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Improvement of oncolytic adenovirus vectors through genetic capsid modifications

Vrij, J. de

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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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TABLE OF CONTENTS

Chapter 1	General introduction	7
Chapter 2	Adenovirus-derived vectors for prostate cancer gene therapy	31
Chapter 3	Efficient incorporation of a functional hyper-stable single-chain antibody fragment protein-IX fusion in the adenovirus capsid	51
Chapter 4	Adenovirus targeting to HLA-A1/MAGE-A1-positive tumor cells by fusing a single-chain T-cell receptor with minor capsid protein IX	65
Chapter 5	A cathepsin-cleavage site between the adenovirus capsid protein IX and a tumor-targeting ligand improves targeted transduction	87
Chapter 6	An oncolytic adenovirus redirected with a tumor-specific T-cell receptor	107
Chapter 7	Enhanced transduction of CAR-negative cells by protein IX-gene deleted adenovirus 5 vectors	125
Chapter 8	General discussion	145
Addendum	Summary	157
	Nederlandstalige samenvatting	159
	Dankwoord	161
	List of publications	162
	Curriculum Vitae	164

