

## HEOR CASE STUDY

# Development of a Local Economic Model: India

Cost-of-Illness (COI)/  
Burden of Disease (BOD) Analysis

Therapy Area **Hematology**

Scope Markets  
**India**

Team Specialization  
**Health Economics & Outcome Research (HEOR)**

### Project background

- ◆ The cost of supportive care and management of a child with thalassemia major is estimated at Rs. 100,000 - 250,000 per year depending on the age and presence of complications
- ◆  $\beta$ -thalassemia imposes a great socio-economic burden on the family, society and the health services in India
- ◆ Cost of a BMT is estimated at Rs.15 lakhs. With more and more patients being brought under the net of care by transfusion and chelation, the requirement for blood transfusions has increased exponentially
- ◆ Government of India has formulated a policy aimed at informing and providing broad guidance on prevention and management of these disorders

## CLIENT OBJECTIVE

Developing a state-transition Markov model/  
Microsimulation model

- Prevalence and incidence: Understanding the burden of beta thalassemia in India
- Estimation for health resource utilization: To estimate the annual and lifetime healthcare cost of the TDT (transfusion dependent thalassemia) population
- Estimation of resources consumed in blood transfusion, as well as the resources consumed in treating IOL (iron overload) complications
  - Direct & indirect cost associated with beta thalassemia management
  - Estimating costs of ICTs (iron chelating agents)
  - Estimating costs of blood and instrumental monitoring, and administration costs
- Running a TDT health utilization survey among leading specialists/ hematologists nationwide
- **Cost-of-illness analysis**; Economic impact of beta thalassemia in India including associated treatment costs

Develop publication and submission into reputed journal

### PMR Insights Key Stakeholders

- Hematologists treating beta thalassemia patients
- Hospital staffs- administration and purchasing dept.

### Sample Size

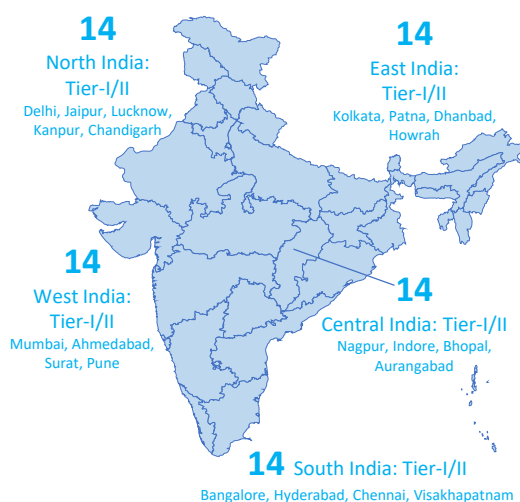
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### Deliverables Format

Automated Dashboard (MS Excel) & Summary Report (PowerPoint)

## OUR APPROACH

- Thorough secondary research has been conducted through literature review and publications are selected based on the key inclusion criteria and data elements
- eQuantX conducted primary market research across India with hematologists treating beta thalassemia patients, and hospital staffs - in order to get insights for estimating resources consumed in blood transfusion, and in treating IOL (iron overload) complications to understand the cost effectiveness for the drug under evaluation



## Burden of Illness Analysis

- **Measuring medical and other costs resulting from beta thalassemia and its economic burden to society:** - Determining economic impact of beta thalassemia in India by measuring and comparing the economic burdens of beta thalassemia to society, estimating the costs of illness associated with mortality, morbidity, disability, and other disease characteristics, conducting healthcare resource utilization analysis by identifying incidence or prevalence of beta thalassemia, estimation of direct and indirect expenditures that result from premature death, disability or injury due to beta thalassemia, opportunity cost of blood shortage over next 1/3/5 years and trial data analyses

## RESULTS ACHIEVED:

- Qualitative and quantitative findings of the research presented on excel-based dashboard report and incorporated client feedback on excel model and simultaneously developing final output report in required format
- As a second step, writing manuscript for publication and to be submission ready after incorporating client feedback and suggestions. Advisory board discussion has been organized to validate the study outcomes and to finalize the manuscripts, publication journals and other key parameters
- Also supported client in creation of an abstract presentation at a conference which is followed by manuscripts submissions and further publication process has been followed

## About eQuantX

eQuantX Pharma Analytics Solutions is a leading provider of research and consulting solutions for life science companies, including those in the pharmaceutical, biotech, and med tech industries. Our specialization lies in delivering cutting-edge research and analytics solutions through a distinguished team that includes experienced therapy area specialists, researchers with domain expertise, pharmacists, data scientists, and software developers. This positions us at the forefront of the digital transformation within the pharmaceutical and biotech sector. Committed to driving innovation and delivering tangible results, our extensive service offerings span a spectrum of capabilities which include providing support to global pharma companies in competitive intelligence, market access, pricing and reimbursement support, asset valuation and forecasting, data analytics, patient analytics, HEOR, and real-world evidence generation support. With a global presence, our strategically located delivery centers in Gurugram and Bangalore, India, and Essen, Germany, ensure accessibility and collaboration with our clients. Additionally, we maintain a dedicated sales team in the United States. At eQuantX, our mission is to equip pharma leaders with the tools and knowledge needed to navigate the complexities of healthcare.

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