Collaboration & Innovation

A case study: Global Oncology Big Data Alliance (GOBDA)

BBSW

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Project Data Sphere (PDS)
Global Oncology Big Data Alliance (GOBDA)

PDS and EMD established GOBDA to further identify and support patient-centric innovation and collaboration by leveraging data and technology

GOBDA Mission:

Connect and empower the oncology community with big data and advanced analytical capabilities to accelerate discovery, development and delivery of innovative treatment to cancer patients.

Open-access data platform

- Provides access to 150+ trials of 120K+ global patient level data
- Continues to incorporate NCI trials and health economics data

Rare tumor data commons

- Provides insights on efficacy and safety data in rare tumors
- Sheds light on novel end-points

Improved rare but serious irAE[1] reporting & analysis

- Allows pooling safety data across tumor types and therapies
- Provides a foundation of big data analysis on the safety signals

Note: [1]irAE: immune-related adverse events

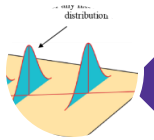
PDS Merkel Cell Carcinoma (MCC) Registry

- multi-institutional collaborative effort: academic medical centers, the drug industry, NIH, and FDA
- PDS provides a secure, open-access data sharing platform designed to optimize research and yield rigorous and timely results
- prospectively define, follow, and record outcomes and events
- real world outcome data in real time
- balance between large detail-lacking DBs (e.g., NCDB) and small single institution DBs (e.g., MD Anderson, MOFFITT)

Global Oncology Big Data Alliance (GOBDA)

Scientific Research Programs of GOBDA

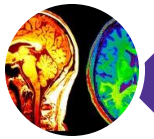
Prostate Cancer DREAM Challenge: Data from multiple prostate cancer trials, provided by multiple sponsors, pooled and investigated to **develop new prognostic and treatment models for patients**



External Control Arm Program: Data from multiple Small Cell Lung Cancer trials (to start), provided by multiple sponsors, pooled and investigated to develop external control arms to **reduce the number of patients needed for individual trials and to enable more patients to receive experimental treatments**

Immune-Related Adverse Events Program: Data from multiple treatment centers, and multiple clinical trials, pooled and investigated to bring sufficient immunology data together to **better understand the risk associated with this remarkable new treatment class**

Rare Tumor Registries Program: Data from multiple treatment centers, and multiple clinical trials, pooled and investigated to **bring sufficient data together to better understand these rare cancers**



Images and Algorithms Program: Imaging data from multiple cancer trials, provided by multiple sponsors, pooled and investigated to **develop machine learning algorithms that will improve clinical trial execution**