

V6

PRIMROSE: A national trainee collaborative-led, multicentre prospective audit on the care of breast cancer patients with central nervous system disease in the UK

Mark P Lythgoe, Vinton WT Cheng, Hayley S McKenzie, Amy Kwan, Apostolos Konstantis, Ruichong Ma, Pei J Teo, Amanda Fitzpatrick, Laura Woodhouse & Carlo Palmieri on behalf of the BNTRC and PRIMROSE study group
Imperial College London

Corresponding Author: Dr. Mark P Lythgoe (M.Lythgoe@imperial.ac.uk)

PRIMROSE: A national trainee collaborative-led, multicentre prospective audit on the care of breast cancer patients with central nervous system disease in the UK

Mark P Lythgoe¹, Vinton WT Cheng², Hayley S McKenzie³, Amy Kwan⁴, Apostolos Konstantis⁵, Ruichong Ma⁶, Pei J Teo⁷, Amanda Fitzpatrick⁸, Laura Woodhouse⁹ & Carlo Palmieri¹⁰ on behalf of the BNTRC[†] and PRIMROSE study group

¹Imperial College Healthcare NHS Trust, London, ²Leeds Cancer Centre, Leeds, ³University of Southampton, Southampton, ⁴University of Sheffield, Sheffield, ⁵The Princess Alexandra NHS Trust, Harlow ⁶Oxford University Hospitals NHS Trust, Oxford, ⁷Worcestershire Acute Hospitals NHS Trust, Worcester, ⁸Institute of Cancer Research, London, ⁹The Christie NHS Foundation Trust, Manchester, ¹⁰University of Liverpool, Liverpool, [†]British Neurosurgical Trainee Research Collaborative

Introduction: Breast cancer is the commonest cancer in the UK and the 4th leading cause of cancer-related death. Breast cancer brain metastases (BCBM) are a poor prognostic indicator and associated with very poor survival and only a minority of patients survive >1 year despite oncological treatment. The rising prevalence of patients with BCBM represent an increasing unmet healthcare need. However, in the UK there is a paucity of data about prevalence, survival and management. Guidance on managing brain metastases is improving, however it is unclear how this has been applied in the context of BCBM and whether recommended standards are uniformly applied across the UK

Methods: PRIMROSE is a trainee collaborative-led initiative to estimate BCBM prevalence, assess current practice (comparing national/international standards) and determine long term outcomes/sequelae. Anonymised data is being pooled via secure REDCap database collating demographics, clinico-pathological information, prior treatment, BCBM treatment and other key variables. All UK hospitals can register, with recruitment driven by trainees via the UK Breast Cancer Trainees Research Collaborative Group and British Neurosurgical Trainee Research Collaborative. Senior oversight will be provided by a local consultant oncologist or neurosurgeon.

Results: Opened in Jan 2020, 180 datasets have been entered, despite significant disrupted due to COVID-19 from February to May). Over 25 sites are open/in the process of joining. Trainee networks have been established in all regions of the UK with the exception of Yorkshire and The Humber, East of England and North East England. Promotion of the network has occurred at significant oncology conferences (e.g. San Antonio Breast Meeting, and National Cancer Research Institute). We plan to expand to all major UK neurosurgical and oncology centres by December 2020, with data collection completed by December 2021.

Conclusions: PRIMROSE demonstrates the utility of trainee collaborative networks in rapidly organising large-scale multicentre data collection to understand care of patients at a national level. Such information will be important for identifying current practice and act as a benchmark for improving local service delivery for patients with BCBM.