PREDICTING RECRUITMENT RATE IN CLINICAL TRIALS

NEST: Nurturing Excellence, Strengthening Talent

AI-POWERED RECRUITMENT RATE PREDICTIONS

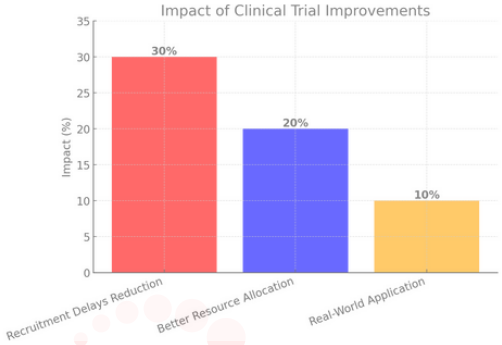
OPTIMIZED TRIALS

THE PROBLEM: WHY THIS MATTERS?

- Clinical trials are delayed by poor recruitment planning, affecting drug approvals & patient access to treatments.
- Traditional methods rely on heuristics, lacking data-driven accuracy to anticipate recruitment success.
- 70% of trials fail to meet enrollment targets, leading to cost overruns and regulatory setbacks.

TANGIBLE IMPACT & VALUE

- Real-World Application – Aligns with industry best practices for clinical trial forecasting.
- 30% Reduction in recruitment delays – Enables faster drug approvals.
- 20% Better Resource Allocation – Ensures optimized site selection & funding..



OUR SOLUTION: AI-POWERED RECRUITMENT RATE PREDICTION

- Data-Driven Insights: Predicts Recruitment Rate (RR) using structured + unstructured trial data.
- AI + Domain Knowledge: Leverages LLMs and techniques to achieve high precision in domain-specific applications.
- Adaptive & Scalable: Works across trial phases, study types, and global datasets.

WHAT MAKES US DIFFERENT?

- Clinical Context Awareness – BioBERT captures medical nuances in text-driven trial descriptions.
- Feature Engineering Excellence – Integrates study duration, patient demographics, sponsor strength & more.
- Active Learning – Minimizes labeled data dependency, improving predictions with fewer samples.
- Optimized for Decision-Making – Provides explainable insights for trial managers, sponsors & regulators.

FUTURE-READY & SCALABLE

- Phase-Wise Modeling : Tailoring predictions to early vs. late-stage trials.
- The Bottom Line : Smarter, Faster, More Reliable Clinical Trials.
- External Data Enrichment: Incorporating geographic, economic & healthcare trends.
- Advanced LLM Integration: Exploring GPT-4/LLaMA-3 for richer embeddings & adaptive modeling.
- Bridging AI + Medicine to accelerate life-saving innovations.