

INSTINCT: The Institute of Child Health - Newcastle University – Institute of Cancer Research High-Risk Childhood Brain Tumour Network

Professor Steve Clifford¹ on behalf of the INSTINCT Network

¹Wolfson Childhood Cancer Research Centre, Northern Institute for Cancer Research, Newcastle University.

steve.clifford@newcastle.ac.uk

‘High-risk’ paediatric brain tumours (HR-PBTs) are the leading cause of childhood cancer death. Biological discoveries, and their translation into effective therapies, will be essential to future clinical advances.

The INSTINCT research programme, co-funded by The Brain Tumour Charity, Children with Cancer UK and Great Ormond street Children’s Charity, integrates leading HR-PBT research programmes at The Institute of Child Health, Newcastle University and The Institute of Cancer Research to create a concerted clinical/research network, with the primary aim of delivering improved therapies for children with HR-PBTs.

INSTINCT is built upon a series of ‘Strategic Initiatives’ which bring together combined strengths across the institutions, in: tumour collection, neuropathology, basic science, experimental modelling, biomarker and drug development, clinical investigations and Phase I/II/III clinical trials, to deliver the essential common infrastructure necessary to undertake state-of-the art biological investigations and translate findings into clinical advances.

These combined strengths are, in turn, applied to support translational research programmes in major HR-PBT types; high-risk medulloblastoma, high-grade and diffuse-intrinsic pontine gliomas, atypical teratoid/rhabdoid tumours and other rare tumour types.

INSTINCT combines the expertise and resources of three of the largest paediatric oncology research/treatment centres in Europe, and builds on established track records and collaborations. Moreover, the leading roles of the teams in international research and clinical trials co-ordinating groups, give the best possible opportunity to translate biological findings into clinical practice.