

Summer greetings

Newsletter June 2019

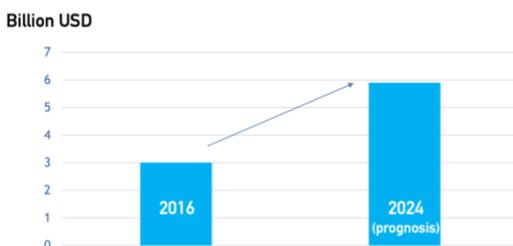


During spring we have reached two important milestones, one in each project. With regards to the hair project we have submitted a patent application for our unique topical formulation of FOL-005, and in the diabetes project we have chosen a candidate. Preparations for a clinical phase II-study with our unique topical formulation of FOL-005 in patients with hair loss are in full swing and we are preparing to take the diabetes project into clinical development.

There are few drugs in late clinical development for hair growth - we're preparing the next phase II-study with FOL-005

The demand for treatment of alopecia, i.e. hair loss, is great. Annual sales of registered pharmaceuticals amount to circa 3 billion USD globally and products not classified as pharmaceuticals are also sold for large sums. Despite the extensive market there are today few drugs in late clinical development.

Sales of drugs for hair loss



Fast and good effect on hair growth in an earlier clinical study

The development of our candidate FOL-005 is now advancing rapidly. During late 2018 we presented new and promising results from the first phase IIa-study where FOL-005 was injected in the scalp of alopecia patients. The study showed that the treatment is safe and has a good effect on hair growth. In these early studies it is difficult to demonstrate a statistically significant effect as the number of patients is small. But despite the low number of patients our phase IIa-study

showed an almost statistically significant effect ($p=0,078$). The results show that in patients receiving injections with FOL-005 hair growth increased by an average of 7 hairs per cm^2 at the highest dose of FOL-005 compared to baseline. The effect that FOL-005 was shown to have on hair growth is at a level with what can be seen found following treatment with established treatments e.g. Minoxidil and Finasteride during significantly longer periods of time. In addition to an increase in the number of hairs, the study also showed a marked increase in the number of hair follicles in growth phase following treatment, especially at the highest dose tested, whilst the placebo group instead showed a clear decrease. This positive effect indicates that a longer treatment with FOL-005 could further increase hair growth.

The results from the phase IIa-study with injected FOL-005 support further development of the candidate. As it is considerably more user-friendly if the patients can avoid injections and instead administer the drug themselves in the form of a cream, our continued development will entirely focus on our new and unique topical formulation that can be applied directly to the skin.

Today there are only two approved drugs for hair loss

Finasteride

- Prescription medication
- Limited to treatment of men

Minoxidil

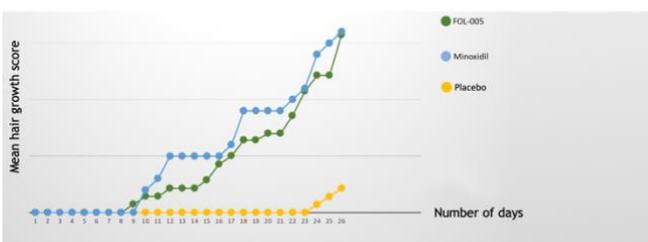
- Non-prescription drug
- Limited effect
- Few patients respond to treatment
- Several types of side effects

During spring Follicum submitted a patent application for the new formulation. If this application is approved, protection for FOL-005 will be extended by 8 years.

Preclinical trials support our hypothesis

Earlier this year we conducted an *in vivo* study with the topical formulation in an established hair growth model in mice. Following application of the highest dose five times a week, we could see a marked increase in hair growth. The positive results from the *in vivo* study are very important as they clearly showed that treatment with the new formulation really works and leads to clear stimulation of hair growth. The study also compared FOL-005 to an established treatment, minoxidil 5% taken twice a day, and the results for the two treatments were equivalent. Based on those results, we also make the assessment that we have not achieved maximum effect with the current dose of FOL-005. Concentration and number of administrations will therefore be optimised in the clinical phase II study with topically administered FOL-005 that we are currently planning.

Topical formulation of FOL-005 shows effect in mice



We expect to begin the new phase II study around the year-end 2019. We will treat more patients than in the previous study, and we will treat them more frequently and with higher doses.

We have discussed our development plan with the German medical authorities, and we will shortly choose a CRO to conduct the study. Already during summer, we will conduct a shorter toxicology study in order to demonstrate that the new topical formulation is as safe as injected FOL-005.

Production of investigational drug

When developing FOL-005 further, it is vital that we have a well-functioning production process. For that reason we have during spring carried out preparations so that the manufacturing process will be ready well before manufacturing is the start. In the future the manufacturing process will be scaled up and the product will be tested in clinical phase IIb- and III studies in both men and women prior to a potential registration and market launch.

Development plan for the topical formulation



Follicum continuously works to communicate results and successes to potential partners and we notice a strong and growing interest in FOL-005 from many pharmaceutical companies. For example, we received a lot of positive feedback regarding our study results from potential partners when we met at the major partnering meeting BIO 2019 in Philadelphia, USA in



FOL-005 IN SHORT

- Two phase IIa studies with injected FOL-005 showed positive results and support continued development of the drug candidate.
- The continued development focuses on clinical studies of the new and unique topical formulation of FOL-005, which means that the patients managed their treatment themselves in an easy manner.
- During spring we submitted a patent application regarding the new formulation. If this is approved protection will be extended by eight years.
- We expect to commence a larger phase II study with the new dosage form of FOL-005 at the year-end 2019.

June.

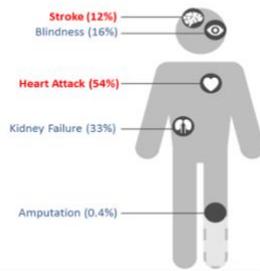
From hair loss to diabetes – a drug candidate has been selected and we are preparing clinical development

Even though hair loss and diabetes are two very different indications there is a biological link between the conditions. The hair growth process is similar to the process of tissue repair, and several diabetes complications arise due to a reduced ability to repair damaged tissue. Improved capacity to repair damaged tissue can reduce the risk of diabetes complications, which would be very desirable from a treatment perspective. Research has also shown that men can be affected by hair loss already in the early stages of diabetes and that hair loss can be an early sign of type 2-diabetes.

In type 2-diabetes the body's ability to produce insulin is gradually impaired. Simultaneously, the body's ability to utilise insulin is also impaired, meaning that a greater amount of insulin is needed to control the blood sugar. It becomes increasingly difficult for the body to produce enough insulin to handle a rise in blood sugar levels, e.g. following a meal. Substantial variations in blood

sugar levels cause various complications often affecting diabetes patients, e.g. cardiovascular complications, obesity, liver- and kidney damage.

46% of patients with type 2-diabetes suffer from at least one complication



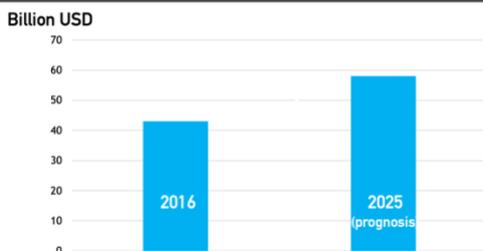
Follicum's peptides show promising properties

We have performed a number of preclinical tests showing that Follicum's peptides have an insulin-releasing effect equivalent to, or even better than, some available diabetes drugs. Furthermore, at elevated glucose concentrations insulin release is potentiated in *in vitro* tests. This is precisely the effect one wants to achieve in patients with high blood sugar levels. The peptides' potential has also been confirmed in glucose-tolerance tests, where they have been shown to have a glucose-reducing effect in animals. Experimental studies have also demonstrated that our new, optimised peptides have a protective and preservative effect on beta cells (the cells that produce insulin) subjected to long-term exposure to high concentrations of glucose.

Potential in type 1-diabetes

In addition to promising preclinical results with regards to type 2-diabetes, the data also show that the peptides have the ability to delay disease onset in type 1-diabetes in an animal model. The results clarify that the peptides find and remain in the pancreas. This is a great advantage in an insulin-regulating drug as the pancreas is the centre for insulin production. Our ongoing work includes dose optimisation as well as studies to establish the mode of action for Follicum's peptides in type 1-diabetes. The knowledge derived from this research will also be valuable with regards to research concerning the mechanisms involved in type 2-diabetes. This work is carried out in close collaboration with a group of experts from the Lund University Diabetes Centre.

Diabetes market (type 2)



An extensive and attractive market

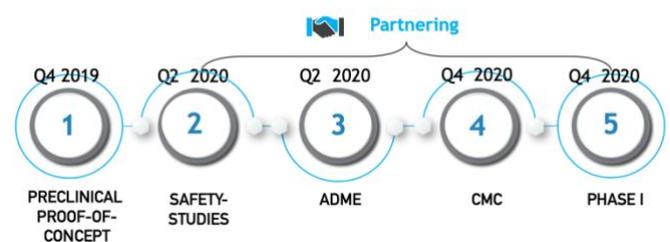
The diabetes market is very extensive and competitive. Therefore, our work is targeted at identifying factors that can differentiate us from our competitors and enable an

early partnership. Within our international network, we are discussing how we can tailor our research in an optimal way by focusing on limiting serious diabetes complications. As a large part of the patients' illness and the health care costs arise from complications, Follicum's aim is to develop a treatment within this area.

Prepared to be able to start the first clinical study during 2020

Following an extensive selection process during spring, we have chosen the most promising candidate to develop further. In addition to this candidate, we have also chosen three follow-up candidates. Several of our peptides demonstrate good effects in initial studies, but the peptides' profiles differ somewhat and demonstrate effects on different types of diabetes complications. In parallel with the preclinical development of the chosen candidate, we want to evaluate this further, not least as potential partners have shown an interest in different types of complications. During autumn 2019 we expect further *in vivo* results regarding our peptides as well as further data concerning effects on diabetes complications. The next important milestone for the diabetes project is to be ready by late 2020 to begin a phase I-study.

Development plan for the diabetes project



A highly-qualified Scientific Advisory Board

In order to accelerate our diabetes project, we have strengthened the company both externally and internally. During spring we established an international and highly-qualified Scientific Advisory Board. The aim is to strengthen knowledge transfer from academic research to clinical application and commercialisation. This is an important part of the project as the candidate is approaching clinical development. Early this year we hired two researchers (both PhDs) in order to establish an in-house lab where we can study the effects of Follicum's peptides on diabetes and its complications *in vitro*. With more than 10 years of experience as a Principal Scientist at Novo Nordisk A/S, Dr. Eva Palmqvist has a solid background in pharmaceuticals with specific expertise in diabetes-related cell biology. Dr. Polyxeni Mantani has several years of experience as a postdoc and researcher at Lund University and is highly competent within the area of chronic inflammation, a condition closely connected to diabetes and its secondary diseases. Follicum's latest addition is Dr. Chrysostomi Gialeli who has joined us in a postdoc position with the aim of strengthening the research on the potential of Follicum's peptides in future diabetes treatment.

Since 2017, Follicum has been part of an extensive diabetes project led from Lund University and whose work is funded by the Swedish Foundation for Strategic Research. In addition to Follicum, among others Novo Nordisk, Johnson & Johnson, and Pfizer participate in the project. This provides us with valuable connections and possibilities for networking at an international top level. Professor Jan Nilsson's research team at the Clinical Research Centre at Lund University has twice been awarded research grants



THE DIABETES PROJECT IN SHORT

- During spring we have selected a candidate for further development in the diabetes project.
- Preclinical results show that Follicum's peptides have an insulin-releasing effect.
- Experimental studies show a protective effect on beta cells, the cells that produce insulin.
- In animal models, our peptides demonstrate an ability to delay the onset of type 1-diabetes.
- We are focusing on counteracting complications connected to diabetes.
- We have strengthened our competency with regards to diabetes.

from the Novo Nordisk Foundation to carry out preclinical diabetes studies with Follicum's peptides.

Increased understanding of the mode of action will strengthen both projects

For the company, there are clear synergies in running two peptide-based projects in different development stages. During spring we have continued the work with mapping the mode of action for our peptides within both hair loss and diabetes. We have identified interesting receptors that appear to be new therapeutic targets in both areas. This work is important for future discussions with regulatory authorities and potential partners as well as for the further development of our products. The work will continue during the coming year in order to gain a detailed understanding of how the receptors and peptide classes function. We have signed an agreement with the Centre for Skin Sciences (CSS) at the University of Bradford, UK, to continue investigating the mode of action. Furthermore, Lund University Diabetes Centre have recently awarded Jan Nilsson's research group a postdoc position with the aim of studying mode of action for our diabetes peptides.

Finally I'd like to note that we have several important milestones ahead of us during the year that will add further value to the company – starting the new clinical phase II-study with our unique topical formulation in patients with hair loss, additional *in vivo* results with our diabetes peptides, and data regarding effects of the peptide class on diabetes complications are some of the most important milestones.

Wishing you all a sunny and relaxing summer!

Lund, 18th June 2019

Jan Alenfall, CEO

[Interview with CEO Jan Alenfall, subtitles in English](#)