Medical Informatics Platform

CHUV - Lausanne

A privacy preserving data analytics software for clinicians & researchers

TECHNOLOGY DESCRIPTION

The Medical Informatics Platform (MIP) is a privacy preserving, federated data analytics software. It connects patient data from hospitals and research cohort datasets without moving them from their original storage and provides a set of pre-integrated statistical methods as well as predictive machine learning algorithms for patient data exploration, data modelling, integration and execution of experiments (data analysis methods).

MIP helps investigate and compare harmonized medical extracted form pre-processed neuroimaging, neurophysiological and medical records.

Federated analysis of patients' datasets distributed in hospitals across Europe.

Access to big data to progress in the understanding of neurological and psychiatric diseases, develop and validate new biomarkers, and offer novel digital solutions for more precise and personalized medicine.

Privacy by Design and by Default; a groundbreaking approach to leverage data sharing in medicine and clinical research.

AREAS

Medicine | Informatics | Neuroscience

COMPETITIVE ADVANTAGES

The MIP leverages vast amounts of data currently locked in hospitals, without moving them outside their center of origin

- Access to patient data across large number of hospitals, large-scale clinical databases and biobanks
- Automatic extraction of neuromorphometric data from MRI
- Combination of biostatistical tools and machine learning algorithms adapted to the specific requirements of federated analyses
- Privacy preserving and GDPR compliant.
- Unique Access to large volume of Human Intracerebral EEG Data

APPLICATION & MARKET POTENTIAL

The MIP addresses the need to manage data within a large network of healthcare centers while providing access to resources outside the hospital's walls;

Our strategy relies on AGILE Methodology, developing use-cases with researchers and healthcare professionals.

- Thousands of real patients´ data across all major neurological diseases
- Streamline access to major research datasets
- Built-in tools and open-source software for advanced analysis and continuous improvement

TECHNOLOGY READINESS LEVEL

1 2 3 4 **5** **6** 7 8 9

REFERENCES

MIP is gradually engaging an increasing number of medical centers in Europe, connecting thousands of patients around the major neurological diseases.

Current MIP users include CHUV, Fatebenefratelli Brescia, CHRU Lille, Niguarda Ospedale, Uniklinik Freiburg

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Co-funded by the European Union