

Lay Summary

BRAIN UK Ref: 24/004

P16 expression as a surrogate marker for homozygous deletion of CDKN2A in IDH-mutant astrocytomas

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We want to find out if there is a link between the absence of a protein called P16 and the loss of a gene called CDKN2A/B in some brain tumours. The loss of the CDKN2A gene in a type of brain tumour called IDH-mutant astrocytoma can be used to estimate recovery or when a tumour might come back. Astrocytoma that has loss of the gene are likely to behave worse and have much lower survival rates than those that don't. Currently the FISH test is used to look for gene changes in cells. FISH stands for fluorescence in situ hybridisation. P16 testing using a laboratory method that uses antibodies to check for certain antigens (markers) in a sample of tissue (immunohistochemistry) is cheaper and faster than the FISH test. It has the potential to be an alternative method used to screen brain tumours of this type. This research will determine if the P16 immunohistochemistry is a viable alternative to the CDKN2A FISH test.

Abbreviations

Fluorescent in situ hybridisation (FISH)