OAKBLOC

Kalehdoo Clinical Analytics Platform 1.0

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Email us for product demonstration: contact@oakbloc.com

Oakbloc enables and assist Clinical Trial Sponsors, CROs, Physicians, Researchers, Special Interest Organizations etc. in the adoption of the emerging technologies: Big Data Analytics, AI/ML, Blockchain, Smart Device, and IOT in a variety of ways and combinations that will significantly advance the practice of clinical trials and remove or reduce some of the major challenges facing the industry.

Platform Overview

Oakbloc has developed a data and analytics platform for the Clinical Research industry. Clinical Analytics provides insights into the clinical research industry. The market and competitive intelligence gained from the insights can benefit Sponsors, CROs, Industry Analysts, Non-Profit, Government and Special Interest Organizations explore avenues for future growth. The platform has pre-built dashboards and reports for stakeholders.

Stakeholders: Use Cases

Sponsors:

- Design Clinical Study
- Reduce Redundant Studies
- Clinical Site Selection
- Design Study Endpoints
- Explore Collaboration Opportunities
- Competitive Intelligence
- Clinical Trends
- Clinical Industry Landscape

Physicians & Patients:

- Participation Opportunities
- Recruiting Studies

Market & Industry Analysts:

- Current Trends
- Market Intelligence

Special Interest Organizations:

- Global Clinical Activity
- Demographics

Benefits to Stakeholders:

1. Help Sponsors design better clinical studies with a patient centric focus.
2. Help sponsors reduce redundant studies, choose study endpoints, select clinical sites, and explore opportunities for collaboration with other stakeholders.
3. Benefit various special interest groups and organizations such as Non-profits, charitable, and government organizations to make informed decisions based on insights gained from the analytics to serve the population better.
4. Clinical Site Finder finds its use case for physicians and patients to explore opportunities for participating in clinical trials.
5. Platform build on open source technologies to reduce operational and upfront license costs

Technologies used in Platform:

- R Programming
- Plotly Charts
- Shiny
- Leaflet OpenStreetMap
- MongoDB NoSQL Database
- Neo4j Graph Database
- Cloud Platform

Business Models:

- Subscription Model
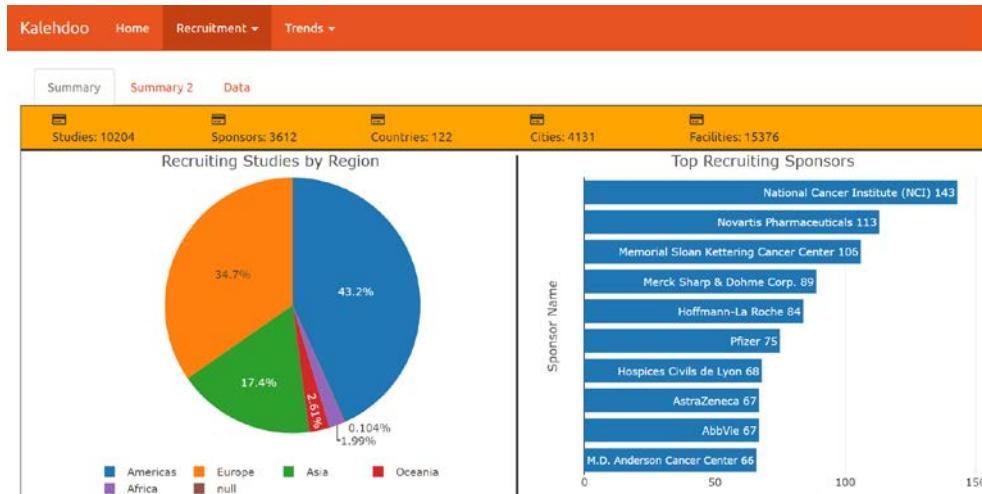- Eat it All Enterprise Model

Pre-built Applications:

1. Clinical Intelligence
2. Patient Monitoring
3. Virtual Clinical Trial Simulator
4. Clinical Trial Site Finder

Clinical Intelligence

Clinical Trials landscape and outlook. Trends in clinical trial activity, trial design, and design outcomes. Insights driven approach for future prioritization.

Recruitment: Recruiting Clinical Trials Dashboard

Trends: Clinical Trials Activity Dashboard

View Application: https://kalehdoo.shinyapps.io/app01/
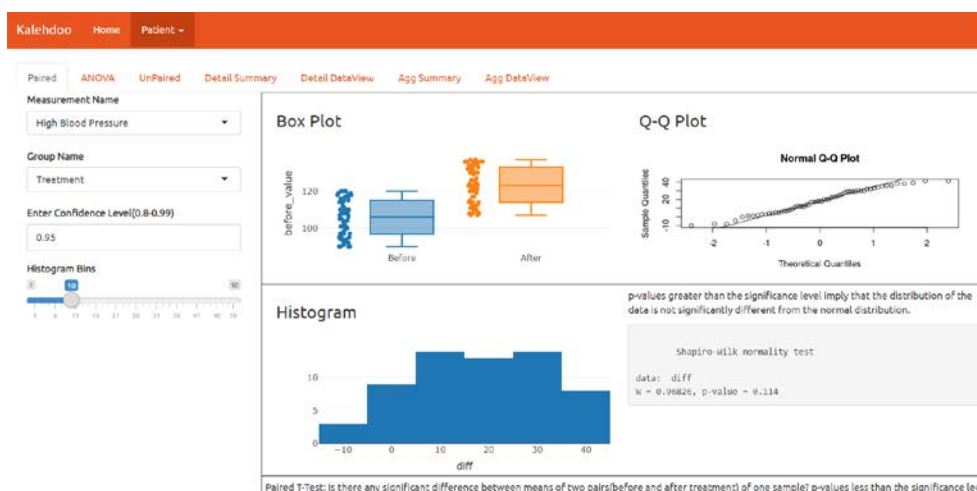
Patient Monitoring

Analyze and monitor patient health in Virtual Clinical Trials. Track patients with abnormal measurements. Analyze endpoints outcome results.

Patient Monitoring Dashboard: Patient and Physician

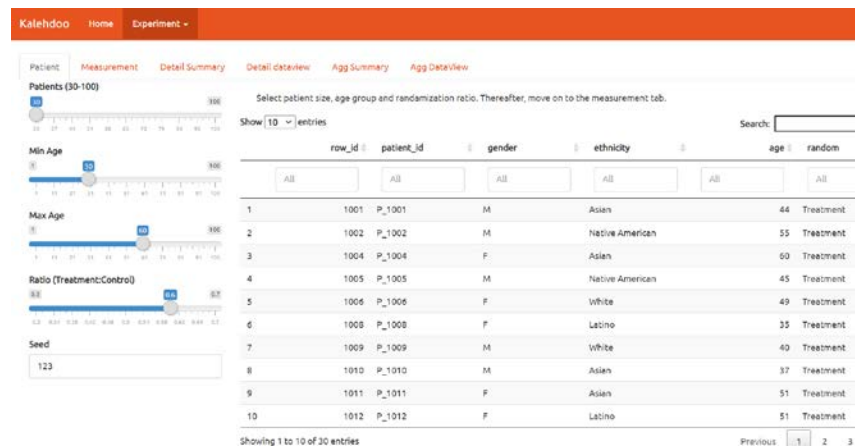## Real Time Clinical Trial Dashboard: Biostaticians

Patient Analysis and Monitoring enables the patients and physicians to analyse the results of a virtual study experiment on a real time. The data used in this application is a sample test data generated programmatically using the Study Experiment Simulator App. This application connects to real-time data on MongoDB cloud server to mimic real-time analysis. The analysis tab allows data scientists and Biostatisticians to analyze the results.

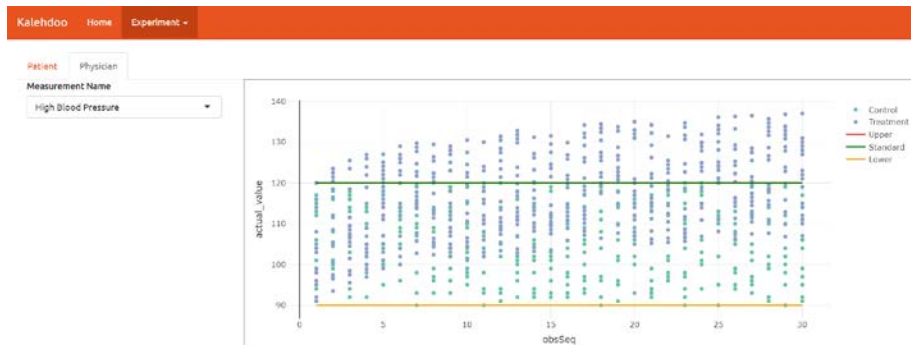## View Application: https://kalehdoo.shinyapps.io/app04pam/

Virtual Clinical Trial Simulator

Choose various study parameters to simulate a virtual study experiment. Analyze the data generated by the application and run statistical tests.

Design Virtual Study Experiment: Sponsors

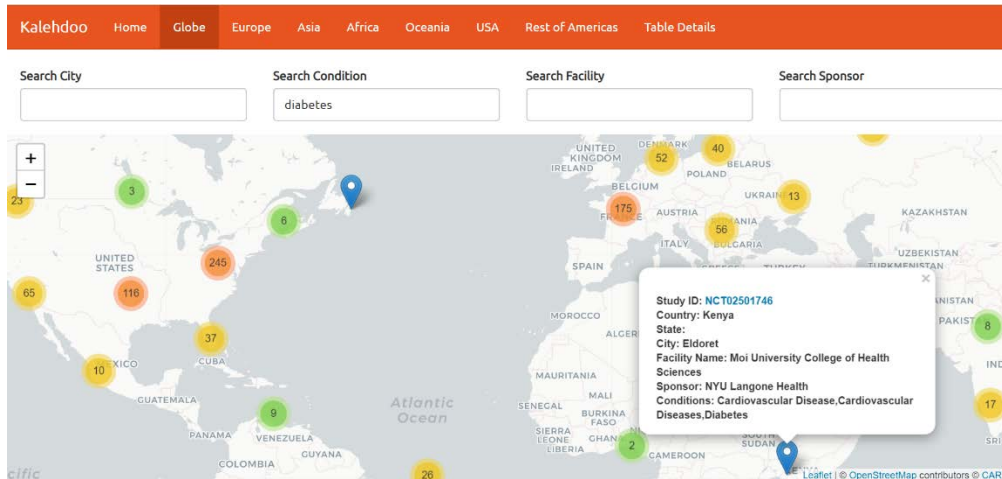## Analyze Virtual Study Experiment: Sponsors

Design a virtual clinical study experiment and analyze the results. Choose parameters of a study such as a study population size, randomization, study outcomes, and measurement frequency. Visualize the results and run various statistical tests (T-Tests and ANOVA) to measure the study results.

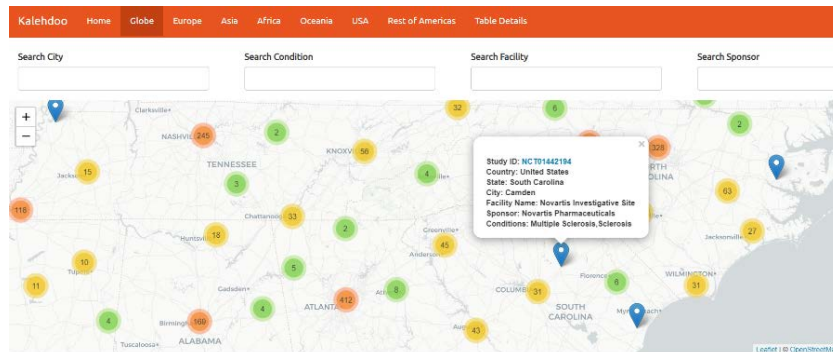## View Application: https://kalehdoo.shinyapps.io/app03/

Clinical Trial Site Finder

Find a recruiting study site on a geographical map interactively for specific conditions. Useful for sponsors, patients, physicians, and special interest organizations.

Find Recruiting Sites: Physicians, Patients, Sponsors

The Clinical Study Finder App is an interactive application that helps in finding clinical studies that are currently recruiting patients globally. The patients can search based on the condition name, sponsor, site, or location, and the results will appear on a geographic map. Once a study is located, the details of the study and contact details of the site can be viewed by navigating to clinicaltrials.gov by simply clicking on the hyperlink.

Enhancing user experience for all patients and organizations such as Pharmaceuticals, CROs, public interest groups, independent consultants, and non-profits contributing to find the recruiting studies.

View Application: https://kalehdoo.shinyapps.io/app02/