

Generating real-world evidence to characterize disease burden and unmet need among CAR-T patients with COVID-19 infection

Client Overview & Business Requirement:

A pharma company sought evidence on outcomes in CAR-T patients with and without COVID-19 to quantify disease burden, highlight unmet needs and inform the PrEP value narrative.



Through a descriptive real-world study, the client wanted to evaluate outcomes such as mortality, progression-free survival, infection burden, and healthcare resource utilization among CAR-T patients with and without COVID-19 infection. The goal was to quantify the burden of disease in CAR-T patients with COVID-19 and build an evidence base for engagement with payers, providers, and policymakers.

Challenge

Despite growing recognition of COVID-19 risks in immunocompromised populations, there was a lack of evidence quantifying how COVID-19 infection impacts the timely receipt of CAR-T therapy among patients with Non-Hodgkin Lymphoma (NHL). Generating such evidence came with several challenges

Limited data available on the impact of COVID-19 on timely receipt of CAR-T therapy for NHL patients

Evaluating real-world outcomes in CAR-T patients required cross-functional expertise in oncology, epidemiology, infectious disease and data science

The study required expedited data processing and analysis to ensure timely generation of evidence for effective stakeholder engagement

Obtaining fit-for-purpose data to address the research questions required identification and evaluation of diverse data sources

Solution:

Burden of disease study was conducted to demonstrate the unmet needs among CAR-T patients with COVID-19 infection. Key components of the solution included:

- Sourced representative patient data from an aggregated EHR data source
- Performed data cleaning and processing to rapidly deliver a study-ready cohort
- Designed a complex, fit-for-purpose study using oncology-focused epidemiology expertise
- Executed analyses rapidly through the Data Science team to meet timelines
- Delivered timely insights that supported abstract and poster acceptance at the [2024 JNCCN Annual Conference](#)

Graticule's Value Add

Graticule provided end-to-end RWD study conduct, meeting evidence generation for internal decision making and publication



Designed a complex real world study leveraging epidemiology expertise to **address nuanced research questions** specific to the CAR-T population

Identified and utilized a **novel, nationally representative data source** to answer research questions beyond the reach of conventional CAR-T data sources such as claims data

Rapid study execution within 6 months from study design to data collection, analysis and publication

Interested in learning more? [Reach out to us at info@graticule.life](mailto:info@graticule.life)