

Lay Summary

BRAIN UK Ref: 22/009

Understanding the role of the tumour microenvironment in ependymoma tumours

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Ependymomas are rare tumours of the brain and spinal cord which occur in children and adults. We need to understand better what drives the growth and spread of these tumours. This will help us to develop further treatments for the condition. We want to investigate the interaction between the tumour associated cells that form part of the ependymoma tumour, and the ependymoma tumour cells themselves. These tumour associated cells include the immune cells, structural cells, and blood vessels. In particular we want to investigate certain molecules that might allow communication between the tumour associated cells and the tumour cells. Two molecules we are particularly interested in including CD44 and hyaluronic acid. The overall aim is to understand whether these or other molecules can be targeted to block ependymoma growth.