

Oncolytic viruses mediating anti-tumor immunity in human cancer patients

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The researchers of the University of Helsinki, and Oncos Therapeutics, the biotech company developing new cancer therapeutics based on the next generation oncolytic viruses, published initial results from their Advanced Therapy Access Program in *Cancer Research*. The therapy program is based on scientific research at the University of Helsinki and serves as the foundation for ongoing clinical development.

The results demonstrate an anti-tumor immunity of oncolytic viruses - published for the first time in humans - and indicate the strong efficacy of the next generation viruses against solid tumor cancers. As of today, 200 patients have been treated with oncolytic virus therapy in the company's Advanced Therapy Access Program.

"This is the first time it has been shown in humans that oncolytic viruses can be used for the induction of anti-tumor immunity. The GMCSF-armed oncolytic [adenovirus](#) can mediate anti-tumor immunologic responses by recruiting [natural killer cells](#) and by the induction of tumor-specific [cytotoxic T-cells](#)", explains research professor Akseli Hemminki, the CSO and co-founder of Oncos.

"Anti-tumor immunity plays a major role in the strong efficacy results. We are starting clinical trials with CGTG-102, which is further improved compared of the virus described in this publication", comments Pekka Simula, the CEO and co-founder of Oncos.

The [Cancer Research](#) article reports strong safety and efficacy results in

patients with advanced [cancer](#) progressing after available chemotherapy options. Out of the 15 radiologically evaluable patients 2 had complete responses (13%), 5 patients had stable disease (33 %) and 1 had a partial response (6 %). Therefore, the clinical benefit rate was 47% according to the RECIST criteria. Responses were frequently seen in both injected and non-injected tumors. The safety profile was favorable with no grade 4-5 side effects realized.

"It has been impressive to see how powerful and consistent the oncolytic adenovirus platform is for directing the body's own immune system against tumor cells" says Dr. Vincenzo Cerullo, the scientist who led the project at the University of Helsinki Cancer Gene Therapy Group (CGTG).

Provided by University of Helsinki

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