DASSAULT SYSTEMES | The 3DEXPERIENCE® Company

JP Morgan Healthcare Conference 2022

Introductions

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Executive Summary

- The Life Science industry is unlocking new frontiers in speed and complexity of therapeutic innovation. Technology, Patient Engagement, AI and Data platforms are critical to accelerate these therapies to patients. Capital markets are backing these trends with significant investments

- We are the industry leader with 7,000+ ongoing clinical trials with world leading sponsors and partners. Our multi-year investments in areas such as Patient Centricity and Data and AI are paying off

- This establishes the foundation for our accelerated growth. Our next-gen life science cloud platform brings real-time AI and rich customer engagement to the point of use and closes the loop across Research & Discovery, Development, Manufacturing and Commercial

- Our focus for 2022 and beyond remains on helping the industry (biopharma, med tech, diagnostics) bring new therapies to patients faster, attract the best talent in healthtech and continue to drive innovation in this import space

Transform How Therapies Get to Patients

+

=

Accelerate and de-risk therapeutics for patients

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Our Mission

Power Smarter Treatments and Healthier People

#1
MS in LS[1]

$8B
of TAM[2]

17 of Top 20
Selling Drugs Developed on MEDIDATA in 2020

8,000+
Customers

20 of 20
Top Biopharma, CRO and Medtech

75%
Of Oncology Approvals Supported 2015 - 2021

11 Dassault Systèmes + Gartners' WW Life Sciences & Healthcare products total software market + IDC 2019 SW vendors' revenue
2Total Addressable Market; sources: Dassault Systèmes' internal sources + Industry analysts' studies from ARC Advisory Group and IDC

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Financial Metrics

13-15%
y/y revenue growth

200bps
y/y margin improvement

Growing Operating Cash Flow
in line with operating margin expansion

Growth Levers

Winning market share in core market: Rave and Attach

Connecting to **Patients & Healthcare ecosystem**

Data, Analytics and AI enable **unique insights and actions**

Optimizing **resource allocation and synergies** across the company

End to end platform for Life Sciences creating new business opportunities

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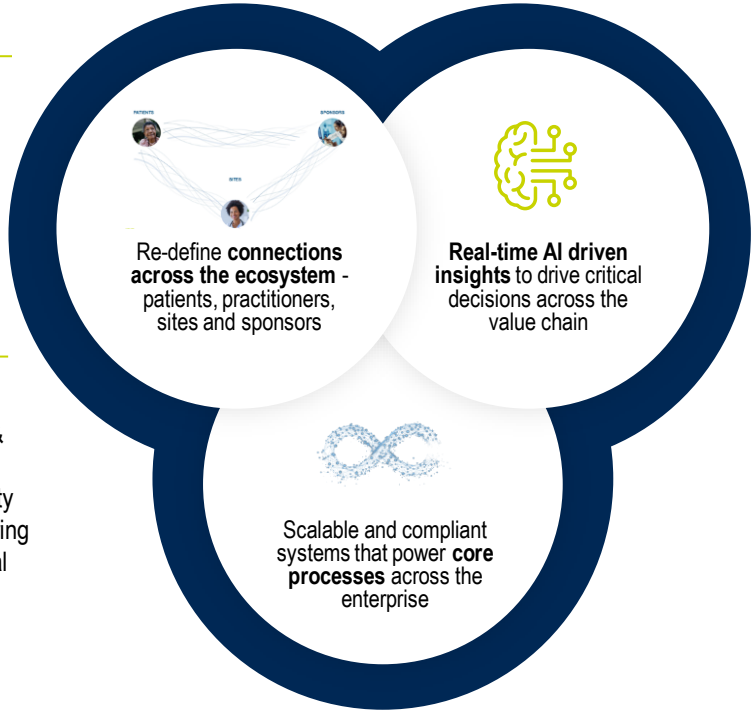
Our Life Sciences Cloud Platform Drives Real-Time AI and User Engagement

Vibrant Ecosystem

- 8,000 customers and partners
- 7.8M+ patients
- 95,000+ physicians
- 30,000+ facilities
- 145+ countries

Critical Functions

- Study Conduct
- Clinical Operations & Decentralized Trials
- Evidence Generation
- Patient Engagement
- Research & Discovery
- Total Quality
- Manufacturing
- Commercial Launch



Award Winning AI Powered By Unique Data

- ~26,000 trials
- 7,500+ live studies
- 1B images in 2021

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Platform

Partnering on the COVID-19 Vaccine Program

- **Hybrid decentralized approach to study execution**
- **Real-time use of AI to identify sites, patients and data quality issues**
- **30,000+ patients provide sensor and outcome data**
- **Workflow innovation to realize unprecedented speed and compliance**
- **Breakthrough use of RWE for long-term follow-up**

Sources: https://www.medidata.com/en/press-releases/medidata-supports-modernas-covid-19-vaccine-clinical-trials-with-rave-clinical-cloud-platform
https://www.nytimes.com/interactive/2021/world/covid-vaccinations-tracker.html
https://www.statista.com/statistics/1198516/covid-19-vaccinations-administered-us-by-company/

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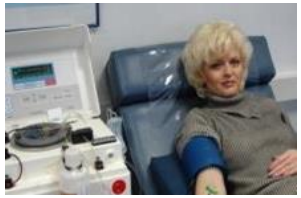
Platform

Closing the Loop to Enable Bedside-Bench-Bedside Therapies

1. Collection



2. Testing

3. Processing

4. Medicine

5. Treatment

Donor Management

Plasma Supply Optimization

Lab Testing

Process Simulation

Process Execution

Process Monitoring

Medicinal Product

Product Supply Optimization

Post-market Monitoring

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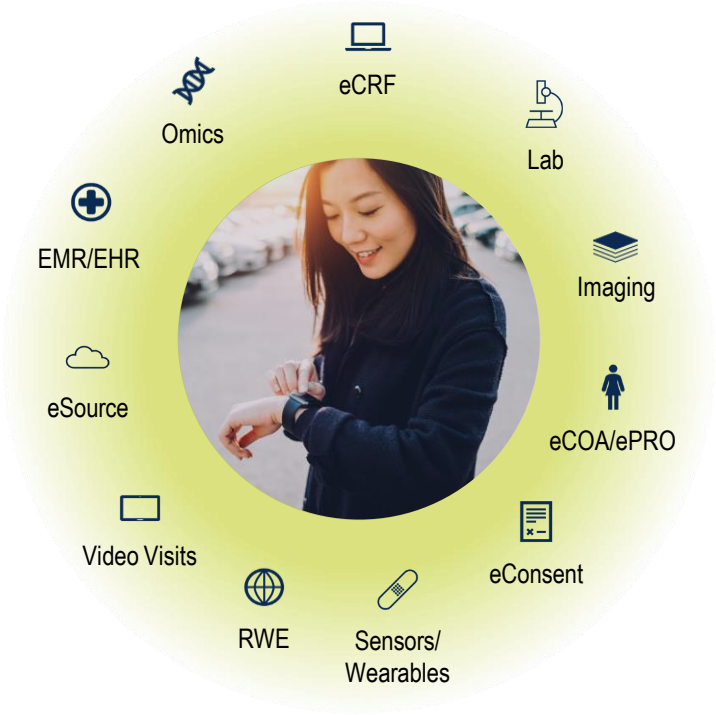
Study Conduct

Rave EDC Goes Beyond eCRF



Scale

- 4,500+ Study starts in 2021
- World-class privacy, security, compliance and quality

Growing Complexity

- Streaming data
- ePRO, eCOA
- Video visits
- Tokenization

Innovation

- Intelligent workflows - Interim study lock/data cut, mid-study change process, **eSource**
- Autonomous of **Medical Coding**
- Integration - Supply forecasting with **RTSM**

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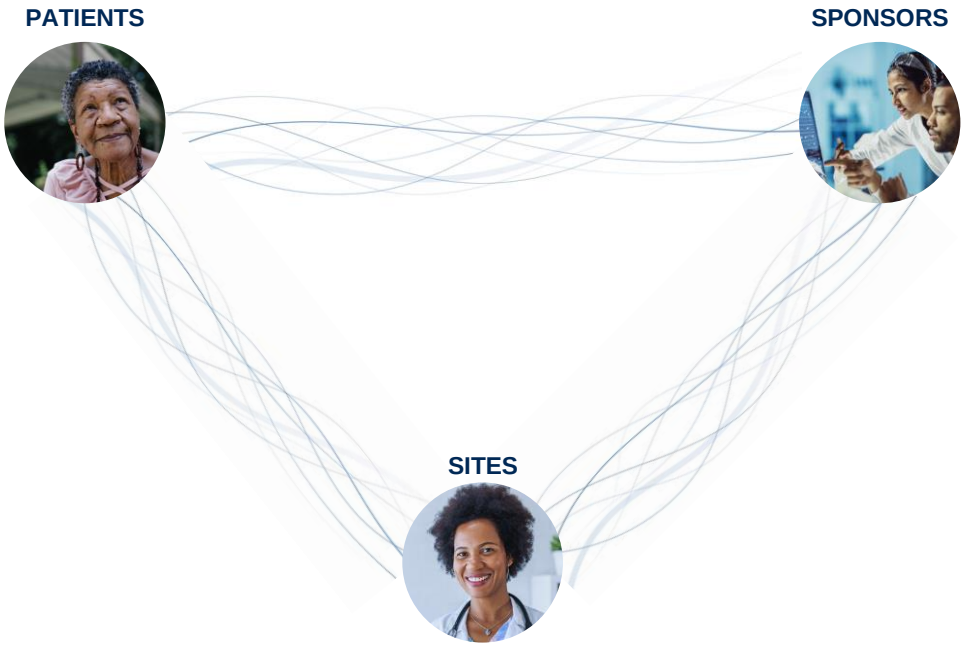
Clinical Operations & Decentralized Trials

COVID-19 Has Permanently Changed the Interactions Between Sponsors, Sites, and Patients



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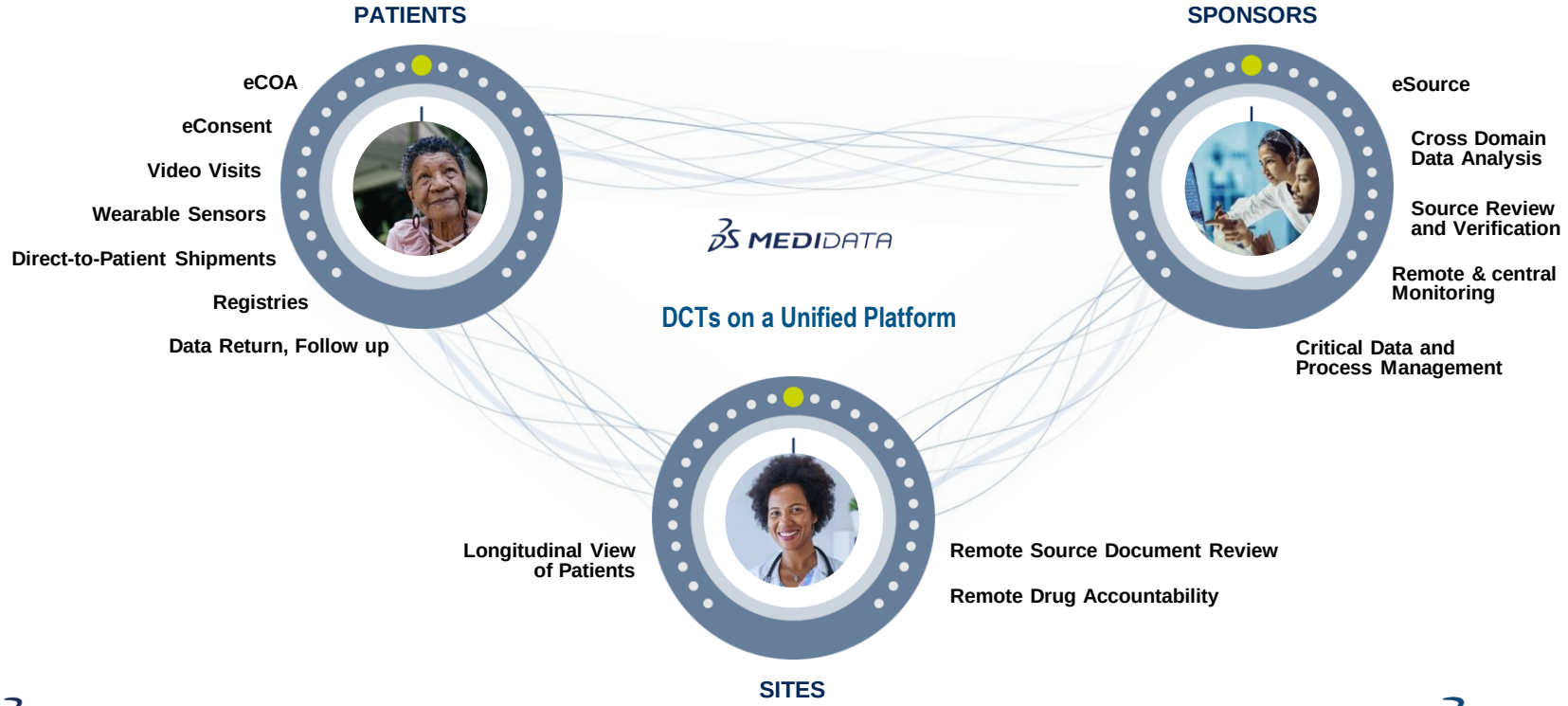
Clinical Operations & Decentralized Trials

Our Platform Orchestrates Complex Interdependencies…



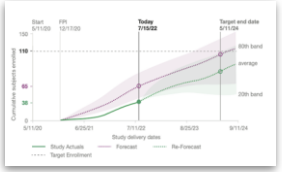
Clinical Operations & Decentralized Trials

…Powered With Live Analytics…

PATIENTS

SPONSORS

Real-Time Forecasting



Patient Activity

Central Cockpit

SITES

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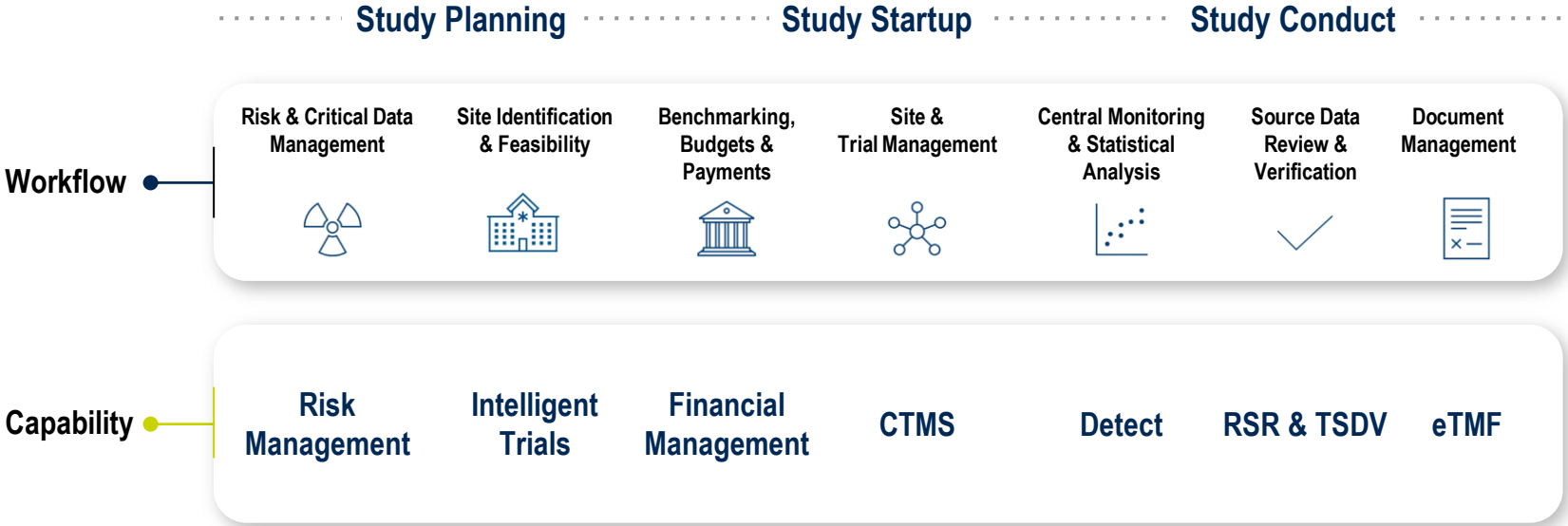
Clinical Operations & Decentralized Trials
…Embedded Within Compliant Workflows



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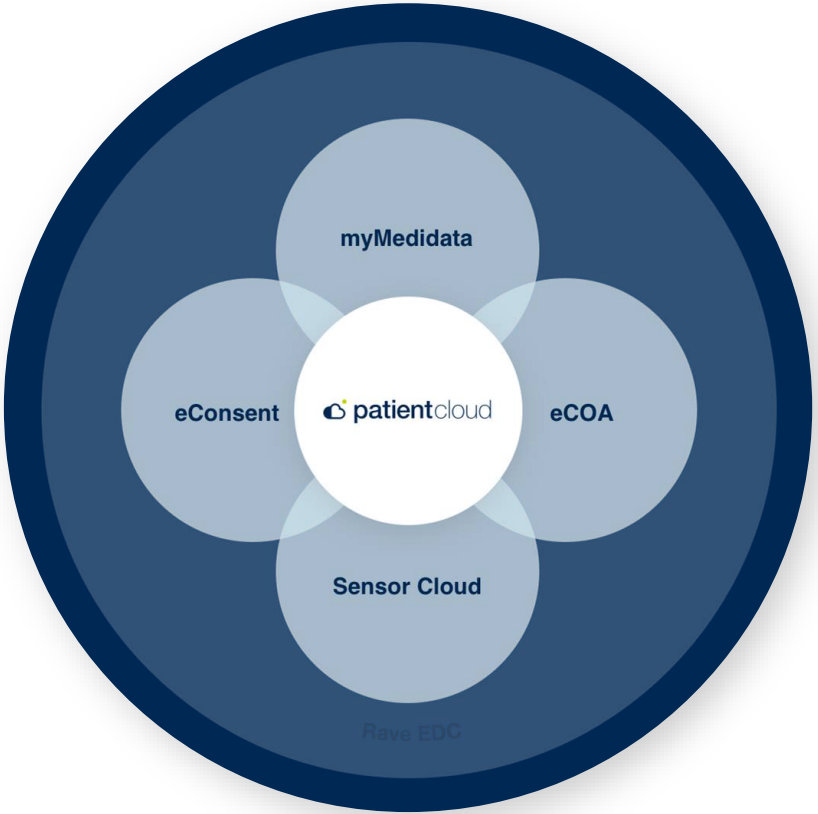
Patient Engagement and Experience
Medidata Patient Cloud

A suite of patient-centric digital health solutions focused on:

- Enabling greater patient participation in clinical research
- Breaking down the barriers of traditional clinical trials through a single, unified platform
- Empowering patients to share data on their terms regardless of location



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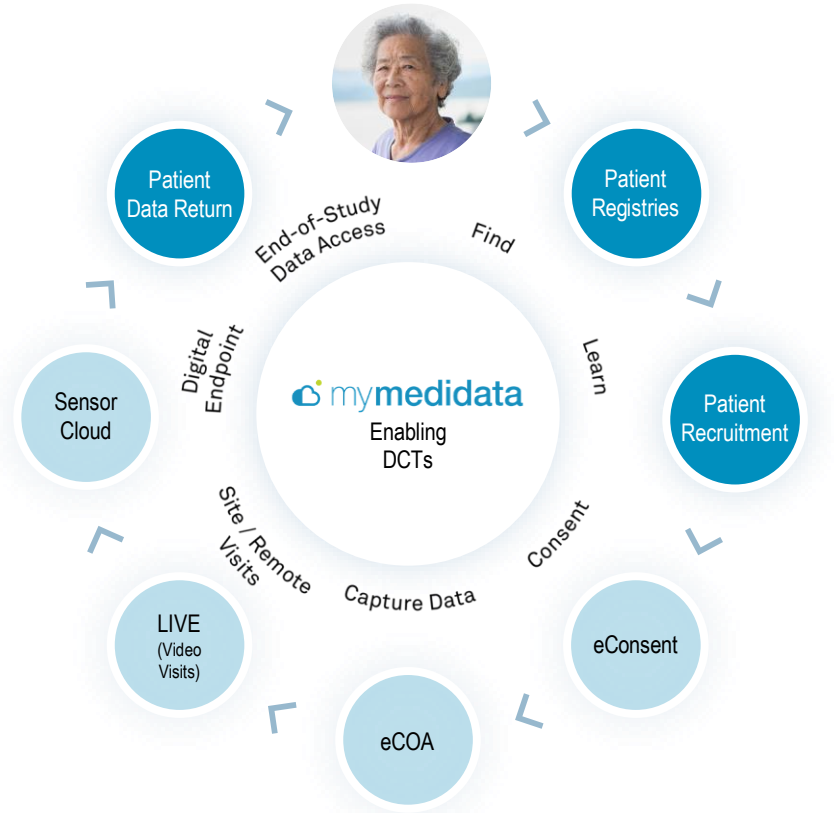
Patient Engagement and Experience

myMedidata



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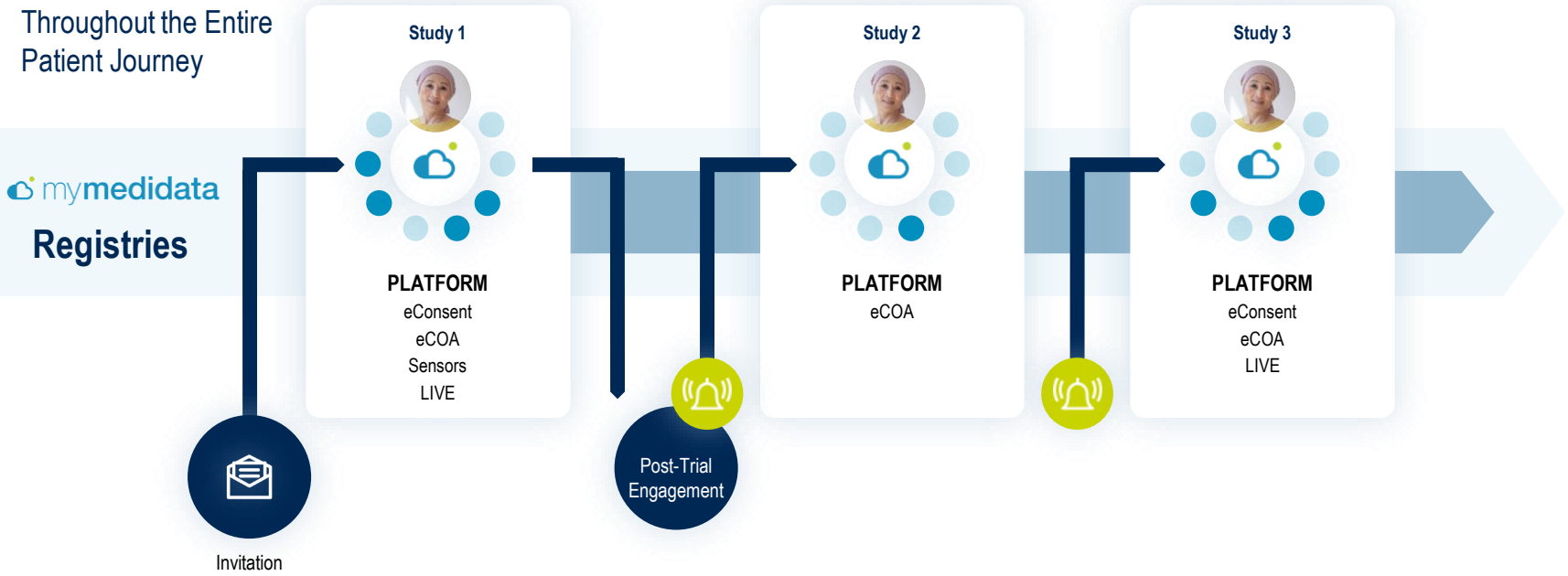
Patient Engagement and Experience
Single Clinical Trial Dashboard



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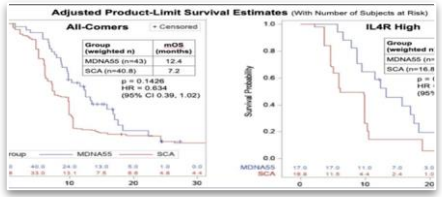
Evidence Generation

Synthetic Control Arm

Augment or replace randomized controls **with historical trial data**

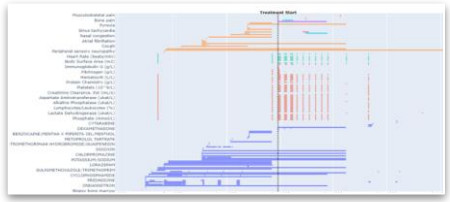
Inform internal decision making and enhance interpretation of single arm trials



Trial Design

Increase probability of success with accurate selection of target population, comparator arm, and clinical endpoints

AI-enabled predictive modeling of outcomes



Medidata Link

Linking individual patients to their clinical trial and real-world data to create a universal record

Evaluate safety and efficacy to inform market access and PV

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Evidence Generation

Two Regulatory Approvals From FDA CDER and CBER in rGBM Using Synthetic Control Arms™

Context

- Two clients in the recurrent glioblastoma space asked Acorn to build synthetic control arms for regulatory submission in phase 3 confirmatory trials
- Acorn designed the SCA, including phase III protocol and SAP and prepared the EoP2 briefing packet including justification of hybrid SCA to regulators and presented at FDA EoP2 meeting

Results of Acorn Analysis

- Two separate FDA agencies (CDER and CBER) independently agreed to use of historical clinical trial data and hybrid SCA design in phase 3 confirmatory trial
- We were able to augment the trial by providing 100 “synthetic patients” in the control arm, reducing clinical development cycle by 6 months

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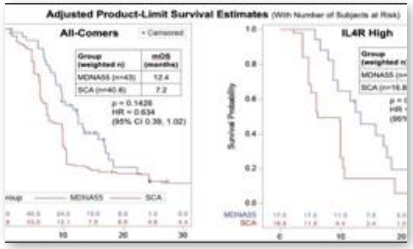
News Release

Medicenna Provides MDNA55 rGBM Clinical Program Update Following Positive End of Phase 2 Meeting with the U.S. Food and Drug Administration (FDA)



“We are extremely impressed with the Acorn AI team for providing a scientifically rigorous rationale for the design of an innovative registration trial incorporating an external control arm for the treatment of recurrent glioblastoma (rGBM) with MDNA55.

The FDA’s acceptance of this unique design, will expedite completion of the Phase 3 trial in rGBM allowing earlier access of MDNA55 for a disease with poor prognosis and high unmet need.”

Dr. Fahar Merchant, President and CEO of Medicenna (October 15, 2020)

The full press release can be viewed here.

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Research and Development

Small Molecule and Biotherapeutics Design

Precise Targeting

Target Selection

50% Reduction in **Cycle Times**

AI Driven Therapeutics Design

20% Reduction in **Cost &Time**

Biologies, Cell, & Gene Therapies Design

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Manfacturing

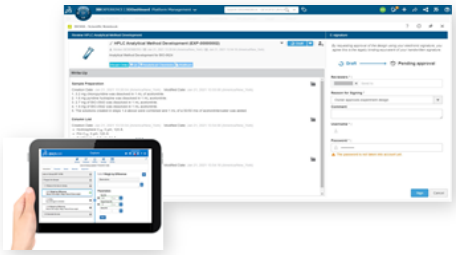
CMC Development, Tech Transfer, Monitoring

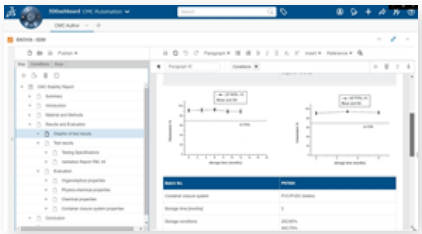
25% Boost in Lab
Efficiency & Productivity

30% Reduction
in **Tech Transfer Time**

30% Reduction
in **Tech Transfer Time**

One Lab → License to Cure → Made to Cure





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Our Priorities

Focus on helping customers bring therapies to patients faster

Attract the best talent around our shared mission and culture

Continue to innovate at the intersection of biology and tech, data and AI

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