

HARMONY



ALLIANCE

# Introducing the HARMONY Alliance

# The power of collaboration

The success of 7 years of multi-stakeholder collaboration

June 2023





## The first and largest Public-Private Partnership for Big Data in Hematology



Community of approx.  
**500** professionals



> **120** Public Partners  
from 28 EU countries and  
including the European  
hematologic organizations



Patient Cluster with  
**9** European Patient  
Organizations



**9** Big  
pharmaceutical  
companies



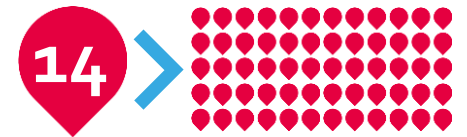
Big Data Platform  
with **>160,000**  
patient records  
identified



Unique anonymization  
concept  
Big Data analytic  
services



Research Projects, Delphi  
Surveys, Multi-stakeholder  
activities, Communications  
and Dissemination.



From key  
targeted to all  
Blood cancers

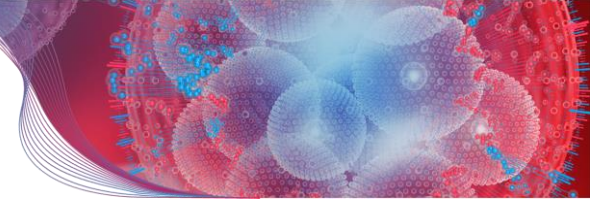


**Data-driven science** will help to meet the **needs of blood cancer patients** by increasing treatment efficacy, decreasing adverse effects, prolonging survival, and contribute to patients' quality of life.

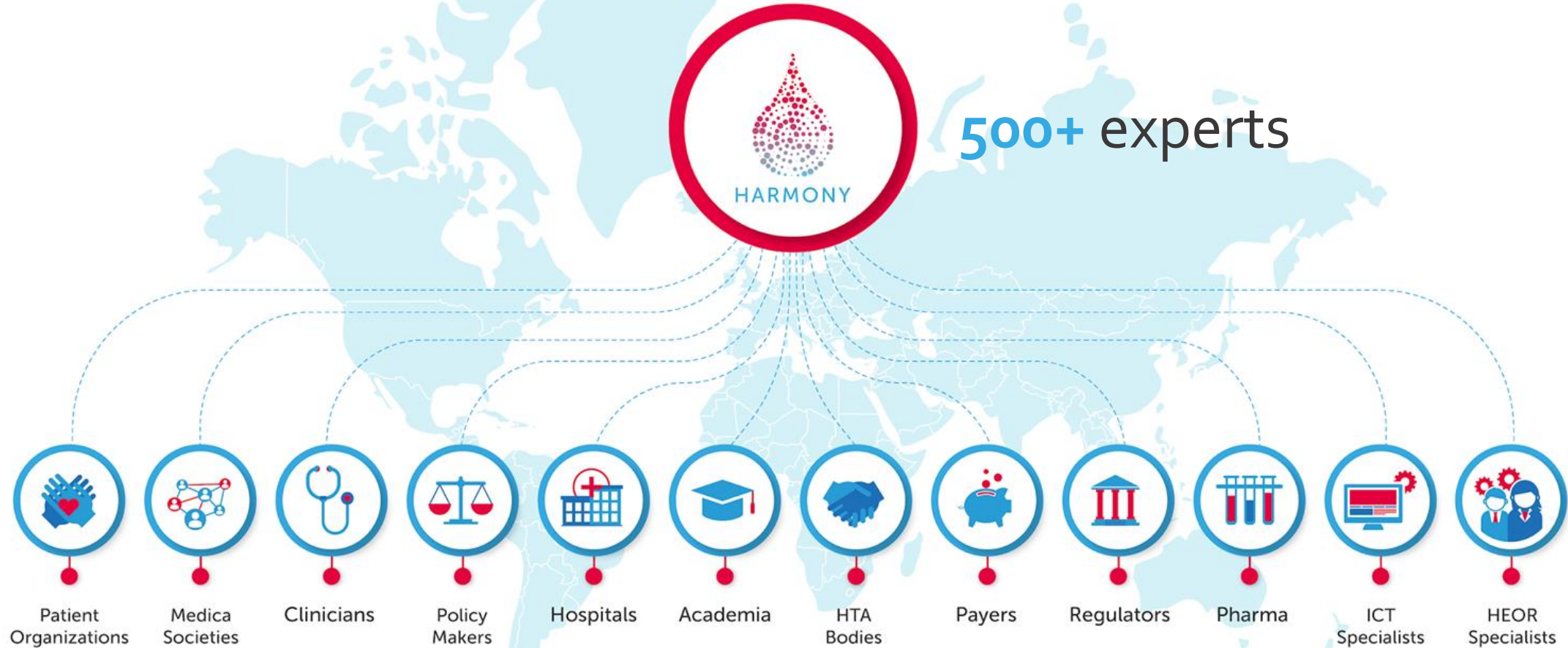
HARMONY



ALLIANCE



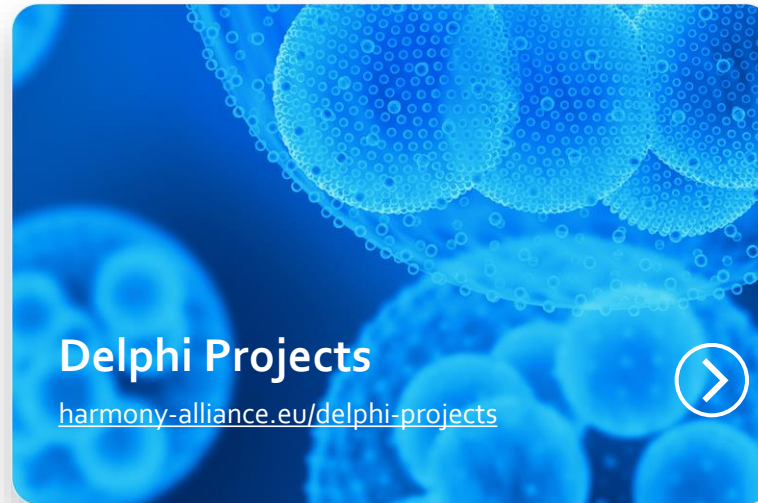
# Uniting the European hematological community





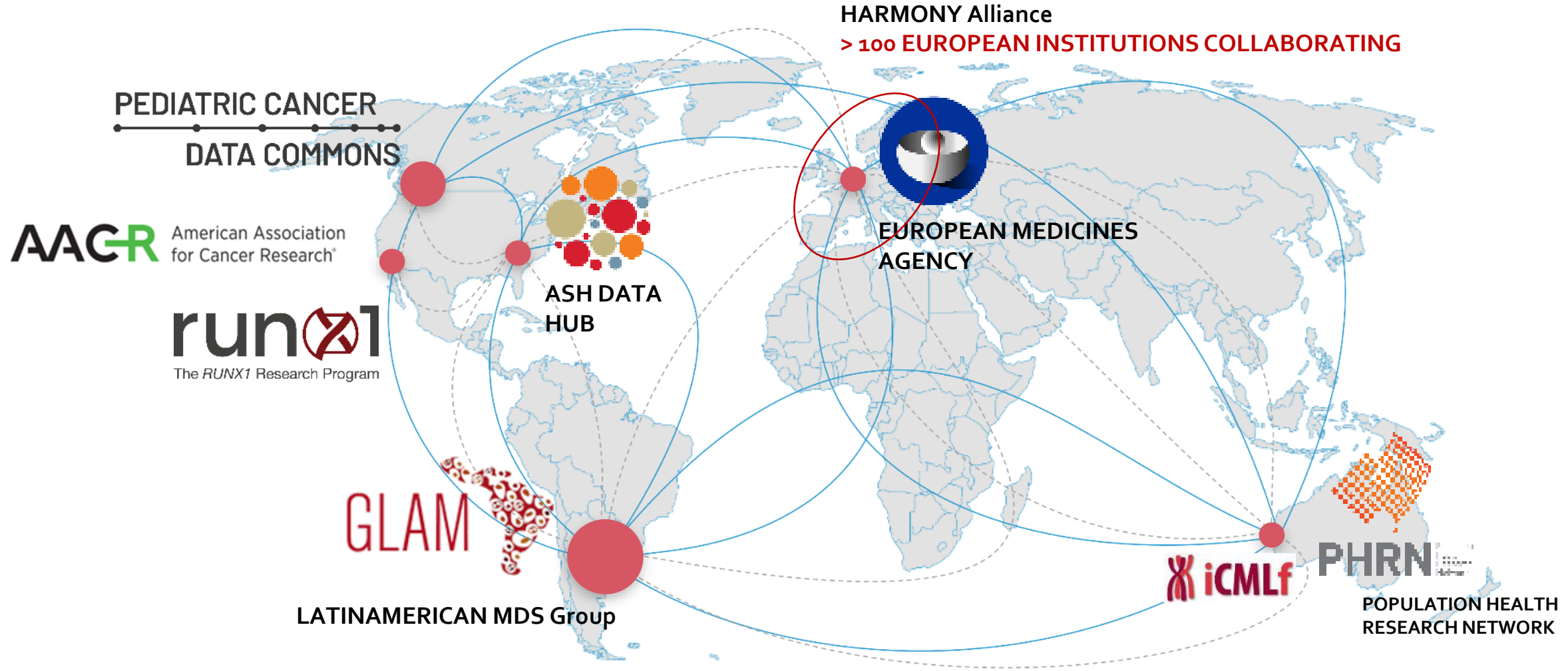
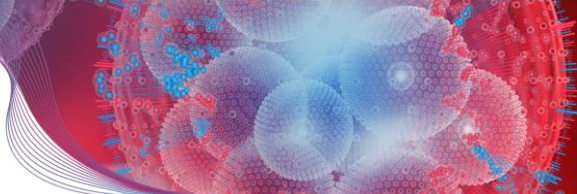
# Activities

Multiple publications  
in scientific journals  
and presentations at  
international meetings



... and more to come

# International collaborations





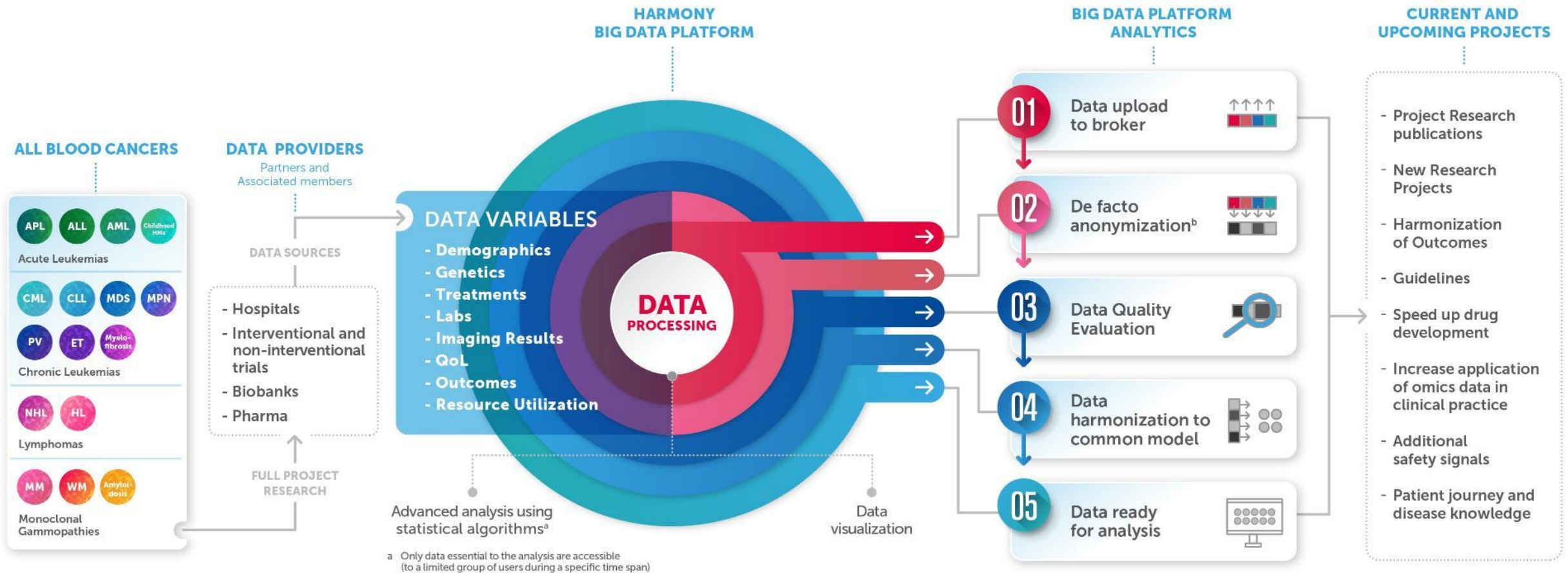
#  
**BIG  
DATA  
FOR  
BLOOD  
CANCER**

**Sharing anonymized data in a secure way, for research purposes, is like a new form of blood donation in the era of digitalization and Big Data. In result, it has the power to save human lives.**



# The HARMONY Alliance Big Data Platform

## Harnessing the full power of big data in hematology

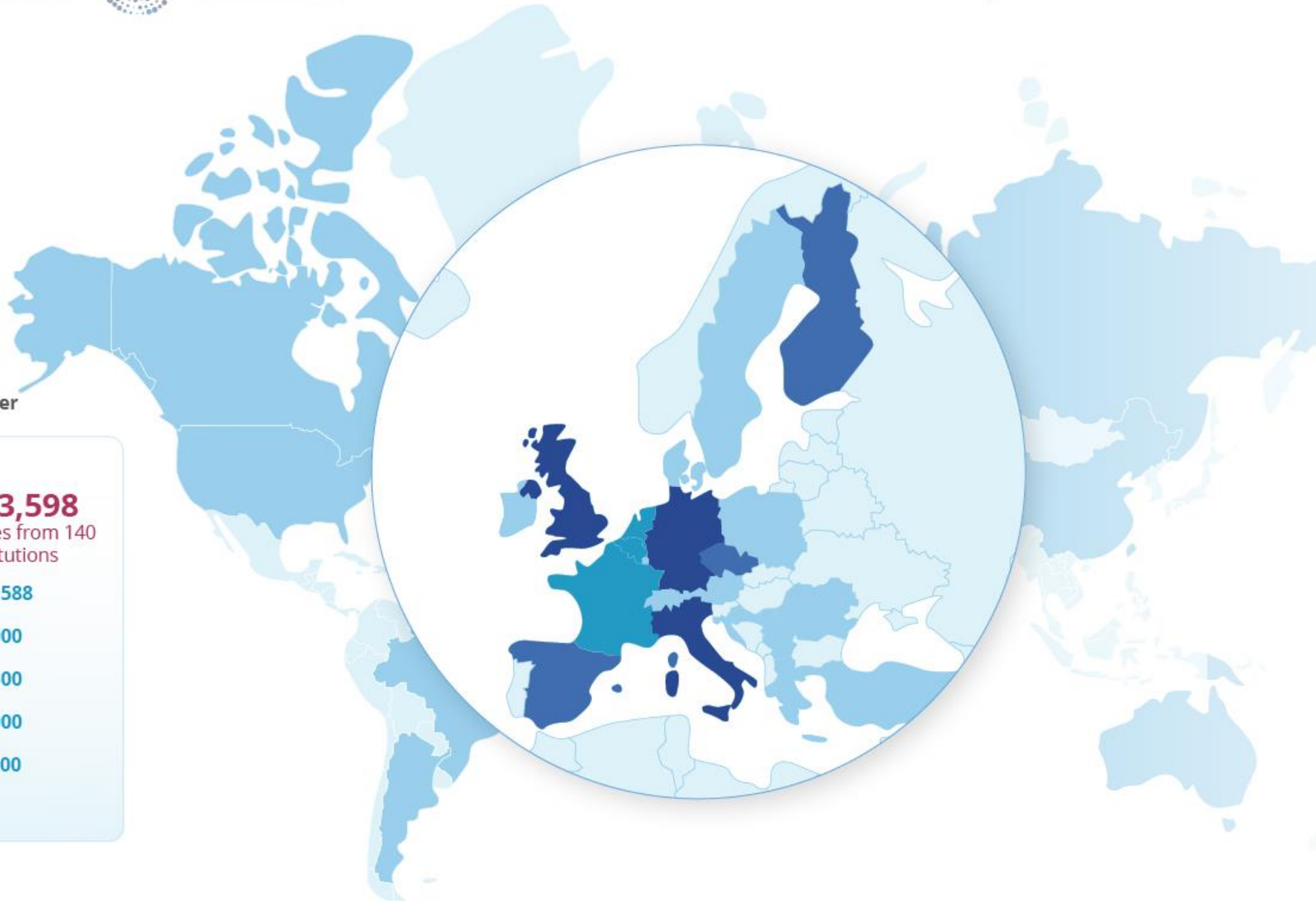




### Number of patient datasets identified per country



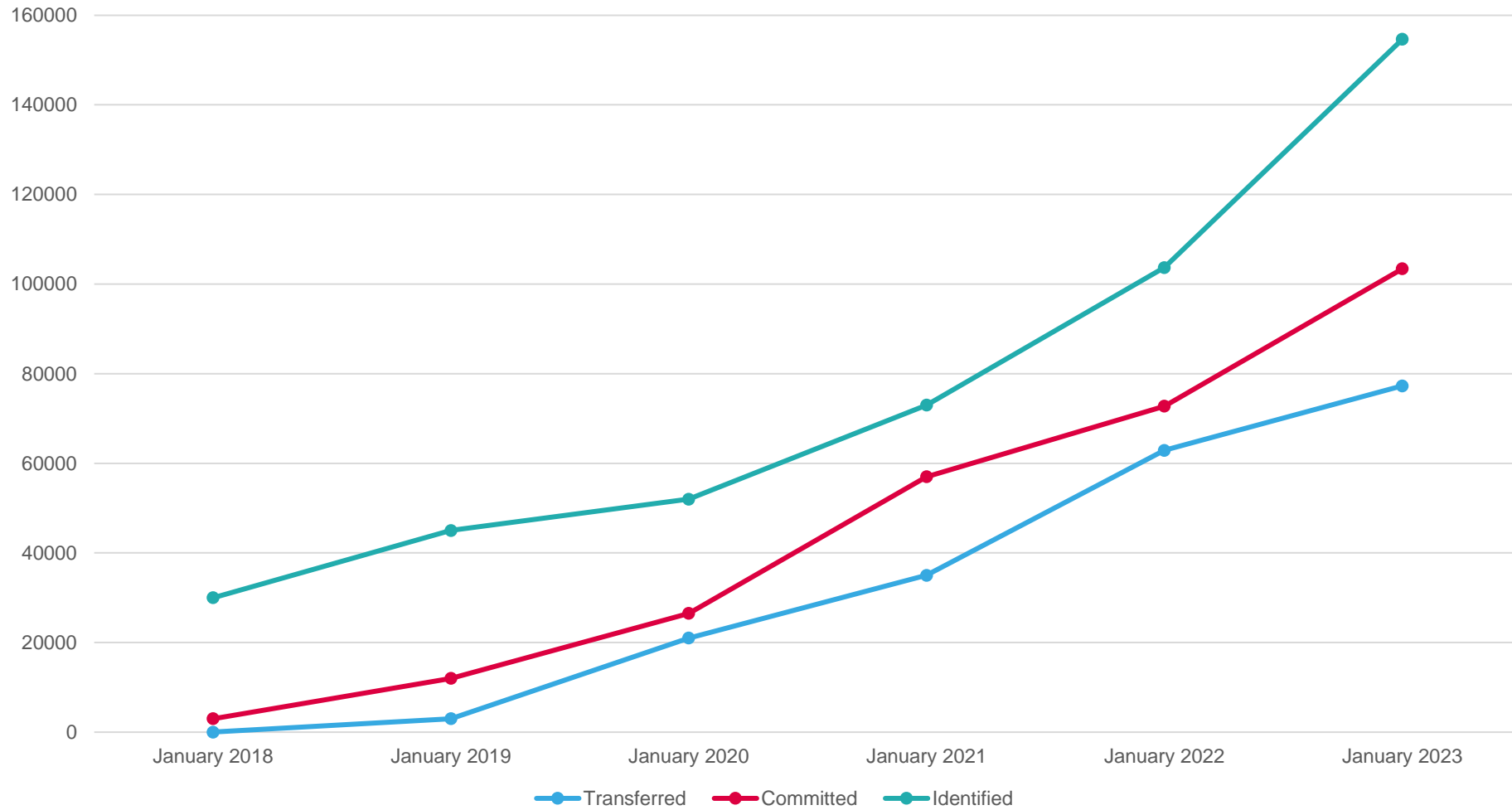
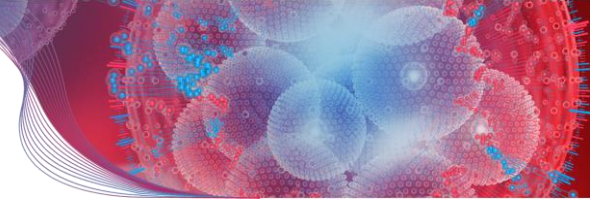
Argentina	133
Australia	1036
Austria	1691
Belgium	4270
Brazil	132
Canada	435
Switzerland	3191
China	181
Czech Republic	9621
Germany	35263
Denmark	1541
Egypt	136
Spain	16872
Finland	9794
France	8012
Greece	2231
Croatia	267
Ireland	140
Israel	544
India	396
International registries	7067
Italy	22269
South Korea	52
Kuwait	613
Moldova	105
North Macedonia	153
The Netherlands	6560
Pakistan	64
Poland	2600
Qatar	592
Romania	267
Serbia	1924
Singapore	81
Sweden	5033
Turkey	598
Taiwan	137
United Kingdom	18303
United States of America	1395
Uruguay	40



#### Databarometer

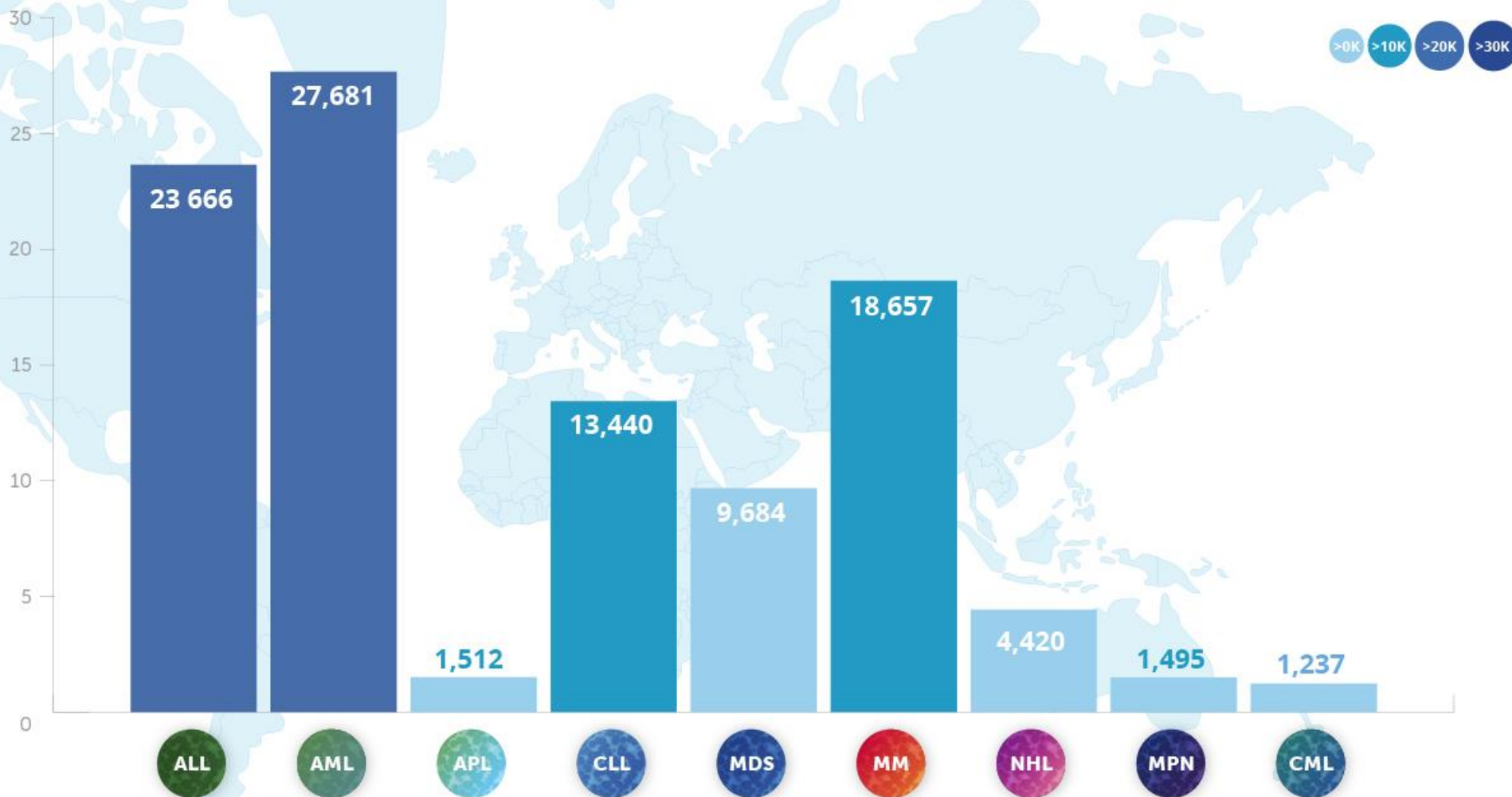


# Progression in data capture per year



## Number of cases transferred per HM

All the data has been transferred complying with GDPR, applying the necessary technical and organizational measures.

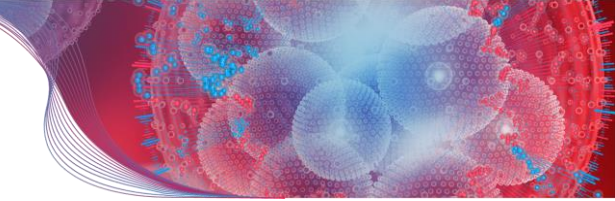


### Databarometer



# Supporting research questions

## 26 ongoing research projects...more expected!



<p><b>Research Project</b></p> <p><b>ALL</b></p> <p>ALL 1: Use of Big Data to improve outcomes for patients with Acute Lymphoblastic Leukemia</p> <p>ALL HARMONY Leukemia</p>	<p><b>Research Project</b></p> <p><b>ALL</b></p> <p>ALL 2: Prognostic Value of IKZF1 Gene Alterations in Adult BCP ALL</p> <p>ALL HARMONY Leukemia</p>	<p><b>Research Project</b></p> <p><b>CLL</b></p> <p>CLL-2: Exploring the occurrence of other malignancies in CLL patients using the HARMONY BigData platform</p> <p>CLL HARMONY Leukemia</p>	<p><b>Research Project</b></p> <p><b>CML</b></p> <p>CML-1: Understanding the clonal hierarchy in Chronic Myeloid Leukemia to help improve patient outcomes</p> <p>CML HARMONY PLUS Leukemia</p>
<p><b>Research Project</b></p> <p><b>ALL</b></p> <p>ALL-3: Exploring treatment patterns and outcomes in older adult B-ALL</p> <p>ALL HARMONY Leukemia</p>	<p><b>Research Project</b></p> <p><b>ALL</b></p> <p>ALL-4: Harnessing the Power of Big Data to Predict Outcomes Post-Stem Cell Transplant in Adult R/R ALL</p> <p>ALL HARMONY Leukemia</p>	<p><b>Research Project</b></p> <p><b>CML</b></p> <p>CML-2: Using Big Data to Map and Identify Optimal Treatment Pathways to Treatment-Free Remission in CML</p> <p>CML HARMONY PLUS Leukemia Research</p>	<p><b>Research Project</b></p> <p><b>MDS</b></p> <p>MDS-1: Prognostic factors to hypomethylating agents and intensive chemotherapy in higher risk Myelodysplastic Syndromes</p> <p>HARMONY Leukemia MDS</p>
<p><b>Research Project</b></p> <p><b>AML</b></p> <p>AML-1: Use of Big Data to revise treatment strategies in Acute Myeloid Leukemia</p> <p>AML HARMONY Leukemia</p>	<p><b>Research Project</b></p> <p><b>AML</b></p> <p>AML-2: Optimizing Acute Promyelocytic Leukemia Management Using Big Data</p> <p>AML HARMONY Leukemia</p>	<p><b>Research Project</b></p> <p><b>MDS</b></p> <p>MDS-2: A retrospective study of patients with Myelodysplastic Syndrome</p> <p>HARMONY Leukemia MDS</p>	<p><b>Research Project</b></p> <p><b>MM</b></p> <p>MM-1: Optimizing prognostication and personalizing treatment in Multiple Myeloma</p> <p>HARMONY MM Monoclonal Gammopathies Myeloma</p>
<p><b>Research Project</b></p> <p><b>AML</b></p> <p>AML-3: Using big data to shed light on the clinical impact of genomic alterations in sAML/tAML</p> <p>AML HARMONY Leukemia</p>	<p><b>Research Project</b></p> <p><b>AML</b></p> <p>AML-4: Using big data to confirm the link between MRD and survival in AML</p> <p>AML HARMONY Leukemia</p>	<p><b>Research Project</b></p> <p><b>MM</b></p> <p>MM-2: Contextualizing clinical trials by developing robust historical control arm cohort</p> <p>HARMONY MM Monoclonal Gammopathies Myeloma</p>	<p><b>Research Project</b></p> <p><b>MPN COVID-19</b></p> <p>MPN-1: Exploring the Impact of Covid-19 on Outcomes in Myeloproliferative Neoplasms</p> <p>COVID-19 HARMONY PLUS Leukemia MPN</p>
<p><b>Research Project</b></p> <p><b>AML</b></p> <p>AML-5: Exploring a role for HARMONY data as historical control in elderly Acute Myeloid Leukemia patients.</p> <p>AML HARMONY Leukemia</p>	<p><b>Research Project</b></p> <p><b>AML</b></p> <p>AML-6: Unravelling the Clinical Impact of Co-mutations in NPM1mut AML</p> <p>AML HARMONY Leukemia</p>	<p><b>Research Project</b></p> <p><b>MPN</b></p> <p>MPN-2: Using big data to improve risk prediction in patients with MPN</p> <p>HARMONY PLUS Leukemia MPN</p>	<p><b>Research Project</b></p> <p><b>NHL</b></p> <p>NHL: Using big data to optimize outcomes in T-cell Non-Hodgkin Lymphomas</p> <p>HARMONY Lymphoma NHL</p>
<p><b>Research Project</b></p> <p><b>AML</b></p> <p>AML-7: The impact of gender on genetic aberrations and clinical outcomes in AML</p> <p>AML HARMONY Leukemia</p>	<p><b>Research Project</b></p> <p><b>CLL</b></p> <p>CLL-1: Harnessing big data to predict prognosis in Chronic Lymphocytic Leukemia</p> <p>CLL HARMONY Leukemia</p>		

+3 recently approved proposals in CML

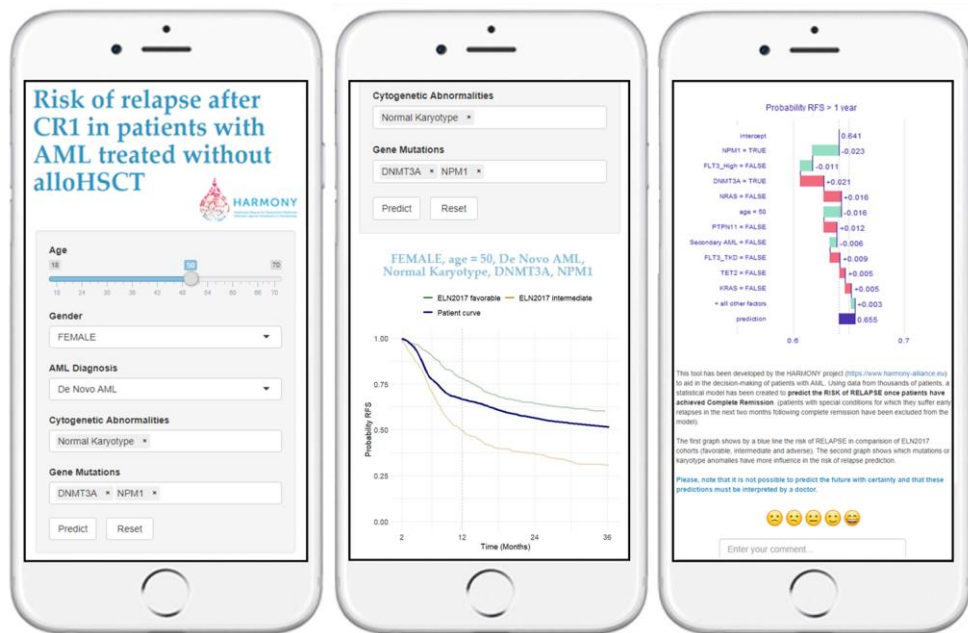
+1 recently approved proposal in Pediatric ALL



# Data Visualization Tools

Models for precision medicine  
 "Risk of relapse after CR1 in patients with AML treated without allogeneic HSCT"

Dashboards for data analysis





#  
**BIG  
DATA  
FOR  
BLOOD  
CANCER**

**Big Data has proven to offer new insights that can contribute to advances in novel therapies and more efficient medicines.**

**We urge researchers across the globe to break data silos and embrace cooperation to foster blood cancer research.**

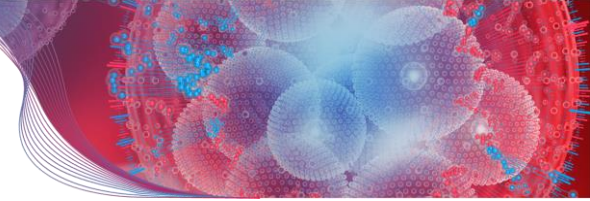


**HARMONY ALLIANCE**

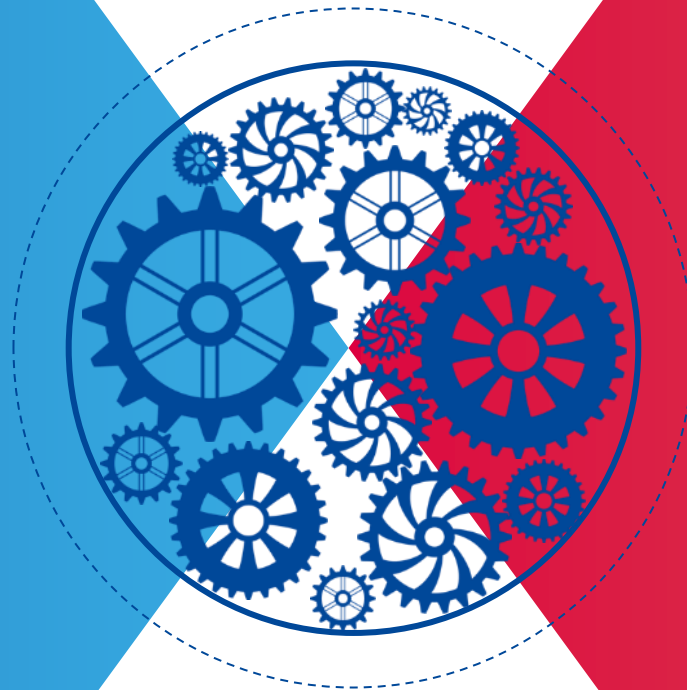
**A call to leverage big data to accelerate blood cancer research**

**OUR MANIFESTO**

# We are evolving...



From an  
IHI funded  
project  
to a...



collaborative **research  
foundation**, where we  
will continue to work  
together to improve the  
care for patients with  
hematologic malignancies



HARMONY



ALLIANCE



[www.harmony-alliance.eu](http://www.harmony-alliance.eu)  
[www.bigdataforbloodcancer.eu](http://www.bigdataforbloodcancer.eu)



@HarmonynetEU  
#bigdataforbloodcancer



HARMONY Alliance  
Public-Private Partnership  
for Big Data in Hematology



Big Data for Blood Cancer

Join us in creating the  
next generation of care  
for blood cancer patients