

Lay Summary

BRAIN UK Ref: 14/010

Designing a glioma panel

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Currently approximately 9,400 patients per year in the UK (based on 2011, CRUK statistics) are diagnosed with a brain, other central nervous system or intracranial tumour; with the incidence of diagnosis and death increasing. The overall 5 year survival rate is 18.8% compared with 50% across all cancers; with 5,200 patients per year in the UK dying of this disease in 2012 - equivalent to 14 people every day (CRUK statistics). Brain, other CNS and intracranial tumours are also the most common cause of childhood death from cancer.

There are currently several genetic tests that are used to diagnose and identify specific brain tumours. This research project aims to provide direct translational benefit to patients by designing a single test, consisting of a gene panel to identify multiple genomic mutations in several pathways in brain tumour formation.

This may ultimately provide a quicker and more efficient method of diagnosis, and will help clinicians identify appropriate targeted treatments.

Publications:

Date	Publication title
2018	Mutational landscape of primary and recurrent glioblastoma reveals potentially actionable SNVs including WNT pathway variation