

## press release

### **Novo Nordisk to establish California manufacturing site for stem cell-based therapies**

**Bagsværd, Denmark, Monday 1 October** – Novo Nordisk today announced the establishment of a manufacturing site in Fremont, California, US to develop and produce stem cell-based therapies. The announcement follows the signing of a long-term lease on a good manufacturing practice (GMP) facility, previously operated by Asterias Biotherapeutics.

The site will support Novo Nordisk's increased commitment to develop stem-cell based therapies within type 1 diabetes and other serious chronic diseases. Once operational in 2019, the facility will fulfil the supply of stem cell-based therapies for Novo Nordisk's clinical trial programmes.

"Our ambition is to develop stem cell-based therapies for a range of serious chronic diseases where we see significant unmet medical need," said Jacob Sten Petersen, corporate vice president and head of Stem Cell Research & Development (R&D), Novo Nordisk. "The reliable, large-scale supply of therapies is a vital component in our efforts, so I am delighted that we have established this facility that further demonstrates our strong commitment to this field."

In addition to the lease agreement, Novo Nordisk has secured a two-year non-exclusive licence on Asterias' intellectual property relating to stem cell manufacturing technology. To facilitate collaboration between the two parties and enable Asterias to progress its own clinical programmes, Novo Nordisk will sublease laboratory, manufacturing and office space within the facility back to Asterias until the end of 2021.

The establishment of the production site follows Novo Nordisk's announcement in May of an agreement with the University of California San Francisco (UCSF) in which it licensed a technology to enable the generation of GMP compliant human embryonic stem cell (hESC) lines in addition to the rights to develop these into future regenerative medicine therapies. Working in a GMP laboratory at UCSF, the partners are deriving cell lines that are defining a new quality standard in the production of stem cell-based therapies.

Novo Nordisk's R&D in this field is anchored in its recently established Stem Cell Transformational Research Unit, based in Måløv, Denmark. The unit oversees multiple

partnership projects pursuing stem cell-based treatments for diabetes, Parkinson's disease, chronic heart failure and dry age-related macular degeneration (AMD). The new production facility will directly support these projects, enabling the future expansion of Novo Nordisk's stem cell research portfolio into the clinic.

### **About stem cells**

Stem cell-based therapy is emerging as a treatment option for a number of serious chronic diseases. It has the potential to provide novel treatments for diseases with high unmet medical needs where no or inadequate therapy exists.

Pluripotent stem cells have an unlimited capacity for self-renewal and the potential to be differentiated into any specialised cell type in the body. The Novo Nordisk stem cell technology platform is based on human embryonic stem cells (hESC) that can be used for generation of cell products for a wide range of therapeutic indications.

### **About Novo Nordisk**

*Novo Nordisk is a global healthcare company with 95 years of innovation and leadership in diabetes care. This heritage has given us experience and capabilities that also enable us to help people defeat obesity, haemophilia, growth disorders and other serious chronic diseases. Headquartered in Denmark, Novo Nordisk employs approximately 43,100 people in 79 countries and markets its products in more than 170 countries. For more information, visit [novonordisk.com](http://novonordisk.com), [Facebook](#), [Twitter](#), [LinkedIn](#), [YouTube](#).*

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