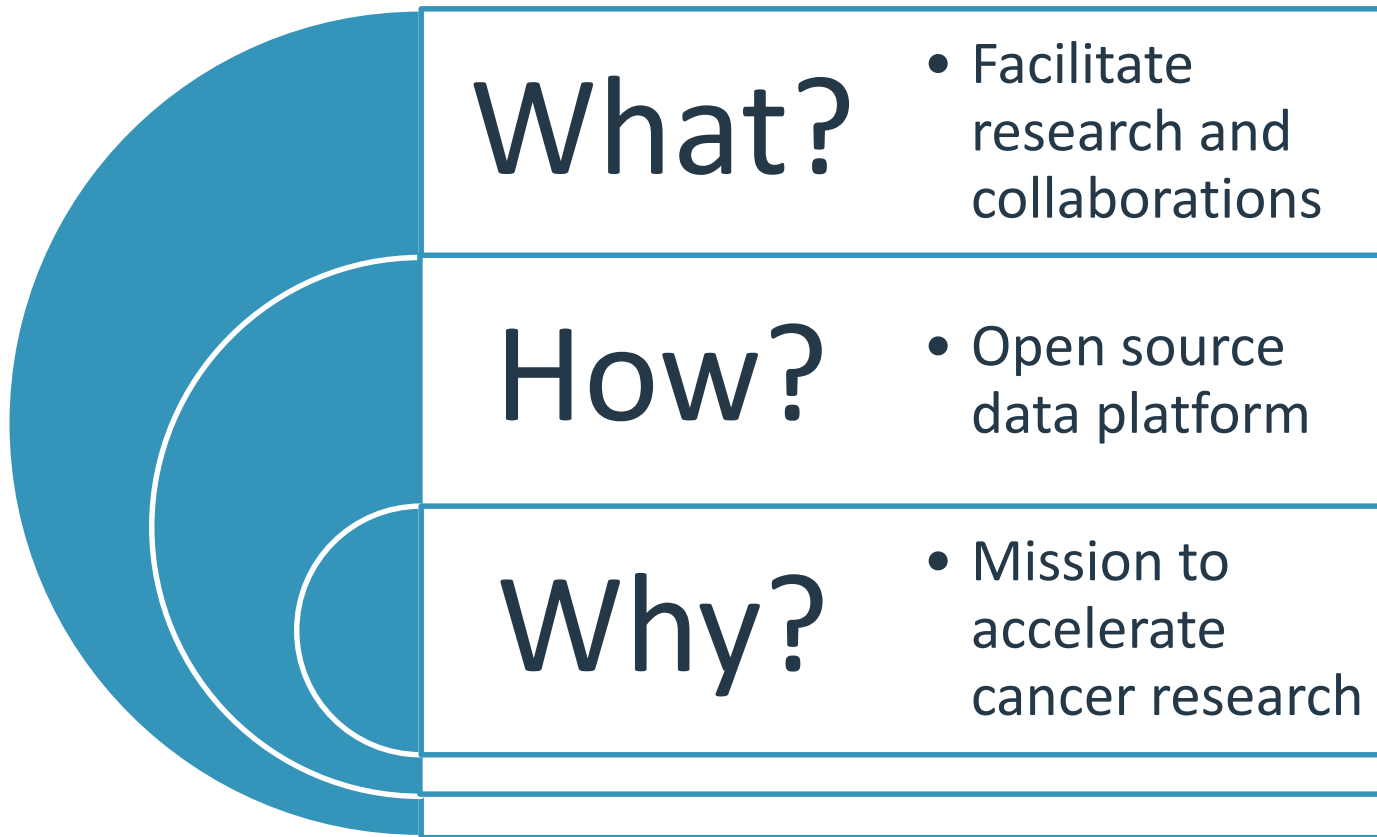


Project Data Sphere

Convener, Collaborator, Catalyst

Bill Louv, PhD; President, Project Data Sphere

Project Data Sphere

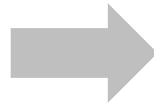


Project Data Sphere[®]: Background

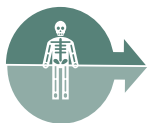
- An initiative of Life Sciences Consortium of the CEORT
- Launched April 8, 2014
- Open-access data sharing
- Integrate data from diverse sources
- Powerful SAS analytic tools

PDS Landscape: Data to Research

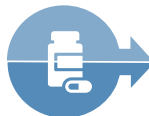
Data Providers



Data Types



Images



Clinical Trials



Molecular Data



Registries



Drug labels,
Ontologies

Research Programs

Images and Algorithms (RECIST)

External Control Arm (SCLC)
Prostate DREAM

Breast Cancer (Alliance)

Rare Tumor Registry (Merkel Cell)

Immune Related Adverse Events



Platform Metrics: *Utilization & Proof of Principle*

- **Industry and NCI's NCTN Commitment**

- ✓ >100,000 patient lives of data from >28 data providers

- **Densely used by researchers**

- ✓ >2,400 researchers have accessed >19,500 files

- **Prostate Cancer DREAM Challenge**

- ✓ >500 participants; 58 teams; 21 countries

- ✓ More participants than first 32 *DREAM Challenges*

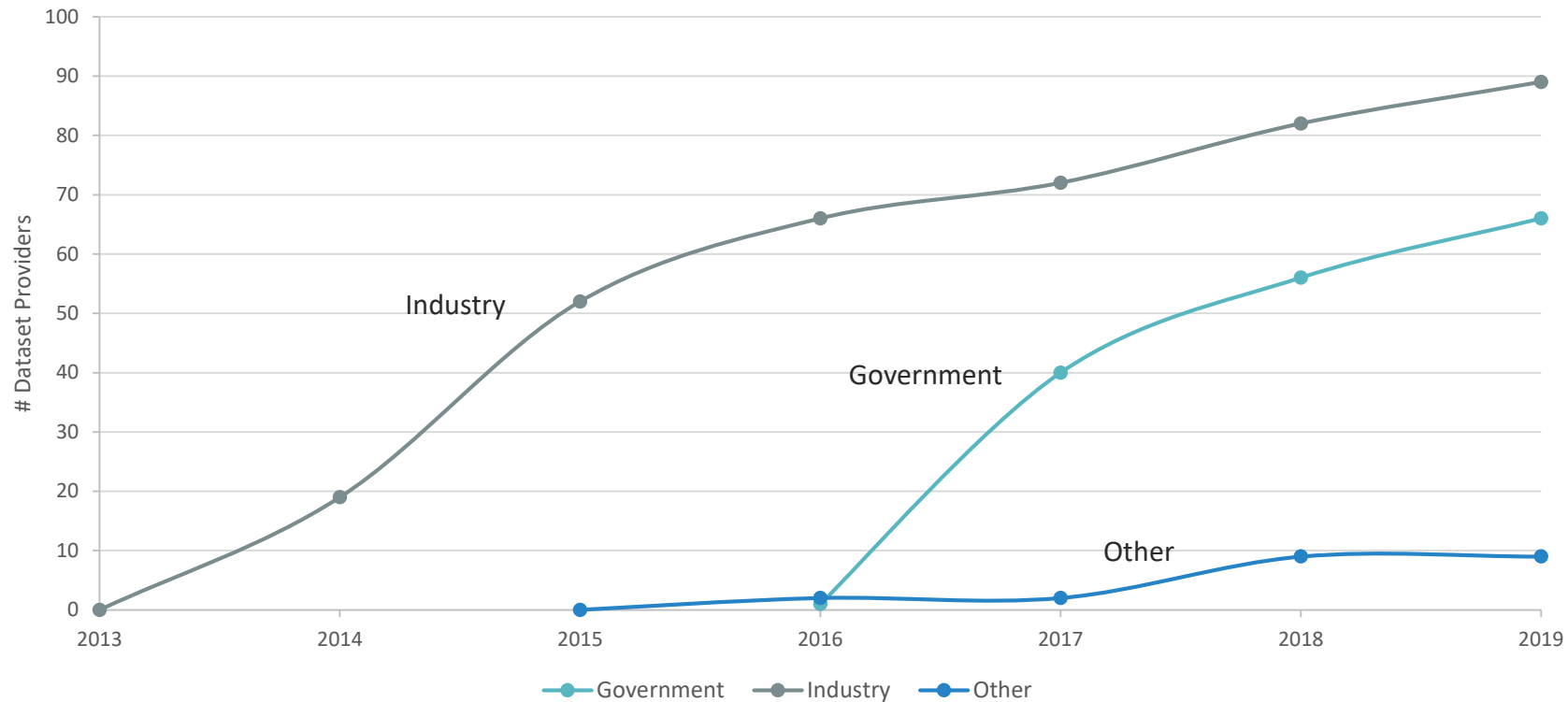
- **Proof of Principle**

- ✓ 26 publications in top-tier peer-reviewed journals

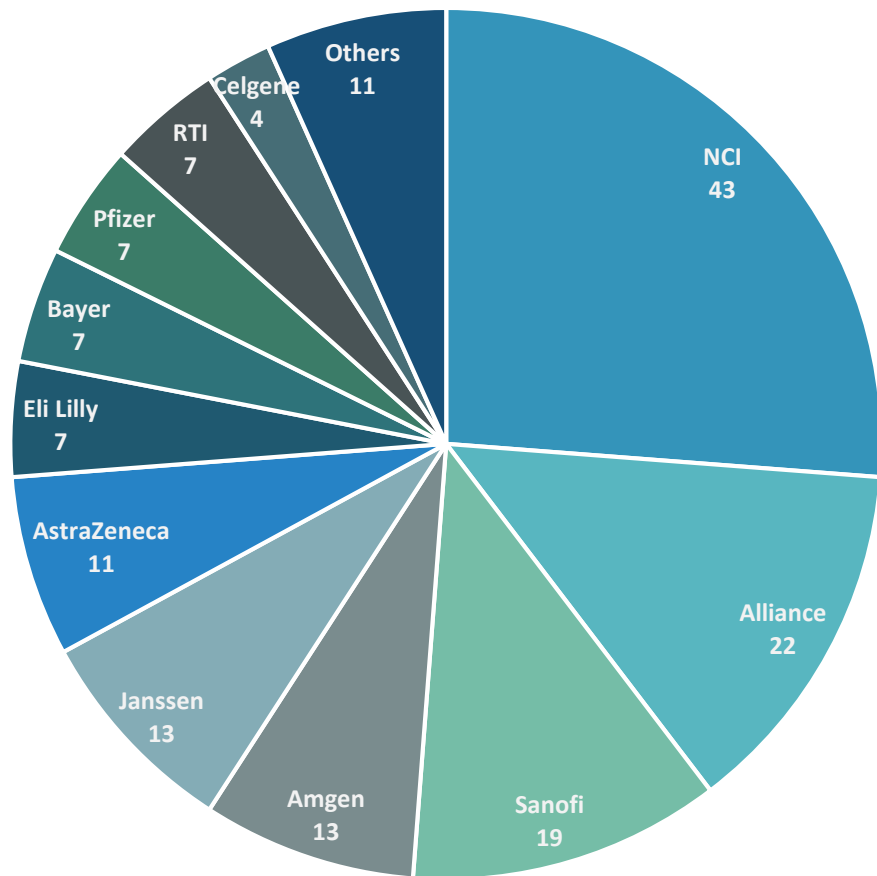
- *e.g., Journal of Clinical Oncology, Lancet Oncology, Nature, PLOS One, The Oncologist.*

Data Growth

of Dataset Providers by Year

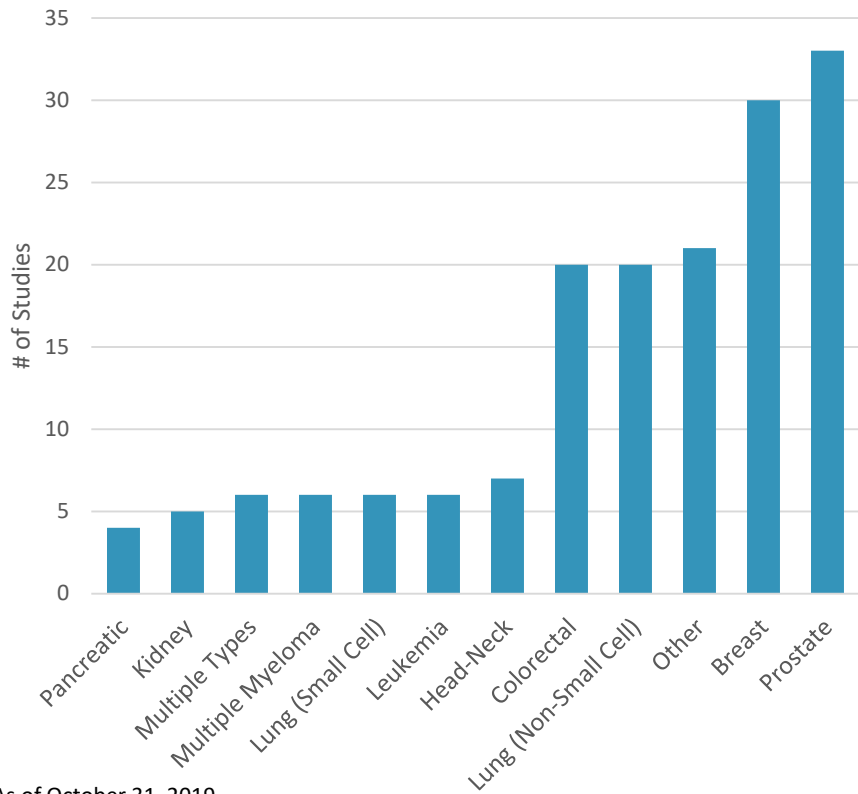


164 Datasets by 28 Data providers

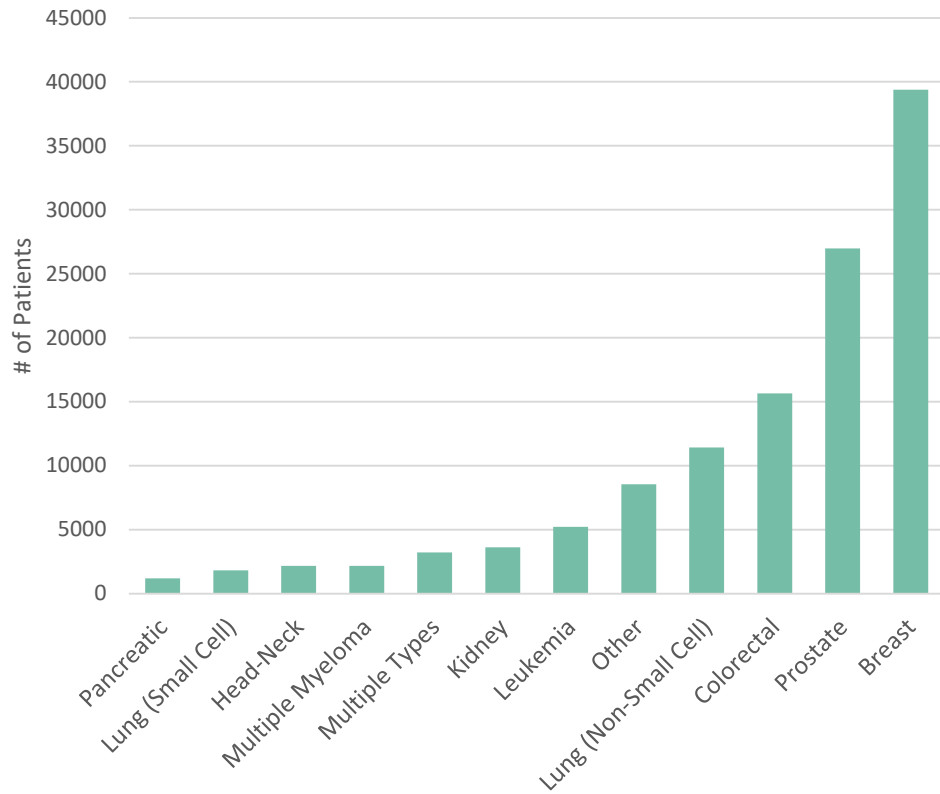


24 Tumor Types from >100,000 Patient Lives

of Studies by Tumor Type



of Patients by Tumor Type



*As of October 31, 2019

Conclusions

- **Convener**

- Bring together experts from academia, industry, and regulatory agencies
- Organize taskforces, workshops, and symposia

- **Collaborator**

- Conceive novel research questions
- Execute research initiatives

- **Catalyst**

- DATA to accelerate cancer research
- Create enriched datasets
- Convener + Collaborator \approx Cascading catalytic effect on the outcomes

- **Challenges**

- Remove barriers to sharing data
- Enable interoperability of data sharing platforms