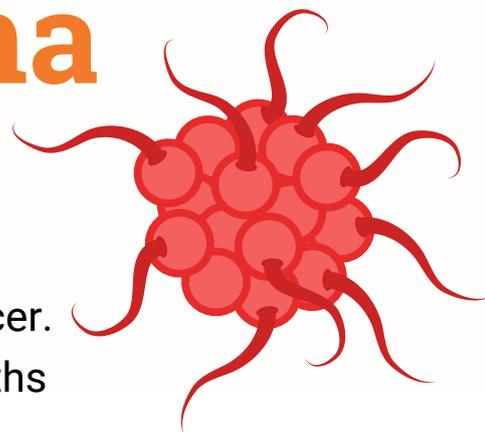


Why glioblastoma is so deadly



Glioblastoma is a highly aggressive form of brain cancer. Even with treatment, 1 in 2 patients die within 15 months of diagnosis.

Here are four reasons why this tumour is so difficult to treat.

1. Tumour Location

Surgery cannot remove all the tumour due to the tumour's structure, and the risk of brain injury which will affect the patient's quality of life.

Often the tumour invades areas of the brain that control vital functions such as movement, vision, speech and language.



Glioblastomas have 'tentacles' that invade nearby tissue – they are invisible to the human eye and current imaging technologies.

Healthy tissue around the tumour cannot be removed to 'catch' the tentacles as it will cause brain damage.

2. Mixed Response to Treatment

Tumours can look the same under the microscope but respond differently to treatment.



Even with 'gold standard' treatment, **3 in 4** patients die within **2 years** of diagnosis.

3. High Recurrence Rate

Almost **100%** of tumours grow back despite 'gold standard' treatment.

Repeat surgery is often not possible when the tumour recurs, so the pathology and sub-type are not available to guide treatment decisions.

4. Few Treatment Options

Drugs must be able to cross the blood-brain barrier to reach the tumour.



Blood-brain barrier is a key reason why drug companies hesitate to invest in research on brain conditions.

Difficult to conduct clinical trials in Singapore due to low incidence unless part of an international research project.

