

# Sebastian Bate

MEDICAL STATISTICIAN

07985 357150 | ✉ sebastiangbate@gmail.com | 📊 sgbstats | 🌐 sebastianbate

## Experience

### Manchester University NHS Foundation Trust

Mar 2021-

#### JUNIOR MEDICAL STATISTICIAN

- I have been involved in multiple studies and lead on statistical design and analysis from concept through to dissemination.
- I support all levels of researchers from undergraduate and postgraduate students, through to clinical academics and consultants.
- I have been responsible for reviewing the design, statistical accuracy and overall viability of Trust-sponsored research protocols prior to ethics submission in collaboration with senior statisticians.
- I have presented my research at conferences both to technical and clinical audiences [NIHR Statistics Group Conference, 2023 (best e-poster); NHS R Community Conference, 2022; Translation Manchester, 2022 (People's Choice award)].
- I have multiple collaborations with clinicians across the whole of MFT, The University of Manchester, and other trusts, including studies in Renal, Critical Care, Gastroenterology, Cardiology, Cystic Fibrosis, Respiratory, Oncogeriatrics, Dermatology, Oncoplastic Surgery, Physiotherapy, Maternity, Trauma Care, and ENT.
- I have been the resident statistician for Respiratory Medicine Journal Club where I led discussions critically appraising research and providing statistical context.
- I have given multiple talks on statistics for critical appraisal across The Trust to the prestigious Specialist Foundation Program, junior doctors and level 7+ clinical practitioners.
- I have provided informal mentoring to a junior team member.
- I have written teaching materials for improving statistical literacy among clinicians.
- I have given guest lectures to undergraduates and apprentices on data literacy at Manchester Metropolitan University.

### IQVIA

Sep 2019-Feb 2021

#### STATISTICIAN

- I worked with senior biostatistics staff on the evaluation, interpretation, and reporting of study results, including writing the analysis data reviewer's guide for one study.
- I quality controlled regulatory documents including CSRs, summaries of clinical efficacy and safety, prescribing information, and FDA briefing documents for large pivotal studies.
- I assisted in developing study analysis plans, including sample size calculations and mock TFLs across multiple studies.
- I programmed TFLs for use in CSRs across multiple studies.
- I provided guidance and interpretation on statistical matters to medical writers and statistical programmers.
- I gained experience in applying the principles in ICH E6 (GCP), E9 (Statistics), E9R1 (Estimands).

## Education

### University of Manchester

2015-19

#### MMATH MATHEMATICS AND STATISTICS, FIRST CLASS (HONS.)

## Peer Reviewed Publications

1. Bate S, Stokes V, Greenlee H, et al. External validation of prognostic models in critical care: A cautionary tale from COVID-19 pneumonia. *Critical Care Explorations*. 2024;6(4):e1067. doi:10.1097/CCE.0000000000001067
2. Bate S, McGovern D, Costigliolo F, et al. The improved kidney risk score in ANCA-associated vasculitis for clinical practice and trials. *Journal of the American Society of Nephrology*. Published online 2023. doi:10.1681/ASN.0000000000000274
3. Floyd L, Bate S, Kafagi A, et al. Risk stratification to predict renal survival in anti-GBM disease. *Journal of the American Society of Nephrology*. 2023;34(3):505-514. doi:10.1681/asn.2022050581
4. Bate S, Brix SR. From prediction tools to precision medicine in antineutrophil cytoplasmic antibody-associated vasculitis. *The Journal of Rheumatology*. 2023;50(5):583-585. doi:10.3899/jrheum.230115
5. Vasant DH, Nigam GB, Bate S, Hamdy S, Limdi JK. The prevalence and burden of Rome IV faecal incontinence in ulcerative colitis: A cross-sectional study. *Alimentary Pharmacology & Therapeutics*. 2023;58(1):26-34. doi:10.1111/apt.17502
6. Ragy O, Bate S, Bukhari S, et al. PLA2R antibody does not outperform conventional clinical markers in predicting outcomes in membranous nephropathy. *Kidney International Reports*. 2023;8(8):1605-1615. doi:10.1016/j.ekir.2023.05.019

7. Heward E, Saeed H, Bate S, et al. Risk factors associated with the development of chronic suppurative otitis media in children: Systematic review and meta-analysis. *Clinical Otolaryngology*. Published online 2023. doi:10.1111/coa.14102
8. Oremule B, Abbas J, Saunders G, et al. Mobile audiometry for hearing threshold assessment: A systematic review and meta-analysis. *Clinical Otolaryngology*. Published online 2023. doi:10.1111/coa.14107
9. Stokes V, Goh KY, Whiting G, et al. External validation of a prediction model for CPAP failure in COVID-19 patients with severe pneumonia. *Critical Care*. 2022;26(1):293. doi:10.1186/s13054-022-04144-4
10. Doyle R, Bate S, Devenney J, et al. Evaluating the impact of an enhanced triage process on the performance and diagnostic yield of oesophageal physiology studies post COVID-19. *BMJ Open Gastroenterology*. 2021;8(1):e000810. doi:10.1136/bmjgast-2021-000810

## Languages & Certifications

---

- R, inc. Tidyverse (Expert)
- SPSS (Proficient)
- SAS (Was proficient, now rusty)
- SQL (Moderate)
- NIHR Good Clinical Practice

## Areas of interest

---

- Prognostic modeling
- Meta-analysis

## Personal

---

- I have run a 3:03:45 marathon
- I have an Erdos number of 6
- This CV was written in RMarkdown using `{vitae}`

1. Doyle R, Bate S, Devenney J, et al. Evaluating the impact of an enhanced triage process on the performance and diagnostic yield of oesophageal physiology studies post COVID-19. *BMJ Open Gastroenterology*. 2021;8(1):e000810. doi:10.1136/bmjgast-2021-000810
2. Stokes V, Goh KY, Whiting G, et al. External validation of a prediction model for CPAP failure in COVID-19 patients with severe pneumonia. *Critical Care*. 2022;26(1):293. doi:10.1186/s13054-022-04144-4
3. Bate S, Stokes V, Greenlee H, et al. External validation of prognostic models in critical care: A cautionary tale from COVID-19 pneumonia. *Critical Care Explorations*. 2024;6(4):e1067. doi:10.1097/CCE.0000000000001067
4. Bate S, McGovern D, Costigliolo F, et al. The improved kidney risk score in ANCA-associated vasculitis for clinical practice and trials. *Journal of the American Society of Nephrology*. Published online 2023. doi:10.1681/ASN.0000000000000274
5. Floyd L, Bate S, Kafagi A, et al. Risk stratification to predict renal survival in anti-GBM disease. *Journal of the American Society of Nephrology*. 2023;34(3):505-514. doi:10.1681/asn.2022050581
6. Bate S, Brix SR. From prediction tools to precision medicine in antineutrophil cytoplasmic antibody-associated vasculitis. *The Journal of Rheumatology*. 2023;50(5):583-585. doi:10.3899/jrheum.230115
7. Vasant DH, Nigam GB, Bate S, Hamdy S, Limdi JK. The prevalence and burden of Rome IV faecal incontinence in ulcerative colitis: A cross-sectional study. *Alimentary Pharmacology & Therapeutics*. 2023;58(1):26-34. doi:10.1111/apt.17502
8. Ragy O, Bate S, Bukhari S, et al. PLA2R antibody does not outperform conventional clinical markers in predicting outcomes in membranous nephropathy. *Kidney International Reports*. 2023;8(8):1605-1615. doi:10.1016/j.ekir.2023.05.019
9. Heward E, Saeed H, Bate S, et al. Risk factors associated with the development of chronic suppurative otitis media in children: Systematic review and meta-analysis. *Clinical Otolaryngology*. Published online 2023. doi:10.1111/coa.14102
10. Oremule B, Abbas J, Saunders G, et al. Mobile audiometry for hearing threshold assessment: A systematic review and meta-analysis. *Clinical Otolaryngology*. Published online 2023. doi:10.1111/coa.14107