

# Next-Gen Therapeutics *Accelerator*

## INTRODUCTION

The pharmaceutical industry is facing an R&D productivity crisis, where a \$1.4B sunk cost for a Phase III failure is an existential threat.

The primary driver of failure is the 'Translational Chasm'—the inability to connect lab-side omics data to clinic-side patient outcomes.

DNAexus' **Next-Gen Therapeutics Accelerator** bridges this gap, providing the "Translational Intelligence" necessary to de-risk multi-billion-dollar assets by unifying multimodal data into a single, actionable ecosystem.

## KEY TAKEAWAYS

- **De-Risk Phase III Trials:** Implement a solution that acts as an insurance policy for your asset, costing less than 0.05% of the failure it prevents.
- **Unified Multimodal Insights:** Break down silos by harmonizing Genomics, Imaging (DICOM), and Clinical data into a single "Source of Truth" for precision biomarker discovery.
- **Democratized Predictive Modeling:** Empower bench scientists to identify "hidden responders" and biomarkers using conversational AutoML workflows, without writing code.

## THE REAL-WORLD CHALLENGE

Mid-to-large pharma teams struggle with data trapped in silos—genomics in one tool, clinical data in another. High-value scientists spend 40% of their time acting as 'Data Janitors,' stitching datasets together rather than interpreting biology. This fragmentation leads to non-reproducible biomarkers and failed trials because stratified cohorts can't be operationalized reliably.

## THE SOLUTION:

# A Scalable "Omics Mesh"

The Next-Gen Therapeutics Accelerator industrializes your translational workflows, turning bespoke analysis into a repeatable factory. This bundle leverages:

- **The Cohort Browser:** A unified interface to explore multimodal data. Stratify patients by combining clinical phenotypes with molecular biomarkers to define precise trial cohorts.
- **An Automated Ingestion Layer:** Standardized ingestion workflows that harmonize data from disparate vendors and assays into a consistent format, eliminating manual cleaning.
- **Asset-Ready Data Rooms:** Secure, governed workspaces designed for external collaboration. Safely ingest partner data (CROs, academic partners) without uncontrolled file transfers.
- **AI/ML Accelerator:** Advanced tooling for biomarker discovery, enabling teams to build rigorous ranking models for target identification 2x faster.
- **GxP + Omics Data Catalog (ODC):** A pre-validated environment to cut FDA/EMA submission preparation time by 6 months.
- **Services:** Includes **1,000 Professional Services Hours** to ingest legacy data "furniture," ensuring teams are running queries on day one.

## USE CASE: THE ADC "RESCUE" MISSION

Following a \$40B acquisition of an Antibody-Drug Conjugate (ADC) asset, a pharma company finds legacy genomics, clinical results, and digital pathology scans locked in incompatible silos.

They leverage the Next-Gen Therapeutics Accelerator for enterprise-grade data ingestion, harmonization, cohorting, and AI tooling. Through this unified translational factory, the team identifies a novel biomarker signature that predicts treatment responders with 30% greater accuracy, validating the acquisition to the Board.

### KEY BENEFITS

- **Reproducible Science:** Move from ad hoc, 'one-off' analyses to consistent, versioned pipelines.
- **Faster Collaboration:** Spin up secure data rooms for partners in days, not months.
- **Unified Stratification:** Define complex patient cohorts once and reuse the logic across multiple trial phases.

### Why DNAnexus

DNAnexus operates some of the most demanding genomic production environments in the industry. We operationalize omics data alongside your enterprise stack for complex translational science, where others are just "bit buckets." Proven to increase R&D productivity up to 3x and accelerate innovation time by up to 5x, based on internal benchmarks.\*

**Next Step:** Would you like to discuss how "Asset-Ready Data Rooms" can streamline your current collaboration with external CROs?