irrevocably sold licenses are posted as revenue for the full amount as of the date of transfer of usage rights (IFRS 15.B56b) if no further obligations exist for 4SC.

### 2.3.18 COST OF SALES

Cost of sales comprises staff, material, consulting and other costs incurred directly attributable to the generation of revenue as well as commission.

### 2.3.19 DISTRIBUTION, RESEARCH AND DEVELOPMENT AS WELL AS ADMINISTRATIVE COSTS

The following costs are classified as distribution, research and development as well as administrative costs:

- Direct staff and material costs
- Depreciation, amortization and impairment losses
- Other direct costs
- Prorated overheads

Research costs are defined as costs that are incurred in connection with the planned research performed to gain new scientific knowledge. They are expensed as incurred in accordance with IAS 38.54.

Development costs are defined as expenses incurred to put research results into technical and commercial practice. They are recognized as intangible assets if the criteria pursuant to IAS 38.57 are met. At 4SC, the risks involved up until the commercialization of its products mean the requirements for the recognition of development costs as intangible assets in accordance with IAS 38 are not met in full. Development costs are therefore also expensed in the period in which they are incurred.

### 2.3.20 GOVERNMENT GRANTS

In accordance with IAS 20.12, government grants are recognized in profit or loss on a systematic basis in the period in which the entity recognizes as expenses the related costs for which the grants are intended to compensate. As funding represents the reimbursement of development expenditures, such amounts offset research and development costs for the relevant period; specific explanations are provided in the notes.

### 2.3.21 OTHER INCOME

Other income includes all income from operating activities which is not shown as finance income or does not represent the reimbursement of development expenditures. For the most part, 4SC generates income from the reimbursement of expenses. Such reimbursements are made in the amount of the actual costs incurred or plus a previously agreed administration fee, depending on the individual case.

## 2.4 USE OF ESTIMATES

In preparing these financial statements, it was necessary for the Management Board to make estimates and discretionary decisions which can influence the disclosed value of assets and liabilities, the disclosed value of uncertain assets and contingent liabilities as of the reporting date, as well as expenses and income within the reporting period. Estimates and discretionary decisions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. 4SC makes estimates and assumptions concerning the future. Actual results could differ substantially from the expected developments.

As of the reporting date, the Management Board has essentially made the following assumptions concerning the future and has identified other key sources of estimation uncertainty:

### 2.4.1 IMPAIRMENT LOSSES

The impairment test for intangible assets (patents) requires the estimation of the value in use on the basis of anticipated future cash flows of the cash-generating unit and the appropriate discount rate. Factors such as lower than expected sales and subsequent lower net cash flows, as well as changes in discount rate, could have considerable consequences for the determination of fair value and, ultimately, the level of impairment losses on intangible assets.

When testing the impairment of receivables, the Management Board must assess their recoverability on the basis of the customer's creditworthiness. Changes in the customer's creditworthiness could lead to a valuation allowance for receivables.

### 2.4.2 MEASUREMENT OF EQUITY INVESTMENTS

An assessment had to be made whether 4SC AG exercises control over Panoptes, in which case the company would have to be consolidated in accordance with IFRS 10. The Management Board determined that Panoptes does not influence 4SC AG's activities and cash flows but that conditions which would constitute control of Panoptes do not exist, either. Nor have the conditions been met in the Management Board's view for a consolidation of the company as special purpose entities in accordance with IFRS 12.

### 2.4.3 RESERVES ESOP / EXPENDITURE FROM STOCK OPTIONS

The accounting for stock options granted to employees and the Management Board (as part of ESOPs) is handled according to the guidelines of IFRS 2. In doing so, the Management Board must carry out estimates of the number of equity instruments expected to be exercisable. Deviations from these estimates influence the amount of reserves for stock options reported as equity, as well as the expenses posted during the financial year.

# 3 Disclosures on the statement of comprehensive income

## 3.1 REVENUE

Revenue decreased year-on-year to €4,173 thousand (2017: €4,197 thousand). The achievement of milestones by licensing partners contributed a total of €4,000 thousand (2017: €2,850 thousand). These revenues are attributable to performance obligations settled in prior periods and result from variable compensation in the form of milestone payments that are no longer constraint. Additional revenues were received for services and cost reimbursements charged to business partners.

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Germany | 25 | 1,090 | -98 |
| Europe (without Germany) | 0 | 0 | - |
| Asia | 4,148 | 3,107 | 34 |
| Rest | 0 | 0 | - |
| **Total Revenue** | **4,173** | **4,197** | **-1** |

### 3.2 STAFF COSTS

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Salaries | 3,525 | 3,428 | 3 |
| Social security contributions | 625 | 621 | 1 |
| Stock options | 933 | 427 | 119 |
| **Total** | **5,083** | **4,475** | **14** |
| | | | |
| Employees and Management Board (annual average) | 46 | 46 | 0 |

The Company's staff costs increased by 14% in 2018 to €5,083 thousand (2017: €4,475 thousand), whereas the average number of employees remained the same.

In 2018, funds accruing through salary waiver were appropriated for direct insurance for the benefit of Company staff. These contributions are classified as defined contribution plans and are recognized and measured in accordance with IAS 19.44. Total expenditures in connection with defined contribution plans amounted to €120 thousand in the reporting year (2017: €120 thousand). In addition, a total of €483 thousand (2017: €470 thousand) was paid to statutory social security funds.

Stock options granted to staff and Management Board members were shown as staff costs in accordance with IFRS 2. Previous years' stock option programs were adjusted accordingly, adding €786 thousand (2017: €383 thousand) to total staff costs. New stock options granted to staff in the reporting year contributed further costs of €147 thousand (2017: €44 thousand).

Staff costs are shown in the income statement under the items cost of sales, distribution costs, research and development costs as well as administrative costs in accordance with their functional classification.

### 3.3 COST OF SALES

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Staff | 0 | 31 | -100 |
| Provisions | 210 | 120 | 75 |
| External services | 76 | 112 | -32 |
| Patents | 52 | 208 | -75 |
| Depreciation, amortization and impairment losses | 0 | 69 | -100 |
| Other | 5 | 34 | -85 |
| **Total** | **343** | **574** | **-40** |

Cost of sales decreased from €574 thousand in 2017 to €343 thousand in the reporting period. These include costs for the Kv1.3 inhibitors licensed to Maruho in the previous year, but also commissions in connection with the achievement of a milestone payment under the license agreement concluded with Yakult Honsha in 2011. Certain parts of the costs for patents, external services and other costs were reimbursed by 4SC's partners (2018: €110 thousand; 2017: €355 thousand).

## 3.4 DISTRIBUTION COSTS

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Staff | 254 | 168 | 51 |
| License fees and software, literature and databases | 82 | 87 | -6 |
| Travel and conferences | 39 | 40 | -3 |
| Legal and consulting | 20 | 45 | -56 |
| Rental costs including ancillary costs | 13 | 12 | 8 |
| Other | 0 | -1 | -100 |
| **Total** | **408** | **351** | **16** |

Distribution costs, which consist of the costs incurred by the Business Development and Strategic Planning & Marketing units, increased by 16% year-on-year to €408 thousand during the reporting period (2017: €351 thousand). The change in staff cost is mainly a result of the ESOP programs for stock options granted in 2016, 2017 and 2018. Legal and consulting as well as travel costs are project driven and were in total €59 thousand (2017: €85 thousand) below the level of the previous reporting year.

## 3.5 RESEARCH AND DEVELOPMENT COSTS

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Staff | 3,289 | 2,620 | 26 |
| External services | 13,448 | 7,509 | 79 |
| Depreciation, amortization and impairment losses | 815 | 803 | 1 |
| Rental costs including ancillary costs | 341 | 340 | 0 |
| Patents | 204 | 266 | -23 |
| Travel and conferences | 116 | 126 | -8 |
| Material | 110 | 142 | -23 |
| Software licenses, literature and online inquiries | 70 | 123 | -43 |
| Other | 153 | 78 | 96 |
| EU Grants | -283 | -532 | -47 |
| **Total** | **18,263** | **11,475** | **59** |

Research and development costs increased by 59% to €18,263 thousand in 2018 (2017: €11,475 thousand). External services basically reflect the development activities in the Company's two main products: Resminostat and Domatinostat, the major part of which was spent on the execution of the pivotal clinical study RESMAIN for resminostat in CTCL and the SENSITIZE study for domatinostat in melanoma.

## 3.6 ADMINISTRATIVE COSTS

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Staff | 1,540 | 1,656 | -7 |
| Investor relations | 241 | 229 | 5 |
| Legal and other consulting | 207 | 138 | 50 |
| Supervisory Board | 207 | 194 | 7 |
| Insurance, fees and contributions | 106 | 147 | -28 |
| Rental costs including ancillary costs | 92 | 109 | -16 |
| IT, software and license fees | 88 | 54 | 63 |
| Travel and conferences | 86 | 92 | -7 |
| Staff recruitment | 37 | 53 | -30 |
| Depreciation, amortization and impairment losses | 26 | 27 | -4 |
| Other | 86 | 93 | -8 |
| **Total** | **2,716** | **2,792** | **-3** |

Administrative costs amounted to €2,716 thousand in the reporting period, a decrease of 3% year-on-year (2017: €2,792 thousand). The most significant change was in legal and other costs for consultancy which increased by €69 thousand, mainly because of strategic projects in the reporting period.

## 3.7 OTHER INCOME

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Sublease | 0 | 18 | -100 |
| Income from sales of assets | 2 | 39 | -95 |
| Other | 1 | 2 | -50 |
| **Total** | **3** | **59** | **-95** |

There was a year-on-year decrease in other income by 95% to €3 thousand in 2018 (2017: €59 thousand).

## 3.8 DEPRECIATION, AMORTIZATION AND IMPAIRMENT LOSSES

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Amortization of and impairment losses on intangible assets | 741 | 809 | -8 |
| Depreciation of and impairment losses on property, plant and equipment | 100 | 90 | 11 |
| **Total** | **841** | **899** | **-6** |

At €841 thousand, depreciation, amortization and impairment losses in 2018 were virtually unchanged year-on-year (2017: €899 thousand). Amortization of and impairment losses on intangible assets – which mainly stemmed from the capitalization of the rights acquired from Nycomed and the recognition of an asset for customer loyalty as defined by IAS 38 plus the corresponding amortization – decreased slightly, whereas depreciation of and impairment losses on property, plant and equipment increased because of new investments. Depreciation, amortization and impairment losses are shown in the income statement under the items, cost of sales, research and development costs, and administrative costs.

### 3.9 NET FINANCE INCOME/LOSS

Net finance income/loss includes the result derived from the accounting of the shares held in associates using the equity method, among others. In 2018, this concerns the measurement of the equity investment in Panoptes. Further explanation can be found under note 6.3 “Investments accounted for using the equity method“ (page 52).

The income shown under net finance income/loss is comprised as follows:

| (In € 000’s, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Interest-bearing investment of cash and cash equivalents | 0 | 14 | -100 |
| Income from exchange rate differences | 5 | 5 | 0 |
| **Total** | **5** | **19** | **-74** |

The capital increase closed in July 2017 provided additional cash to 4SC’s bank accounts. The main investing strategy for these funds was to avoid negative interests in the reporting year.

The expenses shown under net finance income/loss are comprised as follows:

| (In € 000’s, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Expenses from exchange rate differences | 15 | 2 | 650 |
| Securities measured through profit or loss | 0 | 7 | -100 |
| Other interest expense | 1 | 1 | 0 |
| **Total** | **16** | **10** | **60** |

## 4 Income tax, deferred taxes and withholding tax

The income taxes recognized in the income statement are made up as follows:

| (In € 000’s, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Current expenses | -94 | -33 | 185 |
| Deferred tax income | 0 | 0 | - |
| **Income tax expense (-) / income (+)** | **-94** | **-71** | **32** |

The determination of the effective tax rate for the purpose of calculating deferred taxes is based on the following assumptions: In Germany, taxes on income and earnings comprise the corporate income tax, the solidarity surcharge and trade tax. As a result of the German Business Tax Reform Act in 2008 (Unternehmenssteuerreformgesetz) the corporate income tax rate in Germany as of 1 January 2008 is 15%. To calculate deferred taxes, an effective tax rate of 15.83% was applied for corporate income tax (including the solidarity surcharge), and a rate of 10.85% was applied for trade tax. As was the case for the previous year, the total tax rate as of 1 January 2018 is therefore 26.68%.

As in the previous year, at 31 December 2018 deferred tax assets were carried in the amount of the deferred tax liabilities that arose. These were offset in the statement of financial position because they relate to income taxes levied by the same taxation authority. Consequently, the deferred tax liabilities of €128 thousand resulting from taxable temporary differences are set off against deferred tax assets in the same amount.

Deferred tax assets and liabilities as of 31 December 2018 and 31 December 2017 are distributed as follows across the statement of financial position:

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Intangible assets | 10 | 12 | -17 |
| Investments accounted for using the equity method | 0 | 0 | - |
| Other financial assets | 0 | 0 | - |
| Other liabilities | 14 | 14 | 0 |
| Deferred income | 104 | 0 | - |
| Deferred tax assets | -128 | -26 | 392 |
| **Deferred tax assets and liabilities** | **0** | **0** | **-** |

The deferred tax liabilities reported under intangible assets arose from the use of different recognition criteria for an asset resulting from customer loyalty programs recognized in accordance with IFRSs. In the other liabilities they arise from different recognition criteria applicable to deferred liabilities under IFRS and tax law.

The value of tax losses unrecognized as deferred tax assets but reportable per IAS 12.81 (e) is as follows as of the reporting date:

| (In € 000's, unless stated otherwise) | 2018 | 2017 |
|---|---|---|
| Tax loss carryforward | 197,172 | 179,683 |
| Reduction for deferred tax liabilities | -486 | -99 |
| Effective tax rate (in %) | 26.68 | 26.33 |
| **Value of the tax loss carryforwards** | **52,476** | **47,284** |

This calculation is based on the assumption that the tax rates applicable after 1 January 2018 will still be valid in the future upon achieving the value of the taxable losses carried forward, and that 4SC's losses carried forward will still be able to be utilized in full.

In general, losses may be carried forward indefinitely to offset future profits, although some restrictions apply with regard to the use of losses carried forward in relation to Sections 8c and 8d of the German Corporate Income Tax Act (Körperschaftsteuergesetz, KStG). The criteria mentioned – various shareholder changes, capital increases, the addition of new shareholders – could result in a (pro-rated) elimination of tax loss carryforwards, applied to 4SC during previous years. Because of the legal uncertainty, which has arisen in connection with the interpretation of the provisions applicable in this context, and the attitude the competent revenue authorities might adopt, 4SC considers it a possibility that the current losses carried forward will, in future, no longer be available for the purpose of offsetting against profits. 4SC will, however, continue to petition for the admissibility of its loss carryforwards.

Similar regulations exist for trade tax as for corporate income tax.

The reconciliation of expected income tax and the effective tax expense/income is as follows:

| (In € 000's) | 2018 | 2017 |
|---|---|---|
| Earnings before taxes | -17,565 | -10,927 |
| Expected tax income at a tax rate of 26.68% (2017: 26.33%) | 4,686 | 2,877 |
| Income (+) / expense (-) shown in the statement of comprehensive income | -94 | -33 |
| **Difference to be explained** | **4,780** | **2,910** |
| | | |
| Unrecognized tax loss carryforwards | 4,281 | 2,961 |
| Non-deductible expenses | 25 | 25 |
| Ineligible foreign withholding tax | 69 | 24 |
| Release of deferred income due to first-time application of IFRS 15 | 105 | 0 |
| Other differences | 300 | -100 |
| **Total reconciliation** | **4,780** | **2,910** |

# 5 Earnings per share

The basic earnings per share are calculated in accordance with IAS 33.9 ff. by dividing the profit/loss for the period attributable to the shareholders (numerator) by the average weighted number of shares outstanding in the reporting period (denominator).

| | 2018 | 2017 |
|---|---|---|
| Based on net profit/loss for the year (in € 000's) | -17,659 | -10,960 |
| Based on average number of shares (in thousand) | 30,649 | 24,536 |
| **Earnings per share (basic and diluted, in €)** | **-0.58** | **-0.45** |

Given 4SC's loss, the stock options outstanding (potential ordinary shares) are currently "anti-dilutive" as their conversion to ordinary shares would not increase loss per share. As a result, the diluted and basic earnings per share are identical.

### Potential equity instruments

The Company's Annual General Meetings on 28 June 2006, 29 June 2007, 5 June 2008, 15 June 2009, 21 June 2010, 6 August 2012, 9 May 2014, 17 June 2016 and 25 August 2017 decided to increase the Company's share capital conditionally. These resolutions could mean that undiluted earnings per share could potentially be diluted in future if option rights are granted to members of the Management Board and employees of the Company or shares are granted to the owners or creditors of convertible bonds to be issued, participation rights and/or warrants. Details about the conditional capital can be found under notes 6.9 "Equity" (page 54) and 8 "Stock option plan" (page 61).

# 6 Disclosures on the statement of financial position

## 6.1 INTANGIBLE ASSETS

The development of intangible assets pursuant to IAS 38.118 is shown in the statement of changes in non-current assets.

| (In € 000's, unless stated otherwise) | | Cost | | | | Amortization and impairment losses | | | | Carrying amounts | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Useful life from 1 to 15 years | Balance on 1 Jan 2018 | Additions 2018 | Disposals 2018 | Balance on 31 Dec 2018 | Balance on 1 Jan 2018 | Additions 2018 | Disposals 2018 | Balance on 31 Dec 2018 | Balance on 31 Dec 2018 | Balance on 31 Dec 2017 |
| Software and patents | 1-15 | 14,075 | 2 | 0 | 14,077 | 8,427 | 732 | 0 | 9,159 | 4,918 | 5,648 |
| Other | 4 | 520 | 0 | 0 | 520 | 474 | 9 | 0 | 483 | 37 | 46 |
| **Intangible Assets** | | **14,595** | **2** | **0** | **14,597** | **8,901** | **741** | **0** | **9,642** | **4,955** | **5,694** |

Changes in intangible assets during the previous year were as follows:

| (In € 000's, unless stated otherwise) | | Cost | | | | Amortization and impairment losses | | | | Carrying amounts | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Useful life from 1 to 16 years | Balance on 1 Jan 2017 | Additions 2017 | Disposals 2017 | Balance on 31 Dec 2017 | Balance on 1 Jan 2017 | Additions 2017 | Disposals 2017 | Balance on 31 Dec 2017 | Balance on 31 Dec 2017 | Balance on 31 Dec 2016 |
| Software and patents | 1-16 | 14,071 | 4 | 0 | 14,075 | 7,695 | 732 | 0 | 8,427 | 5,648 | 6,376 |
| Customer loyalty | 5 | 520 | 0 | 0 | 520 | 397 | 77 | 0 | 474 | 46 | 123 |
| **Intangible assets** | | **14,591** | **4** | **0** | **14,595** | **8,092** | **809** | **0** | **8,901** | **5,694** | **6,499** |

There were no intangible assets with indefinite useful lives. There were no internally generated intangible assets.

The figure reported for software and patents includes three key patents with carryforward amounts of between €651 thousand and €3,163 thousand (2017: €741 thousand to €3,669 thousand) and whose residual amortization period is between 6.25 years and 8.17 years (2017: between 7.25 and 9.17 years).

The amortization and impairment of intangible assets is shown in the statement of comprehensive income mainly under the items cost of sales, research and development costs and administrative costs.

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Cost of sales and administrative costs | 1 | 69 | -98 |
| Research and development costs | 740 | 740 | 0 |
| **Amortization of / impairment losses on intangible assets** | **741** | **809** | **-8** |

## 6.2 PROPERTY, PLANT AND EQUIPMENT

The development of property, plant and equipment pursuant to IAS 16.73 is shown in the statement of changes in non-current assets.

| (In € 000's, unless stated otherwise) | | Cost | | | | Amortization and impairment losses | | | | Carrying amounts | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Useful life from 0 to 10 years | Balance on 1 Jan 2018 | Additions 2018 | Disposals 2018 | Balance on 31 Dec 2018 | Balance on 1 Jan 2018 | Additions 2018 | Disposals 2018 | Balance on 31 Dec 2018 | Balance on 31 Dec 2018 | Balance on 31 Dec 2017 |
| Office equipment | 4-10 | 117 | 0 | 0 | 117 | 104 | 3 | 0 | 107 | 10 | 13 |
| Laboratory equipment | 1-10 | 298 | 105 | 0 | 403 | 74 | 42 | 0 | 116 | 287 | 224 |
| Installations in third party buildings | 1-9 | 310 | 0 | 0 | 310 | 31 | 31 | 0 | 62 | 248 | 279 |
| Other operating and office equipment | 1-8 | 17 | 0 | 0 | 17 | 16 | 0 | 0 | 16 | 1 | 1 |
| IT equipment | 1-8 | 216 | 10 | 0 | 226 | 164 | 19 | 0 | 183 | 43 | 53 |
| Other | 0-1 | 107 | 5 | 5 | 107 | 107 | 5 | 5 | 107 | 0 | 0 |
| **Property, plant and equipment** | | **1,065** | **120** | **5** | **1,180** | **496** | **100** | **5** | **591** | **589** | **570** |

The development of property, plant and equipment in the previous year was as follows:

| (In € 000's, unless stated otherwise) | | Cost | | | | Amortization and impairment losses | | | | Carrying amounts | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Useful life from 0 to 10 years | Balance on 1 Jan 2017 | Additions 2017 | Disposals 2017 | Balance on 31 Dec 2017 | Balance on 1 Jan 2017 | Additions 2017 | Disposals 2017 | Balance on 31 Dec 2017 | Balance on 31 Dec 2017 | Balance on 31 Dec 2016 |
| Office equipment | 5-10 | 165 | 0 | 48 | 117 | 147 | 3 | 46 | 104 | 13 | 18 |
| Laboratory equipment | 1-10 | 190 | 113 | 5 | 298 | 46 | 29 | 1 | 74 | 224 | 144 |
| Leasehold improvements | 1-10 | 0 | 310 | 0 | 310 | 0 | 31 | 0 | 31 | 279 | 0 |
| Other operating and office equipment | 1-9 | 17 | 0 | 0 | 17 | 16 | 0 | 0 | 16 | 1 | 1 |
| IT equipment | 1-9 | 377 | 14 | 175 | 216 | 318 | 20 | 174 | 164 | 53 | 59 |
| Advances paid for property, plant and equipment | n/a | 275 | 4 | 279 | 0 | 0 | 0 | 0 | 0 | 0 | 275 |
| Other | 0-1 | 108 | 7 | 8 | 107 | 108 | 7 | 8 | 107 | 0 | 0 |
| **Property, plant and equipment** | | **1,132** | **448** | **515** | **1,065** | **635** | **90** | **229** | **496** | **570** | **497** |

Additions in laboratory equipment during the reporting year primarily relate to investments for the replacement or enhancement of equipment.

The depreciation of property, plant and equipment is shown in its entirety in the statement of comprehensive income under the items research and development and administrative costs.

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Research and development costs | 75 | 63 | 19 |
| Administrative costs | 25 | 27 | -7 |
| **Depreciation of / impairment losses on property, plant and equipment** | **100** | **90** | **11** |

## 6.3 INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Investments accounted for using the equity method concern shares held in Panoptes. The respective preliminary key figures of Panoptes as of 31 December 2018 are as follows:

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Revenue | 0 | 0 | - |
| Net profit/loss for the year | -1,391 | -1,244 | 12 |
| Total assets | 952 | 933 | 2 |
| Equity | -3,158 | -2,412 | 31 |
| Liabilities | 4,110 | 3,345 | 23 |

The loss posted by Panoptes lowered the carryforward amount of the shares held by 4SC Discovery in 2013; as of the reporting date it remained at € null.

## 6.4 OTHER INVESTMENTS

This item in the statement of financial position reflects financial instruments within the meaning of IFRS 9 with a remaining life of more than one year as of the reporting date. In the reporting year this includes the equity investment in Quiescence. The 10% stake in Quiescence was acquired in December 2006, however its fair value is still € null due to a lack of clarity with regard to Quiescence's financial situation.

### 6.5 TRADE ACCOUNTS RECEIVABLE

| (In € 000's, unless stated otherwise) | 31 Dec 2018 | 31 Dec 2017 | Change in % |
|---|---|---|---|
| Germany | 1 | 22 | -95 |
| Import / export | 13 | 8 | 63 |
| **Trade accounts receivable** | **14** | **30** | **-53** |

On 31 December 2018, as on the reporting date of the previous year, there were no bad debt allowances for trade accounts receivable in accordance with IFRS 9.

Trade accounts receivable mainly result from cooperation deals and service agreements with BioNTech Small Molecules GmbH (BioNTech Small Molecules) and Maruho. No trade accounts receivable were due on the reporting date; they were paid in January 2019, as contractually stipulated.

### 6.6 CASH AND CASH EQUIVALENTS

This item in the statement of financial position comprises cash on hand and bank balances. Of the amounts shown under "Bank balances", €10 thousand were invested in short term rental deposit.

| (In € 000's, unless stated otherwise) | 31 Dec 2018 | 31 Dec 2017 | Change in % |
|---|---|---|---|
| Bank balances | 25,035 | 41,327 | -39 |
| Cash on hand | 1 | 0 | - |
| **Cash and cash equivalents** | **25,036** | **41,327** | **-39** |

### 6.7 CURRENT INCOME TAX ASSETS

4SC receives interest from its fixed deposits, money market funds and securities. Financial institutions are required to withhold tax and solidarity surcharge on such interest income. Because the Company reported a net loss for the 2018 financial year, it has a tax refund claim with regard to the taxes it has paid.

| (In € 000's, unless stated otherwise) | 31 Dec 2018 | 31 Dec 2017 | Change in % |
|---|---|---|---|
| **Current income tax assets** | **12** | **23** | **-48** |

### 6.8 OTHER ASSETS

| (In € 000's, unless stated otherwise) | 31 Dec 2018 | 31 Dec 2017 | Change in % |
|---|---|---|---|
| Prepaid expenses | 183 | 109 | 68 |
| Current tax assets | 127 | 0 | - |
| Rent deposits | 100 | 101 | -1 |
| Advances paid for third party services | 173 | 0 | - |
| EU government grants | 67 | 53 | 26 |
| Other | 0 | 6 | -100 |
| **Other assets** | **650** | **269** | **142** |

Other assets are presented in the statement of financial position according to IAS 1.60 as separate classifications.

| (In € 000's) | Total receivables | | Thereof non-current | | Thereof current | |
|---|---|---|---|---|---|---|
| | 31 Dec 2018 | 31 Dec 2017 | 31 Dec 2018 | 31 Dec 2017 | 31 Dec 2018 | 31 Dec 2017 |
| Prepaid expenses | 183 | 109 | 1 | 0 | 182 | 109 |
| Current tax | 127 | 0 | 0 | 0 | 127 | 0 |
| Rent deposits | 100 | 101 | 100 | 101 | 0 | 0 |
| Advances paid for third-party services | 173 | 0 | 0 | 0 | 173 | 0 |
| EU government grants | 67 | 53 | 0 | 0 | 67 | 53 |
| Other | 0 | 6 | 0 | 0 | 0 | 6 |
| **Other assets** | **650** | **269** | **101** | **101** | **549** | **168** |

Based on the information available today, there are no indications giving rise to doubts regarding grant funding. Rent deposits serve to safeguard landlords' claims.

Prepaid expenses primarily comprise prepaid invoices under maintenance contracts, online research and licenses. The advances paid for third-party services comprise payments for external services that were made before the service in question was rendered.

## 6.9 EQUITY

### 6.9.1 SHARE CAPITAL AND SHARES

The share capital of 4SC AG as of 31 December 2018 remains unchanged at €30,648,513. All shares are no-par value bearer shares each of which represents €1.00 of 4SC AG's share capital, entailing one vote at the Annual General Meeting. Share capital is fully paid-in.

4SC AG shares are securitized under global non-coupon certificates held in custody by Clearstream Banking AG, Frankfurt am Main, Germany, a central securities depository. The shareholder's right to issuance of individual certificates is excluded pursuant to article 6(3) of the Articles of Association of 4SC AG.

### 6.9.2 CONDITIONAL CAPITAL

The Company's Annual General Meetings decided to increase the Company's share capital conditionally as follows:

| Conditional capital | Amount (€ 000's) | AGM resolution dated | Purpose |
|---|---|---|---|
| IV | 38 | 28 Jun 2006/ 21 Jun 2010 | Granting of options to members of the Management Board and Company employees as well as employees of affiliated companies with a term of up to ten years ("ESOP 2006") |
| VI | 110 | 15 Jun 2009 | Granting of options to members of the Management Board and Company employees as well as employees of affiliated companies in Germany and abroad with a term of up to ten years ("ESOP 2009") |
| VIII | 1,600 | 17 Jun 2016 | Granting of options to members of the Management Board and Company employees as well as employees of affiliated companies in Germany and abroad with a term of up to ten years ("ESOP 2016") |
| IX | 800 | 25 Aug 2017 | Granting of options to members of the Management Board and Company employees as well as employees of affiliated companies in Germany and abroad with a term of up to ten years ("ESOP 2017") |

### 6.9.3 AUTHORIZED CAPITAL

The Annual General Meeting on 25 August 2017 authorized the Management Board to increase the Company's share capital, with the approval of the Supervisory Board, until 24 August 2022, once or repeatedly, by up to €15,324,256 in return for contributions in cash or in kind by issuing, once or repeatedly, an aggregate total of up to 15,324,256 new no-par value bearer shares (Authorized Capital 2017/I).

### 6.9.4 SHARE PREMIUM

The share premium consists of premiums paid by shareholders in the course of capital increases executed in financing rounds. Pursuant to IAS 32.35, transaction costs of an equity transaction are accounted for as a deduction from equity, net of any related income tax benefit.

### 6.9.5 RESERVES

The item in the statement of financial position “reserves” comprises the following individual items:

The ESOP reserve increased to €3,120 thousand (2017: €2,187 thousand) year-on-year and corresponds to the amount of the share options granted during the reporting year and the previous years to employees and the Management Board, which have been measured in accordance with the provisions of IFRS 2. The calculation is explained under note 8 “Stock option plan" (page 61).

The retained earnings of €67 thousand as of 31 December 2018 remained unchanged compared to the previous year.

### 6.9.6 APPROPRIATION OF EARNINGS

The accumulated deficit of €177,476 thousand (2017: €160,310 thousand) is carried forward to a new account.

### 6.9.7 CAPITAL MANAGEMENT DISCLOSURES

Since the Company posted a net loss for the year, the primary objectives of capital management are to retain a sufficiently high amount of liquid reserves to enable the further development of the company’s development pipeline without significant limitations, and to maintain or re-strengthen equity. Accordingly, an increase in the accumulated deficit and thus a further reduction in equity must be minimized to the extent possible without compromising the programs’ progress. Management keeps a close eye on the equity ratio and the total of the items reported under equity. A very restrictive handling of financial reserves is a prerequisite for the achievement of these goals. Furthermore, the acquisition of additional liquid funds is also one of the main options in terms of realizing these objectives. Given the Company's development stage and risk profile, raising equity is usually the only action that can be taken in this context. The Company's goal remains to generate revenue in order to reach break-even and reduce the losses carried forward.

Capital management as a whole concerns continuous management of equity and loss carryforwards. The capital increase in 2017 resulted in an overall higher total equity, though this effect was reduced by the net loss posted for the year and 2017. In total, equity decreased from €44,693 thousand as of 31 December 2017 by €16,241 thousand to €28,452 thousand as of 31 December 2018.

No changes were made in the strategy or objectives with regard to capital management during the reporting year.

## 6.10 TRADE ACCOUNTS PAYABLE

| (In € 000’s, unless stated otherwise) | 31 Dec 2018 | 31 Dec 2017 | Change in % |
|---|---|---|---|
| Germany | 649 | 780 | -17 |
| EU (without Germany) | 285 | 370 | -23 |
| Other countries | 186 | 25 | 644 |
| **Trade accounts payable** | **1,120** | **1,175** | **-5** |

The short-term trade accounts payable decreased by 5% year-on-year. They primarily result from outsourced clinical and scientific services invoiced by the end of the year.

## 6.11 OTHER LIABILITIES

| (In € 000's, unless stated otherwise) | 31 Dec 2018 | 31 Dec 2017 | Change in % |
|---|---|---|---|
| Deferred income | 0 | 493 | -100 |
| Accrued liabilities | 1,613 | 1,428 | 13 |
| Tax liabilities (VAT, wage & church tax) | 71 | 59 | 20 |
| Advances received | 0 | 58 | -100 |
| Other liabilities | 0 | 7 | -100 |
| **Other liabilities** | **1,684** | **2,045** | **-18** |

Accrued liabilities were comprised as follows as of the reporting date:

| (In € 000's, unless stated otherwise) | 31 Dec 2018 | 31 Dec 2017 | Change in % |
|---|---|---|---|
| Invoices outstanding | 1,080 | 984 | 10 |
| Bonus paid to Management Board and the executive management | 130 | 76 | 71 |
| Legal consulting | 17 | 3 | 467 |
| Financial statements preparation and auditing costs | 69 | 68 | 1 |
| Personnel liabilities | 247 | 259 | -5 |
| Renovation obligation | 5 | 4 | 25 |
| Contribution to employer's liability insurance association | 0 | 4 | -100 |
| Other | 65 | 30 | 117 |
| **Accrued liabilities** | **1,613** | **1,428** | **13** |

The non-current accrued liabilities result from long-term Management Board bonuses and outstanding invoices.

All other accrued liabilities are of a current nature. A total of €4,190 thousand were added, €3,916 thousand were used, and €89 thousand were reversed. There is only insignificant insecurity regarding the amount of actual utilization. There are no claims for reimbursement against third parties.

Other liabilities are presented in the statement of financial position according to IAS 1.60 as separate classifications.

| (In € 000's) | Total liabilities | | Thereof non-current | | Thereof current | |
|---|---|---|---|---|---|---|
| | 31 Dec 2018 | 31 Dec 2017 | 31 Dec 2018 | 31 Dec 2017 | 31 Dec 2018 | 31 Dec 2017 |
| Deferred income | 0 | 493 | 0 | 394 | 0 | 99 |
| Invoices outstanding | 1,096 | 967 | 0 | 0 | 1,096 | 967 |
| Tax liabilities (wage & church tax) | 71 | 59 | 0 | 0 | 71 | 59 |
| Advances received | 0 | 58 | 0 | 0 | 0 | 58 |
| Deposits received | 0 | 0 | 0 | 0 | 0 | 0 |
| Other liabilities | 517 | 68 | 82 | 67 | 435 | 1 |
| **Other liabilities** | **1,684** | **2,045** | **82** | **461** | **1,602** | **1,584** |

## 6.12 OTHER DISCLOSURES ON FINANCIAL INSTRUMENTS

### 6.12.1 CARRYING AMOUNTS AND FAIR VALUES ACCORDING TO MEASUREMENT CATEGORIES

| (In € 000's) | Measurement category pursuant to IFRS 9 / (IAS 39) | Measurement as of 31 Dec 2018 | | Measurement as of 31 Dec 2017 | | Measurement as of 31 Dec 2017 (IAS 39) |
|---|---|---|---|---|---|---|
| | | Carrying amount | Fair value | Carrying amount | Fair value | Carrying amount / Fair value |
| Other investments | FVTPL (AfS) | 0 | 0 | 0 | 0 | - |
| Trade accounts receivable | AC (LaR) | 14 | 14 | 30 | 30 | (30/30) |
| Other non-current financial assets | AC (LaR) | 100 | 100 | 101 | 101 | (101/101) |
| Fixed deposits and bank balances | AC (LaR) | 25,036 | 25,036 | 41,327 | 41,327 | (41,327/41,327) |
| Trade accounts payable | AC (AC) | -1,120 | -1,120 | -1,175 | -1,175 | (-1,175/-1,175) |
| Other current financial liabilities | AC (AC) | -1,096 | -1,096 | -967 | -967 | (-967/-967) |
| **Total** | | **22,934** | **22,934** | **39,316** | **39,316** | **(39,316/39,316)** |
| | | | | | | |
| *Of which aggregated by IFRS 9 / (IAS 39) measurement category* | | | | | | |
| Fair value through profit or loss | FVTPL (AfS) | 0 | 0 | 0 | 0 | (0/0) |
| At amortized cost | AC (LaR) | 22,934 | 22,934 | 39,316 | 39,316 | (-3,220/-3,220) (41,458/41, 458) |

### 6.12.2 VALUATION METHODS

Trade accounts receivable and other assets mainly have short remaining terms. The values recognized represent the approximate fair value. The majority of the non-current other assets were guarantee deposits (deposits) lodged with the landlord. The bank balances are not interest-bearing; carrying amount and fair value are therefore also identical.

The primary financial instruments existing as of the reporting date were classified as financial assets at fair value through profit or loss in accordance with IFRS 9.

Of the financial instruments at fair value through profit or loss, gains and losses from subsequent measurement are recognized in profit or loss. Bank statements and other bank confirmations serve to verify the fair value as of year's end.

Trade accounts payable and other liabilities predominantly have short remaining terms. Hence their carrying amounts correspond approximately to their fair value at the reporting date.

The assets are continuously reviewed on the basis of these measurement criteria. Hedge accounting is not applicable.

### 6.12.3 FAIR VALUE HIERARCHY

Both the primary financial instruments that are recognized at fair value through profit or loss as of the reporting date and the securities that were classified held to maturity in the previous year were allocated to Level 1 (prices in active markets) and Level 2 (directly observable assets) in accordance with IFRS 13.76 ff. No reclassifications of fair values from or into another hierarchy level were made in 2018.

### 6.12.4 NET RESULTS ACCORDING TO MEASUREMENT CATEGORIES

The net result of the financial instruments in the reporting year, in accordance with IFRS 9 is composed of the following:

| (In € 000's) | Subsequent measurement | | | | | |
|---|---|---|---|---|---|---|
| | Interest result | At fair value | Currency translation | Impairment loss | Disposal | Net result 2018 |
| Debt instruments at amortized cost | 0 | 0 | -16 | 0 | 0 | -16 |
| Liabilities at amortized cost | 0 | 0 | 5 | 0 | 0 | 5 |
| **Total** | **0** | **0** | **-11** | **0** | **0** | **-11** |

In the previous year, the net result of the financial instruments, in accordance with IAS 39, was comprised as follows:

| (In € 000's) | Subsequent measurement | | | | | |
|---|---|---|---|---|---|---|
| | Interest result | At fair value | Currency translation | Impairment loss | Disposal | Net result 2017 |
| Financial assets at fair value through profit or loss held for trading | 0 | 0 | 0 | 0 | 0 | 0 |
| Held-to-maturity investments | 12 | -7 | 0 | 0 | 0 | 5 |
| Loans and receivables | -1 | 0 | -2 | 0 | 0 | -3 |
| Available-for-sale financial assets | 0 | 0 | 0 | 0 | 0 | 0 |
| Liabilities at amortized cost | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **11** | **-7** | **-2** | **0** | **0** | **2** |

The interest from financial instruments as defined in IAS 39 is shown in net finance income, as are the other components of the net result.

### 6.12.5 RISKS FROM FINANCIAL INSTRUMENTS

#### Liquidity, counterparty credit and interest rate risks related to liquid reserves

4SC possesses liquid reserves that are invested in order to earn interest as long as these funds are not needed. Currently, all of these funds are invested by 4SC in safe forms of investment – with a good or very good credit rating. These securities do not expose the Company to an interest rate risk.

More information is contained in the report on opportunities and risks in section 6 (starting on page 18) of the combined management report.

#### Liquidity risk inherent in financial liabilities

4SC has financial liabilities, i.e. contractual obligations to deliver liquid assets to another party. These are presented in the statement of financial position under trade accounts payable, accounts payable to associates and other liabilities. Because most of the financial liabilities are current, they are not subject to liquidity risk.

#### Currency risks

4SC executes transactions with international business partners where contractual payment terms are made in a currency other than the euro, exposing the Company to a currency risk in the items, loans and receivables and liabilities at amortized cost. This risk includes the relative decrease or increase of the euro vis-à-vis the other currencies during the period until payment of the liability or receivable.

4SC does not engage in hedging transactions but instead endeavors to pay its own obligations in foreign currencies, thereby mitigating the risk of exchange rate fluctuations. For this reason, US dollars (US-$) are bought when the exchange rate is favorable. As of 31 December 2018, 4SC had bank accounts in US dollars worth € null (31 December 2017: € null).

Liabilities denominated in foreign currencies as of 31 December 2018 were limited to the equivalent of €6 thousand in US dollars (US-$) and the equivalent of €9 thousand in British pounds (GBP). Varying exchange rates and their impact on assets and liabilities were simulated in a sensitivity analysis so as to determine the effects on profit or loss. A gain or decline by 10% in the value of the euro versus the foreign currency in question would have changed the outcome as follows as of 31 December 2018:

| (In € 000's) | 31 Dec 2018 | | 31 Dec 2017 | |
|---|---|---|---|---|
| | Increase | Decrease | Increase | Decrease |
| Euro vs. US dollar | -1 | 1 | -1 | 1 |
| Euro vs. British pound | -1 | 1 | -2 | 2 |

If euro and foreign currency exchange rates had remained stable in the financial year just ended, the net loss of 4SC would not have changed (2017: no change).

### Counterparty credit risks in connection with receivables

In addition, 4SC is subject to the risk of a possible loss due to bad debt in terms of the loans and receivables category. 4SC has receivables on its books, all or some of which may be settled with a delay or may not be settled at all. This would lead to valuation allowances being made on such receivables and would thus have a negative impact on the Company's net assets, financial position and results of operations.

4SC's maximum counterparty credit risk in connection with receivables is equivalent to the carrying amount of the trade accounts receivable, i.e. €14 thousand as of the reporting date (2017: €30 thousand). To reduce the counterparty credit risk, the Company regularly runs its business relationships through different evaluation scenarios and fosters intensive customer relationships.

## 6.13 OTHER FINANCIAL OBLIGATIONS

Other financial obligations for the years subsequent to the reporting date stem from leases for the facilities and office space as well as the basement space rented by 4SC. These agreements were signed on 19 May 2016 for a period of ten years and run until 30 November 2026. There are no purchase options, but the lease can be extended twice for three years at a time. Following expiry of the fixed rental period or the option periods, the rental agreement is extended by a further two years if it is not terminated in due time. The leases contain escalation clauses that are linked to the consumer price index for Germany compiled by the Federal Statistical Office. In the event of a change of more than 5% in the index, the rent is adjusted accordingly by a ratio (converted to a percentage), which may be applied no sooner than 1 December 2018.

Other financial obligations result from a fixture lease for the facilities and office space of 4SC. This agreement was also signed on 19 May 2016 for a period of ten years and runs until 30 November 2026. Purchase options do not exist. The lease contract on plant and equipment contains an escalation clause determining that the monthly rent will be reduced by 80% for the first time as of 1 December 2021.

There are no finance lease agreements.

Future payments due pursuant to agreements mentioned break down as follows:

| (In € 000's) | 2018 |
|---|---|
| 2019 | 369 |
| 2020 – 2023 | 1,427 |
| From 2024 | 1,004 |
| **Total** | **2,800** |

The statement of comprehensive income for the reporting year contains expenses of €446 thousand for the rented facilities (2017: €461 thousand). 4SC did not have any further expenses under leases in 2018 and the previous year.

Financial obligations above and beyond those under leases basically stem from scientific service contracts, including external services in connection with the execution of the clinical and preclinical studies. This entails obligations up to an amount of €9,706 thousand (2017: €14,926 thousand).

# 7 Disclosures on the statement of cash flows

The development of cash and cash equivalents is summarized in the table below:

| (In € 000's, unless stated otherwise) | 2018 | 2017 | Change in % |
|---|---|---|---|
| Total cash flows from operating activities | -16,162 | -8,541 | 89 |
| Total cash flows from investing activities | -121 | -133 | -9 |
| Total cash flows from financing activities | -8 | 39,953 | -100 |
| **Net change in cash and cash equivalents** | **-16,291** | **31,279** | **-152** |
| + Cash and cash equivalents at the beginning of the period | 41,327 | 10,048 | 311 |
| **= Cash and cash equivalents at the end of the period** | **25,036** | **41,327** | **-39** |

In addition to cash and cash equivalents, 4SC had no other financial assets, borrower's note loans and bearer notes as of the reporting date. Taken together, these items comprise the cash balance/funds:

| (In € 000's, unless stated otherwise) | 31 Dec 2018 | 31 Dec 2017 | Change in % |
|---|---|---|---|
| Cash and cash equivalents at the end of the period | 25,036 | 41,327 | -39 |
| Other investments | 0 | 0 | - |
| **Cash balance/funds** | **25,036** | **41,327** | **-39** |

# 8 Stock option plan

The table below provides an overview of stock option plans issued to date as well as tranches and option terms:

| Option plan | Tranche | Date of Issue | Exercise price | Exercise ratio[1] | Max. options granted | Outstanding on 1 Jan 2018 | Granted in 2018 | Forfeited in 2018 | Exercised in 2018 | Expired in 2018 | Outstanding on 31 Dec 2018 | Exercisable on 31 Dec 2018 | Max. number of shares available on 31 Dec 2018 | Fair value | Cumulative staff costs[2] | Staff costs in 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | € | | 000's | 000's | 000's | 000's | 000's | 000's | 000's | 000's | 000's | € | € 000's | € 000's |
| ESOP 2001 | 2001/1 | 31 Mar 2001 | 48 | 2:1 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 |
| ESOP 2001 | 2001/2 | 10 Oct 2001 | 48 | 2:1 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 |
| ESOP 2001 | 2002 | 30 Jun 2002 | 60 | 2:1 | 120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 |
| ESOP 2001 | 2003 | 30 Sep 2003 | 25,4 | 2:1 | 318 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,7 | 52 | 0 |
| ESOP 2004 | 2004 | 30 Sep 2004 | 21,2 | 2:1 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,6 | 62 | 0 |
| ESOP 2004 | 2005 | 30 Sep 2005 | 21,2 | 2:1 | 93 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,55 | 53 | 0 |
| ESOP 2004 | 2006/1 | 30 May 2006 | 22,65 | 2:1 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,7 | 19 | 0 |
| ESOP 2006 | 2006/2 | 25 Aug 2006 | 19,00 | 1:1 | 296 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,55 | 436 | 0 |
| Replacement ESOP 2001 | 2006/3 | 25 Aug 2006 | 19,00 | 1:1 | 166 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,7 | 183 | 0 |
| ESOP 2006 | 2007 | 26 Nov 2007 | 18,25 | 1:1 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,45 | 14 | 0 |
| ESOP 2006 | 2008 | 22 Aug 2008 | 17,25 | 1:1 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,5 | 62 | 0 |
| ESOP 2009 | 2009 | 26 Nov 2009 | 16,45 | 1:1 | 888 | 82 | 0 | 4 | 0 | 0 | 78 | 0 | 78 | 5,2 | 829 | 0 |
| ESOP 2009 | 2010 | 26 Nov 2010 | 15,45 | 1:1 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,85 | 10 | 0 |
| ESOP 2009 | 2011 | 30 Nov 2011 | 7,20 | 1:1 | 18 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 3,25 | 11 | 0 |
| ESOP 2016 | 2016 | 22 Dec 2016 | 2,34 | 1:1 | 1.019 | 923 | 0 | 51 | 0 | 0 | 872 | 0 | 872 | 1,15 | 1.005 | 417 |
| ESOP 2016 | 2017 | 7 Nov 2017 | 4,97 | 1:1 | 40 | 40 | 0 | 0 | 0 | 0 | 40 | 0 | 40 | 2,64 | 98 | 41 |
| ESOP 2017 | 2017 | 7 Nov 2017 | 4,97 | 1:1 | 334 | 334 | 0 | 12 | 0 | 0 | 322 | 0 | 322 | 2,64 | 786 | 328 |
| ESOP 2016 | 2018/1 | 19 Nov 2018 | 3,10 | 1:1 | 500 | 0 | 500 | 0 | 0 | 0 | 500 | 0 | 500 | 1,42 | 687 | 107 |
| ESOP 2016 | 2018/2 | 19 Nov 2018 | 3,10 | 1:1 | 187 | 0 | 187 | 4 | 0 | 0 | 183 | 0 | 183 | 1,59 | 236 | 11 |
| ESOP 2017 | 2018 | 19 Nov 2018 | 3,10 | 1:1 | 478 | 0 | 478 | 0 | 0 | 0 | 478 | 0 | 478 | 1,59 | 614 | 29 |
| **Total** | | | | | **4.859** | **1.382** | **1.165** | **71** | **0** | **0** | **2.476** | **0** | **2.476** | | **5.157** | **933** |

[1] The tranches affected by the December 2004 capital reduction had a subscription ratio of 2:1.
[2] Cumulative staff costs are calculated until the end of holding period.

All option tranches issued are exercisable only in return for shares. Authorized Capital I through IV and VI, and Conditional Capital VIII were adopted to fulfill exercise of options issued.

Tranches issued since 25 August 2006 have a term of ten years. Half of the options under the "ESOP 2006" and "ESOP 2009" plans may be exercised a minimum of two years after the issue date. Another 25% are exercisable one year thereafter, and the remaining 25% in another year's time thereafter. All of the options of the "2006/3" tranche are exercisable after two years. All options since the "ESOP 2016", "ESOP 2017" and "ESOP 2018" plan may be exercised a minimum of four years after issuance. The subscription rights may be exercised on condition that the applicable reference price exceeds the exercise price by more than 1/240th per month for the number of full months between the date on which the option is issued and the onset of the respective exercise period in the previous month.

The weighted average remaining term of all tranches outstanding is 8.49 years. The exercise prices of all outstanding tranches range from €2.34 and €16.45.

An overview of weighted average exercise prices is given below:

| (Exercise price, weighted, in €) | 2018 | 2017 |
|---|---|---|
| Options outstanding as of 1 Jan | 3,90 | 3,48 |
| Options granted in the reporting period | 3,10 | 4,97 |
| Options forfeited in the reporting period | 3,55 | 2,79 |
| Options expired in the reporting period | 17,25 | 18,25 |
| Options exercised in the reporting period | - | - |
| Options outstanding as of 31 Dec | 3,53 | 3,90 |
| Options exercisable as of 31 Dec | - | - |

All tranches issued since 30 September 2003 are valued in accordance with the requirements of IFRS 2. When determining the fair value of these options, assumptions must be made. 4SC AG uses the "Black and Scholes model" for option valuation. The following assumptions were made for the new options issued during the reporting year and in previous years:

| Tranche | Expected duration (years) | Market price (€) | Volatility in % | Risk-free interest rate in % |
|---|---|---|---|---|
| 2018/1 | 2.90 | 3.17 | 69.76% | -0.56% |
| 2018/2 | 3.75 | 3.17 | 69.76% | -0.43% |
| 2017 | 3.75 | 5.27 | 68.06% | -0.54% |
| 2016 | 3.75 | 2.34 | 68.98% | -0.71% |
| 2011 | 3.75 | 6.80 | 67.89% | 0.81% |
| 2010 | 3.75 | 15.48 | 29.98% | 1.37% |
| 2009 | 3.75 | 16.15 | 40.17% | 1.89% |

The market price is the closing price of a 4SC share in the XETRA system of the Frankfurt Stock Exchange. The volatility is the 250-day volatility of 4SC shares as it is expected to reflect the actual share price performance better than market volatility. The risk-free interest rate is the one for German government bonds with a comparable residual maturity. There are no dividend payments to be expected. All assumptions were valid on the day of the respective option issue.

# 9 Remuneration of the Management Board and the Supervisory Board

## 9.1 MANAGEMENT BOARD

The total remuneration paid to the members of the Management Board amounted to €669 thousand (2017: €539 thousand) in the reporting year. Of this total amount, € null (2017: € null) represents contributions to defined contribution plans according to IAS 19.7. Pro-rated staff costs attributable to options included in overall remuneration amounted to €244 thousand for the reporting year (2017: €126 thousand).

Individual Management Board member remuneration for the reporting year breaks down as follows:

| (In € 000's) | Fixed | | Variable | | Staff costs arising from options | | Total | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 |
| Jason Loveridge, Ph.D. | 340 | 340 | 85 | 73 | 244 | 126 | 669 | 539 |

The following overview shows the stock options held by the member of the Management Board as of the 31 December 2018 reporting date.

| (Number of stock options) | 1 Jan 2018 | Additions | Expired | Exercised | 31 Dec 2018 (= maximum number of shares available) |
|---|---|---|---|---|---|
| Jason Loveridge, Ph.D. | 300,000 | 500,000 | 0 | 0 | 800,000 |

In addition to 300,000 stock options that were issued to the member of the Management Board under the "ESOP 2016" stock option program in the 2016 financial year, a total of 500,000 stock options were issued to the member of the Management Board under the "ESOP 2016" stock option program in the 2018 financial year.

In addition to the fixed remuneration, of which a percentage is paid out at the end of each month, current benefits owed to the member of the Management Board resulting from a portion of the variable remuneration totaled €25 thousand as of 31 December 2018 (2017: €31 thousand).

For the Management Board member Jason Loveridge, Ph.D., an agreement was included in his directors' contract in the context of his appointment, stipulating that in the event of a takeover by a third party and if the Management Board is to be dissolved as a result, his salary (fixed salary plus Bonus I and II) would be fully paid out for the remaining term of his contract, but for a minimum mathematical remaining period of 6 months. Furthermore, in the event that a controlling interest is acquired in the Company and for the contractual termination of the employment relationship the regulations on the expiry of stock options for the Management Board member are rescinded, i.e. all stock options issued to the member of the Management Board up to the contingent termination date would remain with the Management Board member regardless of the termination of his employment. Apart from this, there are no post-employment or termination benefits owed to the Management Board member.

As of the reporting date, the member of the Company's Management Board was also member of the following control bodies and Supervisory Boards:

Jason Loveridge, Ph.D.

- Member of the Supervisory Board of JDS BioPharma Pty Ltd., Perth, Australia
- Managing Director of Warambi Sarl, Paris, France
- Managing Director of Warambi Ltd., Swansea, United Kingdom

## 9.2 SUPERVISORY BOARD

The total remuneration paid to the members of the Supervisory Board amounted to €188 thousand (2017: €186 thousand). Individual Supervisory Board member remuneration for the reporting year breaks down as follows:

| (In € 000's) | Main occupational activity | Remuneration 2018 | Remuneration 2017 |
|---|---|---|---|
| Clemens Doppler, Ph.D. (Chairman since 19 Sep 2014) | • Partner & Managing Director of HeidelbergCapital Asset Management GmbH, Heidelberg, Germany | 48 | 48 |
| Joerg von Petrikowsky (Deputy Chairman since 18 Jun 2016) | • German public auditor and tax consultant | 40 | 40 |
| Irina Antonijevic, M.D., Ph.D. | • VP Translational Medicine and Development, Wave Life Sciences, Cambridge, MA, USA | 26 | 25 |
| Helmut Jeggle | • COO / Managing Director of Athos Service GmbH, Munich, Germany | 18 | 18 |
| Prof. Helga Rübsamen-Schaeff, Ph.D. | • Chair of the Scientific Advisory Board of AiCuris GmbH & Co. KG, Wuppertal, Germany | 28 | 28 |
| Manfred Rüdiger, Ph.D. | • Managing Director/CEO of catalYm GmbH, Munich, Germany | 28 | 27 |
| **Remuneration of the Supervisory Board** | | **188** | **186** |

The following overview shows the shares held by members of the Supervisory Board as of the 31 December 2018 reporting date.

| Number of shares | 1 Jan 2018 | Purchase | Sale | 31 Dec 2018 |
|---|---|---|---|---|
| Clemens Doppler, Ph.D. | 7,923 | 0 | 0 | 7,923 |
| Prof. Helga Rübsamen-Schaeff, Ph.D. | 3,700 | 0 | 0 | 3,700 |
| Manfred Rüdiger, Ph.D. | 2,500 | 0 | 0 | 2,500 |
| **Total** | **14,123** | **0** | **0** | **14,123** |

As of the reporting date, the members of the Company's Supervisory Board were also members of the following control bodies and Supervisory Boards:

Clemens Doppler, Ph.D.

- Merlion Pharmaceuticals Inc., Berlin, Germany / Singapore, member of the Supervisory Board
- Nanogate AG, Quierschied-Göttelborn, Germany, member of the Supervisory Board
- vasopharm GmbH, Würzburg, Germany, member of the Advisory Board

Helmut Jeggle

- AFFiRiS AG, Vienna, Austria, member of the Supervisory Board
- APK ALUMINIUM UND KUNSTSTOFFE AG, Merseburg, Germany, member of the Supervisory Board
- BioNTech AG, Mainz, Germany, Chairman of the Supervisory Board
- Sidroga AG, Zoffingen, Switzerland, President of the Administrative Board
- SiO2 Medical Products Inc., Auburn, Alabama, USA, member of the Supervisory Board
- Solaris Pharma Corporation, Bridgewater, New Jersey, USA, member of the Supervisory Board

Prof. Helga Rübsamen-Schaeff, Ph.D.

- AiCuris GmbH & Co. KG, Wuppertal, Germany, Chairman of the Scientific Advisory Boards
- E. Merck KG, Darmstadt, Germany, member of the Board of Partners, Chairman of the Research Advisory Board
- Merck KGaA, Darmstadt, Germany, member of the Supervisory Board
- Bonn University Clinic, Bonn, Germany, member of the Supervisory Board

Manfred Rüdiger, Ph.D.

- Apceth GmbH & Co. KG, Munich, Germany, Chairman of the Advisory Board
- ALS Investment Fund, Amsterdam, The Netherlands, Member of the Advisory Board

Irina Antonijevic, M.D., Ph.D.

- Paion AG, Aachen, Germany, member of the Supervisory Board

Joerg von Petrikowsky did not hold any positions in other control bodies or Supervisory Boards as of the reporting date.

# 10 Other information

## 10.1 RELATED PARTY TRANSACTIONS

4SC was engaged in the following significant business transactions with related parties in the period from 1 January to 31 December 2018:

### 10.1.1 BIONTECH AND BIONTECH SMALL MOLECULES (OTHER RELATED PARTIES)

4SC maintains legal relations with BioNTech and its subsidiary BioNTech Small Molecules, which are both members of the Santo Holding (Deutschland) GmbH Group, Holzkirchen, Germany. On 17 December 2012, a licensing agreement was concluded for TLR drug candidates. Under the agreement, 4SC Discovery received an upfront payment of €2,500 thousand from BioNTech and was granted the right to receive subsequent performance-based payments on achievement of specific sales milestones and to royalties. Furthermore, at the start of 2013, a service partnership was launched at standard market terms in which 4SC Discovery was to identify new small-molecule, anti-cancer compounds for defined therapeutic targets on behalf of BioNTech and optimize these further for BioNTech.

The operations of 4SC Discovery were sold to BioNTech Small Molecules for €650 thousand as of 29 April 2016. In addition, and without financial compensation, 4SC is granted the right to temporarily utilize research services provided by BioNTech Small Molecules worth a person year. In this context, a service and materials agreement as of 1 May 2016 for net €34 thousand (2017: €29 thousand) was signed with BioNTech Small Molecules. As of the balance sheet date, this resulted in net liabilities of €1 thousand (31 December 2017: € null), which were paid in February 2019.

In 2018, the transaction volume with BioNTech was at €22 thousand (2017: €87 thousand) and with BioNTech Small Molecules at €3 thousand (2017: €52 thousand). There were no receivables as of the reporting date with BioNTech (31 December 2017: € null). With BioNTech Small Molecules, receivables on 31 December 2018 were at €1 thousand (31 December 2017: €13 thousand). The outstanding receivables from BioNTech Small Molecules as of the reporting date were paid in January 2019.

### 10.1.2 OTHER RELATED PARTY TRANSACTIONS

Beyond this, there were no further business transactions with related parties in the reporting period where the transaction volume in each case exceeded €1 thousand or where the total annual transaction volume is likely to exceed €1 thousand. No liabilities existed from these transactions as of 31 December 2018.

## 10.2 CORPORATE GOVERNANCE CODE PURSUANT TO SECTION 285 NO. 16 GERMAN COMMERCIAL CODE

On 15 February 2019, the Company's Management Board and Supervisory Board declared in accordance with Section 161 German Stock Corporation Act (Aktiengesetz, AktG) that they are in compliance, with a few exceptions, with the recommendations of the "Government Commission on the German Corporate Governance Code" issued by the Federal Ministry of Justice. The declarations of compliance were made permanently available to the public on the same day on the website www.4sc.com.

## 10.3 REPORTABLE EQUITY INVESTMENT PURSUANT TO SECTION 160(1) NO. 8 GERMAN STOCK CORPORATION ACT

The following table shows the principal shareholders of 4SC AG who – on the basis of the notifications received by the Company in accordance with Sections 21 ff. of the German Securities Trading Act (Wertpapierhandelsgesetz, WpHG) – hold more than 3% of the Company’s shares. The figures given in each case refer to the last published notification. The actual status at 31 December 2018 may differ from these amounts, however.

| Notifying entity | Date of notification | Voting share |
|---|---|---|
| Wellington Partners Advisory AG, Zurich, Switzerland,<br>Wellington Partners Management Limited, St. Helier, Jersey, United Kingdom,<br>Wellington Partners Ventures IV Life Science Fund L.P., Edinburgh, United Kingdom | 14 Jul 2017 | 4.54%[1] |
| First Capital Partner GmbH, Gräfelfing, Germany<br>WE Vermögensverwaltungs GmbH & Co. KG, Gräfelfing, Germany,<br>WE Verwaltung GmbH, Gräfelfing, Germany,<br>Wolfgang Egger, Germany | 19 Dec 2017 | 6.05%[1] |
| ATS Beteiligungsverwaltung GmbH, Munich, Germany | 13 Jul 2017 | 19.58%[1] |
| Santo Holding (Deutschland) GmbH, Holzkirchen, Germany | 9 Jul 2012 | 41.48%[1] |

[1] Based on an estimate of the management, the shares as of 31 December 2018 were as follows:

| | |
|---|---|
| Wellington Partners Ventures IV Life Science Fund L.P., Edinburgh, United Kingdom | 4.5% |
| First Capital Partner GmbH, Gräfelfing, Germany | 6.0% |
| ATS Beteiligungsverwaltung GmbH, Munich, Germany | 20.9% |
| Santo Holding (Deutschland) GmbH, Holzkirchen, Germany | 37.5% |

### 10.4 AUDITOR'S FEES PURSUANT TO SECTION 314(1) NO. 9 GERMAN COMMERCIAL CODE

On 17 May 2018, the Company's Annual General Meeting appointed Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Nymphenburgerstrasse 3b, 80335 Munich, Germany, to serve as the auditor of the 2018 financial statements.

| (In € 000's) | 2018 | 2017 |
|---|---|---|
| Auditing services | 76 | 88 |
| Other verification services | 4 | 4 |
| Other services | 0 | 66 |
| **Total fee billed** | **80** | **158** |

### 10.5 AVERAGE NUMBER OF EMPLOYEES

The average number of employees developed as follows:

| (Headcount) | 2018 | 2017 |
|---|---|---|
| Annual average number of employees, excluding Management Board and executive management | 45 | 46 |

The average number of employees (excluding the Management Board of 4SC AG) during 2018 was 45 (2017: 46).

Of these 45 employees (excluding the Management Board and the executive management), 34 worked in research and development (2017: 33), 10 in sales and administration (2017:12) and 1 in information technology (2017: 1).

## 11 Events after the reporting period

4SC had announced the following event by the time these financial statements were prepared:

- The Phase II study EMERGE of domatinostat plus checkpoint inhibitor avelumab in up to 70 patients with advanced-stage gastrointestinal cancer opened for recruitment in January 2019 and in February 2019 the first patient was enrolled. This investigator-sponsored study is conducted by Prof. David Cunningham, MD FRCP FMedSci, Head of the Gastrointestinal and Lymphoma Unit and Director of Clinical Research at The Royal Marsden NHS Foundation Trust (London, UK).
- The Data Safety Monitoring Board (DSMB), an independent committee of clinical and drug safety experts, in January 2019 again recommended continuation of the ongoing pivotal RESMAIN study of resminostat in advanced-stage CTCL without modification of the study protocol. The DSMB reviewed cumulative safety data after 100 patients have been enrolled and completed at least one treatment cycle.
- In January 2019, the first patient was enrolled in the third dose cohort of the ongoing Phase Ib/II study SENSITIZE of domatinostat in advanced-stage melanoma.

Planegg-Martinsried, Germany, 11 March 2018

Jason Loveridge, Ph.D.
Sole Managing Director

# INDEPENDENT AUDITOR'S REPORT

*Note: This is a convenience translation of the German original. Solely the original text in German language is authoritative.*

To 4SC AG, Planegg-Martinsried, Munich County

## REPORT ON THE AUDIT OF THE ANNUAL FINANCIAL STATEMENTS AND THE MANAGEMENT REPORT

### Audit Opinions

We have audited the annual financial statements of 4SC AG, Planegg-Martinsried, Munich County, comprising the balance sheet as of December 31, 2018, the income statement for the fiscal year from January 1, 2018 through December 31, 2018, the cash flow statement and the statement of changes in equity for the fiscal year from January 1, 2018 through December 31, 2018 as well as the notes to the annual financial statements, including a summary of significant accounting and valuation methods. In addition, we have audited 4SC AG's management report for the financial year from January 1, 2018 through December 31, 2018.

In our opinion, on the basis of the knowledge obtained during the audit,

- the attached standalone financial statements comply, in all material respects, with the IFRS as adopted by the EU, and the additional requirements of German commercial law pursuant to Art. 325 Sec. 2a HGB (German Commercial Code) in conjunction with Art. 315e Sec. 1 HGB and provides, in compliance with these requirements, a true and fair view of the Company's assets, liabilities, and financial position as of December 31, 2018, and of its profit situation for the fiscal year from January 1, 2018 through December 31, 2018; and
- the attached management report as a whole provides a true and fair view of the Company's position. In all material respects, this management report is consistent with the standalone financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of the Company's future development.

Pursuant to Art. 322 Sec. 3 sentence 1 HGB, we declare that our audit has not led to any reservations relating to the standalone financial statements' and the management report's legal compliance.

### Basis for the audit opinions

We conducted our audit of the standalone financial statements and of the management report in accordance with Art. 317 HGB and the EU Audit Regulation (No. 537/2014, hereinafter referred to as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the *Institut der Wirtschaftsprüfer* (Institute of Public Auditors in Germany; "IDW"). Our responsibilities under those requirements and principles are further described in the sections "Auditor's Responsibilities for the Audit of the Standalone Financial Statements and of the Management Report" in our auditor's report. We are independent from the Company in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. Furthermore, we declare in accordance with Article 10 Sec. 2 lit. f) of the EU Audit Regulation, that we have not provided any non-audit services prohibited under Article 5 Sec. 1 of the EU Audit Regulation. We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the standalone financial statements and on the management report.

### Key Audit Matters in the Audit of the Standalone Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the standalone financial statements for the fiscal year from January 1, 2018 through December 31, 2018. These matters have been taken into account in connection with our audit of the standalone financial statements as a whole, and in forming our audit opinion related herewith; we do not provide a separate audit opinion on these matters.

From our perspective, the following matters were of most significance during our audit:

- Revenue recognition for license agreements
- Examination of the completeness of accrued liabilities for outstanding invoices of contract research organizations

We have structured our presentation of these key audit matters as follows:

1. Facts and problems
2. Audit approach and findings
3. Reference to further information

In the following, we will present these key audit matters:

### I. Revenue recognition for license agreements

1. 4SC AG's business model aims to generate revenue from license agreements (depending on the contract structure in the form of advance payments, milestone payments, reimbursements of costs within the scope of development cooperation and sales participation) and the sale of products. In 4SC AG's standalone financial statements, the statement of comprehensive income shows sales revenues in the amount of EUR 4.2 million, whereas EUR 4.0 million is attributable to license revenues. Date and scope of the revenue recognition are based upon complex, not standardized contracts. Furthermore, there have been effects from the first-time application of the new revenue recognition standard "IFRS 15 – revenues from contracts with customers". In light of this, the correct application of the accounting standard – in particular the determination of contractual obligations, the evaluation of the type of a confirmed license and the date or period of revenue recognition – can be considered as complex. Hence, there is an increased risk of misstatements in the accounting records.

2. We have assessed the processes and controls implemented by the Company for the recognition of revenues. Our further audit approach includes substantial audit procedures. We have convinced ourselves from the correct recognition of sales by means of the contractual agreements and obtained an understanding of the transacttions by means of relevant documents and explanations provided by 4SC AG's staff. Furthermore, we audited the interpretation of contracts and the legal representatives' discretionary decisions resulting therefrom which affect the amount and date of revenue recognition. Our audit procedures did not result in any objections as to revenue recognition.

3. The Company's statements on the revenue recognition's particularities in 4SC AG's standalone financial statements are contained in the notes on accounting and valuation methods in Sections 2.3.17 "Revenue recognition" and 3.1 "Revenue". The cumulative effect of the first-time application of IFRS 15 – revenue from contracts with customers" is presented in Section 2.2.1.

### II. Examination as to the completeness of deferred liabilities for outstanding invoices of contract research organizations

1. The scope of research and development costs mainly reflects development activities in connection with the Company's three main products. From our perspective, the recognition of such research and development costs and the related deferred liabilities for outstanding invoices of clinical research organizations (CROs) in the balance sheet was a particularly important audit issue. Such activities are performed, to a major extent, by external service providers; therefore, it must be documented to what extent the commissioned services have already been used. This is subject to considerable uncertainties and requires estimates which might have an impact on the relevant provision's recognition and amount and as such on the assets and the profit situation.

2. In order to audit the completeness of such used services, we have evaluated the processes and controls implemented by the Company. We have examined the correct accrual of liabilities and the completeness of research and development costs by means of the contractual agreements and obtained an understanding of the transactions and the exercise of discretionary decisions by means of relevant documents and explanations provided by 4SC AG's staff. Furthermore, we examined the completeness of accrued liabilities as of the balance sheet date by examining invoices received after the balance sheet date on a random basis. Our audit procedures did not result in any reservations as to the completeness of accrued liabilities for outstanding invoices of clinical research organizations.

3. The Company's statements on 4SC AG's research and development costs are contained in the Notes' Section 3.5 "Research and development costs" and in Section 6.11 "Other liabilities".

### Other information

The legal representatives and the supervisory board are responsible for other information. Other information comprises:

- the remaining parts of the annual report other than the audited standalone financial statements and the management report as well as our auditor's report,
- declaration on corporate governance pursuant to Art. 289f HGB,
- the Corporate Governance Report pursuant to No. 3.10 of the German Corporate Governance Code.

Our audit opinions on the standalone financial statements and on the consolidated management report do not cover other information, and consequently we do not express an audit opinion or any other form of audit conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in doing so, to assess whether the other information

- is materially inconsistent with the standalone financial statements, with the consolidated management report or our knowledge obtained during the audit; or
- otherwise seems to have been materially misstated.

### Responsibilities of the Legal Representatives and the Supervisory Board for the Standalone Financial Statements and the Management Report

The legal representatives are responsible for the preparation of the standalone financial statements that comply, in all material respects, with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Art. 325 Sec. 2a HGB in conjunction with Art. 315e Sec. 1 HGB and that the standalone financial statements, in compliance with these requirements, provide a true and fair view of the Company's assets, liabilities, financial position, and profit situation. Furthermore, the legal representatives are responsible for such internal controls they have determined, in accordance with German Generally Accepted Accounting Principles (German GAAP), as being necessary in order to provide for the preparation of standalone financial statements that are free from material misstatements, whether due to fraud or error.

In preparing the standalone financial statements, the legal representatives are responsible to assess the Company's ability to continue as a going concern. They also have the responsibility to disclose, as applicable, matters related to the continuation as a going concern. Furthermore, they are responsible for financial reporting based on the going concern principle unless they intend to liquidate the Company or to discontinue business operations or in case there is no realistic alternative but to do so.

Furthermore, the legal representatives are responsible for the preparation of the management report that, as a whole, provides a true and fair view of the Company's position and is, in all material respects, consistent with the standalone financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. Furthermore, the legal representatives are responsible for such arrangements and measures (systems) they have deemed necessary in order to provide for the preparation of a management report that is in accordance with applicable German legal requirements, and in order to provide sufficiently appropriate evidence for the assertions in the management report.

The supervisory board is responsible to monitor the Company's financial reporting process for the preparation of the standalone financial statements and of the management report.

### Auditor's Responsibilities for the Audit of the Standalone Financial Statements and of the Management Report

Our objective is to obtain reasonable assurance as to whether the standalone financial statements as a whole are free from any material misstatements, whether due to fraud or error, and whether the management report as a whole presents a true and fair view of the Company's position and is, in all material respects, consistent with the standalone financial statements and the knowledge obtained during the audit, complies with German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the standalone financial statements and on the management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Art. 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the IDW will always detect any material misstatement. Misstatements can arise from fraud or error and are considered material if they, individually or in the aggregate, could reasonably be expected to influence the economic decisions of users taken on the basis of these standalone financial statements and the management report.

Throughout the entire audit, we exercise professional judgment and maintain professional skepticism. We also:

- identify and assess the risks of material misstatements in the standalone financial statements and the management report, whether due to fraud or error, plan and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting any material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls;

- obtain an understanding of the internal control system relevant for the audit of the standalone financial statements and of arrangements and measures relevant for the audit of the management report in order to plan audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of the Company's systems;
- evaluate the appropriateness of accounting policies used by the legal representatives and the reasonableness of estimates made by the legal representatives as well as the related disclosures;
- draw conclusions on the appropriateness of the legal representatives' application of the going concern principle and, based on the audit evidence obtained, whether a material uncertainty exists in connection with events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the standalone financial statements and in the management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern;
- evaluate the overall presentation, structure and content of the standalone financial statements, including the disclosures, and whether the standalone financial statements present the underlying transactions and events in a manner that the standalone financial statements provide a true and fair view of the Company's assets, liabilities, financial position and profit situation in compliance with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Art. 325 Sec. 2a HGB;
- obtain sufficiently appropriate audit evidence regarding the Company's accounting information or business activities in order to express audit opinions on the standalone financial statements and on the management report. We are responsible for the direction, supervision and performance of the audit. We remain solely responsible for our audit opinions;
- evaluate the consistency of the management report with the standalone financial statements, its conformity with German law, and its presentation of the Company's position;
- perform audit procedures on the prospective information presented by the legal representatives in the management report. On the basis of sufficiently appropriate audit evidence we evaluate, in particular, the significant assumptions used by the legal representatives as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the underlying assumptions. There is a substantial unavoidable risk that future events will differ significantly from the prospective information.

We discuss with those charged with governance, inter alia, the planned scope and timing of the audit and significant audit findings, including any deficiencies in the internal control system we identify during our audit.

We also provide those charged with governance with a declaration that we have complied with the relevant independence requirements, and discuss with them all relationships and other circumstances that may reasonably be expected to affect our independence, as well as the related protective measures taken in this regard.

From the circumstances discussed with those charged with governance, we determine those matters that were of most significance in the audit of the standalone financial statements of the current reporting period and therefore constitute key audit matters. We describe these circumstances in our auditor's report unless any law or other regulation precludes the circumstance's public disclosure.

## OTHER LEGAL AND REGULATORY REQUIREMENTS

### Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as auditor by the annual general meeting on May 17, 2018. We were engaged by the supervisory board on December 12, 2018. We have been the auditor of 4SC AG, Planegg-Martinsried, Munich County, without interruption since the fiscal year 2013.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

### RESPONSIBLE AUDITOR

The German Public Accountant responsible for the audit is Fabian Grigo.

Munich, dated 11 March 2018

**Baker Tilly GmbH & Co. KG**
**Wirtschaftsprüfungsgesellschaft (Düsseldorf)**

| | |
|---|---|
| Hund | Grigo |
| Wirtschaftsprüfer | Wirtschaftsprüfer |
| [German Public Auditor] | [German Public Auditor] |

# RESPONSIBILITY STATEMENT

„To the best of my knowledge, and in accordance with the applicable reporting regulations, the annual financial statements give a true and fair view of the assets, liabilities, financial position and profit and loss of the Company, and the combined management report includes a fair review of the development and performance of the business and the position of the Company, together with a description of the material opportunities and risks associated with the expected development of the Company."

Planegg-Martinsried, Germany, 11 March 2018

Jason Loveridge, Ph.D.
Sole Managing Director

# EXCERPT FROM THE ANNUAL FINANCIAL STATEMENTS OF 4SC AG (HGB)

## FOR THE FINANCIAL YEAR FROM 1 JANUARY TO 31 DECEMBER 2018

### INCOME STATEMENT

| (In € 000's) | 2018 | 2017 |
|---|---|---|
| Revenue | 4,272 | 2,630 |
| Other operating income | 292 | 313 |
| **Total revenue and income** | **4,564** | **2,943** |
| Cost of materials | | |
| Cost of raw materials, consumables and supplies | 0 | -2 |
| Cost of purchased services | -172 | -245 |
| Personnel expenses | -4,150 | -4,053 |
| Depreciation, amortization and write-downs | -840 | -822 |
| Other operating expenses | -15,941 | -10,485 |
| **Total expenses** | **-21,103** | **-15,607** |
| Other interest and similar income | 0 | 27 |
| Interest and similar expenses | -1 | -1 |
| **Net finance income/loss** | **-1** | **26** |
| Cost of loss absorption | 0 | 1,217 |
| Taxes on income | -94 | -33 |
| **Profit/loss after taxes = Net loss for the year** | **-16,634** | **-11,453** |
| Loss brought forward | -163,530 | -152,077 |
| **Accumulated deficit** | **-180,164** | **-163,530** |

## BALANCE SHEET

| (In € 000's) | 31 Dec 2018 | 31 Dec 2017 |
|---|---|---|
| *Assets* | | |
| **Fixed assets** | | |
| Intangible assets | 5,057 | 5,795 |
| Tangible fixed assets | 590 | 570 |
| Long-term financial assets | 9 | 9 |
| **Total fixed assets** | **5,656** | **6,374** |
| **Current assets** | | |
| Receivables and other assets | 892 | 622 |
| Cash-in-hand and bank balance | 25,036 | 41,317 |
| **Total current assets** | **25,928** | **41,939** |
| **Prepaid expenses** | **182** | **109** |
| **Total assets** | **31,766** | **48,422** |
| | | |
| *Equity and liabilities* | | |
| **Equity** | | |
| Subscribed capital | 30,649 | 30,649 |
| Capital reserves | 178,028 | 178,028 |
| Accumulated deficit | -180,164 | -163,530 |
| **Total equity** | **28,513** | **45,147** |
| **Provisions** | **1,620** | **1,434** |
| **Liabilities** | | |
| Trade accounts payable | 1,120 | 1,175 |
| Other liabilities | 513 | 666 |
| **Total liabilities** | **1,633** | **1,841** |
| **Total equity and liabilities** | **31,766** | **48,422** |

The balance sheet and the income statement are excerpts from the full annual financial statements of 4SC AG. These annual financial statements were audited by Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Munich, Germany, and issued with an unqualified auditor's report.

The full annual financial statements of 4SC AG are disclosed in the German Federal Gazette. The full annual financial statements can also be solicited from 4SC AG, Corporate Communications & Investor Relations, Fraunhoferstrasse 22, 82152 Planegg-Martinsried, Germany.

# GLOSSARY

### CHECKPOINT INHIBITOR

The immune system has a series of mechanisms to prevent excessive defense reactions. Cancer cells misuse these so-called checkpoints (such as PD-1 and PD-L1) to override the immune defense set up against them. This is where checkpoint inhibitors come in. They inhibit signaling pathways and enable the immune system to attack cancer cells.

### CLINICAL DEVELOPMENT

The performance of studies on patients in order to advance a drug candidate to market approval.

### COMBINATION THERAPY

Use of two or more compounds to treat an illness.

### CTCL

Cutaneous T-cell lymphoma, specific type of blood cancer in which certain white blood cells (T cells) multiply uncontrollably, primarily affecting the skin.

### EPIGENETICS

Regulation of when and to what degree genes in the cells are switched on and off. The same genetic information is contained in both skin and heart cells, for example, but different genes are active, ensuring that the cells perform different functions.

### FIRST-LINE THERAPY

The first therapy used to treat the patient following diagnosis.

### HDAC

Histone deacetylase. HDACs are epigenetically active enzymes that among other things modify histones by removing acetyl groups from them. The HDACs thereby enable a greater or lesser degree of expression of certain genes. The development of HDAC inhibitors holds enormous potential in the fight against cancer.

### HISTONES

“Packaging” proteins around which DNA is wrapped in the cell nucleus.

### IMMUNOTHERAPY

Form of treatment in which the immune system is targeted, e.g. for the therapy of cancer.

### INDICATION

Medical field of application for a compound.

### INHIBITOR

A blocking substance.

### MAINTENANCE THERAPY

Therapy prolonging the period patients are stable and not progressing after successful prior treatment.

### MELANOMA

Malign type of cancer that develops from pigment-containing skin cells.

### MERKEL-CELL CARCINOMA

Rare type of malign skin cancer.

### MONOTHERAPY

Patient treatment using a drug containing only a single active substance.

### ONCOLOGY

The scientific study of cancer.

### PD-1 / PD-L1

Cell surface receptors acting as an immune checkpoint with an important role in down-regulating the immune system.

### SECOND-LINE THERAPY

Treatment that is given when the initial treatment (first-line therapy) doesn’t work or stops working.

### SMALL-MOLECULE COMPOUNDS

Compounds with a low molecular weight. In some cases, their small size enables these compounds to penetrate directly into cells and take effect there. The vast majority of currently approved drugs are small-molecule compounds.

# 5-YEAR OVERVIEW 4SC – KEY FIGURES AT A GLANCE

## RESULTS OF OPERATIONS AND CASH FLOWS

| (In € 000's, unless stated otherwise) | **2018** | **2017** | **2016** | **2015** | **2014** |
|---|---|---|---|---|---|
| Revenue | 4,173 | 4,197 | 2,060 | 3,266 | 7,055 |
| *From continuing operations** | *4,173* | *4,197* | *2,060* | *2,296* | *3,778* |
| *From discontinued operations** | *0* | *0* | *278* | *970* | *3,277* |
| Operating profit/loss | -17,554 | -10,936 | -11,603 | -8,915 | -9,437 |
| *From continuing operations* | *-17,554* | *-10,936* | *-11,792* | *-7,915* | *-8,554* |
| *From discontinued operations* | *0* | *0* | *189* | *-1,000* | *-883* |
| Net profit for the year | *-17,659* | -10,960 | -11,166 | -9,228 | -9,696 |
| Earnings per share (basic and diluted) in €** | -0.58 | -0.45 | -0.59 | -0.64 | -0.95 |
| Monthly use of cash from operations (average) | -1,357 | 723 | 827 | 767 | 706 |
| Cash flows from financing activity | -8 | 39,953 | -1,500 | 28,773 | 6,778 |

* The Discovery & Collaborative Business activities were discontinued due to the sale of the key operating assets of 4SC Discovery in April 2016.
** Adjusted for the reverse stock split carried out in April 2015.

## FINANCIAL POSITION AND NET ASSETS, STAFF (at year-end)

| (In € 000's, unless stated otherwise) | **2018** | **2017** | **2016** | **2015** | **2014** |
|---|---|---|---|---|---|
| Equity | 28,452 | 44,693 | 15,273 | 26,428 | 2,050 |
| Equity ratio in % | 91.0 | 93.3 | 80.2 | 78.9 | 13.7 |
| Total assets | 31,256 | 47,913 | 19,055 | 33,492 | 14,934 |
| Cash balance/funds | 25,036 | 41,327 | 11,333 | 22,794 | 3,202 |
| | | | | | |
| Number of employees (incl. Management Board) | 47 | 48 | 49 | 67 | 66 |
| Number of full-time equivalents (incl. Management Board) | 42 | 43 | 44 | 58 | 57 |

# FINANCIAL CALENDAR

## 2019

| | |
|---|---|
| Annual Report 2018 | 20 March 2019 |
| Q1 Announcement 2019 | 18 April 2019 |
| Annual General Meeting 2019 | 24 May 2019 |
| Half-Year Report 2019 | 8 August 2019 |
| Q3 Announcement 2019 | 17 October 2019 |

# PUBLISHING INFORMATION

## EDITOR

4SC AG, Fraunhoferstrasse 22, 82152 Planegg-Martinsried, Germany

## 4SC ON THE INTERNET

More information about 4SC, its products and development programs, is available on the Company's website, www.4sc.com, as well as the following information:

- Previous reports on 4SC's progress and outlook
- Audio recordings of conference calls
- Presentations
- General investor information

## CORPORATE COMMUNICATIONS & INVESTOR RELATIONS

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## DISCLAIMER

This document contains certain forward-looking statements that are subject to risks and uncertainties that are described, with no claim to be exhaustive, in the section entitled "Report on opportunities and risks" in the combined management report. In many cases, these risks and uncertainties are outside of 4SC's control and may cause actual results to differ materially from those contemplated in these forward-looking statements. 4SC expressly does not assume any obligation for updating or revising forward-looking statements to reflect any changes in expectations or in events, conditions or circumstances on which such statements are based.

4SC