Sharing Patient-Level Clinical Trial Data: The YODA Model

National Brain Tumor Society Research Roundtable July 20, 2023

Cary P. Gross, MD

Yale Cancer Center
Yale Open Data Access (YODA) Project Co-Investigator
Yale School of Medicine









Strengthening Science through Data Sharing

- Ensures all data can be used to inform clinical decisions
- Positions research as a public good
- Respects contributions of participants:
 - maximizing value of collected data, while
 - minimizing duplicative data collection
- Facilitates secondary studies of existing d
- Promotes transparency and reproducibilit
 - · sample, design, and analysis









Food and Drug Administration Amendments Act



Abbreviations.com





National Institute for Health Research

BILL&MELINDA GATES foundation

ABOUT

REQUEST

TRIALS

METRICS

LOG IN

Somewhere, something incredible is waiting to be known.

Carl Sagan



Our Mission

The Yale University Open Data Access (YODA) Project's mission is to advocate for the responsible sharing of clinical research data, open science, and research transparency. The Project is committed to supporting research focused on improving the health of patients and informing science and public health. The YODA Project can only improve with your feedback.

Please share your comments and ideas.

CONTACT US

Our Model

The YODA Project seeks mutually beneficial partnerships with Data Partners, promoting independence, responsible conduct of research, good stewardship of data, and the generation of knowledge in the best interest of society. To participate, each Data Partner must transfer full jurisdiction over data access to the YODA Project.

HOW IT WORKS

Request Data

Are you ready to request data? To date, 445 trials have been identified as available. The YODA Project and Data Partners continue to identify and add more.

GET STARTED

Principles of the YODA Project

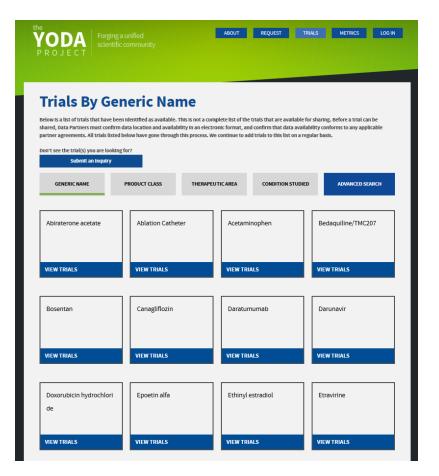
- Promote sharing of clinical research data to advance science and improve public health and healthcare
- Promote responsible conduct of research
- Ensure good stewardship of clinical research data by external investigators
- Protect rights of research participants

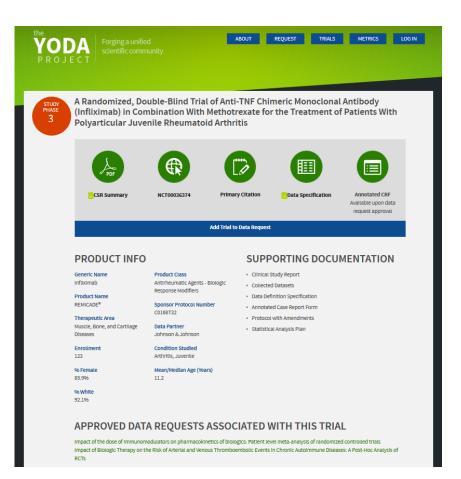


Johnson & Johnson Partnership

- Initiated in 2014 effort focused on promoting and facilitating access to clinical trial data:
 - All pharmaceutical products (including legacy trials)
 - Device and diagnostic products as of 2015
 - Consumer products as of 2017
- Established data access policy and procedures, with input from Steering Committee, experts, stakeholders, and public comment









Requests Submitted Online

- Investigator names, affiliations, funding
- Narrative summary / public abstract
- Detailed research proposal, including:
 - Project background, clear objectives
 - Trials, sample eligibility criteria, variables
 - Primary and secondary endpoints
 - Statistical analysis plan
- Project purpose (meta-analysis, validation ...)
- Timeline and dissemination plan
- Data use agreement training

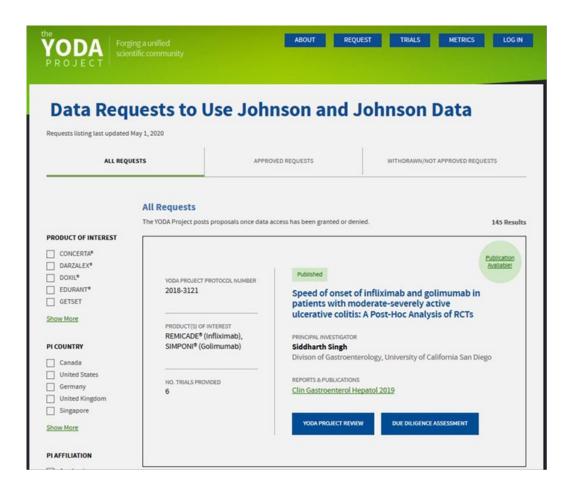






- Once approved, require signed DUA
- Investigators gain access to data maintained on secure platform via VPN
- Prevents re-distribution, protects patient privacy

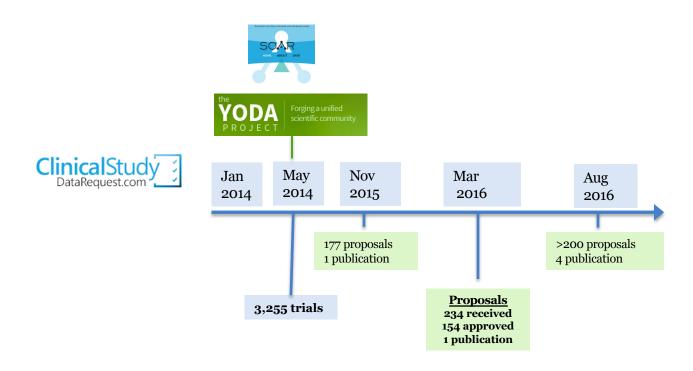






If we share it, will they come?



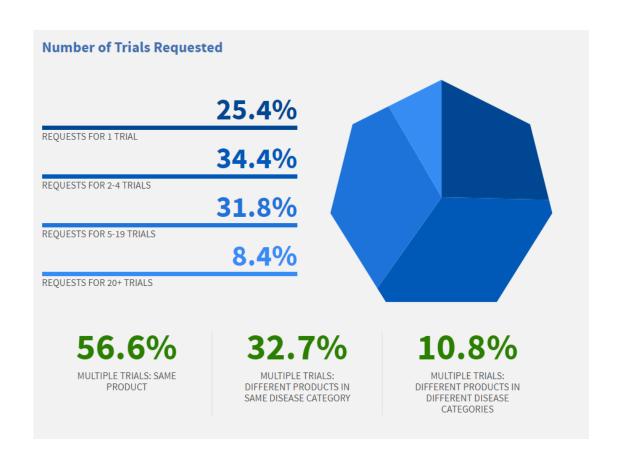


Experience so far ...

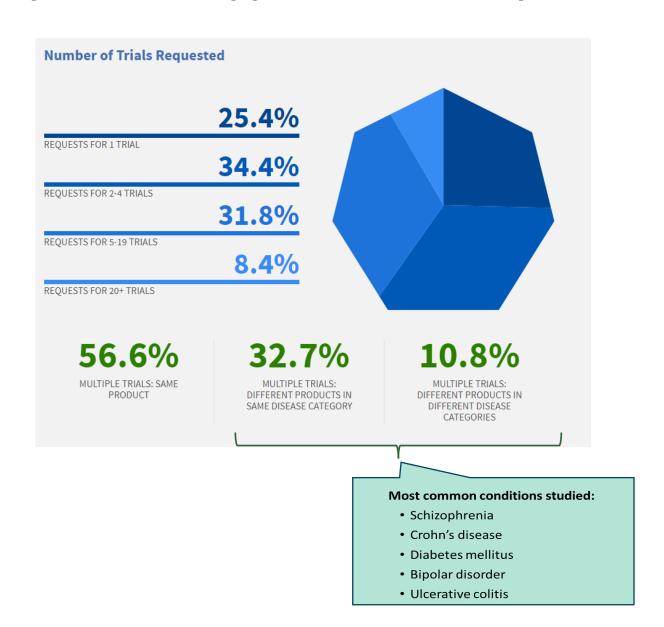
- Of 445 trials currently available, 86% have thus far been requested
- Of 346 requests submitted, 331 (95.7%) approved, 5 (1.4%) remain under review; 10 (2.9%) withdrawn/closed, 1 (0.3%) rejected
 - Usually because data not available/cannot be adequately deidentified
- Nearly all require some administrative revision, but onequarter required scientific revision after review for clarity
- 133 manuscripts have been submitted for publication to peer-reviewed journals, 99 of which have been published

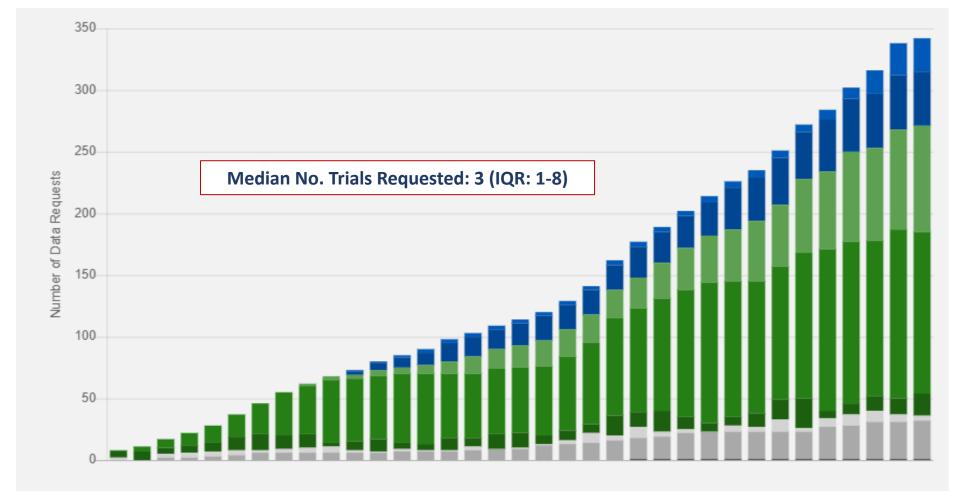


Specifics of Approved Data Requests



Specifics of Approved Data Requests





Not Approved

Withdrawn/Closed

Under Review/Revisions Requested

Approved (pending signed DUA or data preparation)

Data access granted (analyses in progress or manuscript under review) Published

Concluded with project summary

Incomplete without results

reported

Challenges Remain

- Broadening awareness of data availability
- Fostering expertise in using data from clinical trials
- Making older trial data available in contemporary formats
- Adopt data standards, across sponsors, to enable metaanalyses
- Sustainable model that covers the cost of data sharing
- Data Use Agreements ...
- Establish standards: when should data be available, for how long, how to reward those who share data?



Challenges Ahead for Data Sharing

Incentives

- Who should pay for this?
- Large pharma companies are far ahead, what about everyone else?
- What incentives for sharers, users will promote greater success?

Stakeholders

- Maintaining public input, transparency
- Engaging research community to use data

Process

- What are best practices among data sharing platforms?
- Giving "credit" where its due
- Data Use Agreements



Survey of Trial Authors Published in "Pro-Sharing" Journals



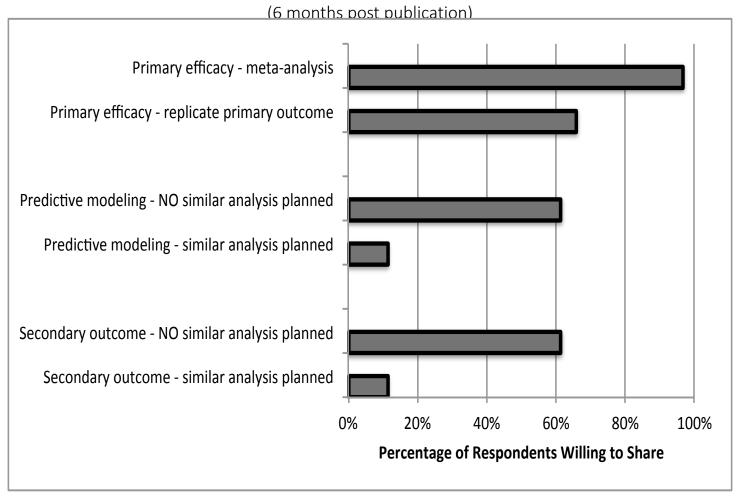




89 Trial Manuscripts

35% Received ≥1 Request (n=31) 68 Requests Total 59 Granted

Willingness to Share by Request Type



Tannenbaum et al. Annals Intern Med, 2019

Thank You!

YODA Project

- Harlan Krumholz
- Joseph Ross
- Cary Gross
- Richard Lehman

Johnson & Johnson

- Joanne Waldstreicher
- Karla Childers
- Stephen Bamford

Additional Thanks

 YODA Project Steering Committee

- Jessica Ritchie
- Maryam Hussain
- Nihar Desail

- Jesse Berlin
- Sandra Morris
- Peter Lins



http://yoda.yale.edu

@YODAProject

