醣苷轉化微脂體

主要領域

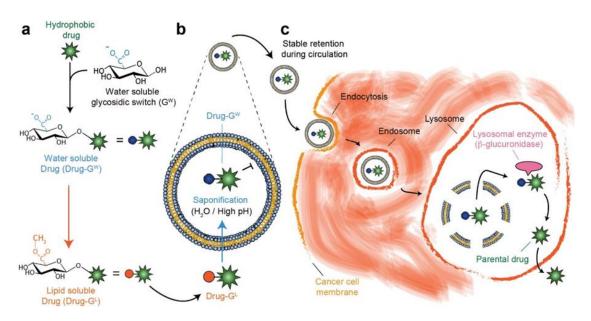
奈米藥物/癌症治療

■ 產品/技術簡介

■ 醣苷轉化微脂體(GSL)藉由提升抗癌藥物在微脂體中的承載力、穩定 滯留性及其安全運輸性來增加奈米藥物的功效。

■ 原理

此技術利用化學修飾抗癌藥物上的糖苷轉換官能基(-G)以控制藥物在親脂的狀態下(-G^L)可有效地負載於微脂體內、且以親水的狀態(-G^W)穩定滯留在微脂體的水相中心。



可逆性醣苷轉化之概念

應用

■此醣苷轉化技術透過穩定負載藥物於微脂體中,促進抗癌藥物的運輸,提供更佳效力以及安全性的抗癌治療選擇。

■ 專利現況

- ■已核准: 美國專利及商標局,中華民國經濟部智慧財產局
- ■審查中: 歐洲專利局,中國大陸國家知識產權局
- ■可逆性糖苷轉化之概念

Glycosidic Switch Liposomes

Research Area

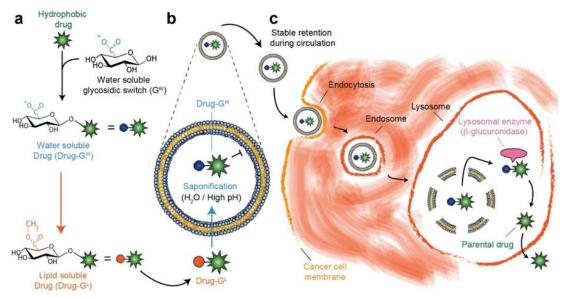
Nanomedicines / Cancer treatment

Technical novelty

The Glycosidic Switch Liposome (GSL) platform increases the power of nanomedicines by facilitating active loading, stable retention, and safe delivery of potent drugs in liposomes.

Principle

This is chemically achieved via a glycosidic switch (-G), which can be reversibly attached to drugs and controllably interchanged between a lipophilic state (-GL) for efficient loading and a hydrophilic state (-GW) for stable retention of drugs in the liposomal aqueous core.



The concept of the reversible glycosidic switch

Advantages

The platform technology provides a general method for different potent drugs loading with higher encapsulation efficiency, higher drug retention, and multiple drugs loading.

Application

The glycosidic switch could facilitate retention, delivery, and safety of a large range of highly potent hydrophobic anticancer drugs and subsequently provide more effective anticancer therapies

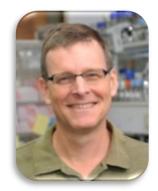
Patent status

Granted: United States, Taiwan

Pending: European Patent Office, China

Glycosidic Switch Liposomes

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