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Improvement of oncolytic adenovirus vectors through genetic capsid modifications

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Improvement of Oncolytic Adenovirus Vectors through Genetic Capsid Modifications

Jeroen de Vrij

Cover: The cover illustrates the ongoing developments in the field of oncolytic adenovirology. The mechanism of action of an oncolytic adenovirus is illustrated by the virus particles attacking the crab. The crab is the international symbol of cancer. Cancer was originally named *karkinoma* (Greek for *krab*) by Hippocrates, to whom the growth of a tumor with its sprouting blood vessels reminded on the legs and claws of a crab. As indicated, different types of capsid modifications are being explored to establish tumor-targeting, for example through adding a heterologous polypeptide to the fiber protein or to protein IX. The staircase symbolizes the 'road towards successful oncolytic virus therapies'. The helical form of the staircase illustrates the importance of introducing genetic modifications in the DNA genome of oncolytic adenoviruses.

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