



MEDIDATA IS ADVANCING RARE DISEASE TRIALS, ONE PATIENT AT A TIME.

RARE DISEASES BY THE NUMBERS



400+ MILLION

affected globally, 25M in the U.S. alone¹



~7,000Rare Diseases identified¹



new therapies in the last 3 years



50%

begin in childhood²



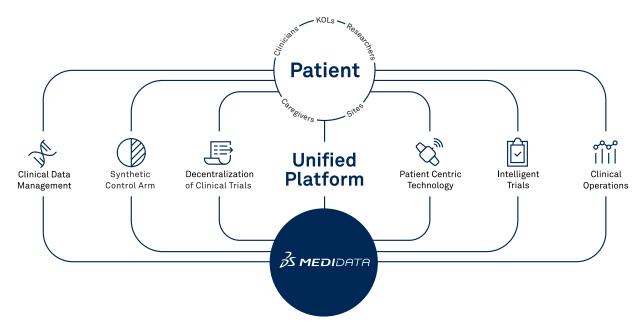
do not have an approved drug²



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R&D pipeline by 2024³

WHY MEDIDATA CAN HELP EXPEDITE CRITICAL RARE DISEASE TRIALS



MEDIDATA HAS THE TRIAL EXPERIENCE, TECHNOLOGY, DATA, AND EXPERTISE IN RARE DISEASE TRIALS*

Rare Disease studies

335+

Unique sponsors with Rare Disease trials

95K+

Sites setup to conduct Rare Disease trials

297K+

Enrolled Rare Disease patients





SOME CHALLENGES OF RARE DISEASE TRIALS AND HOW MEDIDATA HELPS

INDUSTRY CHALLENGES

MEDIDATA SOLUTIONS

PATIENT ENROLLMENT

- Small cohorts
- Predominantly pediatric populations
- · Geographically scattered patient base
- Divergent landscape of clinical trial regulations

- · Faster study and site set up
- Enrollment and patient tools across borders and languages
- Market-leading technology used by sites globally
- Ability to integrate multiple diverse data sets and use predictive analytics to identify high priority sites and investigators via Intelligent Trials
- myMedidata Patient Registries and recruitment: educate, engage, and empower patients to be prepared to participate in clinical trials

PATIENT RETENTION

- Predominantly life-threatening and debilitating diseases
- Sites geographically remote from patients
- Lack of patient experience for participation outside of sites
- Placebo/standard therapy controls (Trial Design) disincentivized to patients
- BYOD/Hybrid/Virtual Trials flexibility for at-home data collection
- Synthetic Control Arm™ reducing patients number in trial
- Patient Insights
- · Lower patient burden with technology like eConsent
- Patient Cloud Help Desk dedicated to patient support

LIMITED DATA

- Difficulty acquiring and managing patient data
- Limited Real-World Evidence and data
- Lack of biomarker data to inform prognosis and treatment

- Patient-level data from many historical trials
- Clinical data integration with omic data to accelerate biomarker discovery
- Advanced insights to understanding the impact of new drugs on rare diseases in the real world
- myMedidata registries with data linkage to collect data outside of a clinical trial
- Sensor Cloud enables robust data collection in support of new biomarker development

CLINICAL TARGETS

- · Unclear diagnostic criteria and testing strategy
- Lack of validated surveys for Patient Outcomes Assessments
- · Complex biomarker identification to differentiate patients

- Statistically powered end-points with fewer patients
- Patient-centric technology for expedited development and reduced patient burden
- Replicate the outcomes of a randomized control arm by using propensity score matching and historical trial data through a Synthetic Control Arm

CLINICAL TRIAL EXECUTION

- Identification and retention of qualified investigators
- Non-site data collection
- Ineffective traditional study designs

- Medidata Clinical Cloud[™] powers complex trials through its unified platform
- Patient data easily collected from their own devices
- Streamlined workflows across a global study ecosystem
- Optimized trial design
- Advanced analytics for trial design, feasibility, and monitoring through Intelligent Trials
- Support and expertise in decentralized clinical trials