

Octapharma & ClinStorage

How trust, security and communication safeguard world-class protein therapy development

Human cell banks are precious. They are the prized genetic material from which Octapharma develops new biologic therapies against many of the world's most severe diseases – as well as its existing treatments for critical conditions like haemophilia.

So who Octapharma trusts to store and secure these raw materials is a critical decision. In Sweden, specialist bio-science and ultra-low temperature storage provider ClinStorage stores many of Octapharma's most valuable Master Cell Banks and Working Cell Banks.

Octapharma Strategic Purchaser Marie Strandberg and Asoc Prof Ola Camber, CEO of ClinStorage, explain.

Trust, security and communication are at the heart of most successful relationships – and they're crucial to the work between pharmaceutical giant Octapharma and biologic storage provider ClinStorage.

Octapharma Strategic Purchaser Marie Strandberg: "ClinStorage's storage facilities are safe, strong and secure. They're GDP and GMP certified and the company is skilled and easy to communicate with. We store both Working Cell Banks and Master Cell banks with ClinStorage."



Reducing risk in human cell bank storage

Human cell banks contain the 'golden eggs' of biologic therapeutic research. They are rich databases that include many of the specific genomes that will be crucial for future therapies. So it is important for biologic pharma developers not to store all these 'eggs' in one basket.

Storage conditions for MCBs are rigorous and stringent. It's important for protein therapy manufacturers to reduce the risk of damage or loss to the cell line by spreading their assets: Off-site as well as on-site storage is crucial to reducing risk. At production facilities cell banks are often stored in two or more sites, separated from each other, and storage at a separate site to the production plant also plays a vital role in reducing risk.

Octapharma Strategic Purchaser Marie Strandberg: "We need two sites to store the cell banks – it's important that one of them is a non-Octapharma site. ClinStorage's storage facilities are strong and secure and close to our production plant. We started storing materials with ClinStorage in October 2018 and have stored more new materials with them in 2019 as requirements have grown."

The science of cell banks

Cell banks are kept in a two-tier system – **MCBs** (Master Cell Banks), made from human cell lines, and **WCBs** (Working Cell Banks). MCBs require a huge array of tests against contaminants such as bacteria, fungi, and mycoplasmas and need to be kept in sterile conditions and be **PCR** (Polymerase Chain Reaction) tested for viruses.

ClinStorage CEO Asoc Prof in biopharmaceutics

Ola Camber: "Obviously as specialists in biopharmaceutics we were delighted to begin collaborating when Octapharma first contacted us. Octapharma is one of the world's most innovative and important protein experts – and the world's largest privately owned independent plasma fractionator. We're very proud Octapharma has chosen us in a market unit as large as Sweden to help them store cell banks which are key to their future."

Octapharma Head of Market Communication

Per Eriksson: "Biologic therapies are very important for Octapharma's future. Protein is a big part of what makes us special – and at the heart of protein production are our cell banks. As a privately owned family company we have a long-term perspective. Many of the patients worldwide who depend on us are chronically ill with long-term diseases. They deserve a long-term partner, and being privately owned allows us to be that partner for them in the long-term. Specializing in human protein too will allow us to keep our lead in the long-term. We believe the market is moving more and more towards human protein and recombinant technologies applied to human cell lines. That's a real driving force for our R&D."

ClinStorage CEO Asoc Prof in biopharmaceutics

Ola Camber: "Octapharma is the largest protein-based biologic pharma company here in Scandinavia. We look forward to continuing to work with them in this critical, fast-moving field of medical treatment."

Octapharma:

3 NEED-TO-KNOWs

1. Octapharma products are available in 115 countries and treat hundreds of thousands of patients every year.
2. Octapharma focuses on three therapeutic areas: haematology, immunotherapy and critical care.
3. Octapharma develops and produces premium quality medicines based on human proteins from human cell lines and human plasma sourced from plasma donation centres and external sources.



Secure storage guaranteed

24/7 temperature monitoring, comprehensive power backup, redundancy storage chambers, fully controlled facility access.



Specialists in low and ultralow temperatures

We store and ship APIs, IMPs, cells, plasma and others down to $-196^{\circ}\text{C}/\text{LN}_2$.



One-stop-shop: global distribution

Distribution, transport and cold chain logistics management. Includes import and batch release from 3rd countries, and QP release.