

Digitalisation and Big Data: implications for the health sector

HARMONY

Digitalisation in Health Care and sources of Big Data

19th June, Brussels




HARMONY
Horizon Alliance for Research in Medicine
Colaboración europea en Hematología

Red Europea de Excelencia en Big Data y Hematología, compuesta por 53 socios de 11 países.


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Financiado por   



Europe's largest public-private partnership in healthcare should speed up the development of, and patient access to, new medicines



1.6 B €
from H2020
cash for grants
from public
partners




1.4 B €
EFPIA direct and
indirect members
213
other sectors

€ Cash

Consumables

Laboratories


People





Speed up
patient access

Improve
outcomes
and safety

Improve
R&D




Initiatives within IMI seeking to leverage big data to improve outcomes and support the transition towards more patients-focused, sustainable healthcare systems in Europe.







4 key enablers

- 1 Design sets of standard outcomes and demonstrate value
- 2 Increase access to high quality outcomes data
- 3 Use data to improve value of HC delivery
- 4 Increase patient engagement through digital solutions

Data Sharing: healthcare in Europe at present



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"Big data for better outcomes"

Goal: Support the evolution towards outcomes-focused and sustainable healthcare systems, exploiting the opportunities offered by large data sets from variable sources

COORDINATION AND SUPPORT ACTION (CSA) (Consortium formed)

1	EUROPEAN DISTRIBUTED DATA NETWORK		3
Design sets of standard outcomes and demonstrate value	Increase access to high quality outcomes data	Use data to improve value of HC delivery	Incr
HARMONY: HEMATOLOGIC MALIGNANCIES			
ROADMAP: ALZHEIMER'S DISEASE			
BIG DATA @ HEART: CARDIOVASCULAR			
PIONEER: PROSTATE CANCER			
OUTCOMES IN THE BIG 5 TUMOURS			
<i>Future topic proposals, e.g. respiratory, oncology and ophthalmology</i>			

PLANNED PROJECTS

NOVARTIS
Celgene
Bayer
Janssen
AMGEN
Takeda
abbvie

Big Data to meet the biggest needs in Hematologic Malignancies

HARMONY
Harmonization of outcome measures and endpoint definitions for HMs at the European level

Funded by **imi** **European Commission** **efpia**

HARMONY is the biggest BD4BO Project within IMI

HARMONY
Harmonization of outcome measures and endpoint definitions for HMs at the European level

Building a high-quality Big Data platform on haematological malignancies

Harmonization of outcome measures and endpoint definitions for HMs at the European level

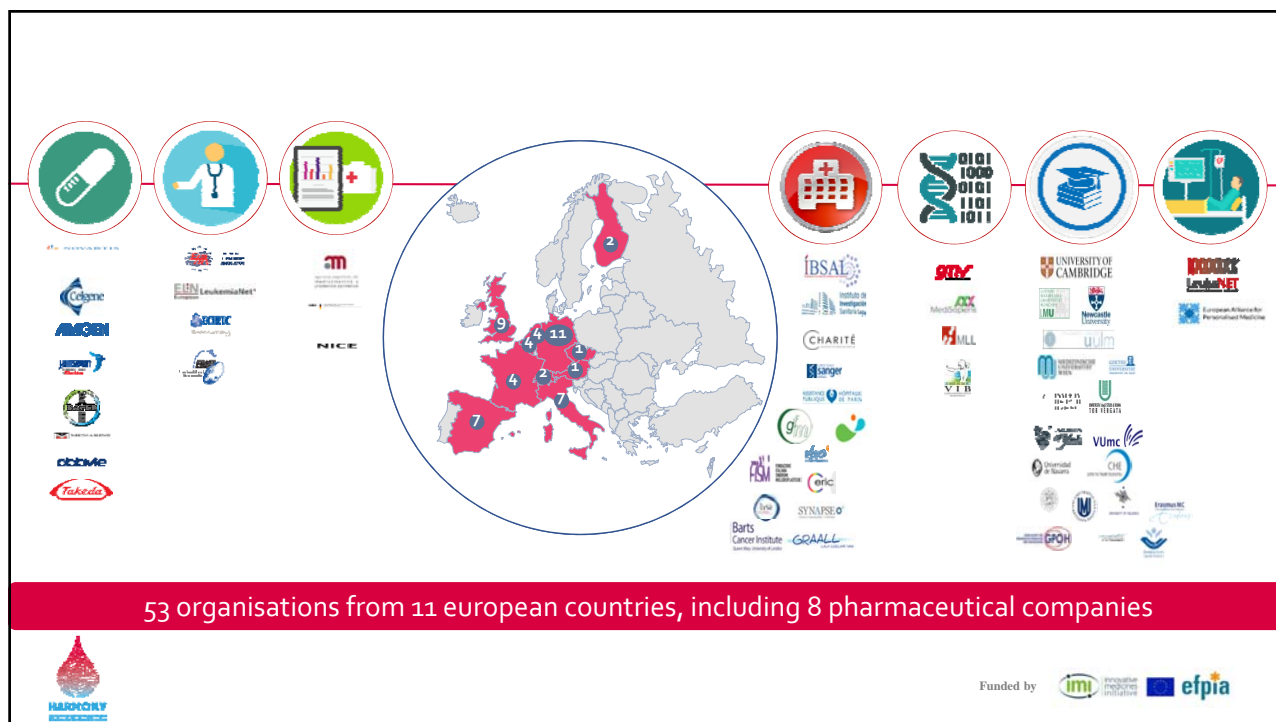
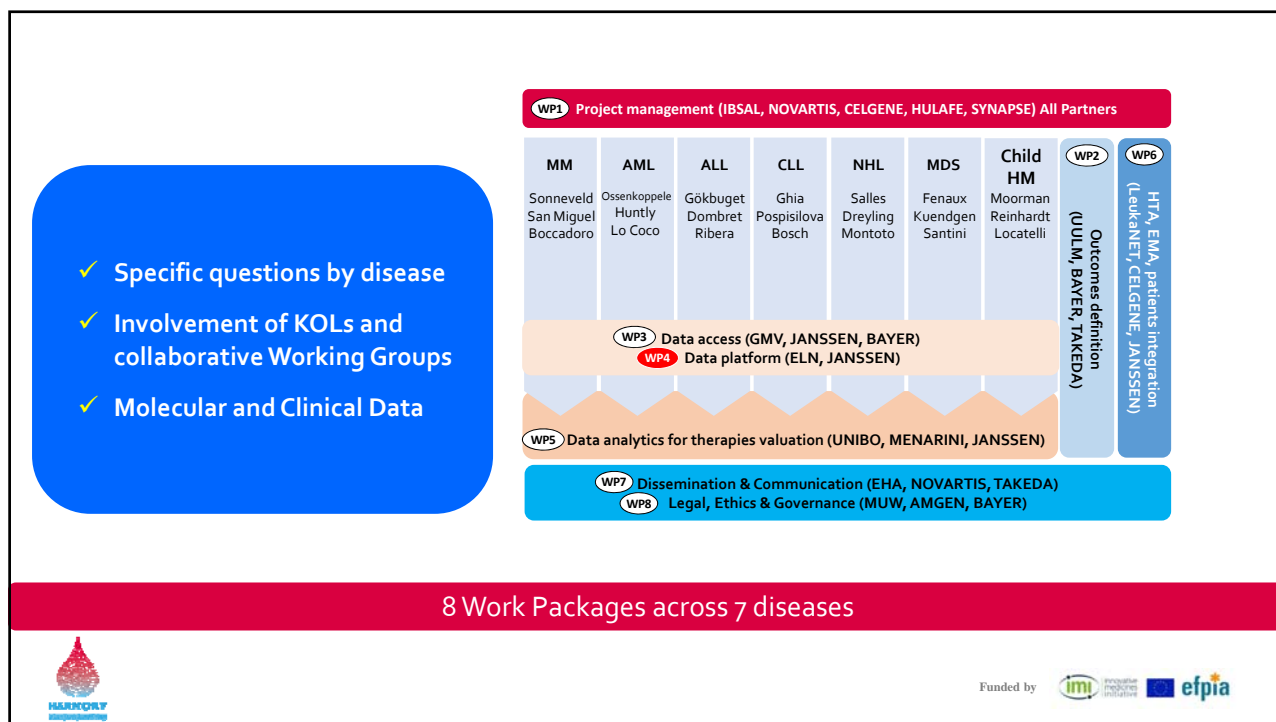
Speed up drug development, access pathways and bench-to-bedside process

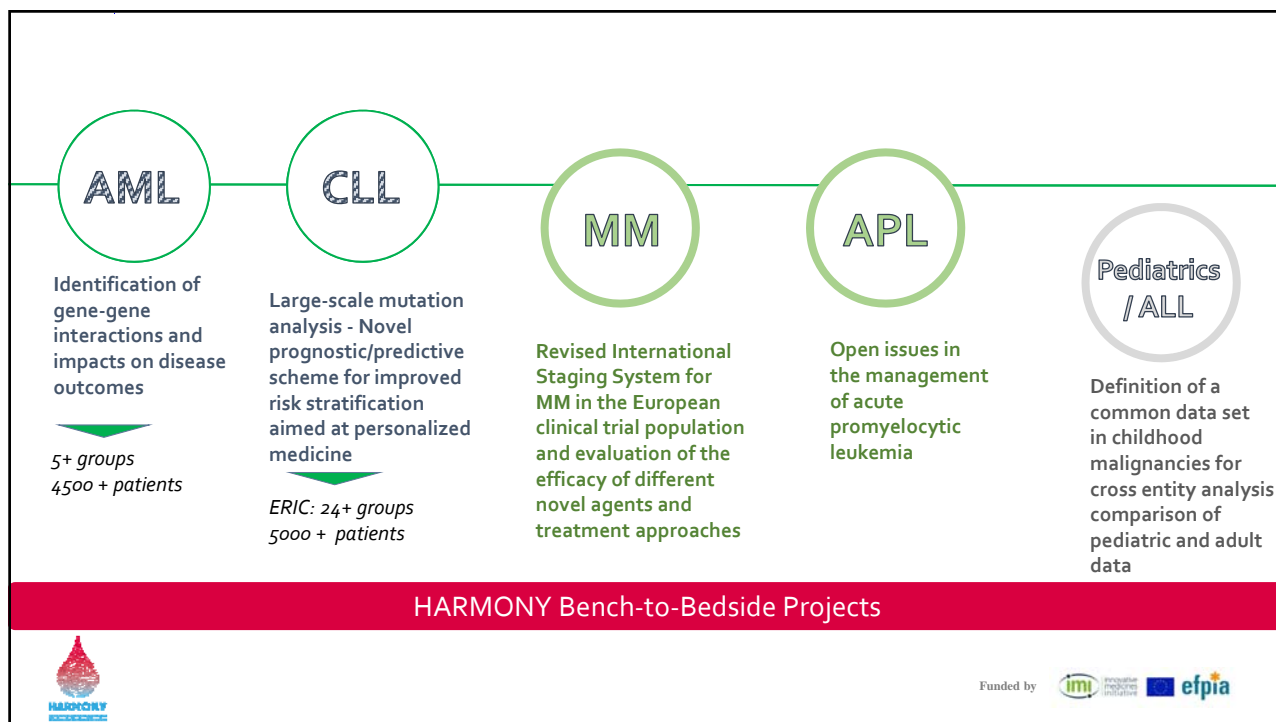
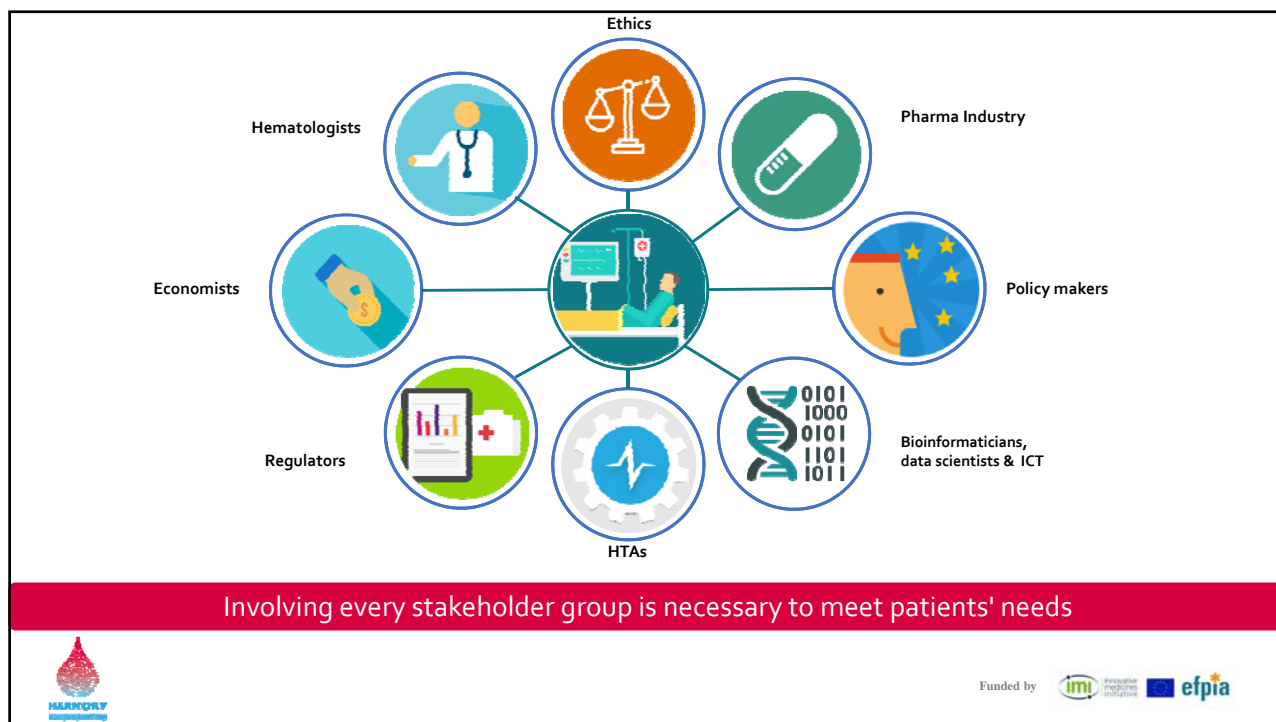
Increases the application of omics data in clinical practice

Big Data aims to meet the biggest needs in Hematologic Malignancies

HARMONY
Harmonization of outcome measures and endpoint definitions for HMs at the European level

Funded by **imi** **European Commission** **efpia**







Platform ready for Data Intake



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1 VOLUME
MAGNITUDE OF DATA



2 VARIETY
ASSOCIATED MEMBERS



3 VELOCITY
STREAMING
& QUALITY DATA



4 VERACITY
PARTIES INVOLVED



VALUE

Big Data Platform based on OUTCOMES



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1 VOLUME MAGNITUDE OF DATA



Data Quality Supervision
(WP leaders WP-1, 2, 3, 5)

Data Custodians

MM	AML	ALL	CLL	NHL	MDS	Child HM
KOLs						
EFPIA Companies						
Working Cooperative Groups (WCG)						
Associated Members and Other sources						

Clinical data	7000	7500	4000	5600	5500	6000	8000
Immuno-fluorescence	4000	1500	3750	2000	3000		5000
Cytogenetics	5000	4500	3750	4000	1000	4000	4000
"Omics"	2800	2800	1200	1700	1600	1500	3000

Big Data Platform based on OUTCOMES



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2 VARIETY ASSOCIATED MEMBERS



18 Countries
±80 Institutions in the
process of becoming AM
7,8M Budget

Big Data Platform based on OUTCOMES

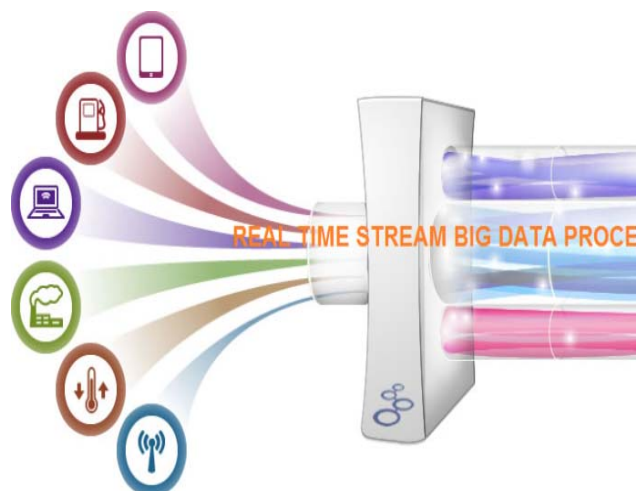


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3 VELOCITY

STREAMING
& HIGH-QUALITY OF DATA



Big Data Platform based on OUTCOMES



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4 VERACITY



Stakeholders: patients, regulators,
HTA, policy makers...

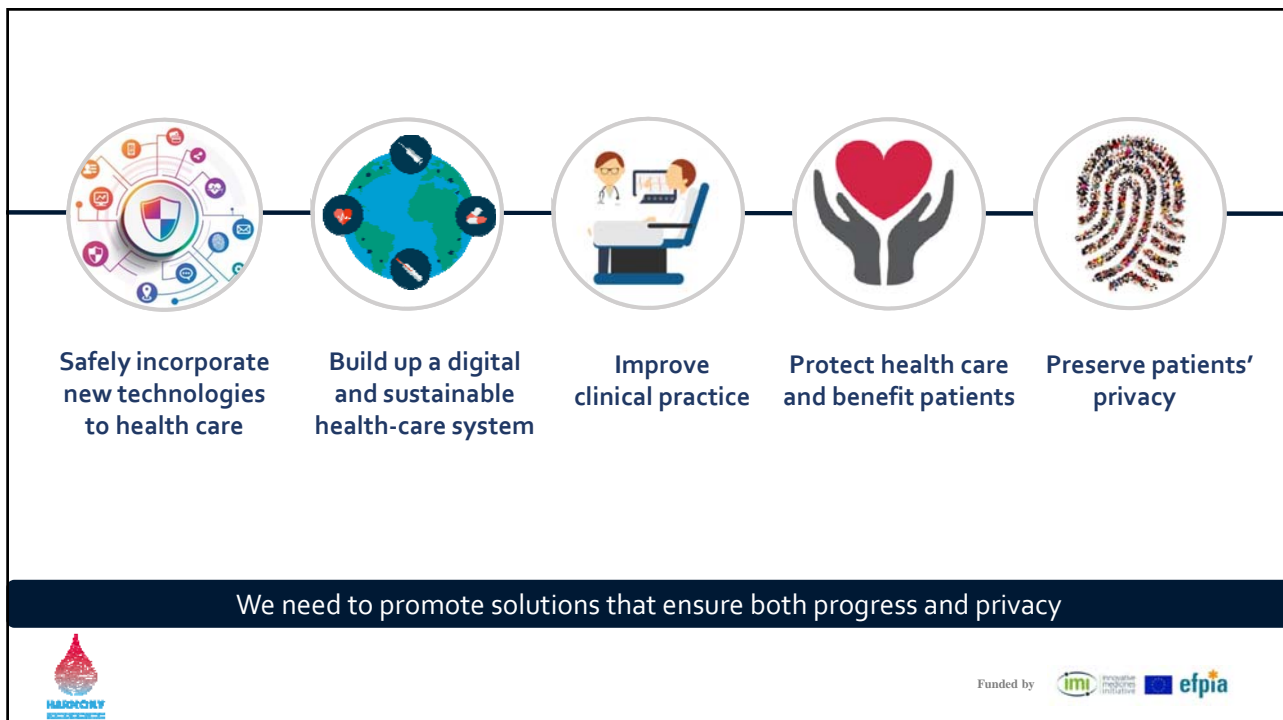
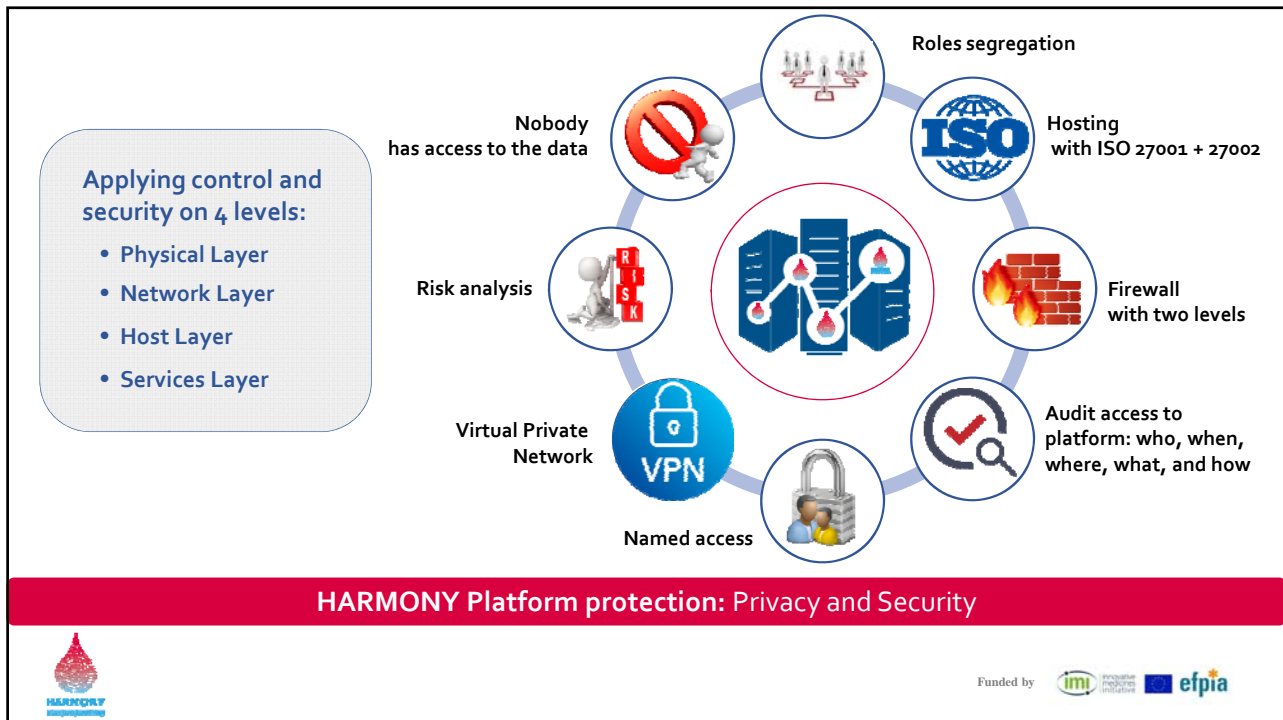
Dedicated WP6 to HTA, EMA,
patients alignment & optimisation

- Constitution of a **Policy Health Stakeholder Feedback Forum (PHSFF)**
- Development of a **Clinical Value Framework**
- Development of a set of **outcomes relevant for decision-makers**
- **Health literacy**: communication strategy for transfer and adoption of project results
- **Patients perspective** incorporated – link with EUPATI

Big Data Platform based on OUTCOMES



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Thank you!



Any questions?



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Acknowledgement

This project has received funding from the Innovative Medicines Initiative 2 Joint Undertaking under HARMONY Grant Agreement n°116026. This Joint Undertaking receives support from the European Union's Horizon 2020 Research and Innovation Programme and EFPIA.