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## Natural killer cell recognition of glioblastoma

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Glioblastoma multiforme (GBM) is the most common form of primary brain cancer. GBM is infiltrated by immune cells but, as with other cancers, immune evasion pathways minimise productive anti-tumour immunity. We have investigated the interaction of human natural killer (NK) cells with GBM using both established tumour cell lines and patient-derived samples. A high-throughput, multiplex flow cytometry-based screen of tumour cells revealed the expression of a number of cell surface molecules that regulate NK cell activation. Furthermore, GBM cells were susceptible to NK cell lysis *in vitro*. This screen identified potential mechanisms by which GBM might evade immune surveillance *in vivo*. Analysis of the cell surface phenotype of brain cancer infiltrating immune cells will be used to test the hypothesis that the tumour microenvironment exerts localised immune evasion mechanisms that serve to dampen anti-tumour immunity. Targeting these pathways and restoring functional immune surveillance provides a potential route for future immunotherapy of this disease.