Oncolytic virus, Development of new cancer therapies

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[Cancer Therapy with Virus]

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Oncolytic activity of recombinant measles virus

We have generated a recombinant virus (rMV-SLAMblind) by genetically modifying its ability to bind to a principal receptor (SLAM) of measles virus, which led attenuation of the virus. The rMV-SLAMblind selectively infects cancer cells without causing measles and exhibits oncolytic activity.

Antitumor effect of rMV-SLAMblind against a lung cancer cell line subcutaneously transplanted into immunodeficient mice

Broad antitumor activity of rMV-SLAMblind among various refractory cancers

Systemic administration was effective in a mouse model of refractory breast cancer.

Focusing on the benefits of viruses, we are developing a new cancer therapy tool.

Practical application of measles virus for cancer therapy

Clinical trial (Phase 1) : Scheduled to be implemented

Elucidation of the mechanism of action of recombinant measles virus

Cell death mechanism in cancer cells
Interaction with the immune system
Mechanism of resistance in cancer cell lines

Aiming to enhance the effect of the virus