

# MSS2024

HYBRID

## Process development for an oncolytic rhabdovirus

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Vesicular stomatitis virus (VSV) is a rhabdovirus with excellent potential to function as an oncolytic viral therapeutic due to its potential to infect many different types of cancer cells where it replicates quickly and results in their destruction. There is little preexisting immunity in humans against VSV and rare natural infections are generally asymptomatic. Wildtype VSV is neurotoxic in rodents and non-human primates. However, this limitation can be circumvented by replacing the VSV glycoprotein (GP) with that of the non-neurotropic lymphocytic choriomeningitis virus (LCMV).

At ViraTherapeutics we have developed a scalable CMC process for the production of VSV-GP from suspension cell culture using a combination of different chromatography and filtration steps. The resultant drug substance contains only low levels of impurities and high infectious titers suitable for use in clinical studies.

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