

Lay Summary

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Investigation the role of Cellular Prion protein (PrP C) in multi drug resistance (MDR) in schwannoma and meningioma tumours

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Meningioma and schwannoma are common types of nervous system tumours. They can occur sporadically or as part of a genetic condition called NF2-related schwannomatosis. These tumours are usually not aggressive, but they can cause significant health problems, especially when they are in hard-to-reach areas or when there are multiple tumours. Currently, these tumours are treated with surgery and radiotherapy. However, these treatments don't work for all patients, especially those with inoperable, aggressive, or recurring tumours.

Our previous research showed that a protein called PrPC is overproduced in schwannoma cells derived from patients, leading to increased growth and survival of the tumour cells. Since PrPC may cause multi-drug resistance (a phenomenon observed in other tumours), we are now investigating its potential role in drug resistance in schwannoma.