

**Press release**

Helsingborg, Sweden, May 12, 2017

**Glactone Pharma granted patent for STAT3 inhibitors**

**Glactone Pharma has been granted a Swedish patent covering novel synthetic analogs of the STAT3 inhibitor GPA500 with improved druglike properties. Glactone Pharma is actively profiling small-molecule inhibitors of STAT3 as a potential new immunotherapy and for the treatment of drug resistant cancers, areas where a STAT3 inhibitor has great potential to address large unmet medical needs and help patients.**

The patent “Ether analogues of galiellalactone”, Swedish Patent No. SE539204, is valid until 2035. The decision to grant the patent was published in the Swedish Patent Gazette   
No. 2017/19 on May 9, 2017.

“The granting of this patent is very pleasing as it further strengthens Glactone Pharma’s position as a leader in the discovery and development of direct small-molecule STAT3 inhibitors,” said Martin Johansson, CEO of Glactone Pharma.

The patent is the result of research by an interdisciplinary collaboration with researchers at Lund University, Sweden, led by Professor Olov Sterner.

STAT3, a so-called transcription factor, is one of the most promising targets in cancer drug research. It is involved in many key disease processes, including tumor induced immunosuppression, proliferation, drug resistance and metastasis. However, STAT3 lacks the druggable characteristics of enzymes and cell receptors, which makes it a very difficult drug target. Furthermore, it is an intracellular molecule and as such not amendable to be targeted by antibodies.   
  
Glactone Pharma has built a strong portfolio of small molecule STAT3 inhibitors based on the naturally occurring STAT3 inhibitor GPA500. The innovators behind Glactone Pharma have previously demonstrated that GPA500 binds directly to STAT3 and that this prevents the function of STAT3 regardless of up-stream activators.

Glactone Pharma is continuing to profile its proprietary small molecules in immuno-oncology models to determine the most effective ways of combining STAT3 inhibition with immunotherapies and in models of treatment resistant cancers.

**Immuno-oncology**

Immuno-oncology therapies are drugs or vaccines that have the ability to activate the immune system to recognize cancer cells and destroy them. Immunotherapy has the potential to revolutionize cancer treatment. One immunotherapy strategy involves targeting checkpoint molecules that act as brakes on immune cells with e.g. PD-1 and PD-L1 antibodies, thereby unleashing a more powerful immune response. However, a majority of patients treated with anti-PD-1/PD-L1 monotherapies do not achieve objective responses and most tumor regressions are partial. To increase the number of patients who benefit from immune checkpoint blockade combination treatments are necessary. Preclinical models have indicated possible targets for combination treatment including STAT3.

**STAT3 and GPA500**

The transcription factor STAT3 (Signal Transducer and Activator of Transcription 3) is a protein that is involved in several mechanisms of carcinogenesis, including the regulation of genes involved in cell proliferation, differentiation and metabolism. Constitutively active STAT3 is known to contribute to tumor progression and is considered a key factor in tumor induced immunosuppression and drug resistance. STAT3 is an ideal target for cancer therapy and inhibition of STAT3 represents a highly promising strategy in immuno-oncology.   
  
GPA500 is a small molecule inhibitor of the transcription factor STAT3 with a unique mechanism of action. GPA500 directly inhibits STAT3 and reduces the proliferation of prostate cancer cells *in vivo* and *in vitro*. With GPA500 as a lead, Glactone Pharma has developed novel proprietary STAT3 inhibitors with improved drug-like properties.

**Glactone Pharma**Glactone Pharma is a biopharmaceutical company within PULS and is based on ground-breaking science from Lund University in Sweden. PULS is a life science company with a unique combination of scientists and industrialists who together with innovators are commercializing ideas by providing capital, know-how and committed partnership. Glactone Pharma has developed a pipeline of novel potential drugs that target the STAT3 transcription factor for the use in immuno-oncology and for the drug resistant cancers. STAT3 is directly involved in tumor mediated immune suppression and in resistance to targeted therapies making it an ideal target in combination treatments. To learn more, visit [www.glactone.com](http://www.glactone.com) and [www.pulsinvest.se](file:///C:\Users\Maklarhuset\Desktop\www.pulsinvest.se).

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