

Real World Science, Data Scientist
Cambridge, UK ; Gaithersburg, US

At AstraZeneca we turn ideas into life changing medicines. Working here means being entrepreneurial, thinking big and working together to make the impossible a reality.

We're focused on the potential of science to address the unmet needs of patients around the world. We commit to those areas where we think we can really change the course of medicine and bring big new ideas to life.

Do you have expertise in, and passion for Medical Affairs in Oncology? Then AstraZeneca might be the one for you!

At AstraZeneca, we put patients first and strive to meet their unmet needs worldwide. Working here means being entrepreneurial, thinking big and working together to make the impossible a reality. If you are swift to action, confident to lead, willing to collaborate, and curious about what science can do, then you're our kind of person.

AstraZeneca's vision in Oncology is to help patients by redefining the cancer-treatment paradigm, with the aim of bringing six new cancer medicines to patients between 2013 and 2020. A broad pipeline of next generation medicines is focused principally on four disease areas - breast, ovarian, lung and hematological cancers. As well as other tumor types, these are being targeted through five key platforms -immunotherapy, the genetic drivers of cancer and resistance, DNA damage repair, HER2 and antibody drug conjugates, underpinned by personalized healthcare and biomarker technologies.

The Role

- The ideal candidate for this role will assist in building a capability that becomes a source of sustained competitive advantage for AZ in identifying, acquiring, integrating and mining diverse RW data from multiple geographic and healthcare system sources to support evidence generation and real-world studies. In close collaboration with colleagues in Epidemiology, Statistics and health economics, you will also design, implement, interpret, and communicate data analyses with an aim to scientifically address a clearly defined research question or business question. The role will promote best practice in Real World Data Science across multiple domains, and/or stakeholder groups.

Typical Accountabilities

- Collaborate with Payer and Epidemiology teams to maximise the value derived from large observational research data
- Deliver analyses of data from EMR, claims and primary observational data required by TA RWE strategies
- Support the development of IVS strategies and selection of optimised contact models for prioritised markets through analysis of RWD
- Provide scientific guidance on the application of Real World Evidence and observational research data to address issues across the Oncology and Biopharmaceuticals business units
- Provide technical input and options to strategic decisions made by AZ observational study teams on study design, data partner selection and best practices in RWE data utilization
- Support technical teams to provide access to analytical tools and develop visual analytics to enable self-serving applications for end customers
- Assist in building a capability that becomes a source of sustained competitive advantage for AZ in identifying, acquiring, integrating and mining diverse RW data from multiple geographic and healthcare system sources to support evidence generation and real-world studies
- Assist in advancing and shaping AZ's Real World Science data capability through the due diligence on new data providers/vendors, informatics support for data acquisitions in oncology and other therapeutic area.

Education, Qualifications, Skills and Experience

Essential

- PhD or MS in data science or other advanced degree in life sciences
- Experience in real-world evidence and familiarity with health economics/epidemiology, and quantitative science such as health outcome modelling
- Experience in EMR/Health IT, disease registries, and insurance claims databases
- Expertise in clinical data standards or medical terminologies and controlled vocabularies used in healthcare data and ontologies (ICD9/10/ReadCode)
- Expertise in methods development and application using statistical languages such as R/Matlab/SAS/SQL/Hadoop/Python
- Experience in working with a multi-disciplinary team

Desirable

- Training/work in Medical/Health Informatics or related field

- Experience in advanced visualisation and visual analytics of routinely collected healthcare data
- Expertise in data mining approaches within healthcare settings generating insight from routinely collected healthcare data
- A history of patient care or equivalent background of working at a patient care setting that allows the candidate to bring medical perspective into real-world evidence generation and observational studies
- Ability to lead & manage multi-disciplinary data science projects
- Strong track record of delivering large, cross functional projects
- Experience working in a global organization and delivering global solutions
- Use of Machine Learning and Artificial Intelligence in the generation of hypotheses within Real World Data

For more information, contact [Angela Lin](#).