

Lay Summary

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Molecular pathology of infant gliomas

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The diagnosis of a high-grade glioma (a type of brain tumour) in a child has a dismal prognosis ranging from a 2 year survival of <10 – 30% depending on where the tumour is located within the brain. However, a small group of tumours that occur in infants tend to have a better prognosis than those occurring in older children. And we want to try and find out why. There is a great need to study the molecular biology of these tumours to better understand how they grow, develop and identify potential targets for treatment. We are gathering samples of different brain tumours from children who are aged less than 4 years old. We are using microscopes to assess the different features of the tumour cells, and we are performing various molecular experiments and tests on these samples to try and find the different genetic abnormalities that occur within the cancer cells. Once these are identified, we can try and design different drugs that can be used to try and stop the cancer from growing and help to improve the survival of the children diagnosed with these tumours.