CASE STUDY

Company: A leading global pharma team advancing combination oncology therapies needed a systematic way to predict emergent safety risks during early-phase trials.

Pain Point: Clinical Trial and preclinical data is fragmented and requires manual curation to integrate diverse data types. This hinders or slows down insights and decision that can impact the clinical trial design and patient recruitment.

Approach: The team used Elucidata's platform to harmonize structured and unstructured clinical, target expression, and safety data. Polly's AI-driven pipelines enabled rapid synthesis of drug mechanism data, PK/PD profiles, and historical AE trends to create combination-specific risk models.

What the Customer Says

"We were able to proactively flag high-risk AE clusters, weeks before the first patient dose, cutting down redesign cycles and patient risk."

-Clinical Safety Lead, Oncology

Key Challenges

- **No standard approach** for predicting combination-specific AEs
- **Inadequate signal visibility** across overlapping/non-overlapping pathways
- **Manual risk tables lacked** biological and mechanistic layering
- **Safety data fragmented** across literature, preclinical, and PK/PD sources

How We Helped

1. Harmonized **3000+ publications and clinical trial summaries** along with preclinical datasets from public and internal sources
2. Mapped to **proprietary data model to detect overlapping targets, MOAs and patient cohorts** of interest
3. Enabled **chat interface with the complex multimodal data** to enable intuitive data exploration and visualization
4. Automated **signal capture from public + proprietary sources** for real-time dashboards
5. **Demo Link :** https://drive.google.com/file/d/1vpnGFW_VIlE24uKO_adIfgZUmI42ON7I/view?usp=sharing

Impact

3X faster ML model development	**Supported 5+** Clinical Trial Teams
6X faster delivery of dashboards	**Enterprise-wide access** to Preclinical and Clinical Data Knowledge Graph