Integrating Cancer Imaging Biomarker Clinical Research Across the UK

UK National Cancer Imaging Translational Accelerator (NCITA) establishes infrastructure for validation and adoption of cancer imaging biomarkers as decision-making tools in clinical trials and NHS practice.

Researchers and medical experts from nine world-leading medical imaging centres across the UK come together to form an integrated infrastructure for standardising and validating cancer imaging biomarkers for clinical use.

The centres include University of Oxford, University College London, University of Manchester, King's College London, The Institute of Cancer Research, London, and The Royal Marsden NHS Foundation Trust, Imperial College London, Cambridge University, Newcastle University and University of Glasgow. This unique UK infrastructure provides clinical researchers across the UK with open access to world-class clinical imaging facilities and expertise, as well as a repository data management service, artificial intelligence (AI) tools and ongoing training opportunities.

The NCITA consortium, through engagement with NHS Trusts, pharmaceutical companies, medical imaging and nuclear medicine companies as well as funding bodies and patient groups, aims to develop a robust and sustainable imaging biomarker certification process, to revolutionise the speed and accuracy of cancer diagnosis, tumour classification and patient response to treatment.

Professor Geoff Higgins at the University of Oxford and Honorary Consultant Clinical Oncologist at Oxford University Hospitals NHS Foundation Trust said

'We are delighted to be part of the NCITA network and are confident it will improve the UK's ability to effectively deliver multi-centre imaging trials. We look forward to opening a NCITA supported trial in Oxford later this year assessing whether a novel PET-CT tracer can reliably differentiate high-grade and low-grade brain tumours.'

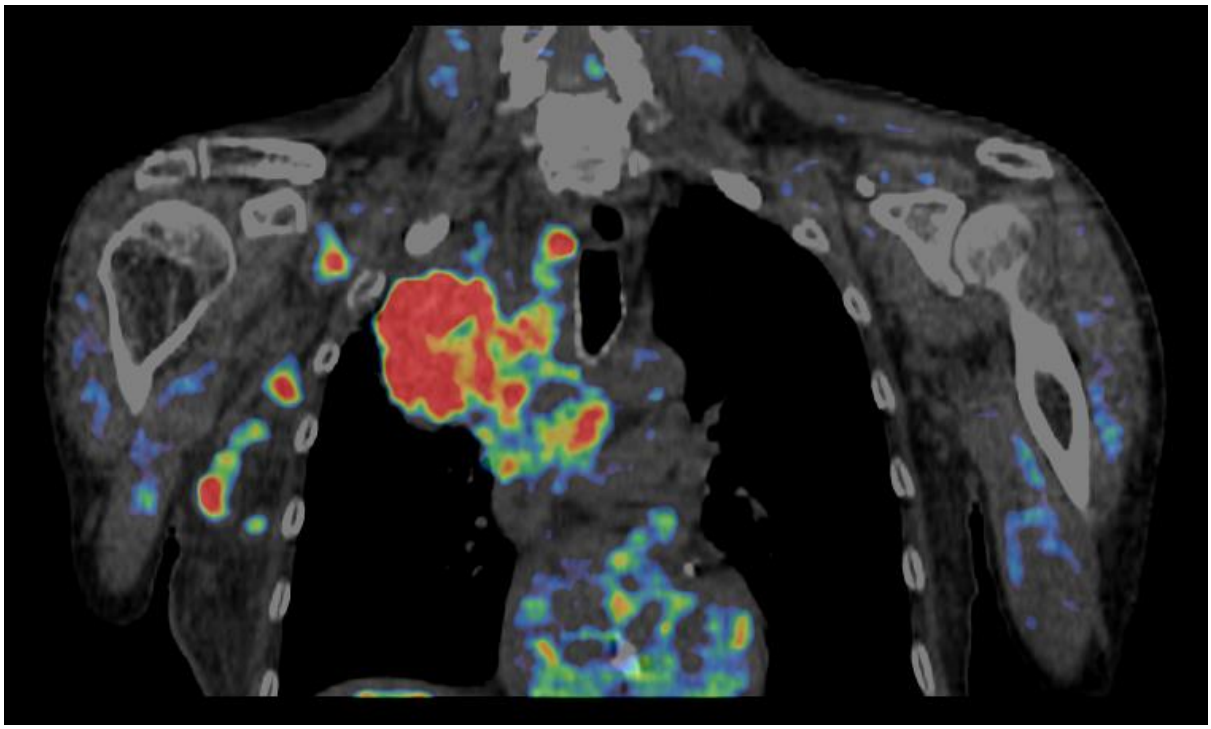
The NCITA initiative is funded by Cancer Research UK and will receive up to £10 million over 5 years.

The NCITA network is led by Prof Shonit Punwani, Prof James O'Connor, Prof Eric Aboagye, Prof Geoff Higgins, Prof Evis Sala, Prof Dow Mu Koh, Prof Tony Ng, Prof Hing Leung and Prof Ruth Plummer with up to 49 co-investigators supporting the NCITA initiative. NCITA is keen to expand and bring in new academic and industrial partnerships as it develops.

To stay up-to-date with NCITA news, follow us on Twitter and see our website http://ncita.org.uk/

CAPTION

^{18}F-Misonidazole PET-CT scan showing a large left upper lobe tumour with lymph node metastases. Hypoxic areas of the tumour are represented by red regions on the scan.



CREDIT

Image from Phase 1 study published by:

McGowan DR, Skwarski M, Papiez BW, Macpherson RE, Gleeson FV, Schnabel JA, Higgins GS, Fenwick JD Whole tumor kinetics analysis of ^{18}F-fluoromisonidazole dynamic PET scans of non-small cell lung cancer patients, and correlations with perfusion CT blood flow. EJNMMI Res. 2018; 8:73.