



ARTEMIS: Accelerating Access to Pediatric Cancer Clinical Trials via AI-Powered Decision Support

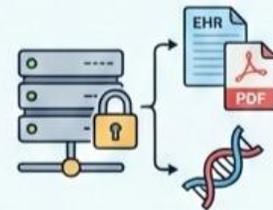
A Human-in-the-Loop AI System for Precision Trial Matching



THE CRITICAL CHALLENGE

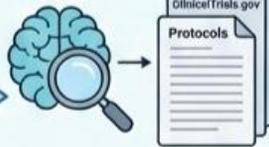
Problem: Manually sifting through dense EHRs and evolving protocols is a race against time, leading to missed enrollment, clinician burnout, and treatment delays for children with rare cancers.

THE ARTEMIS SOLUTION: From Messy Data to Clear Insights



1. Secure & Comprehensive Data Integration

Connects to EHRs, ingesting structured labs and unstructured text (notes, pathology, genomics).



2. Intelligent 'Read and Reason' Capability

Advanced AI extracts clinical features and compares against real-time eligibility criteria.



3. Evidence-Based Recommendations (No 'Black Box')

Provides verifiable, evidence-cited assessments for review. NOT a final decision maker.



KEY INNOVATIONS & SAFEGUARDS



Human-in-the-Loop Design

Clinicians verify all matches, providing rationale for feedback and continuous improvement.



Uncompromising Security & Compliance

Fully HIPAA-compliant. Encrypted, role-based access, with immutable audit logs.



Pediatric Specificity

Prioritizes child-specific data points like age-adjusted norms and pediatric biomarkers.



PROJECT GOALS & EXPECTED IMPACT



Increase Trial Enrollment Rates. Ensure every eligible child is identified.



Reduce Time-to-Treatment. Slash screening time for faster access to therapies.



Democratize Access. Standardize matching quality across institutions.