

## **Postdoc Long Title: Meta analytics to quantify clinical immune-mediated adverse events under immuno-oncology agent treatments**

We are currently looking for talented scientists to join our AstraZeneca postdoctoral fellowship programme, at our centre of excellence in Boston, Massachusetts. You will be an integral part of a striving global pharmaceutical environment with the richest Oncology pipeline in the industry, driven by some of the most innovative and rigorous science and quantitative analytics. Our postdoctoral fellows thus have the opportunity to drive science-based advances - including publications - in the discovery and development of novel medicines, working in open teams of peers, internal mentors and an external academic mentor.

Within the programme, you will have the opportunity to participate in global science and training events, including scientific, technical, as well as drug discovery and development seminars and symposia across our UK, Swedish and US sites. You will also have the support of a leading academic advisor, who may provide additional guidance and knowledge to drive your scientific and career developments. The present position is in the field of immuno-oncology, a most exciting scientific and medical domain which has shown game-changing advances in treating cancer patients and has yet to reach its full potential.

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### **About AstraZeneca**

AstraZeneca is a global, innovation-driven biopharmaceutical business that focuses on the discovery, development and commercialisation of prescription medicines for some of the world's most serious diseases. But we are more than one of the world's leading pharmaceutical companies. At AstraZeneca, we are proud to have a unique workplace culture that inspires innovation and collaboration. Here, employees are empowered to express diverse perspectives - and are made to feel valued, energised and rewarded for their ideas and creativity.

Clinical Pharmacology & Safety Sciences (CPSS) is where innovative science meets patient needs. We work across drug development, from discovery to late-phase development and regulatory approval. It is our responsibility to take novel therapeutic medicines into the clinic, identify appropriate patient populations in indications of unmet medical needs, and ensure these patients receive the right dose within a favourable therapeutic window (efficacy vs. safety). We drive innovation in quantitative, model-based drug-disease analytics, clinical outcome predictions, clinical trial design, and data integration and interpretation to inform decisions and regulatory approvals.

Integration of clinical data and development of models that can predict adverse events of immuno-oncology agents in patients is an essential and timely issue. Given the number of oncology combinations in clinical development, conducting such meta analytics will help in streamlining clinical trials, address dose scheduling and dose sequencing challenges, and thus inform the decision-making process in drug project teams. In the present position, you will design and conduct quantitative, model-based meta analytics of adverse events, across clinical

trials featuring various treatment agents, in monotherapy and combination therapy settings, in various cancer indications.

### **Education and Experience required:**

#### **Essential:**

- A recent PhD and/or a recent postdoctoral fellowship in a quantitative discipline (pharmacokinetics & pharmacodynamics, quantitative pharmacology, computational biology, Bayesian statistics, meta-analyses, mixed-effects modeling, machine learning and artificial intelligence, systems dynamics). Experience in oncology a significant plus. Demonstrated productivity in scientific publications and conference presentations.
- Deep interest and motivation in applying quantitative tools to solve clinically-meaningful problems

#### **Desirable:**

- Working knowledge of biology, pharmacology, disease pathophysiology; experience working with clinical data a significant plus.
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#### **Skills and Capabilities required:**

- Proficiency and hands-on experience with multi-variate data analyses, machine learning, and/or computational modelling in R or related software tools.
- Ability to communicate technical material to a scientifically diverse audience.

The position is for a 3-year programme. The first 2 years will be a fixed-term contract, with potential for a 1-year extension based on merit. The role will be based in Boston, Massachusetts, with competitive salary and benefits.

Advert opening date – 19th March 2019

Advert closing date – 26th May 2019

AstraZeneca is an equal opportunity employer. AstraZeneca will consider all qualified applicants for employment without discrimination on grounds of disability, sex or sexual orientation, pregnancy or maternity leave status, race or national or ethnic origin, age, religion or belief, gender identity or re-assignment, marital or civil partnership status, protected veteran status (if applicable) or any other characteristic protected by law.