Drug Delivery Solutions

Never Stand Still | NewSouth Innovations

AlbuMiz - a versatile nano-sized drug delivery system based on albumin. The system offers multiple drug delivery solutions.

The Technology

The nano-albumin (nab) technology has been successfully applied for the delivery of a range of small molecule anti-cancer drugs, most notably paclitaxel (abraxane). Here we developed a technology based on albumin that also allows the delivery of other drugs such as metal-based drugs, proteins and genes (oligonucleotides, siRNA). The drug carrier has a shell made from albumin and a core made from polymer. The core is tailored specifically to the type of drug

Key Benefits

- Can be tailored to suit most delivery needs
- Size of nanoparticle can be altered between 50-150 nm, probably smaller and larger particles can be generated
- Albumin shell mimics the current nab-technology
- Albumin is the main substituent of blood, the drug carrier is compatible and degradable

Applications

- Drug delivery of various drugs including proteins, small drugs, genes, peptides and metal-based drugs
- Main application: Delivery of anti-cancer drugs and anti-arthritis drugs.

The Opportunity

UNSW is seeking a commercial partner to licence and/or to work collaboratively with the inventor Professor Martina Stenzel in the development of this potentially disruptive drug delivery technology.

https://research.unsw.edu.au/people/professor-martina-stenzel

For more information contact:
Dr Joe Brennan
Business Development Manager
NewSouth Innovations
Ref 12_2686
T: +61 2 9385 7729 I M: +61 450 469 492
E: j.brennan@nsinnovations.com.au