

6-MONTH CONSOLIDATED FINANCIAL REPORT 2016

# EpiScience for Life

4SC

## ABOUT THIS REPORT

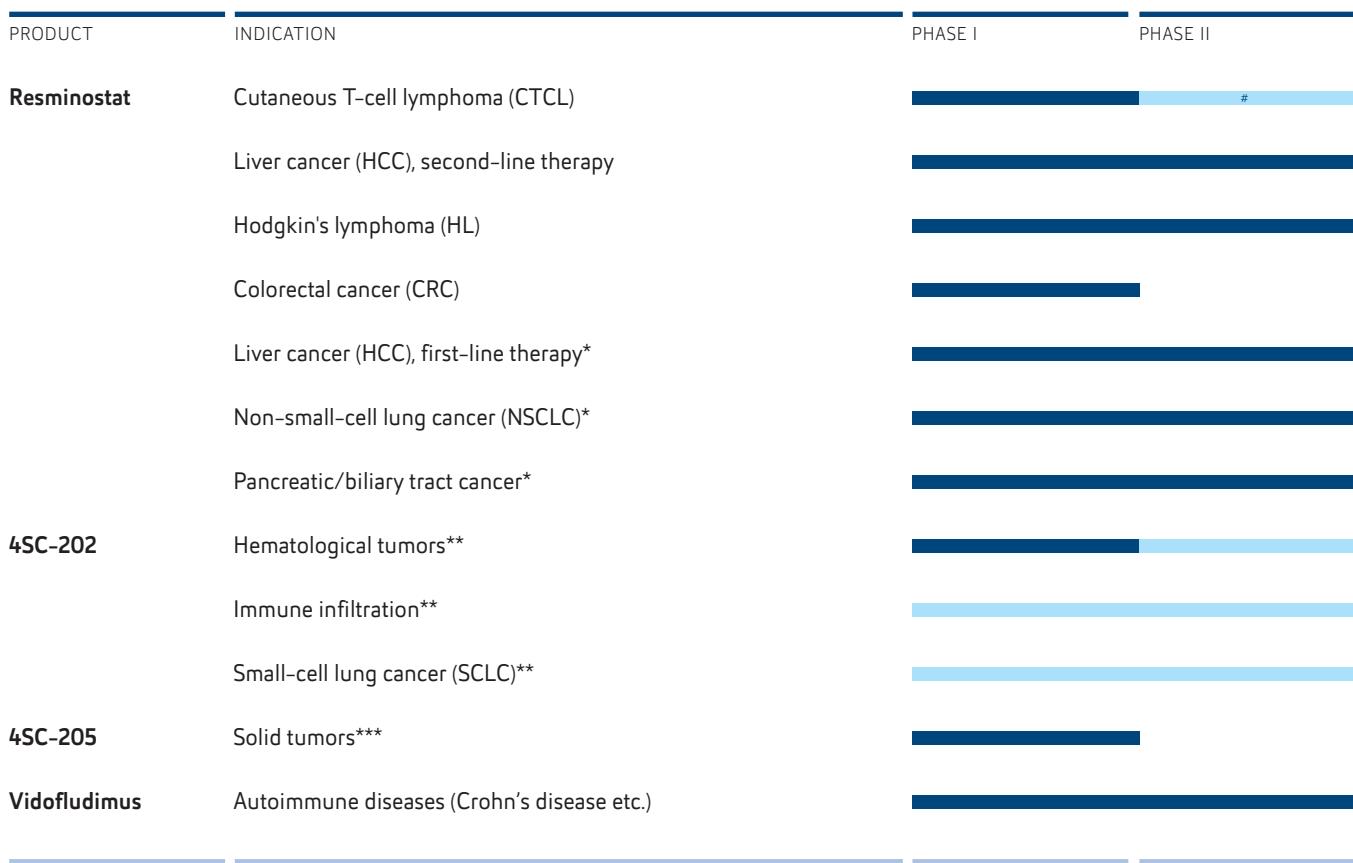
This 6-month interim report is comprised of the interim Group management report and the condensed consolidated interim report of 4SC AG ("4SC Group" or "4SC") as of 30 June 2016, and complemented by a responsibility statement. The 6-month interim report should be read in conjunction with 4SC's Annual Report for the 2015 financial year and the 3-month Group Communication 2016.

The interim Group management report – in particular the report on expected developments – contains certain forward-looking statements that are subject to risks and uncertainties which are described, with no claim to be exhaustive, in the section entitled "Report on opportunities and risks" in the Annual Report 2015 and also in this

6-month interim 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 the parties' expectations or in events, conditions or circumstances on which such statements are based.

Compared with the previous year, 4SC focused the 6-month interim report more on presenting key developments that are relevant for evaluating the Company. 4SC is looking forward to receiving feedback – both positive and negative – on the new reporting format.

## PRODUCTS (As of 8 August 2016)



Completed or ongoing  
 In preparation or planned

\* Study conducted by Yakult Honsha in Japan

\*\* Study initiation subject to partnering or financing arrangement

\*\*\* Further development for China, Hong Kong, Taiwan and Macao out-licensed to Link Health

# Pivotal

## ABOUT 4SC

4SC (www.4sc.com) is a biotech company dedicated to the research and development of small-molecule drugs focused on epigenetic mechanisms of action for the treatment of cancers with high unmet medical needs. These drugs are intended to provide innovative treatment options for cancer that are more tolerable and efficacious than existing therapies, provide a better quality of life and offer increased life expectancy. The Company's pipeline

comprises promising products that are in various stages of clinical development. 4SC's aim is to generate future growth and enhance its enterprise value by entering into partnerships with pharmaceutical and biotech companies. Founded in 1997, 4SC had 50 employees as of 30 June 2016. 4SC has been listed on the Prime Standard of the Frankfurt Stock Exchange since December 2005.

## KEY FINANCIAL FIGURES AT A GLANCE

in € 000's unless stated otherwise

	Q2 2016	Q2 2015	Change	6M 2016	6M 2015	Change
<b>Results of operations and cash flows</b>						
Revenue	442	496	-11%	854	2,488	-66%
Operating profit/loss	-3,565	-2,370	-50%	-6,701	-3,703	-81%
Net profit/loss for the period	-3,534	-2,408	-47%	-6,639	-3,949	-68%
Earnings per share (basic and diluted, in €)	-0.19	-0.24	+21%	-0.35	-0.39	+10%
Monthly inflow (+)/use of (-) cash from operations (average)	-1,275	-500	-155%	-1,243	-599	-108%
Cash flows from financing activities	0	1,300	-100%	-1,500	1,300	-
 <b>Financial position and net assets, staff</b>						
Equity				19,789	-2,416	-
Equity ratio in %				79	-21	+100% points
Total assets				24,918	11,760	+112%
Cash balance/funds				13,798	908	+1,420%
Number of employees (incl. Management Board)				50	68	-26%
Number of full-time employees (incl. Management Board)				43.6	60	-27%

# KEY EVENTS IN Q2 2016 AND BEYOND

The key events mentioned here were each made public on the date specified via an ad hoc or press release. Details about these events can be found in the relevant

releases (available at [www.4sc.com](http://www.4sc.com)) and in the information on the course of business in this 6-month interim report.

## **RESMINOSTAT**

**27 May**

4SC provides headline results from Yakult Honsha's Phase II trial of resminostat in combination with sorafenib as first-line therapy in liver cancer

**16 June**

Resminostat boosts cancer immunotherapy: Promising scientific data open up new therapeutic combination options for the epigenetic anti-cancer compound resminostat

## **4SC-202**

**2 June**

4SC-202 and checkpoint inhibitors – strong partners in cancer treatment: 4SC-202's epigenetic mechanism of action makes tumors receptive to treatment with checkpoint inhibitors to which they would otherwise be resistant

## **4SC-205**

**31 May**

4SC enters into licensing and development partnership with Link Health for the anti-cancer compound 4SC-205 in China: Link Health is responsible for clinical development and regulatory process in China whereas 4SC receives upfront, milestone and royalty payments

## **GROUP**

**29 April**

4SC to focus on clinical development of epigenetics programs, sells operations of Discovery division

**20 July**

4SC forms international Scientific Expert Panel: Renowned experts in the fields of epigenetics and oncology to provide 4SC with guidance on research and its clinical value

# INTERIM GROUP MANAGEMENT REPORT

## 1. COURSE OF BUSINESS

### 1.1 ECONOMIC ENVIRONMENT

#### Macroeconomic development

In its most recent outlook, the International Monetary Fund (IMF) estimates that global economic growth will be +3.1% for 2016 as a whole, 0.3 percentage points less than the figure forecasted in January 2016. This decrease affects both the developed economies (+1.8%, compared with +2.1% in the January forecast) and the emerging market and developing countries (+4.1%, compared with +4.3%), though the growth rates in the individual countries will be quite mixed as usual. In the United States, mainly weaker consumer demand and lower investments in the energy sector led the IMF to cut its forecast from +2.6% to +2.2%. For Germany, the IMF experts anticipate a growth rate of +1.6%, compared with +1.7% in January. By contrast, the IMF's growth estimate for China is higher than in January (+6.6%, compared with +6.3%), mainly on the back of stronger consumer demand and very robust growth in the services sector. In Russia, the forecasted decrease in economic output widened from -1.0% to -1.2%, principally on account of the currency depreciation, lower oil prices, and sanctions imposed by other countries.

In its main scenario, the IMF estimates that the decision made by the United Kingdom at the end of June to leave the European Union (EU), known as "Brexit," will have only a very moderate impact on the global economy with a particular effect on the advanced economies in Europe. However, the IMF believes that the uncertainty that has arisen regarding the future economic relations between the United Kingdom and the EU and political developments in the EU itself will make a further reduction of the growth forecast for 2016 to 2.9% conceivable.

#### Developments in the pharma and biotech industry

In H1 2016, the sector indexes NASDAQ Biotechnology and DAXsubsector Biotechnology recorded substantial losses of -24% and -15%, respectively. The continued slide in pharmaceutical and biotech stock prices in the US equity markets since the middle of last year stems from market volatility caused in part by the political uncertainty that has arisen ahead of the US presidential

elections this November – particularly concerning the possibility that stricter price controls might be introduced in the US drug market. Even so, the trend in US biotech stocks stabilized in Q2 2016 (NASDAQ Biotechnology: +1%) – in spite of the Brexit referendum at the end of June. Nevertheless, large numbers of investors who are not specialized in the industry have likely become more cautious about biotech investments since the beginning of the year, among other things due to disappointing news from major industry players such as Biogen and Alexion Pharmaceuticals.

According to industry analysts BioCentury, biotech companies worldwide received funds of US-\$18 billion in H1 2016 – far less than half of the record US-\$109 billion that the industry garnered in 2015 as a whole.

According to figures from management consultants EY, funds amounting to €490 million flowed into German biotech companies in 2015, 45% more than in the previous year. However, the cash inflows in Germany are dwarfed by the US-\$61 billion raised in the United States in 2015, which exceeds the German volume by a factor of more than a hundred. EY believes that this imbalance is mainly attributable to the fact that the exceedingly small number of IPOs in the biotech industry often makes it very difficult for venture capitalists in Germany to exit an investment with success. Curetis was the only German biotech company to go public in 2015 (listed on the Euronext in Amsterdam), while 2016 to date has seen just one flotation by a German biotech company, BRAIN (listed on the Frankfurt Stock Exchange).

There was very little positive financing news from the German biotech sector in H1 2016. For example, AdrenoMed, which is unlisted, and Wilex, which trades on the Frankfurt Stock Exchange, successfully implemented capital increases.

### 1.2 BUSINESS REVIEW

In Q2 2016, 4SC continued to focus its activities on the clinical development of epigenetic substances.

#### 1.2.1 DEVELOPMENT SEGMENT

As of 30 June 2016, the Development segment comprised the oncology compounds resminostat, 4SC-202, 4SC-205, and the autoimmune candidate vidofludimus, with the two

epigenetic drug candidates resminostat and 4SC-202 at the forefront of in-house development.

## ONCOLOGY

### RESMINOSTAT

Resminostat is an orally administered epigenetic anti-cancer compound. As an inhibitor of HDAC (histone deacetylase) that selectively targets class I, IIB, and IV HDACs, resminostat reactivates e.g. silenced genes in cancer cells or downregulates excessively active areas. In addition to the direct effects, resminostat also enhances the body's own immune response to cancer.

Resminostat has the potential to be developed both as monotherapy and in combination with other drugs. The compound has been shown to be well tolerated and safe in Phase I studies, and its use in the treatment of cutaneous T cell lymphoma, Hodgkin's lymphoma and liver, lung, colon, pancreatic and biliary tract cancers is being investigated in clinical trials. Initial positive efficacy results for resminostat monotherapy have already been observed in patients with Hodgkin's lymphoma and in combination with the standard medication sorafenib in selected patients with advanced liver cancer.

4SC is currently making preparations for the RESMAIN Phase II clinical trial of resminostat in cutaneous T-cell lymphoma (CTCL). This trial will be conducted in Europe to examine whether resminostat as a maintenance therapy can delay or prevent the progression of the disease in patients with advanced CTCL who responded to prior systemic therapy. 4SC finalized the study design in Q1 2016, following scientific advice from the European Medicines Agency (EMA). Starting in Q4 2016, 150 patients in ten countries will be included at 50 trial centers for the randomized, placebo-controlled RESMAIN trial, and 4SC expects initial meaningful data to be available in 2019. If the results are positive, the Company plans to immediately submit this data to the relevant regulators for market approval.

Yakult Honsha Co., Ltd. (Yakult Honsha), 4SC's Japanese development partner, continues to make progress with the clinical development of resminostat. Of

particular importance in this context was the disclosure in Q2 2016 of the headline results from Yakult Honsha's Phase II trial of resminostat in combination with the cancer drug sorafenib as first-line therapy in Asian patients in Japan and South Korea with advanced liver cancer (HCC). The primary endpoint of statistically significant prolonged time to disease progression (TTP) compared to sorafenib monotherapy (currently the standard treatment for HCC) was not reached. Based on this result, Yakult Honsha will not conduct a corresponding pivotal follow-up study in the overall patient population.

However, Yakult Honsha is analyzing the results in more detail, and there are already initial indications for 4SC that patients in certain subgroups can benefit from the sorafenib/resminostat combination therapy when compared with sorafenib monotherapy. The conclusive findings are particularly important for 4SC because if the data are positive the Company intends to continue developing resminostat in the HCC indication also in Europe and the United States in the medium term. In this indication, the Company has already successfully completed a Phase II trial as second-line therapy and considers both the medical need and the market potential to be particularly high.

Menarini Asia-Pacific Holdings Pte. Ltd (Menarini AP), another 4SC development partner for resminostat, is currently reviewing the clinical development options in the Asia-Pacific region excluding Japan.

In June, 4SC presented current research results at the Cancer Immunotherapy and Combinations Symposium as part of the World Preclinical Congress in Boston, USA, showing that due to its epigenetic mechanism of action resminostat has potential as a combination therapy with already approved immunotherapies for cancer based on its ability to boost their efficacy. In an experiment, a non-Hodgkin's lymphoma cancer cell line was treated with both resminostat and the immunotherapeutic anti-cancer compound rituximab alone and with a combination of both drugs. While the individual treatment showed that substances individually boosted the destruction of the cancer cells by immune cells, when combined the effect more than tripled.

## 4SC-202

4SC-202 is an orally administered epigenetic anti-cancer compound with a unique mechanism of action. 4SC-202 works as a combined LSD1 (lysine-specific demethylase) and HDAC1, 2, 3 (histone deacetylase) inhibitor and causes a reactivation of deactivated genes or a downregulation of excessively active areas e.g. in cancer cells. By way of these epigenetic modifications, 4SC-202 inhibits the cells' Hedgehog and WNT signal pathways that play an important role in the development and metastasis of cancer. In addition to the direct effects, 4SC-202 also enhances the body's own immune response to cancer.

In a Phase I trial evaluating the compound in the treatment of advanced hematological and lymph node cancer, 4SC-202 proved to be safe and well tolerated. Encouraging signs of efficacy have also been observed. The disease sustainably regressed completely in one patient and partially in another.

To the best of 4SC's knowledge, 4SC-202 is the only blocker of the SMO protein-independent hedgehog pathway in clinical development and therefore could open up treatment options for those cancers for which other hedgehog inhibitors to date have not been effective or have shown a quick build-up of resistance. This constitutes an important and unique feature for 4SC-202. Since 4SC-202 differs markedly from resminostat in terms of both its mechanism of action and its chemical structure, and as the compounds' potential fields of therapy are dissimilar, 4SC-202 optimally extends and expands the 4SC clinical product pipeline.

Building on the results presented in Q1 2016, 4SC unveiled further clinical data at the ASCO conference in Chicago, USA, in June demonstrating that due to its epigenetic mechanism of action, 4SC-202 is an effective combination partner for checkpoint inhibitors when treating cancer. Tumors exploit these immune system "checkpoints," which can prevent excessive or misdirected defensive reactions, to switch off the immune response that specifically targets them. Checkpoint inhibitors obstruct the signaling pathways to "release the brakes" on the immune cells and enable

them to attack the cancerous tissue again. In a mouse model, 4SC showed that the combined use of checkpoint inhibitors and 4SC-202 caused tumors to shrink to a significantly greater extent than checkpoint inhibitors alone.

This extremely promising immunological data opens up additional possibilities for 4SC for the clinical development of 4SC-202, particularly to explore treatment strategies for patients with certain types of hematological, lung or skin cancer in mono- and combination therapy.

4SC is currently engaged in discussions with potential financing and industry partners to secure the further development of 4SC-202 in different Phase II clinical programs.

## 4SC-205

4SC-205 is an orally administered anti-cancer compound. 4SC-205 inhibits the kinesin spindle protein Eg5 (KIF11) which plays a key role in cancer cell division and growth.

In a Phase I trial of the treatment of solid tumors completed in 2015, 4SC-205 proved to be safe and well tolerated. As the only orally administered Eg5 inhibitor currently in clinical development, 4SC-205 can be taken daily at low doses. This ensures that the substance is steadily available in the body and can have a continuous effect. The dosing scheme also has a highly positive influence on the side effect profile. Serious adverse reactions of the peripheral nervous system known from drugs with a similar mechanism of action did not occur in association with 4SC-205.

Based on this, 4SC and Guangzhou LingSheng Pharma Tech Co., Ltd (Link Health) in May 2016 entered into a licensing and development partnership for the further development of 4SC-205 in Greater China (China, Hong Kong, Taiwan and Macao). Link Health now holds the exclusive licensing rights for the development and marketing of 4SC-205 in these countries, for which 4SC receives upfront and milestone payments totaling up to €76 million. In addition, 4SC will be entitled to double-digit royalties linked to product sales of 4SC-205 in China.

4SC will use Link Health's findings to advance the further development of 4SC-205 in other parts of the world as well, possibly also through additional partnerships.

## AUTOIMMUNE DISEASES

### VIDOFLUDIMUS

Vidofludimus is a 4SC compound in the field of autoimmune diseases. This oral drug candidate has exhibited promising results in an initial clinical Phase IIa trial in the field of inflammatory bowel disease (IBD). As 4SC has focused its research and development activities on epigenetic compounds to fight cancer, it is not investing any appreciable company resources in the further development of this compound at this time. That said, the Company aims to develop vidofludimus clinically – in the indication of Crohn's disease, for example – with external partners and investors.

## 1.2.2 DISCOVERY & COLLABORATIVE BUSINESS SEGMENT

Until April 2016, the Discovery & Collaborative Business segment comprised the activities involved in the discovery, early-stage research and subsequent commercialization of drug compounds by 4SC Discovery GmbH (4SC Discovery). In addition to maintaining scientific collaborations with academic institutions, 4SC Discovery also cooperated with BioNTech AG (BioNTech) and had a technology and sales partnership with CRELUX GmbH, among others.

On 29 April 2016, 4SC announced the sale of all key operating assets of 4SC Discovery to BioNTech Small Molecules GmbH (BioNTech Small Molecules), a subsidiary of BioNTech, for €650 thousand. The assets were transferred directly to BioNTech Small Molecules. In addition and without financial compensation, 4SC was granted the right to temporarily utilize research services provided by BioNTech Small Molecules worth a person year. Furthermore, as of 1 May 2016, all 22 employees of 4SC Discovery were transferred to BioNTech Small Molecules. 4SC Discovery will retain its preclinical research projects for the time being. 4SC will continue using the epigenetic schemes and the underlying intellectual property for itself, and in addition plans to out-license other projects.

## 1.2.3 SIGNIFICANT EVENTS AT GROUP LEVEL

At the Annual General Meeting (AGM) held on 17 June 2016, all six existing members of the Supervisory Board were re-elected for three more years. Directly following the AGM, the Supervisory Board appointed Joerg von Petrikowsky as Deputy Chairman of the Supervisory Board with immediate effect. The previous Deputy Chairman of the Supervisory Board, Dr Manfred Rüdiger, will continue to act as a regular member of the Supervisory Board. Dr Clemens Doppler retains his post as Chairman of the Supervisory Board.

Enno Spillner left 4SC at his own request effective 30 June 2016 after having served as Chief Financial Officer (CFO) for more than ten years and as Chief Executive Officer (CEO) since 2013. The Supervisory Board is working on a succession plan. Since 1 July 2016, Chief Development Officer (CDO) & Chief Scientific Officer (CSO) Dr Daniel Vitt has acted as the sole Managing Director.

## 1.2.4 STAFF

As of 30 June 2016, the headcount of the 4SC Group totaled 50 employees, including the members of 4SC AG's Management Board (31 December 2015: 67). The percentage of female employees increased from 55% at the end of 2015 to 62% on 30 June 2016.

By the sale of the operations of 4SC's subsidiary 4SC Discovery to BioNTech Small Molecules, 22 employees from the Discovery & Collaborative Business segment were taken over by BioNTech Small Molecules on 1 May 2016 in a transfer of operations. Four more employees working in the Biology department moved to the Development unit. Since this date, 4SC has not employed any staff in the Discovery & Collaborative Business segment (28 employees as of 31 December 2015). Due to the preparations for the CTCL trial of resminostat, in addition to the employees from the Discovery unit, seven more employees joined the Development unit in H1 2016 so that as of 30 June 2016 there were 50 employees in the Development segment (compared with 39 on 31 December 2015), which also corresponds the total headcount.

On average, 64 employees (headcount) worked for the 4SC Group in H1 2016 (H1 2015: 68). The Company had a total of 44 full-time employees (full-time equivalents, FTEs) as of 30 June 2016 (31 December 2015: 58), taking

part-time employees and employees on parental leave into account. As of the end of H1 2016, 68% of these FTEs (31 December 2015: 76%) worked in Research and Development, with the remaining 32% (31 December 2015: 24%) working in Business Development and Administration.

## **2. RESULTS OF OPERATIONS, FINANCIAL POSITION AND NET ASSETS**

The 4SC Group, comprising 4SC AG and its wholly-owned subsidiary 4SC Discovery GmbH, reports consolidated figures for both the first six months of the 2016 financial year and the comparative period of the 2015 financial year.

Since the beginning of 2012, the 4SC Group has reported in the operating segments Development and Discovery & Collaborative Business. As of 30 June 2016, the Development segment comprised the development programs for resminostat, 4SC-202, 4SC-205 and vidofludimus. The Discovery & Collaborative Business segment comprises the activities involved in the discovery, early-stage research and subsequent commercialization of drug compounds. The service business included in this segment and the research collaborations concerning drug discovery and optimization were discontinued with the sale of operations to BioNTech Small Molecules at the end of April 2016.

### **2.1 RESULTS OF OPERATIONS**

#### **Revenue**

4SC's consolidated revenue fell to €442 thousand in Q2 2016 (Q2 2015: €496 thousand). Consolidated revenue in H1 2016 declined by 66% to €854 thousand (H1 2015: €2,488 thousand). The significant decrease in revenue compared with the previous year is mainly due to the fact that 4SC passed on non-recurring charges amounting to €1,195 thousand for the production of the resminostat compound to Yakult Honsha in H1 2015. Furthermore, the research collaboration with LEO Pharma was terminated according to plan at the end of March 2015.

Revenue in H1 2016 was primarily composed of the reversal of the deferred income for the upfront payments

received from the cooperation partners Yakult Honsha, Menarini AP and, since May 2016, Link Health.

Revenue of €661 thousand was generated in the Development segment in H1 2016 (H1 2015: €1,699 thousand). Revenue in the Discovery segment declined to €193 thousand (H1 2015: €789 thousand) owing to the sale of 4SC Discovery's operations at the end of April 2016.

Further information regarding segment results can be found in chapter 2 of the consolidated notes.

#### **Operating expenses**

Operating expenses, comprising the cost of sales, distribution costs, research and development costs and administrative costs, amounted to €4,976 thousand in Q2 2016 (Q2 2015: €2,889 thousand) and to €8,556 thousand in H1 2016 (H1 2015: €6,324 thousand). Both figures were up compared with the previous year.

The Development segment accounted for €7,472 thousand (H1 2015: €4,931 thousand) of operating expenses in the first half-year, while the Discovery & Collaborative Business segment incurred €1,550 thousand (H1 2015: €2,013 thousand) and the consolidation accounted for €-466 thousand (H1 2015: €-620 thousand).

Research and development costs, amounting to €4,006 thousand in Q2 2016 (Q2 2015: €1,888 thousand) and to €6,386 thousand in H1 2016 (H1 2015: €3,016 thousand), continued to make up the majority of expenses. This significant increase year-on-year is largely attributable to the fact that 4SC has started to make intensive preparations for the RESMAIN trial of resminostat in the CTCL indication.

The cost of sales decreased significantly to €59 thousand in Q2 2016 (Q2 2015: €217 thousand) and to €152 thousand in H1 2016 (H1 2015: €1,596 thousand). In the previous year, there had been a one-off sharp increase in the cost of sales in connection with the manufacturing of the resminostat compound on behalf of 4SC's cooperation partner Yakult Honsha, which was passed on to this company (see also the explanations under "Revenue").

Distribution costs, which comprise business development and corporate communications & investor relations costs, fell slightly to €125 thousand in the

second quarter of the year (Q2 2015: €132 thousand) and by 12% to €212 thousand in H1 2016 (H1 2015: €242 thousand) due to a lower level of consulting services.

Administrative costs rose to €786 thousand in Q2 2016 (Q2 2015: €652 thousand) and to €1,806 thousand in H1 2016 (H1 2015: €1,470 thousand). This increase was mainly due to higher legal and consulting costs in the reporting period.

Other operating income rose substantially to €1,001 thousand in H1 2016 (H1 2015: €133 thousand). Most of this income was generated from the sale of the key operating assets of 4SC Discovery to BioNTech Small Molecules for €650 thousand as well as from a temporary research service worth a person year. Other income of €117 thousand was generated from subleases (H1 2015: €46 thousand).

#### **Operating profit/loss**

Owing to the substantial rise in research and development costs, the Company's loss from operating activities increased by 50% to €3,565 thousand in Q2 2016 (Q2 2015: €2,370 thousand) and by 81% to €6,701 thousand in H1 2016 (H1 2015: €3,703 thousand).

#### **Net finance income/loss**

Net finance income of €92 thousand was recorded in Q2 2016 (Q2 2015: €2 thousand). Net finance income for H1 2016 amounted to €123 thousand (H1 2015: net finance loss of €206 thousand). This was mainly due to the substantial increase in the share in the profit/loss of associates, which amounted to €135 thousand in H1 2016 (H1 2015: €33 thousand), and to the large drop in interest expense to €21 thousand (H1 2015: €260 thousand) as a consequence of the full repayment of the remaining loan liabilities to Santo Holding (Deutschland) GmbH (Santo Holding).

#### **Taxes**

In Q2 2016 and in H1 2016, 4SC reported income tax expense of €61 thousand (Q2 2015 and H1 2015: €40 thousand), which is attributable to non-deductible withholding tax in connection with the upfront payment received from Link Health. The taxes reported in the previous year also result from non-deductible withholding tax in connection with the upfront payment received from Menarini AP.

#### **Consolidated net loss**

The net loss for the period increased by 47% in Q2 2016 to €3,534 thousand (Q2 2015: net loss of €2,408 thousand) and by 68% in H1 2016 to €6,639 thousand (H1 2015: €3,949 thousand). Further information regarding segment results can be found in the consolidated notes.

#### **Earnings per share**

The loss per share decreased to €0.19 in Q2 2016 (Q2 2015: €0.24) and to €0.35 in H1 2016 (H1 2015: €0.39). This reflects two countervailing effects: on the one hand, the capital action successfully completed in July 2015 led to a significantly higher number of shares of 18,966,646 (H1 2015: 10,216,646), and on the other hand 4SC reported a higher loss of €6,639 thousand in H1 2016 than in the previous year (H1 2015: loss of €3,949 thousand).

## **2.2 NET ASSETS**

#### **Non-current assets**

Non-current assets amounted to €9,393 thousand as of 30 June 2016 (31 December 2015: €11,077 thousand). This decrease is due firstly to depreciation and amortization and to the sale of 4SC Discovery's property, plant and equipment to BioNTech Small Molecules. Intangible assets continued to comprise the largest share of non-current assets, amounting to €8,766 thousand as of 30 June 2016 (31 December 2015: €9,123 thousand). Secondly, the funds in the form of borrower's note loans of €1,281 thousand (31 December 2015: €1,318 thousand) are presented in other non-current assets, as their remaining terms were reclassified to other current assets at the reporting date.

#### **Current assets**

Current assets decreased to €15,525 thousand as of 30 June 2016 (31 December 2015: €22,415 thousand), mainly as a result of lower cash and cash equivalents of €12,517 thousand (31 December 2015: €21,476 thousand). Trade accounts receivable increased to €706 thousand in the reporting period (31 December 2015: €94 thousand). They mainly stem from the cooperation agreement with 4SC's partner Link Health in the Development segment. Other current assets rose to €2,279 thousand as of 30 June 2016 (30 June 2015: €816 thousand) due to the reclassification explained under non-current assets.

## **Equity**

The decline in equity from €26,428 thousand as of 31 December 2015 to €19,789 thousand as of 30 June 2016 was driven primarily by the loss for the period of €6,639 thousand, lifting the accumulated deficit accordingly, from €138,184 thousand at the end of the 2015 financial year to €144,823 thousand as of 30 June 2016. The full repayment of the liabilities to majority shareholder Santo Holding in the amount of €1,983 thousand (31 December 2015: €1,962 thousand) raised the equity ratio from 78.9% at the end of the 2015 financial year to 79.4% at the end of H1 2016.

## **Non-current liabilities**

Non-current liabilities decreased to €1,431 thousand as of 30 June 2016 (31 December 2015: €1,471 thousand). Other non-current liabilities as of 30 June 2016 mainly comprised deferred income of €1,393 thousand (31 December 2015: €1,433 thousand). This figure consists largely of deferred income in connection with the partnerships with Yakult Honsha, Menarini AP and Link Health.

## **Current liabilities**

Current liabilities decreased by 34% to €3,698 thousand (31 December 2015: €5,593 thousand). This was due to the repayment of the remaining loan liabilities to Santo Holding in the amount of €1,500 thousand as well as to the interest expense of €483 thousand that accumulated as a result. Furthermore, this item includes trade accounts payable of €747 thousand (31 December 2015: €688 thousand), deferred income of €1,262 thousand (31 December 2015: €1,164 thousand) and other liabilities of €1,689 thousand (31 December 2015: €1,779 thousand).

## **Total assets/total equity and liabilities**

Total assets/total equity and liabilities of the 4SC Group amounted to €24,918 thousand as of 30 June 2016 (31 December 2015: €33,492 thousand). This 26% decrease is primarily attributable to the net loss for the period.

## **2.3 FINANCIAL POSITION**

### **Cash flows from operating activities**

Cash flows from operating activities amounted to €-8,037 thousand in H1 2016 (H1 2015: €-3,562 thousand). The

change compared with the net loss for the period of €6,639 thousand (H1 2015: net loss of €3,909 thousand) is attributable in part to adjustments for non-cash items from the statement of comprehensive income such as depreciation and amortization, but also to the one-off disposals of property, plant and equipment and current assets in connection with the sale of 4SC Discovery's operations, which had an offsetting effect. Another contributing factor was changes in items from the statement of financial position that have a predominantly negative effect on cash flows such as the interest paid on the majority shareholder loan from Santo Holding and the increase in trade accounts receivable associated with the cooperation agreement signed with Link Health in Q2 2016.

### **Cash flows from investing activities**

Cash inflows from investing activities in H1 2016 amounted to €578 thousand (H1 2015: €-32 thousand). The inflows stem from the disposal of non-current and current assets as a result of the sale to BioNTech Small Molecules. In H1 2016, €13 thousand was also invested in property, plant and equipment (H1 2015: €32 thousand), while €60 thousand was invested in intangible assets.

### **Cash flows from financing activities**

The cash flows of €-1,500 thousand from financing activities in H1 2016 (H1 2015: €1,300 thousand) result from the repayment of the remaining debt associated with the shareholder loan from Santo Holding.

### **Cash balance/funds**

Cash and cash equivalents amounted to €12,517 thousand as of 30 June 2016 (31 December 2015: €21,476 thousand). The average monthly use of cash from operating activities was €1,243 thousand in H1 2016 (H1 2015: €599 thousand). The year-on-year increase of this key figure is largely attributable to the fact that 4SC has started to make intensive preparations for the RESMAIN trial of resminostat in the CTCL indication.

## **3. REPORT ON OPPORTUNITIES AND RISKS**

Please see pages 57 to 69 of the Annual Report 2015 for a detailed description of the risks and opportunities arising from the Company's business activities as well as its IT-based risk management and controlling system.

Based on the results published on 27 May 2016 of the Phase II trial conducted by Yakult Honsha of resminostat in combination with sorafenib as a first-line therapy for liver cancer patients, Yakult Honsha decided not to conduct a pivotal study in this indication, in the overall patient population at least. This has increased both the product development risks and the required financing compared to the information provided in the Annual Report 2015. The Company's risks and opportunities have otherwise remained virtually unchanged. The occurrence of any one of the risks described in the annual report – alone or in conjunction with each other – could have a negative impact on the results of operations, financial position and net assets of 4SC.

#### **4. REPORT ON POST-BALANCE SHEET DATE EVENTS**

On 20 July 2016, 4SC announced the formation of an international Scientific Expert Panel (iSEP). The panel is comprised of renowned experts in the fields of epigenetics and oncology, who will support 4SC in further expanding its leadership position in the development of epigenetic cancer drugs. The iSEP's inaugural members are Prof Dr Thomas Jenuwein, Dr Charles B. Epstein and Prof Dr Wolff Schmiegel. Prof Dr Dr Alexander Tarakhovsky joined the panel on 28 July 2016.

#### **5. ANTICIPATED DEVELOPMENTS**

##### **Forecast for the sector**

In an April 2016 study, management consultants EY referred to a survey of the biotech industry that had been conducted by BIOCOM/BIO Germany three months prior. According to the survey, the respondents were "more optimistic than for a long time" based on the outcome that 70% agreed that the biotech sector had enjoyed a strong position in 2015 and 60% expected the uptrend to continue in 2016. However, EY claimed that this positive assessment was based on data that had been distorted by several significant individual events. For instance, the capital raised by German biotech companies rose by 45% to €490 million in 2015, but after adjusting for the €167 million that went to CureVac alone, a decrease of 5% would be recorded. EY reported that many

companies in Germany continued to have great difficulty securing capital, which it attributed in particular to a higher level of risk aversion in Germany compared with other countries around the world.

The industry information service BioCentury reported that in Q2 2016 eight biotech companies worldwide announced plans to go public in the United States. This raises the number of envisaged IPOs to 23. In Q2 2016, 16 companies in the industry generated US-\$0.8 billion from their IPOs, bringing the aggregate proceeds from biotech stock market flotations in H1 2016 to US-\$1.4 billion. This figure is substantially less than the US-\$5 billion raised in H1 2015. Through follow-ons, 37 biotech companies realized a total of US-\$2.1 billion in Q2 2016. Total proceeds from follow-ons in H1 2016 therefore came to US-\$3.9 billion, also significantly less than the US-\$19 billion achieved in H1 2015.

##### **Further operating and strategic development**

In the Development segment, 4SC is continuing to concentrate on its focused development strategy in which the two epigenetic products resminostat and 4SC-202 are at the forefront.

The primary operating focus is on the planned clinical development of the oncology compound resminostat in the indication of advanced cutaneous T-cell lymphoma (CTCL) with the goal of achieving regulatory approval for resminostat in this indication in the EU as quickly as possible. 4SC is currently preparing a randomized, placebo-controlled Phase II clinical trial in the indication of advanced CTCL, the RESMAIN trial. Starting in Q4 2016, 150 patients in ten countries will be included at 50 trial centers, and 4SC expects initial meaningful data to be available in 2019. If the results are positive, the Company plans to immediately submit this data to the competent regulators for market approval.

Yakult Honsha, 4SC's Japanese development partner, will continue to analyze the detailed results of the recently completed Phase II trial of resminostat in combination with the cancer drug sorafenib as first-line therapy in Asian patients in Japan and South Korea with advanced liver cancer (HCC). The conclusive findings are particularly important for 4SC and its licensing partners because if the data are positive, the Company intends to continue developing resminostat in the HCC indication

also in Europe and the United States in the medium term. In this indication, the Company estimates that both the medical need and the market potential are particularly high. Furthermore, 4SC assumes that Menarini AP, its second partner for the development of resminostat, will in the near-term finalize its plans in countries in the Asia-Pacific region excluding Japan, also with a likely focus on HCC.

In addition, 4SC will continue to advance its ongoing preclinical trials for investigating the immune priming potential of resminostat.

For its second epigenetic anti-cancer compound, 4SC-202, 4SC expects to be able to complete the official report on the completed Phase I trial (TOPAS) before the end of this year. Based on the findings of this trial and the recently presented immunological data, additional opportunities will open up for 4SC for the clinical development of 4SC-202, particularly to explore treatment strategies for patients with certain types of hematological, lung or skin cancer in mono- and combination therapy.

Moreover, 4SC will expedite the further development of its third oncology compound, 4SC-205, on the basis of the positive results of a Phase I trial with 4SC-205 in patients with advanced solid tumors and the licensing and development partnership recently entered into with Link Health for 4SC-205 in Greater China (China, Hong Kong, Taiwan and Macao).

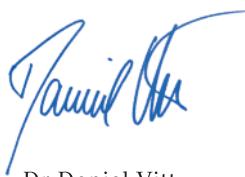
Overall, 4SC is seeking to secure further licensing deals with companies from the pharmaceutical and biotech sectors to advance clinical development of its products and generate additional value for the Company.

In the Discovery & Collaborative Business segment, following the sale of the key operating assets of 4SC Discovery to BioNTech Small Molecules, preclinical research projects are still being carried out in the areas of epigenetics, cancer stem cells, cancer immunotherapy and cellular signaling pathways, among others. 4SC will continue using the epigenetic schemes and the underlying intellectual property for itself, and plans to out-license further projects.

#### Financial forecast

The 4SC Group held cash/funds amounting to €13,798 thousand at the end of H1 2016. Taking into account the current financial planning and the intended operating activities, the Managing Director of 4SC confirms its existing financial forecast for the full year 2016 of an average monthly use of cash from operations of €1,200 thousand. The Managing Director further estimates that the funds earmarked for the Company's financing will probably be sufficient until after the start of 2018 and will therefore fund the key portions of the planned trial of resminostat in the CTCL indication. 4SC estimates that it will receive the projected funds from the partnerships with Yakult Honsha and Menarini AP later than originally assumed, because the analysis of the results of the Phase II trial conducted by Yakult Honsha of resminostat in Asian patients with advanced liver cancer (HCC) is still ongoing. However, this will be compensated for the most part by two effects: short-term inflows from the sale of the operations of 4SC Discovery plus the associated cost savings, and the out-licensing of 4SC-205 for the Greater China region.

Planegg-Martinsried, 8 August 2016



Dr Daniel Vitt  
Managing Director

# INTERIM IFRS CONSOLIDATED FINANCIAL STATEMENTS

for the period from 1 January to 30 June 2016

## // CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

in € 000's unless stated otherwise

	Q2 2016	Q2 2015	6M 2016	6M 2015
Revenue	442	496	854	2,488
Cost of sales	-59	-217	-152	-1,596
<b>Gross profit</b>	<b>383</b>	<b>279</b>	<b>702</b>	<b>892</b>
 Distribution costs	 -125	 -132	 -212	 -242
Research and development costs	-4,006	-1,888	-6,386	-3,016
Administrative costs	-786	-652	-1,806	-1,470
Other income	969	23	1,001	133
<b>Operating profit/loss</b>	<b>-3,565</b>	<b>-2,370</b>	<b>-6,701</b>	<b>-3,703</b>
 <b>Net finance income/loss</b>				
Share in the profit of equity-accounted investees	93	0	135	33
Finance income	10	1	28	2
Finance costs	-11	1	-40	-241
<b>Net finance income/loss</b>	<b>92</b>	<b>2</b>	<b>123</b>	<b>-206</b>
 <b>Earnings before taxes</b>	<b>-3,473</b>	<b>-2,368</b>	<b>-6,578</b>	<b>-3,909</b>
 Income tax	 -61	 -40	 -61	 -40
<b>Net profit/loss for the period = Consolidated comprehensive income/loss</b>	<b>-3,534</b>	<b>-2,408</b>	<b>-6,639</b>	<b>-3,949</b>
 Earnings per share (basic and diluted; in €)	 -0.19	 -0.24	 -0.35	 -0.39

## // CONSOLIDATED STATEMENT OF FINANCIAL POSITION - ASSETS

in € 000's

	30 June 2016	31 Dec. 2015
<b>Non-current assets</b>		
Intangible assets	8,766	9,123
Property, plant and equipment	213	357
Investments accounted for using the equity method	413	278
Other investments	0	1,318
Other assets	1	1
<b>Total non-current assets</b>	<b>9,393</b>	<b>11,077</b>
<b>Current assets</b>		
Inventories	5	20
Trade accounts receivable	706	94
Receivables from associates	5	8
Cash and cash equivalents	12,517	21,476
Current income tax assets	13	1
Other assets	2,279	816
<b>Total current assets</b>	<b>15,525</b>	<b>22,415</b>
<b>Total assets</b>	<b>24,918</b>	<b>33,492</b>

## // CONSOLIDATED STATEMENT OF FINANCIAL POSITION - EQUITY AND LIABILITIES

in € 000's

	30 June 2016	31 Dec. 2015
<b>Equity</b>		
Subscribed capital	18,967	18,967
Share premium	143,829	143,829
Reserves	1,816	1,816
Accumulated deficit	-144,823	-138,184
<b>Total equity</b>	<b>19,789</b>	<b>26,428</b>
<b>Non-current liabilities</b>		
Deferred income	1,393	1,433
Other liabilities	38	38
<b>Total non-current liabilities</b>	<b>1,431</b>	<b>1,471</b>
<b>Current liabilities</b>		
Trade accounts payable	747	688
Liabilities to shareholders	0	1,962
Deferred income	1,262	1,164
Other liabilities	1,689	1,779
<b>Total current liabilities</b>	<b>3,698</b>	<b>5,593</b>
<b>Total equity and liabilities</b>	<b>24,918</b>	<b>33,492</b>

## // CONSOLIDATED STATEMENT OF CASH FLOWS

in € 000's

	6M 2016	6M 2015
<b>Cash flows from operating activities</b>		
Earnings before taxes	-6,639	-3,909
<b>Adjustment for statement of comprehensive income items</b>		
Depreciation and amortization	480	490
Net finance income/loss	-108	206
Other non-cash items	-496	45
<b>Changes in statement of financial position items</b>		
Inventories	15	1
Trade accounts receivable	-612	455
Receivables from associates	3	0
Current income tax assets	-12	15
Other assets	-145	-16
Trade accounts payable	59	-368
Accounts payable to associates	0	30
Deferred income	59	497
Other liabilities	-91	-962
Interest received	7	0
Interest paid	-557	-6
Income taxes paid	0*	-40
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>	<b>-8,037</b>	<b>-3,562</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Purchase of intangible assets	-60	0
Purchase of property, plant and equipment	-13	-32
Proceeds from sales of property, plant and equipment	382	0
Proceeds from sales of current assets	269	0
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>	<b>578</b>	<b>-32</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Cash receipts from the increase in subscribed capital/from the capital reduction	0	234
Payments to share premium/from the capital reduction	0	-99
Cash received (paid) from the issuance of convertible bonds	0	-335
Repayment of shareholder loans	-1,500	1,500
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>	<b>-1,500</b>	<b>1,300</b>
<b>NET CHANGE IN CASH AND CASH EQUIVALENTS</b>	<b>-8,959</b>	<b>-2,294</b>
+ Cash and cash equivalents at the beginning of the period	21,476	3,202
<b>= CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD</b>	<b>12,517</b>	<b>908</b>

\* The withholding tax regarding the upfront payment from Link Health was not paid until it had become due at the start of Q3 2016

## // CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

in € 000's

	Subscribed capital	Share premium	Reserves		Accumulated deficit	Total
			Reserves stock options	Retained earnings		
<b>Balance on 01.01.2015</b>	<b>50,849</b>	<b>78,339</b>	<b>1,751</b>	<b>67</b>	<b>-128,956</b>	<b>2,050</b>
Options issued (ESOP 2009/2009)			0			0
Options issued (ESOP 2009/2010)			0			0
Options issued (ESOP 2009/2011)			0			0
Capital increase from the conversion of convertible bonds	47	88				135
5:1 capital reduction	-40,679	40,679				0
Expenditures related to the implementation of the resolved capital increase		-652				-652
Comprehensive income/loss 01.01.-30.06.2015					-3,949	-3,949
<i>Net profit/loss for the period 01.01.-30.06.2015</i>					-3,949	-3,949
<b>Balance on 30.06.2015</b>	<b>10,217</b>	<b>118,454</b>	<b>1,751</b>	<b>67</b>	<b>-132,905</b>	<b>-2,416</b>
 <b>Balance on 01.01.2016</b>	 <b>18,967</b>	 <b>143,829</b>	 <b>1,749</b>	 <b>67</b>	 <b>-138,184</b>	 <b>26,428</b>
Comprehensive income/loss 01.01.-30.06.2016					-6,639	-6,639
<i>Net profit/loss for the period 01.01.-30.06.2016</i>					-6,639	-6,639
<b>Balance on 30.06.2016</b>	<b>18,967</b>	<b>143,829</b>	<b>1,749</b>	<b>67</b>	<b>-144,823</b>	<b>19,789</b>

# SELECTED NOTES

to the interim consolidated financial statements for the period from 1 January to 30 June 2016

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### 1.1 BASIS OF PREPARATION

These interim consolidated financial statements were created in accordance with the accounting principles of the International Financial Reporting Standard (IFRS) – as adopted by the EU – in consideration of IAS 34 (interim financial reporting) in accordance with 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. 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.

### 1.2 COMPANIES INCLUDED IN THE CONSOLIDATED FINANCIAL STATEMENTS

These interim consolidated financial statements as at 30 June 2016 comprise 4SC AG, based in Planegg-Martinsried, Germany, and its wholly-owned subsidiary 4SC Discovery GmbH, Planegg-Martinsried, Germany, which is fully consolidated (together referred to as the "4SC Group" or "4SC"). The following companies were also taken into account in these financial statements:

Company / Domicile	Measured as	Measured acc. to
Panoptes Pharma Ges.m.b.H., Vienna, Austria	Associate	IAS 28
quattro research GmbH, Planegg-Martinsried, Germany	Associate	IAS 28

### 1.3 RELEASE OF THE FINANCIAL STATEMENTS

The consolidated interim report was approved for publication by the Management Board on 8 August 2016. The discussion of the interim report by the Supervisory Board or Audit Committee and the Management Board in line with the German Corporate Governance Code (as amended on 5 May 2015) was held via teleconference on 1 August 2016.

## 1.4 GENERAL DISCLOSURES

The accounting policies applied and estimates made essentially correspond to those used for the consolidated financial statements for the year ending 31 December 2015.

## 2. SEGMENT REPORTING

Since 1 January 2012, 4SC has used two operating segments – "Development" and "Discovery & Collaborative Business" – as its segment reporting format in line with its internal control (management approach). Each individual operating segment, along with its core business and core projects, is set out below.

### Development

The Development segment comprises the clinical and preclinical development work for drug candidates from the Group's product pipeline and is conducted by the Group's parent company 4SC AG. As of 30 June 2016, it comprised the development programs for resminostat, 4SC-202, 4SC-205 and vidofludimus.

### Discovery & Collaborative Business

The Discovery & Collaborative Business segment comprises the activities collectively handled by 4SC Discovery GmbH as of 30 June 2016, namely drug discovery and early-stage research plus subsequent commercialization. The service business included in this segment and the research collaborations concerning drug discovery and optimization were discontinued with the sale of operations to BioNTech Small Molecules at the end of April 2016.

There was no intersegment revenue. The segment results were as follows:

in € 000's

	Development		Discovery & Collaborative Business		Not allocated		Consolidation		Group	
	6M 2016	6M 2015	6M 2016	6M 2015	6M 2016	6M 2015	6M 2016	6M 2015	6M 2016	6M 2015
	<b>STATEMENT OF COMPREHENSIVE INCOME</b>									
<b>Revenue total</b>	<b>661</b>	<b>1,699</b>	<b>193</b>	<b>789</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>854</b>	<b>2,488</b>
External revenue	661	1,699	193	789	0	0	0	0	854	2,488
Intersegment revenue	0	0	0	0	0	0	0	0	0	0
<b>Other income</b>	<b>447</b>	<b>655</b>	<b>1,020</b>	<b>98</b>	<b>0</b>	<b>0</b>	<b>-466</b>	<b>-620</b>	<b>1,001</b>	<b>133</b>
<b>Operating expenses</b>	<b>-7,472</b>	<b>-4,931</b>	<b>-1,550</b>	<b>-2,013</b>	<b>0</b>	<b>0</b>	<b>466</b>	<b>620</b>	<b>-8,556</b>	<b>-6,324</b>
of which research and development costs	-5,456	-2,166	-1,280	-1,259	0	0	350	409	-6,386	-3,016
of which cost of sales, distribution costs and administrative costs	-2,016	-2,765	-270	-754	0	0	116	211	-2,170	-3,308
<b>Segment result</b>	<b>-6,365</b>	<b>-2,577</b>	<b>-336</b>	<b>-1,126</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-6,701</b>	<b>-3,703</b>
<b>Net finance income/loss</b>	<b>6</b>	<b>-3</b>	<b>0</b>	<b>-3</b>	<b>117</b>	<b>-200</b>	<b>0</b>	<b>0</b>	<b>123</b>	<b>-206</b>
<b>Earnings before taxes</b>	<b>-6,359</b>	<b>-2,580</b>	<b>-336</b>	<b>-1,129</b>	<b>117</b>	<b>-200</b>	<b>0</b>	<b>0</b>	<b>-6,578</b>	<b>-3,909</b>
Income tax expense	-61	-40	0	0	0	0	0	0	-61	-40
<b>Profit/loss for the period</b>	<b>-6,420</b>	<b>-2,620</b>	<b>-336</b>	<b>-1,129</b>	<b>117</b>	<b>-200</b>	<b>0</b>	<b>0</b>	<b>-6,639</b>	<b>-3,949</b>

in € 000's

	Development		Discovery & Collaborative Business		Not allocated		Consolidation		Group	
	30 June 2016	30 June 2015	30 June 2016	30 June 2015	30 June 2016	30 June 2015	30 June 2016	30 June 2015	30 June 2016	30 June 2015
<b>ITEM OF THE STATEMENT OF FINANCIAL POSITION &amp; FIXED ASSETS</b>										
Non-current assets	7,699	9,515	0	289	1,694	420	0	0	9,393	10,224
Current assets	2,208	169	95	320	13,222	1,047	0	0	15,525	1,536
<b>Total segment assets</b>	<b>9,907</b>	<b>9,684</b>	<b>95</b>	<b>609</b>	<b>14,916</b>	<b>1,467</b>	<b>0</b>	<b>0</b>	<b>24,918</b>	<b>11,760</b>
Equity	0	0	0	0	19,789	-2,416	0	0	19,789	-2,416
Non-current liabilities	1,393	2,015	0	0	38	1,997	0	0	1,431	4,012
Current liabilities	2,569	3,435	421	382	708	6,347	0	0	3,698	10,164
<b>Total segment liabilities</b>	<b>3,962</b>	<b>5,450</b>	<b>421</b>	<b>382</b>	<b>20,535</b>	<b>5,928</b>	<b>0</b>	<b>0</b>	<b>24,918</b>	<b>11,760</b>
Capital expenditure*	73	22	0	10	0	0	0	0	73	32
Depreciation and amortization*	450	434	30	56	0	0	0	0	480	490

\* 6M until end of period

The following overview shows the regional distribution of the Group's revenue, based on the customers' geographic location:

in € 000's

	6M 2016	6M 2015
Germany	216	443
Europe	5	346
Asia	633	1,699
<b>Revenue</b>	<b>854</b>	<b>2,488</b>

### 3. EARNINGS PER SHARE

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

	Q2 2016	Q2 2015	6M 2016	6M 2015
Based on net profit/loss for the period (in € 000's)	<b>-3,534</b>	-2,408	<b>-6,639</b>	-3,949
Based on average number of shares (in thousand)	<b>18,967</b>	10,164	<b>18,967</b>	10,167
Earnings per share (basic and diluted, in €)	<b>-0.19</b>	<b>-0.24</b>	<b>-0.35</b>	<b>-0.39</b>

Given 4SC's loss, the options issued are not dilutive. As a result, the diluted and basic earnings per share are identical.

### 4. NOTES TO THE CASH BALANCE/FUNDS

4SC holds cash and cash equivalents. There were other financial assets in the form of borrower's note loans as of 30 June 2016. Taken together, these items comprise the cash balance/funds:

in € 000's	30.06.2016	31.12.2015	30.06.2015
Cash and cash equivalents at the end of the period	<b>12,517</b>	21,476	908
Other financial assets	<b>1,281</b>	1,318	0
<b>Cash balance/funds</b>	<b>13,798</b>	<b>22,794</b>	<b>908</b>

### 5. SHAREHOLDINGS AND DIRECTORS' DEALINGS

In Q2 2016 no reportable transactions pursuant to Section 15a of the German Securities Trading Act (Wertpapierhandelsgesetz - WpHG) were made with shares or options by members of the Management Board or Supervisory Board.

The following overviews show the shares and stock options held by members of the Management Board and Supervisory Board as of the 30 June 2016 reporting date as well as changes in these holdings compared to the start of the year.

	Number of shares			
	Shares 01.01.2016	Purchase	Sale	Shares 30.06.2016
<b>Management Board</b>				
Dr Daniel Vitt	83,361	0	0	83,361
Enno Spillner	14,760	0	0	14,760
<b>Shares held by the Management Board</b>	<b>98,121</b>	<b>0</b>	<b>0</b>	<b>98,121</b>
<b>Supervisory Board</b>				
Dr Clemens Doppler	3,719	0	0	3,719
Dr Manfred Rüdiger	1,500	0	0	1,500
<b>Shares held by the Supervisory Board</b>	<b>5,219</b>	<b>0</b>	<b>0</b>	<b>5,219</b>

	Number of stock options			
	Options 01.01.2016	Additions	Expired	Exercised
<b>Management Board</b>				
Dr Daniel Vitt	28,520	0	0	0
Enno Spillner	44,640	0	0	0
<b>Options held by the Management Board</b>	<b>73,160</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Supervisory Board</b>				
Dr Clemens Doppler	3,719	0	0	3,719
Dr Manfred Rüdiger	1,500	0	0	1,500
<b>Options held by the Supervisory Board</b>	<b>5,219</b>	<b>0</b>	<b>0</b>	<b>5,219</b>

### 6. RELATED PARTY TRANSACTIONS

4SC engaged in the following significant business transactions with related parties in the period from 1 January to 30 June 2016:

#### Santo Holding GmbH, Holzkirchen, Germany (shareholder with a 47.8% interest in the share capital of 4SC AG)

In June 2014, Santo Holding (Deutschland) GmbH granted 4SC AG a shareholder loan of up to €10,000 thousand earmarked for financing the costs of preparing for a planned clinical trial of the substance resminostat in the liver cancer indication and for financing the ongoing administrative costs of 4SC AG. As per its financial planning, 4SC AG was eligible to draw down the credit line in tranches until 31 December 2015. The loan carried interest of 8% p.a. (maturity date) and ran until the end of 2016. A large portion of the loan liability of €7,500 thousand remaining as of the end of Q2 2015 was

extinguished in early July 2015 through a capital increase in return for contributions in kind by issuing consideration shares worth €6,000 thousand. The liability in the amount of €1,500 thousand remaining after 31 December 2015 and the accrued interest liability of €483 thousand were fully extinguished in Q1 2016.

#### **quattro research GmbH, Planegg-Martinsried, Germany (associate)**

4SC maintains legal relations with quattro research GmbH, in which it has held a 48.8% stake of the share capital since its founding at the beginning of 2004. A software service contract exists between the companies. quattro research GmbH renders services for improvement, further development, user support, further training and database maintenance in relation to software created by 4SC for supporting research activities. In H1 2016, this contract had a net volume of €30 thousand (H1 2015: €90 thousand). Furthermore, a software license was purchased from quattro research GmbH for €2 thousand in the reporting period (H1 2015: €0 thousand). As in the prior-year period, there were no liabilities to quattro research GmbH as of the reporting date.

#### **BioNTech AG, BioNTech RNA Pharmaceuticals GmbH, and BioNTech Small Molecules GmbH, Mainz, Germany (other related parties)**

4SC Discovery GmbH maintains legal relations with BioNTech AG, Mainz, Germany, and its subsidiary BioNTech RNA Pharmaceuticals GmbH (formerly: Ribological GmbH), and to BioNTech Small Molecules GmbH, which was established in Q2 2016. All of these entities belong to the Santo Holding (Deutschland) GmbH Group, Holzkirchen, the main shareholder of 4SC AG. On 17 December 2012, a licensing agreement was concluded for TLR antagonists. Under the agreement, 4SC Discovery GmbH received an upfront payment of €2,500 thousand from BioNTech AG and is entitled to 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 GmbH will identify new small-molecule, anti-cancer compounds for defined therapeutic targets and optimize these for BioNTech AG and/or its subsidiaries. In H1 2016, this contract had a net volume of €70 thousand (H1 2015: €289 thousand) with respect to BioNTech AG and €0 thousand (H1 2015:

€-1 thousand) with respect to BioNTech RNA Pharmaceuticals GmbH.

On 29 April 2016, all key components of the operating assets of 4SC Discovery GmbH were sold to BioNTech Small Molecules GmbH for a purchase price of €650 thousand. In addition and without financial compensation, 4SC was granted the right to temporarily utilize research services provided by BioNTech Small Molecules GmbH worth a person year. As of 1 May 2016, all 22 employees of 4SC Discovery GmbH were taken over in a transfer of operations. The assets transferred included, among others, the 4SCan software developed in-house for compound discovery and optimization, the tangible fixed assets and the substance libraries of 4SC Discovery GmbH. Other intangible assets are not affected by this transaction. At the 30 June 2016 reporting date, there were receivables from BioNTech AG amounting to €11 thousand (31 December 2015: €63 thousand) and receivables from BioNTech Small Molecules GmbH totaling €3 thousand (31 December 2015: €0 thousand). There were no receivables from BioNTech RNA Pharmaceuticals GmbH (31 December 2015: €0 thousand).

#### **Other related party transactions**

Beyond this, there were further business transactions with related parties, where the transaction volume in the six-month reporting period in each case did not exceed €10 thousand or where the total annual transaction volume is likely not to exceed €10 thousand. No liabilities existed from these transactions as of 30 June 2016.

## **7. REVIEW REPORT**

These interim consolidated financial statements and the interim Group management report as of 30 June 2016 have been subjected to a review by Baker Tilly Roelfs AG Wirtschaftsprüfungsgesellschaft, Munich, Germany.

## **8. EVENTS AFTER THE REPORTING PERIOD**

For more information regarding events after the reporting period, please see section 4 of the interim group management report, “Events after the reporting period”. In this section, the direct effects on the Group’s results of operations, financial position and net assets are explained.

# REVIEW REPORT

To 4SC AG, Planegg-Martinsried, District of Munich,  
Germany

We have reviewed the interim consolidated financial statements - comprising the consolidated statement of comprehensive income, consolidated statement of financial position, the consolidated statement of cash flows, consolidated statement of changes in equity as well as selected explanatory consolidated notes - together with the interim Group management report of 4SC AG, Planegg-Martinsried, District of Munich, Germany, for the period from 1 January to 30 June 2016 that are part of the consolidated half-year financial report according to Section 37w WpHG ("Wertpapierhandelsgesetz": "German Securities Trading Act"). The preparation of the condensed consolidated interim financial statements in accordance with the IFRS as adopted by the EU and of the interim Group management report in accordance with the provisions of the German Securities Trading Act applicable to interim Group management reports is the responsibility of the Company's legal representatives. Our responsibility is to issue a review report on the condensed interim consolidated financial statements and the interim management report of the Group based on our review.

We performed our review of the condensed interim consolidated financial statements and the interim management report of the Group in accordance with German generally accepted standards for the review of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW). Those standards require that we plan and perform the review so that we can preclude through critical evaluation, with a certain level of assurance, that the condensed interim consolidated

financial statements have not been prepared, in material respects, in accordance with the IFRS applicable to interim financial reporting as adopted by the EU and that the interim management report of the Group has not been prepared, in material respects, in accordance with the provisions of the German Securities Trading Act applicable to interim group management reports. A review is limited primarily to inquiries of Company employees and analytical assessments and therefore does not provide the assurance attainable in a financial statements audit. Since, in accordance with our engagement, we have not performed a financial statements audit, we cannot issue an auditor's report.

Based on our review, no matters have come to our attention that cause us to presume that the condensed consolidated interim financial statements have not been prepared, in all material respects, in accordance with the IFRS applicable to interim financial reporting as adopted by the EU, or that the interim management report of the Group has not been prepared, in all material respects, in accordance with the requirements of the German Securities Trading Act applicable to interim group management reports.

Munich, 28 July 2016

**Baker Tilly Roelfs AG Wirtschaftsprüfungsgesellschaft**

Stahl  
Wirtschaftsprüfer  
(German Public Auditor)

Hund  
Wirtschaftsprüfer  
(German Public Auditor)

"To the best of my knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements for the first six months give a true and fair view of the assets, liabilities, financial position and profit or loss of the 4SC Group, and the interim management report of the Group includes a fair review of the development and performance of the business and the position of the 4SC Group, together with a description of the material opportunities and risks associated with the expected development of the 4SC Group."

Planegg-Martinsried, 8 August 2016



Dr Daniel Vitt  
Managing Director

### EDITOR

4SC AG, Am Klopferspitz 19a,  
82152 Planegg-Martinsried, Germany

### 4SC ON THE INTERNET

More information about 4SC, including its products, is available on the Company's website, [www.4sc.com](http://www.4sc.com), as well as the following information:

- this interim report
- previous interim reports and interim communications
- annual reports
- audio recordings of conference calls
- presentations
- general investor information

### CORPORATE COMMUNICATIONS & INVESTOR RELATIONS

Wolfgang Güssgen  
[wolfgang.guessgen@4sc.com](mailto:wolfgang.guessgen@4sc.com)  
Phone: +49 89 700763-73

Dr Anna Niedl  
[anna.niedl@4sc.com](mailto:anna.niedl@4sc.com)  
Phone: +49 89 700763-66