

## PRESS RELEASE

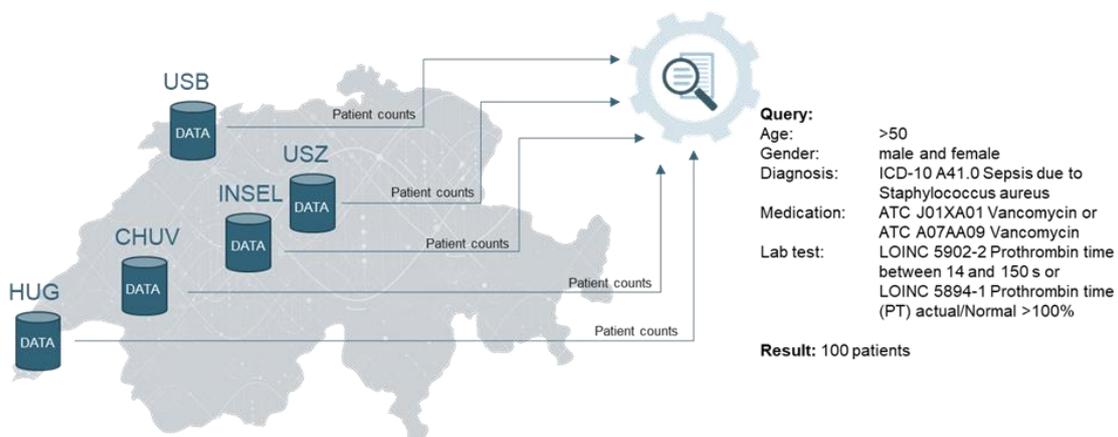
Basel, Switzerland, November 18<sup>th</sup>, 2021.

**Clinerion Patient Network Explorer technology used by the Swiss Personalized Health Network (SPHN) to enable feasibility queries on clinical data across all five of Switzerland's university hospitals simultaneously.**



Clinerion Patient Network Explorer technology powers the Federated Query System (FQS) of the Swiss Personalized Health Network (SPHN), which operates across all five of Switzerland's university hospitals. Via the FQS, authorized researchers can run feasibility queries for multisite data-driven research projects on clinical data in all five hospitals simultaneously.

Clinerion was selected by the Swiss Personalized Health Network (SPHN) to be the backbone of its Federated Query System (FQS) due to the unique nature of its patented federated cloud infrastructure, which allows patient data to remain inside the IT infrastructure and under the control of each hospital, while still allowing queries of anonymized and obfuscated patient data from other hospitals in the network.



The five university hospitals of Switzerland are:

- Centre hospitalier universitaire Vaudois – CHUV (Lausanne University Hospital)

- Hôpitaux Universitaires de Genève – HUG (Geneva University Hospitals)
- Inselspital, Universitätsspital Bern – INSEL (University Hospital of Bern)
- Universitätsspital Basel – USB (University Hospital of Basel)
- Universitätsspital Zürich – USZ (University Hospital of Zürich)

The FQS allows researchers to verify the feasibility of their project by assessing whether suitable patient data for specific research questions exist at Swiss university hospitals. The available information in the system, currently more than 70 million data elements from over 450'000 patients, who have consented to the further use of their data for research purposes, is a subset of the clinical data of all five university hospitals.

The platform includes demographic data (age and gender), diagnosis (coded in ICD-10), procedures (coded in CHOP), medication (coded in ATC), laboratory tests (coded in LOINC) and laboratory test results with units (according to UCUM). Under the project lead of the SPHN Data Coordination Center (DCC) managed by the SIB Swiss Institute of Bioinformatics, the clinical partners harmonized and standardized the anonymized clinical information, making it available for federated queries via a common front-end.

The FQS uses a customized version of Patient Network Explorer, enabling researchers to search for fully anonymized clinical information across all five university hospitals, while allowing the hospitals to retain full control over their data. It fully complies with privacy requirements, since only aggregated search results are shared with users and small patient numbers are obfuscated to prevent potential re-identification.

“For the first time, it is now possible to run feasibility queries for data-driven research projects over all five university hospitals in Switzerland. This is a major step for SPHN,” says Dr. Katrin Cramer, Director, Personalized Health Informatics of the Swiss Institute of Bioinformatics. “Adapting the Patient Network Explorer technology to SPHN's needs and specifications was necessary because the focus of the SPHN Federated Query System lies on data. We are confident that the customization in Patient Network Explorer for SPHN can also be beneficial for other research networks outside Switzerland.”

“We are very pleased to be able to announce this collaboration, our first closed network based on Clinerion technology, as it is in our home country of Switzerland,” says Baris Erdogan, CEO of Clinerion. “Even in a closed network, the federated, cloud nature of Patient Network Explorer offers great flexibility in assembling patient data access from across multiple data warehouses and silos while keeping the data within the IT infrastructure of each hospital. We foresee that this achievement can be used by other national networks, closed research consortia and other organizations who have collected data from multifarious sources, around the world.”

## About Clinerion

Clinerion accelerates clinical research and medical access to treatments for patients. We use proprietary technologies for analysis of patient data from our global network of partner hospitals.

Clinerion's Patient Network Explorer radically improves the efficiency and effectiveness of clinical trial recruitment by offering data-driven protocol optimization, site feasibility evaluation and real-time patient search and identification to match patients to treatments. Our technology solution provides real-world evidence analytics for medical access. Clinerion facilitates the participation of partner hospitals in leading-edge, industry-sponsored trials and time savings in patient recruitment. We create innovative and disruptive fit-for-purpose solutions which enable pharmaceutical companies to shorten patient recruitment and save costs by streamlining operations and leveraging strategic intelligence. Clinerion's proprietary Big Data analytics technologies leverage real-time data from electronic health records which comply with international patient privacy and data security regulations. Clinerion is a global data technology service company headquartered in Switzerland.

Clinerion website: [www.clinerion.com](http://www.clinerion.com)

Clinerion's Patient Network Explorer:

[www.clinerion.com/index/OverviewOurSolutions/ClinerionPatientNetworkExplorer](http://www.clinerion.com/index/OverviewOurSolutions/ClinerionPatientNetworkExplorer)

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### **About the Swiss Personalized Health Network (SPHN)**

SPHN is a national initiative under the leadership of the Swiss Academy of Medical Sciences (SAMS), in collaboration with the SIB Swiss Institute of Bioinformatics. It contributes to the development, implementation and validation of coordinated data infrastructures in order to make health-relevant data interoperable and shareable for research in Switzerland. SPHN's scale and nature are unprecedented in Switzerland. It is collectively building a sustainable and FAIR health-data ecosystem from which citizens, researchers, healthcare providers, authorities and cooperating partners can benefit. SPHN works hand-in-hand with the Personalized Health and Related Technologies program (PHRT) of the ETH Domain, and interacts closely with international data sharing initiatives (e.g. GA4GH, ICPeMed, 1+MG) to ensure lessons learned are shared.

Swiss Personalized Health Network (SPHN) website: <https://sphn.ch>

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