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Rilimogene Galvacirepvec/Rilimogene Glafolivec

National Cancer Institute

Source

National Cancer Institute. <u>Rilimogene Galvacirepvec/Rilimogene Glafolivec</u>. NCI Thesaurus. Code C132990.

A vaccine formulation consisting of rilimogene galvacirepvec (V-PSA-TRICOM; PROSTVAC-V), a recombinant vaccinia virus, and rilimogene glafolivec (F-PSA-TRICOM; PROSTVAC-F), a recombinant fowlpox virus, with potential immunostimulating and antineoplastic activities. Both viruses encode modified forms of human prostate specific antigen (PSA) and the three co-stimulatory molecule transgenes (TRIad of COstimulatory Molecules; TRICOM), B7.1 (CD80), intercellular adhesion molecule-1 (ICAM-1), and lymphocyte function-associated antigen-3 (LFA-3). Using a prime-boost vaccine regimen, with a primary vaccination of rilimogene galvacirepvec followed by multiple booster vaccinations of rilimogene glafolivec, the PSA-TRICOM vaccines infect antigenpresenting cells (APCs), such as dendritic cells (DCs). Upon processing and expression of the PSA and TRICOM proteins on their surfaces, the DCs are able to initiate cytotoxic Tlymphocyte (CTL) responses against PSA-expressing cancer cells. The combination of PSA and TRICOM greatly enhances T-cell activation and T-cell-mediated tumor cell killing.