

Accepted Manuscript

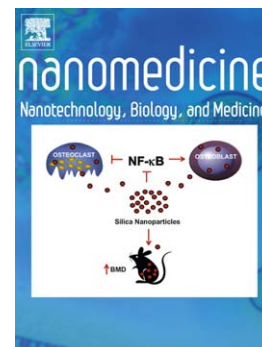
Just so stories: The random acts of anti-cancer nanomedicine performance

S. Moein Moghimi PhD, Z. Shadi Farhangrazi PhD

PII: S1549-9634(14)00213-5
DOI: doi: [10.1016/j.nano.2014.04.011](https://doi.org/10.1016/j.nano.2014.04.011)
Reference: NANO 939

To appear in: *Nanomedicine: Nanotechnology, Biology, and Medicine*

Received date: 31 March 2014
Revised date: 28 April 2014
Accepted date: 29 April 2014



Please cite this article as: Moghimi S. Moein, Farhangrazi Z. Shadi, Just so stories: The random acts of anti-cancer nanomedicine performance, *Nanomedicine: Nanotechnology, Biology, and Medicine* (2014), doi: [10.1016/j.nano.2014.04.011](https://doi.org/10.1016/j.nano.2014.04.011)

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.

**Just So Stories:
The Random Acts of Anti-Cancer Nanomedicine Performance**

S. Moein Moghimi, PhD^{a,b*}, Z. Shadi Farhangrazi, PhD^c

^aCentre for Pharmaceutical Nanotechnology and Nanotoxicology, Department of Pharmacy, Faculty of Health and Medical Sciences, University of Copenhagen, Universitetsparken 2, DK-2100 Copenhagen Ø, Denmark

^bNanoScience Centre, Faculty of Science, University of Copenhagen, Universitetsparken 2, DK-2100 Copenhagen Ø, Denmark

^cBiotrends International, Denver Technological Center, Greenwood Village, Colorado, USA

ABSTRACT: Contrary to high expectations, the majority of clinically approved anti-cancer nanomedicine, and those under clinical trials, have shown limited therapeutic efficacy in humans. So, why these nanomedicine are not delivering their promise? Here, we discuss likely factors, and call for a paradigm shift in approach and design of future cancer nanotherapeutics based on realistic cancer models representing human disease, and better understanding of integrated pathophysiological processes, including systems immunology, that modulate human tumor functionality and growth.

Keywords: Cancer; Complement system; Enhanced permeability and retention; Nanomedicine; Spontaneous tumors; Systems immunology; Xenografts

Number of words (Abstract):	76
Number of words (excluding Abstract):	3331
Reference:	52
Tables:	0
Figures:	1

SMM acknowledges financial support by the Danish Agency for Science, Technology and Innovation, references 09-065736 (Det Strategiske Forskningsråd), and 12-126893 (Technology and Production).

*Correspondence: S.M. Moghimi; Tel.: +35 35336528; E-mail: moien.moghimi@sund.ku.dk

In memory of our friend, Max.

Download English Version:

<https://daneshyari.com/en/article/7238947>

Download Persian Version:

<https://daneshyari.com/article/7238947>

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