Summary
The University of Texas MD Anderson Cancer Center is a comprehensive cancer center with one mission — to end cancer. By aggregating clinical, research and genomic data, then ensuring it is reliable and accessible in the right place at the right time, MD Anderson is empowered to shorten research cycles and fuel its Moon Shots Program.

Business Need
- MD Anderson launched the Moon Shots Program in 2012 to target six forms of cancer with large multi-disciplinary clinical and research teams to make substantial inroads against the disease, improve survival and quality of life for cancer patients.
- The organization supports and accelerates the iterative scientific process by harnessing Big Data, reducing clinical trial cohort selection from weeks to minutes, and speeding time to discovery of evidence.
- MD Anderson is accelerating the implementation of personalized cancer medicine, by rapidly disseminating changes and improvements in clinical practice to improve patient outcomes globally.

Challenge
- Create a single source of hugely disparate longitudinal patient data, operational data and genomic data to power insight discovery, clinical decision support and business analytics.
- Define a data governance process that ensures important data assets are formally managed and protected throughout the enterprise.
- Empower scientific and clinical collaboration by turning data into knowledge and facilitating self-service business intelligence.

Solution and Results
- Built big data analytics platform which securely houses clinical and genomics data in one centralized location.
- After one year, patient samples have been collected and analyzed to determine genetic signatures of disease.