

# Introducing a Modern Data Experience

## About Tag.bio

Tag.bio is a data science platform that enables data scientists to rapidly build analysis apps for domain experts. These reusable apps streamline data analysis and accelerate discovery. Our differentiating data mesh architecture connects distributed data into a centralized data analysis site. All activities on the site are saved as an instantly replayable, collaborative history. Recording activity provides quantitative data that results in better strategic decisions that drive innovation throughout the organization.

### Life Science Data Areas

- COVID-19
- Oncology
- Immuno-Oncology
- Biomarker Discovery
- Diagnostics
- Precision Medicine
- Clinical Trials

## Relevant questions

- Are you dealing with **siloes** data?
- How quickly are you **asking questions** of your data?
- How quickly can you **get the answers**?
- How quickly can you **integrate** distributed data?
- How quickly can you **collaborate**?
- And how easy is it to **reproduce** your results and the results of others?

## Benefits of Tag.bio

- UX Data portal**  
Takes you from your **data** -> your **question** -> your **answer**.
- Data mesh architecture**  
Run analyses on any data in any location.
- Time to value**  
Calculate ROI with autosaved activities.

## Tag.bio + Microsoft values

- Immediate deployment**  
The initial deployment (data node and foundational analysis apps) only takes hours to days depending on the data source.
- Value from day one**  
After the initial deployment, it only takes 4 weeks to get to a production site. The handful of weeks are spent on refining analysis apps and assigning data access rules.
- Uninterrupted ongoing data updates**  
Once data is in Azure environment, it stays secured, allowing continuous deployment.

## Case studies



**Iterative analysis allows faster insights**  
3 major insights in 1 evening leading to AACR poster.

Milan Radovich, PhD,  
Assoc. Prof. IU School of Medicine,  
IU Health Vice President for Oncology Genomics,  
Co-Director IUH Precision Genomics,  
ORIEN Network Scientific Committee Co-Chair

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**Enabling doctors to provide instant answers**  
Over 2,000 analyses performed in 1 year.  
Go from 2 months to 2 minutes to run an analysis.

Jahan Fahimi, MD, PhD,  
Associate Professor of Emergency Medicine,  
Director of Value Improvement at UCSF Health

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**Query across clinical trials**  
A single site allowing researchers to ask questions across any selection of trials (or arms).

Research Investigator,  
Companion Diagnostics & Translational Medicine  
Top 5 Pharma Company



### Domain Experts

Domain experts **parameterize**, **iterate** and **reproduce** analyses on the fly with no waiting.

**Discover:**  
Reduce the cost of curiosity



### Data Scientists

Data scientists build **analysis apps** that **guide a wide range of users** through any data question.

**Deliver:**  
Complete the last mile



### Chief Information Officers

**Change the culture** by giving domain experts agency over data and analyses.

**Democratize:**  
Become a data-driven organization

# A Modern Data Experience

## Decentralized data mesh. Centralized data portal.

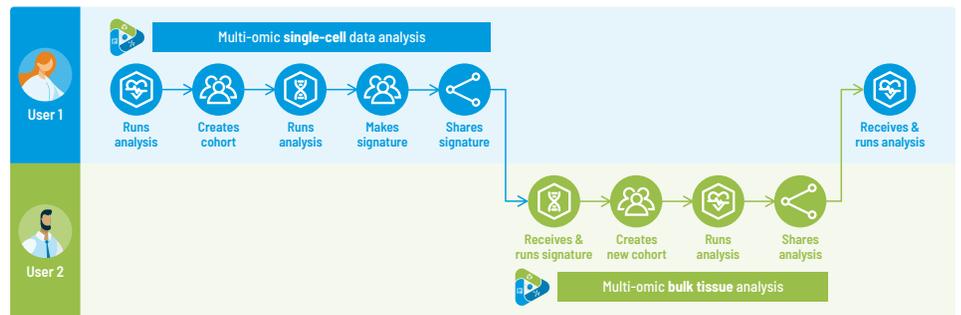
Tag.bio's centralized data portal enables domain experts to ask highly specific questions across multiple datasets using analysis apps.

Using Tag.bio is as simple as choosing a dataset, selecting an app, setting the parameters, and pressing "run". Results are automatically saved, shareable, and reproducible.



## Collaborate across datasets

With all the analysis results saved in the data analysis site, users can easily share their insights with a single click of a button. A unique feature of Tag.bio is the ability to pivot between datasets.



## Data mesh architecture

A data mesh is a network of interconnected data nodes.

Each data node ties a data source, algorithms and a smart API together into an independently deployable, containerized analysis server.

The smart API is designed for communication across data sources using a universal communication schema. At the same time, the analysis apps designed into each smart API enable highly specific questions of each data source.

With a mesh of interconnected data nodes, your data becomes findable, accessible, interoperable, reproducible, and most importantly – useful – all of which creates our modern data experience.



The advantages of the data mesh are:  
**agility, scalability, and accelerate time to value.**