OCR 6290: An Oncolytic Virus for Treatment of Brain Cancers

Lassa-VSV is a superior safe oncolytic virus for treatment of brain cancers

- Glioblastoma (GBM) are aggressive and invasive brain tumors that generally lead to death within a year of diagnosis.
- No cure exists for this form of cancer and current treatments only prolong life by a few months.
- Lassa-VSV is a novel recombinant oncolytic virus (OV) that can cross the blood brain barrier (BBB) and selectively kill glioma in the brain without the adverse effects of neurotoxicity that is associated with other VSV-related OVs.
- In vivo mouse studies revealed selective infection and killing of GBM cells in the mouse brain after intravenous or intracerebral virus administration with substantially prolonged cancer survival far beyond that of control tumor-bearing mice that received no virus
- Lead Innovator: Anthony van den Pol, PhD

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Intratumoral injection of Lassa-VSV (green) selectively infects and kills GBM cells (red) in the injected right tumor, and then migrates to the left tumor

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Intravenously delivered Lassa-VSV crosses the BBB and protects mice from an implanted glioma



Intracranial glioma xenograft survival