

## **Lay Summary**

**BRAIN UK Ref: 17/002**

### **Identification of novel therapeutic targets and/or predictive biomarkers in brain gliomas**

**Prof Ji-Liang Li, Plymouth University**

Brain gliomas, a class of brain tumours, can be low grade (slow growing) or, more commonly, high grade (fast growing). About half of low grade gliomas progress to a higher grade of tumour. Compared to other tumours, current knowledge about brain tumour is still very limited.

We know that a type of biological signalling between cells, called Notch signalling, starts the binding of a protein on one cell to another protein on a neighbouring cell and activates cell to cell signals or communication that determines the cells fate. This signalling plays an important role in human development such as unborn baby development in pregnant woman. In this study, we will investigate if some important molecules involved in either Notch signalling or other signal pathways controlling cell growth could control glioma growth and tumour development as well as tumour response to drug therapy. We aim to develop new treatments or identify if there is a genetic test that could indicate if a treatment would work or expected patient outcome.