



IHI Call Days | Call 12

AMIGO – The Missing Data-Link: From Sick Children to Precision Care

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AMIGO-Consortia (**A**dvanced **M**edical **I**ntelligence for **G**uiding **O**mic-based
Medicine)

Further Information on Brokerage Platform:
[AMIGO Proposal Link](#)



The Challenge

Why pediatric therapies are missing

- Separate PIP/iPSP → added time & cost
- Small trial populations → limited feasibility
- Ethical constraints restrict early access
- Adult drugs reach market years earlier
- Weak incentives = “Adult-First” development
- Children often excluded from omics data
→ Pediatric R&D is slow, risky, and underfunded



Our Goal

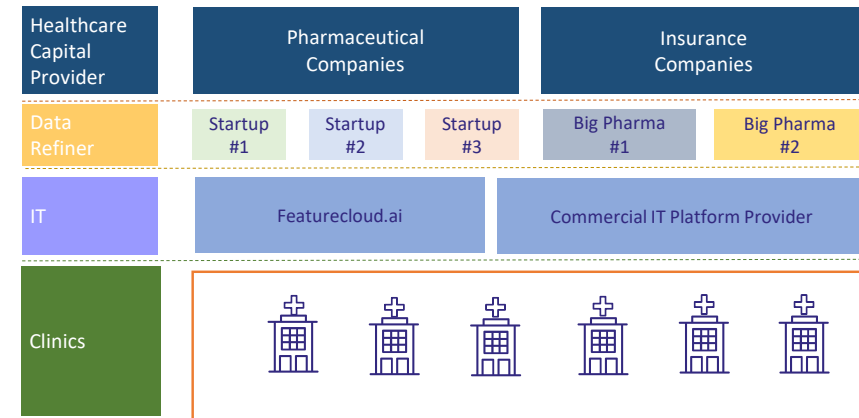
Bringing precision medicine to children

- Make children visible in AI-driven drug R&D
- Unlock pediatric-specific disease biology
- Leverage existing pharma targets (e.g. IL-23)
- Identify new pediatric indications
- Reuse preclinical & tox data → faster approval
- Bridge AI, hospitals & pharma for efficiency
→ Address SO2 & SO4 of IHI Strategic Agenda

Our Solution

Federated platform: pediatric data, safely accessible

- AI platform across EU children's hospitals
- Data stays local (GDPR-compliant)
- Access to multi-omics + longitudinal clinical data
- Pharma & CROs query data → identify pediatric targets
- Target validation via existing CRO assays
- Drug repurposing → PUMA (Pediatric Use Marketing Authorization) exclusivity
→ 30–50% reduction in time & cost to pediatric label



Pharma Value

What's in it for industry?

- Pediatric indication engine for existing assets
- Platform answers: “Where is my target active in children?”
- Accelerates pediatric strategy for blockbusters
- Direct line to real-world patient cohorts
- Uses pharma’s existing tox and compound data
- Pre-competitive → collaborative, not competitive
→ From “adult-first” to “parallel pediatrics by design”

Why IHI?

AMIGO is built for public–private collaboration

- EU-wide clinical & omics data → accessible & secure
- Academia + hospitals + AI + CROs + pharma
- Shared infrastructure, shared benefits
- SMEs develop assays and AI algorithm, CROs validate targets
- Pharma contributes IKOP & co-design
- Drives diagnostics, biomarkers & repurposing
→ Aligned with IHI's goals on integration & innovation



Outcomes and Impact

What success looks like

- New pediatric indications for known targets
- Rapid CDx development & patient stratification
- Net health-economic ROI within months
- Strengthens EU pharma & medtech in pediatrics
- Platform re-used post-project: sustainable value
→ Precision medicine for the most underserved





Who We Are / Who We Seek

We offer

- Top EU pediatric hospitals & >10,000 patients
- CROs for assays & trial support (systasy, biotx.ai)
- Clinical access, real-world data, multi-omics
- Platform & AI infrastructure (Featurecloud.ai, Capgemini)

We seek

- Pharma partners (target-to-drug expertise)
- More CROs
- Diagnostic/Medtech for CDx and monitoring
- In-kind (IKOP) contributors: use cases, validation

→ Let's bring precision medicine to children — together