

Lay Summary

BRAIN UK Ref: 18/008

Characterising the role of chromatin regulator EZH2 in glioblastoma

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Glioblastoma is the most common form of brain cancer, affecting over 2000 people every year in the UK. Despite large amounts of research, few drugs exist which can consistently treat this cancer. Recent work has shown that a protein called EZH2 is extremely important in many cancer types. As a result, drugs have been made which switch off the EZH2 protein, causing tumours to shrink. We want to understand whether the EZH2 protein is also important in glioblastoma. Furthermore, we would like to know whether switching off the EZH2 protein with drugs could be an effective treatment. Excitingly, using laboratory models of glioblastoma, we have previously shown that the EZH2 protein is needed to make the cells of this tumour grow. To understand whether this is also the case in real tumours, we will use samples from the BRAIN UK biobank to confirm the importance of the EZH2 protein. This confirmation will be crucial in letting us know whether drugs targeting the EZH2 protein could be used to treat patients with glioblastoma in the future.