

Secured ex vivo gene therapy candidate for the treatment of solid tumor



ONCOLOGY	Candidate
Product Type	Mesenchymal stem cells (MSCs) engineered to express a non-human suicide gene, CD
Indication	Glioblastoma multiforme (GBM)
Target	Thymidylate synthase
MoA(Mechanism of Action)	MSCs expressing cytosine deaminase (CD) are injected into the surgical cavity wall after surgery. MSCs/CD migrate to the residual tumor cells and convert 5-FC (antibiotic) to 5-FU (anti-cancer). 5-FU exerts anti-cancer effects on nearby tumor cells by targeting thymidylate synthase in DNA and RNA metabolism. MSCs/CD overcome the targeting barriers of in-vivo gene therapy and the systemic toxicity of 5-FU.
Competitiveness	Gliadel (BCNU biopolymer), Toca-511
Development Stage	Candidate
Route of Administration	Intra-tumoral injection or direct injection to post-surgical cavity wall