

Accepted Manuscript

Towards antibody-drug conjugates and prodrug strategies with extracellular stimuli-responsive drug delivery in the tumor microenvironment for cancer therapy

Nicolas Joubert, Caroline Denevault-Sabourin, Francesca Bryden, Marie-Claude Viaud-Massuard



PII: S0223-5234(17)30660-8

DOI: [10.1016/j.ejmech.2017.08.049](https://doi.org/10.1016/j.ejmech.2017.08.049)

Reference: EJMECH 9693

To appear in: *European Journal of Medicinal Chemistry*

Received Date: 30 June 2017

Revised Date: 21 August 2017

Accepted Date: 22 August 2017

Please cite this article as: N. Joubert, C. Denevault-Sabourin, F. Bryden, M.-C. Viaud-Massuard, Towards antibody-drug conjugates and prodrug strategies with extracellular stimuli-responsive drug delivery in the tumor microenvironment for cancer therapy, *European Journal of Medicinal Chemistry* (2017), doi: 10.1016/j.ejmech.2017.08.049.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Towards Antibody-Drug Conjugates and Prodrug Strategies with Extracellular Stimuli-Responsive Drug Delivery in the Tumor Microenvironment for Cancer Therapy

Nicolas Joubert^{†,*} Caroline Denevault-Sabourin,[†] Francesca Bryden,[†] Marie-Claude Viaud-Massuard.[†]

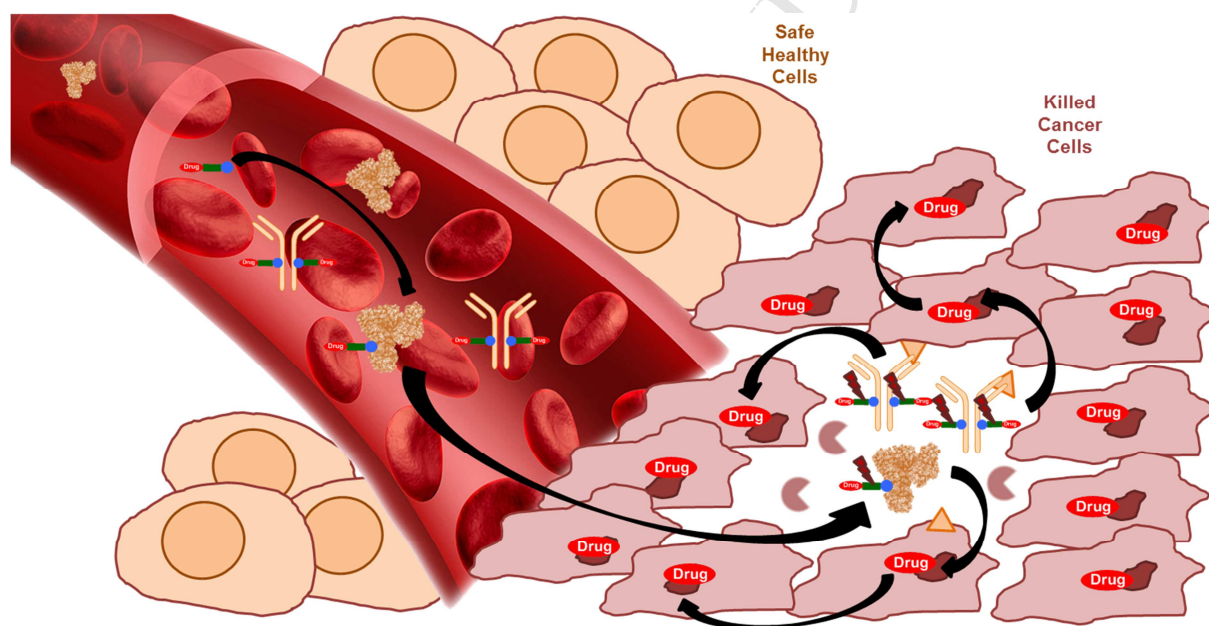
[†]GICC UMR 7292 CNRS, Team Molecular Innovation and Therapy, University of Tours, France.

*Corresponding author at GICC UMR 7292 CNRS, Team Molecular Innovation and Therapy, University of Tours, France.

E-mail address: nicolas.joubert@univ-tours.fr

Keywords: Antibody-Drug Conjugate, Albumin-Drug Conjugate, Prodrug, Glucuronide, Matrix Metalloproteinase, chemotherapy, Cancer, Tumor Targeting.

Graphical abstract



Abstract

The design of innovative anticancer chemotherapies with superior antitumor efficacy and reduced toxicity continues to be a challenging endeavor. Recently, the success of Adcetris[®] and Kadcyla[®] made antibody-drug conjugates (ADCs) serious contenders to reach the envied status of Paul Ehrlich's "magic bullet". However, ADCs classically target overexpressed and internalizing antigens at the surface of cancer cells, and in solid tumors are associated with poor tumor penetration, insufficient targeting in heterogeneous tumors, and appearance of several resistance mechanisms. In this context, alternative non-internalizing ADCs and prodrugs have been developed to circumvent these limitations, in which the drug can be

Download English Version:

<https://daneshyari.com/en/article/7797430>

Download Persian Version:

<https://daneshyari.com/article/7797430>

[Daneshyari.com](https://daneshyari.com)