

# IMPROVING ONCOLYTIC VIRAL THERAPY FOR GLIOMA

SANDER IDEMA

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Glioblastoma Multiforme is a form of brain cancer that is characterized by the presence of a rapidly growing tumor mass combined with extensive tumor infiltration into normal brain. These characteristics determine the poor prognosis of this disease leading to a median survival of no more than 15 months.

Oncolytic viral therapy fights cancer cells by using replicating viruses spreading within the tumor and selectively killing tumor cells. In this thesis various methods are assessed to improve the use of oncolytic adenoviruses in the experimental treatment of Glioblastoma Multiforme. These methods include improvements in the cell killing potential of the viruses either as single treatment or combined with radiotherapy, the delivery, distribution and imaging of the viral particles as well as an objective method to determine the potency of the oncolytic adenovirus. The results are discussed in the context of the current clinical status of gene therapy in the treatment of cancer, especially Glioblastoma Multiforme.

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## UITNODIGING

Voor het bijwonen van de openbare verdediging van het proefschrift  
*Improving oncolytic viral therapy for glioma*  
Sander Idema

Vrijdag 10 juni 2011 om 13.45 in de aula van de Vrije Universiteit, de Boelelaan 1105 te Amsterdam  
Receptie na afloop ter plaatse

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**FEEST**

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