HARMONY ALLIANCE

What makes HARMONY Big Data Platform Unique?

We have already identified 70.000 patient data records from all over Europe, this number is expected to increase significantly in the upcoming years.

COMMUNITY

HARMONY Alliance is a Public-Private Partnership. 53 Partners and 43 Associated Members from 17 European countries, including nine pharmaceutical companies and 7 Patient Umbrella Organizations, aim to harness and mine Big Data to speed up the development of improved treatments for patients and more effective treatment strategies.

APPROACH

Artificial intelligence (AI) and machine learning (ML) algorithms make it possible to discover new relationships between large datasets: treatment outcomes, lab results, genetic and demographic data. It's been built on the latest advancements in ML/AI, such as spark technology and the OMOP Common Data Model.

TRUST

The HARMONY data platform is based on the principles of close, transparent and trusted cooperation. A spectrum of healthcare market players - pharmaceutical companies, biobanks, hospitals, organizations conducting clinical trials - are united by a mission to understand blood cancers' characteristics.

SCALE

The HARMONY Big Data Platform includes already datasets from 60,000 patients.

GOALS

The researchers and data scientists are looking for answers to yet unanswered questions: How can we diagnose patients faster and with greater precision? What are the best practices that could help doctors in making better treatment decisions? How can we tackle the unmet needs of patients? What is the best way to make progress in new drug development?

Michel van Speybroeck
Director of Data Sciences JPNV - JANSSEN, Partner of the HARMONY Alliance

"With our partners' and members' commitment, a robust governance model, and data processing procedures, the project runs seamlessly. And this is what makes the HARMONY Big Data Platform unique: teamwork and precision."

HARMONY BIG DATA PLATFORM
Leverages latest advancements in Artificial Intelligence and Machine Learning

Spark Technology
It is a unified analytics engine for large-scale data processing, an open-source, distributed processing system used for big data workloads.

The OMOP Common Data Model
The Model allows for the systematic analysis of disparate observational databases. This approach relies on transforming data within different databases into a common format and representation (terminologies, vocabularies, coding schemes).

DATA SECURITY AND DATA ETHICS
The HARMONY Alliance has developed data security and data processing standards consistent with EU legislation and ethical guidelines. This novel approach could become a blueprint for similar projects.