

In this issue

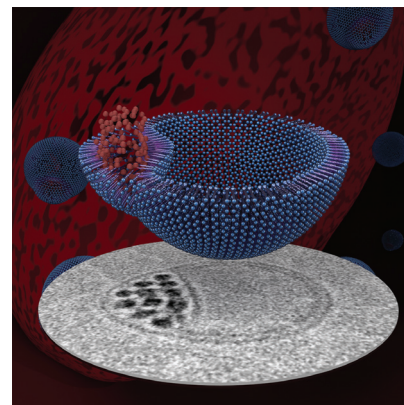
Christophe A. Monnier, David Burnand, Barbara Rothen-Rutishauser, Marco Lattuada and Alke Petri-Fink

Magnetoliposomes: opportunities and challenges

DOI 10.1515/ejnm-2014-0042

Eur. J. Nanomed. 2014; 6(4): 201–215

Review article: This review highlights recent developments in the field of magnetoliposomes, i.e., combinations of a liposomal drug carrier and magnetic nanoparticles. Several key aspects, e.g., the materials needed, characterization techniques and theoretical aspects are particularly addressed in detail. The picture shows a virtually rendered Janus magnetic liposome, along with a Cryo TEM micrograph. The clustered magnetic nanoparticles embedded in the bilayer are the cornerstone of this vesicle.



Keywords: electron microscopy; magnetic nanoparticles; magnetoliposome; membrane energetics; stimuli-responsive.

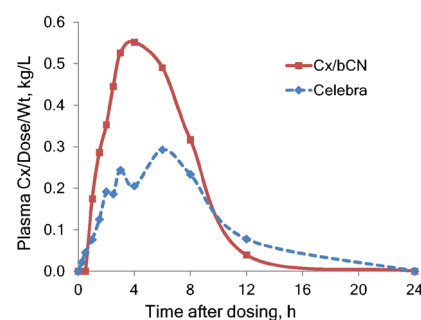
Hadas Perlstein, Yaelle Bavli, Tanya Turovsky, Abraham Rubinstein, Dganit Danino, David Stepensky and Yechezkel Barenholz

Beta-casein nanocarriers of celecoxib for improved oral bioavailability

DOI 10.1515/ejnm-2014-0025

Eur. J. Nanomed. 2014; 6(4): 217–226

Original research article: A crossover pig study showed that following intra-duodenal administration of celecoxib-loaded beta-casein micelles (Cx/bCN), C_{max} increased 2.3-fold, T_{max} was attained 1.6-fold faster and the relative bioavailability was 176% as compared to the Celebra® formulation.



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

Lubna Noorani, Mohammad Hossein Pourgholami, Mingtao Liang, David Lawson Morris and Martina Stenzel
Albendazole loaded albumin nanoparticles for ovarian cancer therapy

DOI 10.1515/ejnm-2014-0026

Eur. J. Nanomed. 2014; 6(4): 227–236

Original research article: Albendazole was loaded into albumin nanoparticles and stabilized using a pH-responsive cross-linker. They were found to be highly toxic to various ovarian cancer cells, but non-toxic to healthy cells.

Keywords: Albendazole; albumin nanoparticles; drug delivery; nanomedicine; ovarian cancer.

