# NOESIS

**USE CASE** 

# Replacing Manual Processes with Intelligent Cost Forecasting

BIG, a tool designed to generate fast and reliable cost estimates for clinical studies, works in conjunction with a centralized platform (CBO) that maintains all study-related data in a structured and up-to-date format. This integrated approach simplifies and accelerates cost management by enabling automated, real-time estimations and eliminating time-consuming manual processes.

Sector | Pharma

**Delivery Unit** | Low-Code Solutions

**Solution** | BEST Investigator Grants (BIG)



## 5 to 15 minutes

minutes to gather all data and start study estimation



**10** million records per study



### THE CHALLENGE

The primary objective of the BIG application was to enhance the accuracy and efficiency of forecasting costs for clinical trials at pharmaceutical company. Previously reliant on Excel, the clinical operations team faced significant challenges as the size and complexity of trials increased, making Excel-based forecasts impractical and inaccurate.

### **GOALS**

Development of an App able to automate the estimation of the Study cost, taking the sites and patients' costs:

- > The digital transformation of a manual and laborious process able to save time and money by removing the use of Excel files.
- An App easily configurable to create different estimates for the same clinical study to allow multiple comparisons taking different variables.
- > The Automation of data management that allows a better triage of different costs dimensions.
- > The possibility of adjusting the different cost items and quantities to get accurate estimates.

### SOLUTION

This dual-solution approach represents a transformative shift in the management of clinical trial costs. A centralized platform ensures that clinical trial data remains structured and up-to-date, enabling automated cost forecasting with the click of a button.

Together, these tools replace cumbersome Excel sheets and outdated VBA scripts traditionally used in the industry, introducing key innovations such as:

- > Data Normalization: Ensures consistent data handling by maintaining site-specific costs in local currencies (like rupees) while converting them to a standard currency (usually USD) for forecasting purposes.
- > Flexibility and Customization: Allows clinical operations teams to easily customize variables used in forecasts and update estimates to reflect changes in the trial, enhancing adaptability

This integrated approach not only streamlines data management but also enables real-time, accurate forecasting, setting a new standard in the industry.



### **RESULTS**

The introduction of a cost forecasting solution, combined with a centralized platform for managing up-to-date clinical trial data, has led to significant improvements in operational efficiency and decision-making at the pharmaceutical company:

- > Data Processing: An innovative multi-threaded solution was developed to handle the vast amount of data (over 10 million records per study), reducing the time required for data copying, processing, and conversion from over 10 hours to a drastically shorter duration, thereby ensuring data integrity and speeding up the forecasting process.
- > Cost and Time Efficiency: By automating and streamlining the data handling and forecasting processes, BIG has substantially reduced the time and labor previously required for manual data management and calculation, allowing the clinical operations team to focus more on strategic aspects of trial management.

# **NOESIS**

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