

## 4SC AG strengthens patent protection for its Hedgehog/GLI signaling inhibitor 4SC-208

- Patents provide market exclusivity until 2033 not only in the U.S. but also in China, Japan, Singapore, Australia and New Zealand
- Formal preclinical testing of 4SC-208 has already started and is expected to be completed in 2018, followed immediately thereafter by a Phase I/II clinical study

**Planegg-Martinsried, Germany, 22 January 2018** – 4SC AG (4SC, FSE Prime Standard: VSC) today announced that composition of matter patents for a group of molecules including 4SC-208, an orally-available hedgehog/GLI signaling inhibitor in formal preclinical testing for the treatment of Hedgehog-driven cancers, were granted in further geographic regions. The patents now not only provide 4SC with market exclusivity until 2033 in the U.S. but also in China, Japan, Singapore, Australia and New Zealand.

China and the Asia-Pacific region, according to market intelligence experts, are the world's second-largest market for pharmaceuticals behind the U.S.. Analysts from the International Trade Administration in the U.S. have forecast strong annual growth for the sector of approximately 9.1 percent expecting a total volume of USD 167 billion in 2020. The oncology market in Asia will see particularly strong growth and therefore become increasingly important for the development and marketing of innovative cancer drugs such as 4SC-208. Nearly half of all new cancer cases worldwide occur in Asia already.

"4SC-208 is one of our three core assets, along with resminostat and 4SC-202, that are the focus for development at 4SC," said Jason Loveridge, Ph.D., CEO of 4SC. "These patents further strengthen our IP portfolio and successfully secure our position in the field of treatment of hedgehog-driven cancers. The formal preclinical testing for 4SC-208 is well on track and we expect it to be completed in 2018, after which we plan to initiate a Phase I/II clinical study. Cancer indications that are particularly promising are those where resistance to therapies targeting the Hedgehog/GLI pathway are emerging, such as in basal cell carcinoma, a kind of skin cancer."

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### Related article

1 August 2017, [4SC AG was granted a fundamental composition of matter patent for 4SC-208 for the US](#)

### Further information

#### About 4SC-208

Data from several preclinical *in vivo* models has established the efficacy of [4SC-208](#) in inhibiting the Hedgehog/GLI signaling pathway. Inhibition of this signaling pathway has emerged as a highly effective strategy in obstructing the tumorigenic capacity of cancer stem cells, as well as tumor development, proliferation and survival.

Available inhibitors of Hedgehog signaling target the pathway upstream of the transcription factor GLI, whereas 4SC-208 inhibits at the level of GLI and is thus potentially able to avoid the tumor recurrence and relapse observed in response to currently available inhibitors.

4SC believes that 4SC-208 is a promising drug candidate and expects to complete formal preclinical testing in 2018 and to enter into a Phase I/II clinical study immediately thereafter. Cancer indications that are particularly promising are those where resistance to therapies targeting the Hedgehog/GLI pathway are emerging, such as in basal cell carcinoma.

### **About cancer stem cells**

Cancer stem cells, like somatic stem cells, are multi-potent; they are able to self-renew and to generate more differentiated bulk tumor cells. They are also the 'roots' of the tumor, assuring its sustained growth. If disseminated, they cause metastasis and lead to new tumor lesions.

Cancer stem cells are often resistant to chemo- and radiotherapy and even after section, circulating cancer stem cells are often left behind. The result is a lifelong risk of tumor re-initiation and metastasis. So in order to achieve sustained remission, cancer stem cells must be completely eliminated.

4SC believes that [4SC-208](#) is a promising drug candidate in the field of cancer stem cells and intends to advance the compound into clinical studies in relevant cancer indications.

### **About 4SC**

[4SC AG](#) is a clinical-stage biopharmaceutical company developing small-molecule drugs that can target key indications in cancer with high unmet medical needs. Such drugs are intended to provide patients with innovative treatment options that are more tolerable and efficacious than existing therapies and provide a better quality of life. 4SC's pipeline is protected by a comprehensive portfolio of patents and currently comprises three key drug candidates in various stages of preclinical and clinical development: [resminostat](#), [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 had 47 employees as of 30 September 2017 and is listed on the Prime Standard of the Frankfurt Stock Exchange (FSE Prime Standard: VSC; ISIN: DE000A14KL72).

### **Forward-looking information**

*Information set forth in this press release contains forward-looking statements, which involve risks and uncertainties. The forward-looking statements contained herein represent the judgement of 4SC as of the date of this press release. Such forward-looking statements are neither promises nor guarantees, but are subject to a variety of risks and uncertainties, many of which are beyond 4SC's control, and which could cause actual results to differ materially from those contemplated in these forward-looking statements. 4SC expressly disclaims any obligation or undertaking to release any updates or revisions to any such statements to reflect any change in its expectations or any change in events, conditions or circumstances on which any such statement is based.*

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