HARMONY ALLIANCE

Leverage Big Data to accelerate blood cancer research

Improving blood cancer care through data-driven research

#BIG DATA FOR BLOOD CANCER

Big Data offers new insights that can contribute to advances in novel therapies and more efficient medicines. The **HARMONY Alliance** encourages the research and the innovation community across the globe to share data and harness the potential of applying big data to the study of hematologic malignancies. Just one missing piece of data can be the key to a breakthrough.

Progress lies in data. Access to data provides scientists and healthcare professionals with better understanding of disease characteristics and correlations between different biomarkers.

Help us to speed up blood cancer research to develop personalized treatment and achieve better patiento outcomes. Let's break the information silos by integrating data within a secure and trusted ecosystem.

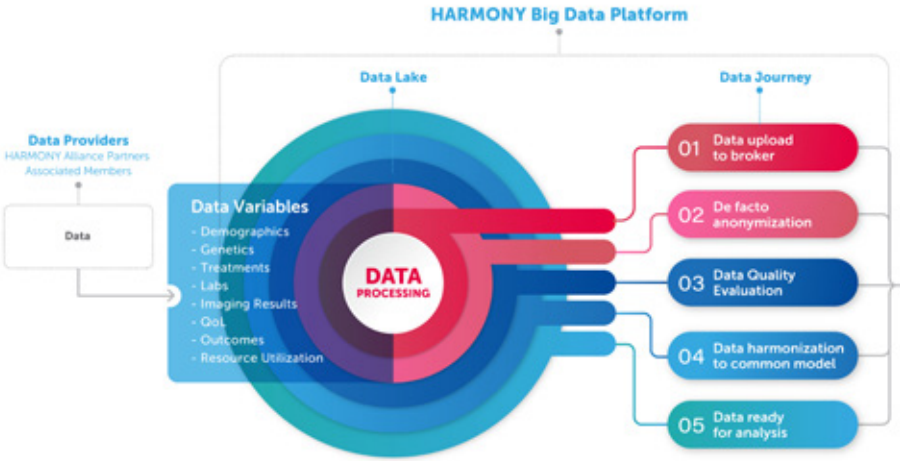
Breakthroughs developed in HARMONY

The HARMONY Alliance is a European Public–Private Partnership for Big Data in Hematology aiming to accelerate research for personalized treatment for blood cancer patients. Created in 2017, it has brought together 128 partners from 28 countries sharing their data for scientific purposes.

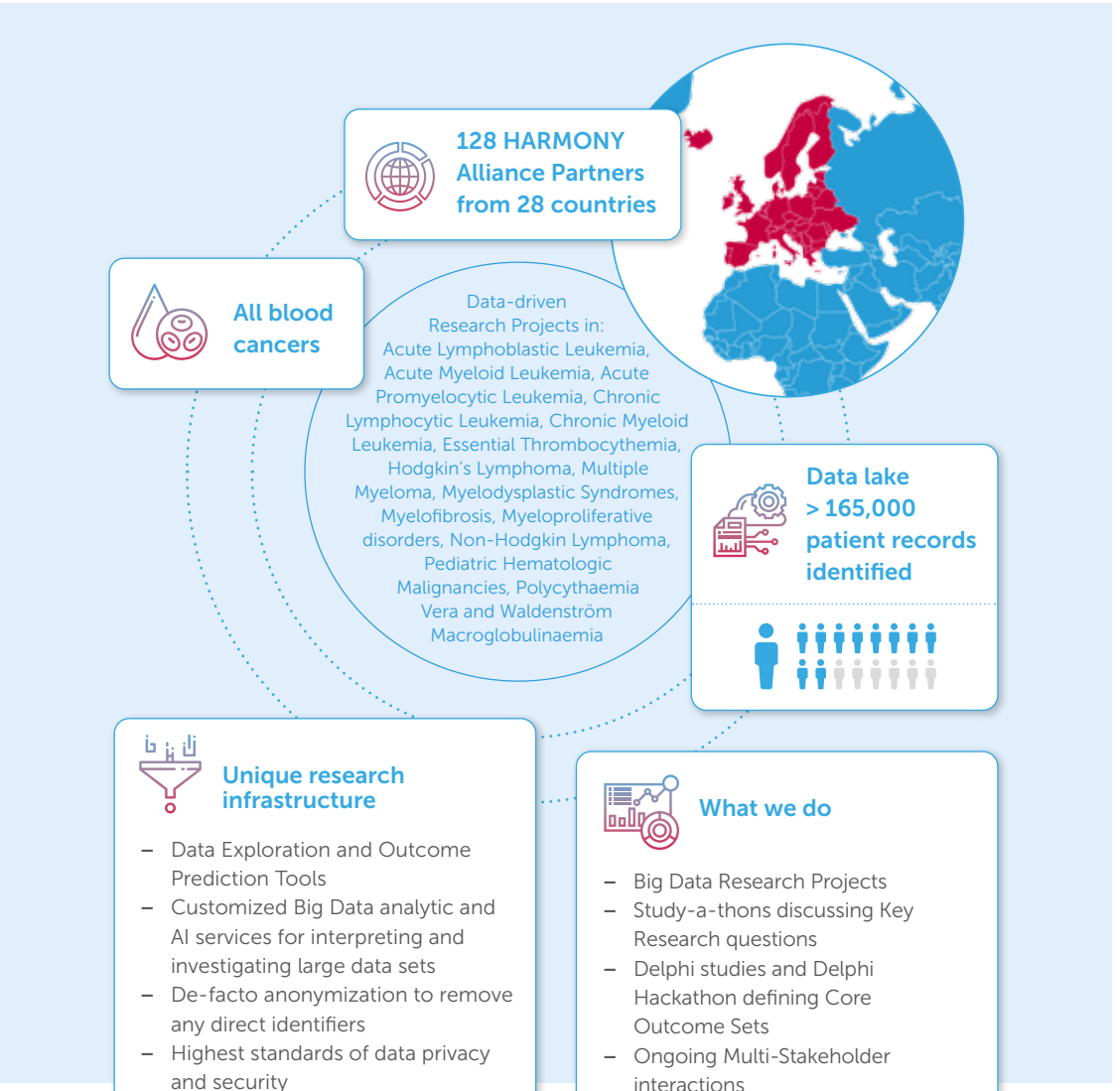
Over the past few years, the HARMONY Alliance has evolved into a unique data-driven science hub, bringing together stakeholders from across the healthcare and hematology ecosystem.

The HARMONY Big Data Platform is a centralized repository of diverse data types, ranging from clinical trials to national registries, and real-world data from hospitals. It's one of the largest databases of its kind and is continuously growing.

Our strict standards for securing data processing and ensuring patient anonimity while maintaining data quality - aligned with the General Data Protection Regulation (GDPR) - have made us a trusted partner in scientific research. We are dedicated to pioneering responsible science and research, striving for results that benefit all stakeholders, including patients, hematologists, clinicians, scientists, and regulators.



HARMONY ALLIANCE



Our manifesto for strengthening the role of data in medical sciences

Every dataset matters and can contribute to producing medical advances in the era of big-data-driven science. However, this unique opportunity to accelerate research in hematology will only become a reality when healtcare data is shared collaboratively instead of being locked in silos.

This is why the HARMONY Alliance has built a secure data platform that meets all legal requirements for data security and privacy, and is expanding its network for collaboration and data sharing.

The technology is there. Let's collaborate!

Therefore, we call all stakeholders in healthcare and life sciences to:

Share the data for science

The future of medicine relies on data-driven science. Donate your datasets to unlock insights emerging from Big Data analysis.

Collaborate within trusted networks

We We ensure the highest security and privacy standards to make data safe. We bring data and people together across multidisciplinary teams.

Make medical progress

Anonymized and harmonized high-quality data lake covering all patient groups can contribute to novel research outcomes.

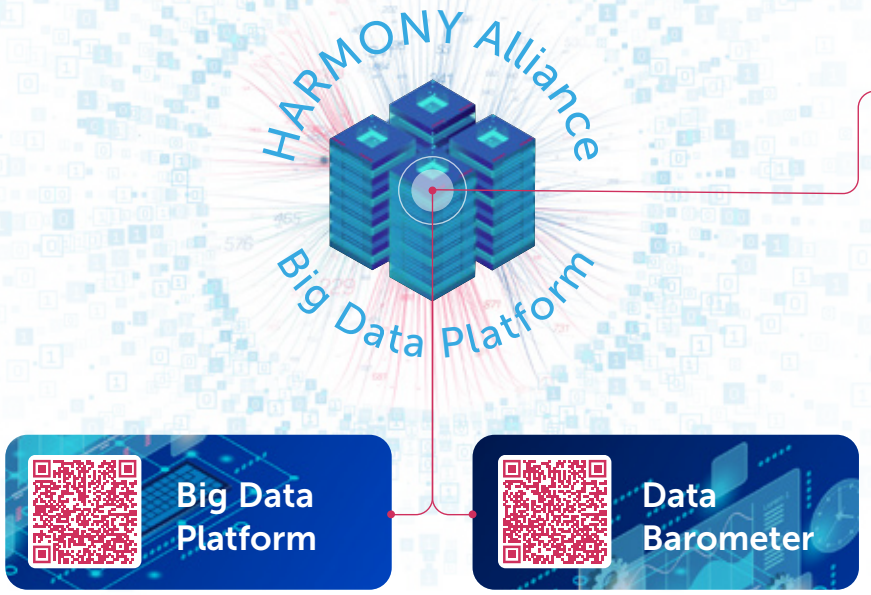
Join us!

harmony-alliance.eu

Improving blood cancer care through data-driven research

We have built the foundation for data-driven research in hematology: **The HARMONY BigData Platform, a secure, innovative research data ecosystem providing a large data lake and state-of-the-art analytic services.** The HARMONY Big Data Platform assembles harmonized clinical data of blood cancer patients provided by HARMONY Alliance Partners and Associated Members. The HARMONY data processing pipeline ensures data safety and quality, as well as patient privacy. Data analytic tools allow research teams to answer key questions that cannot be addressed with other methods.

Over 179,000 blood cancer patient datasets have been identified so far of which approx. 121.000 of these records are harmonized, translated to the OMOP common data model, and ready to be analyzed in the framework of peer-reviewed research questions. Open the QR codes to read more.



The HARMONY Big Data Platform is a catalyst for progress, demonstrating that when data is shared, collaboration is fostered, and innovation is embraced.

From data to the next generation of care

HARMONY is evolving to serve science and industry as an open and trusted research ecosystem. Check out our recently launched Data Exploration and Outcome Prediction Tools, which enable clinicians and researchers to experience the benefits of working with the Big Data Platform containing large amounts of disease-specific data.

- **The new Data Exploration Dashboards are designed to provide an overview of the data at the HARMONY Big Data Platform. Through these visualization tools clinicians, researchers and statisticians can already explore the feasibility of research using existing data, and fuel new research ideas. Currently available for ALL and AML cohorts, more to follow soon for additional Hematological Malignancies.**

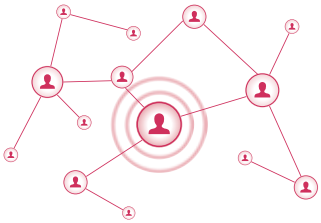
- **The Outcome Prediction Calculator, a machine-learning model for research purposes only, can help clinicians decide if an AML patient should be considered for allogeneic transplantation.**

Accelerating bloodcancer care through data-driven research

HARMONY ALLIANCE FOUNDATION

The HARMONY Alliance is a public-private partnership for Big Data in Hematology. Our mission is to unlock and spread valuable knowledge on blood cancer to speed up the development of improved treatments for patients and more effective treatment strategies. Over the past seven years, we have revolutionized the use of big data to accelerate developments in treating and managing patients with Hematological Malignancies. We have built a robust, open, collaborative research community that leverages big data to improve patient care. The EU grant phase (European Commission's Innovative Health Initiative, IHI) that made this possible will end in 2024.

Thanks to the strong commitment and drive of the multi-stakeholder partners and members involved in HARMONY, we have the unique opportunity to continue our work as a non-profit, collaborative research foundation. This new foundation will build upon the achievements of the HARMONY Alliance and bring hematology research and patient care to the next level.



"In the era of Big Data and AI, sharing anoymized data for research purposes is like a new form of blood donation. It holds the power to save human lives.

HARMONY continues to utilize the most advanced data analytics techniques and computational biology to develop personalized medicine approaches and improve clinical care."

Connect with us

Co-operative working groups, hospitals and academic institutions are invited to collaborate and contribute data.

HARMONY IHI grant agreement No. 116026 | HARMONY PLUS IHI grant agreement No. 945406. The IHI Joint Undertaking received support from the European Union's Horizon 2020 Research and Innovation Programme and the European Federation of Pharmaceutical Industries and Associations (EFPIA).

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