

# Development of eIF4E ASO treating childhood intractable epilepsy as a first-in-class drug and establishment of R&D environment for RNA therapeutics

Sovargen Co.,Ltd



NEUROSCIENCE	Non-Clinical
Product Type	Anti-sense Oligonucleotides (RNA Therapeutics)
Indication	Control and management of seizures in Focal Cortical Dysplasia type II (FCD T2) patients who are refractory to neuro-surgery
Target	eIF4E
MOA(Mechanism of Action)	<ul style="list-style-type: none"> <li>Brain somatic mutations in mTOR pathway (mTORopathy) genes leads to hyperactivation of eIF4E activity, resulting in abnormal protein translation which is causative for epilepsy.</li> <li>SVG102 complementarily binds to eIF4E mRNA, leading to its degradation by RNase H cleavage.</li> </ul>
Competitiveness	<p>First-in-class</p> <ul style="list-style-type: none"> <li>No available drug for FCD T2 epilepsy patients</li> <li>Neuro-surgery is the only option but 40% of surgery patients still have seizures (refractory to neuro-surgery)</li> </ul> <p>Potential for other disease</p> <ul style="list-style-type: none"> <li>Potential to expand the indication to mTORopathy disease such as Tuberous Sclerosis Complex (TSC) epilepsy patients</li> </ul>
Development Stage	Pre-Clinical Stage (US IND filing is planned in 2023)
Route of Administration	Intrathecal administration