In this issue

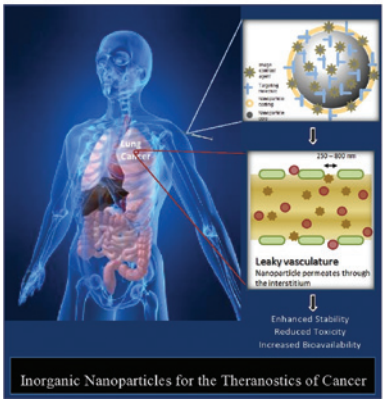
Jyoti Verma, Sumit Lal and Cornelis J.F. Van Noorden

Inorganic nanoparticles for the theranostics of cancer

DOI 10.1515/ejnm-2015-0024
Eur. J. Nanomed. 2015; 7(4): 271–287

Review: This article presents a comprehensive review of preclinical and clinical advances in the application of inorganic nanoparticles for diagnosis, drug delivery and therapeutics of cancer.

Keywords: carbon nanotubes; nanomedicine; nano-oncology; metal nanoparticles; quantum dots.



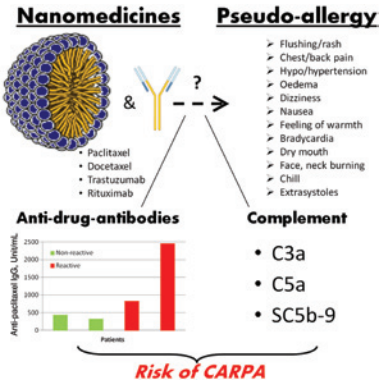
Gergely Tibor Kozma, Tamás Mészáros, Zsóka Weiszhár, Tamás Schneider, András Rosta, Rudolf Urbanics, László Rosivall and János Szebeni

Variable association of complement activation by rituximab and paclitaxel in cancer patients in vivo and in their screening serum in vitro with clinical manifestations of hypersensitivity: a pilot study

DOI 10.1515/ejnm-2015-0026
Eur. J. Nanomed. 2015; 7(4): 289–301

Review: Nanomedicines can cause non-IgE mediated hypersensitivity reactions due to complement activation. Accordingly, measuring complement activation by nanomedicines, or anti-drug antibody levels in serum enables predicting the risk of such pseudo-allergies.

Keywords: anaphylaxis; anti-drug antibodies; cancer therapy; hypersensitivity reactions; immunogenicity; nanomedicines.



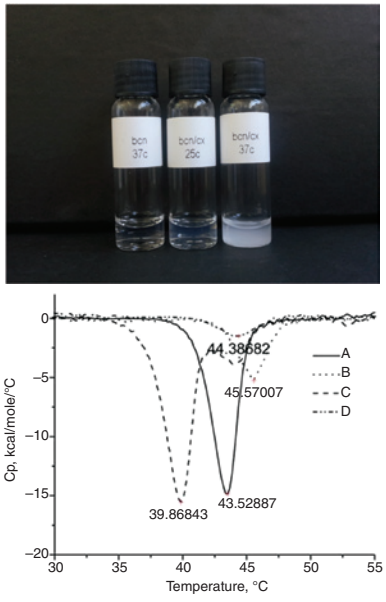
Hadas Perlstein, Tanya Turovsky, Peter Gimeson, Rivka Cohen, Abraham Rubinstein, Dganit Danino and Yechezkel Barenholz

Thermotropic behavior of celecoxib-loaded beta-casein micelles: relevance to the improved bioavailability

DOI 10.1515/ejnm-2015-0023
Eur. J. Nanomed. 2015; 7(4): 303–312

Original Article: Solution DSC suggests that celecoxib-loaded beta-casein micelles are metastable assemblies transforming into more stable empty micelles at elevated temperatures. This may be related to enhanced Cx bioavailability in pigs.

Keywords: beta-casein; celecoxib; DSC; micelles.



Maosheng Zheng and Jie Yu

Effect of particle surface charge on drug uptake

DOI 10.1515/ejnm-2015-0015
Eur. J. Nanomed. 2015; 7(4): 313–317

Original Article: The cellular uptake enhanced factor *f* is due to the statically electric action of surface charge of the particle, which is influenced by particle size (radius *r*) significantly.

Keywords: cell; drug particle; enhanced uptake; surface charge; wetting.