

# 糖苷轉化微脂體

## 主要領域

## 癌症治療 / 奈米藥物

### 產品/技術簡介

- 糖苷轉化微脂體(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。

### 應用

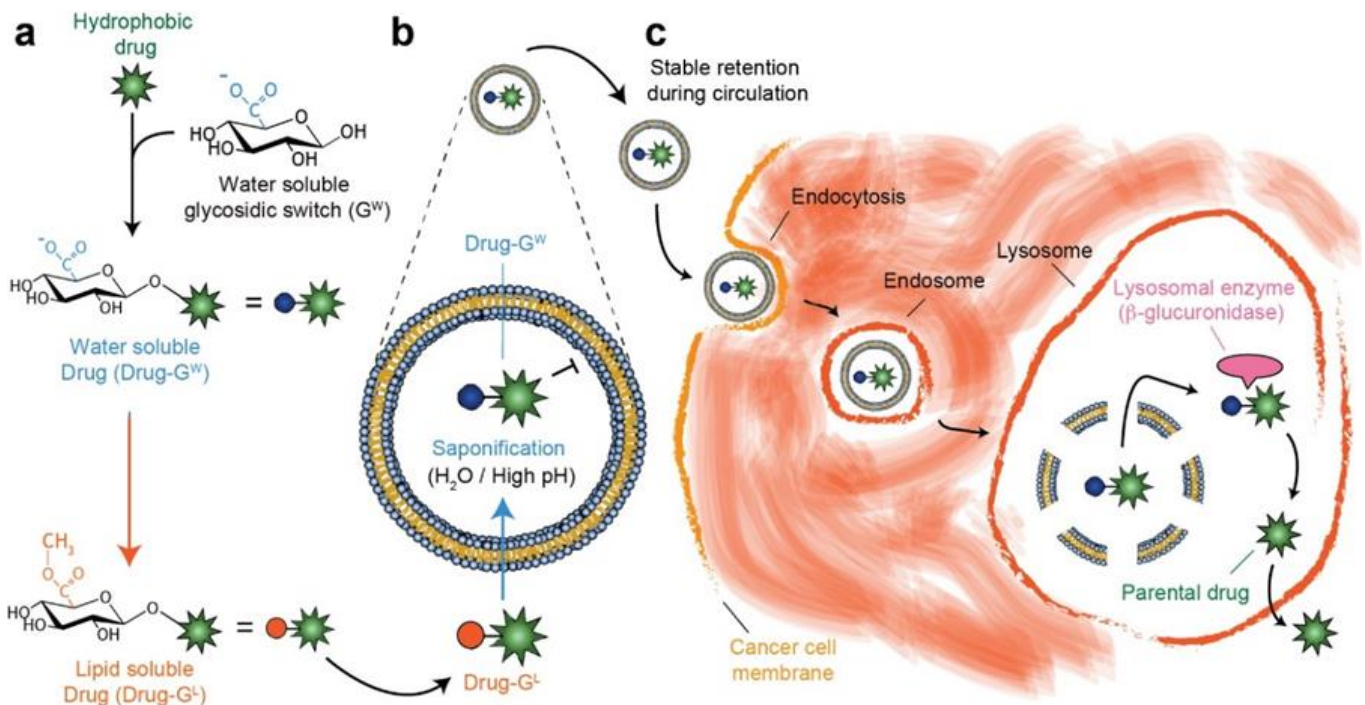
- 此技術利用化學修飾抗癌藥物上的糖苷轉換官能基 (-G) 以控制藥物在親脂的狀態下(-G<sup>L</sup>)可有效地負載於微脂體內、且以親水的狀態(-G<sup>W</sup>)穩定滯留在微脂體的水相中心。

### 優勢

- 可更進一步克服許多抗癌藥物不易被穩定包覆在微脂體內的障礙，並拓展GSL的運用範疇於單一或多重藥物的負載。

### 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



# Glycosidic Switch Liposomes

Research Area

Cancer Treatment / Nanomedicines

## Technical statement

The glycosidic switch liposome (GSL) platform increases the power of nanomedicines by facilitating active loading, stable retention and safe delivery of drugs in liposomes.

## Applications

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

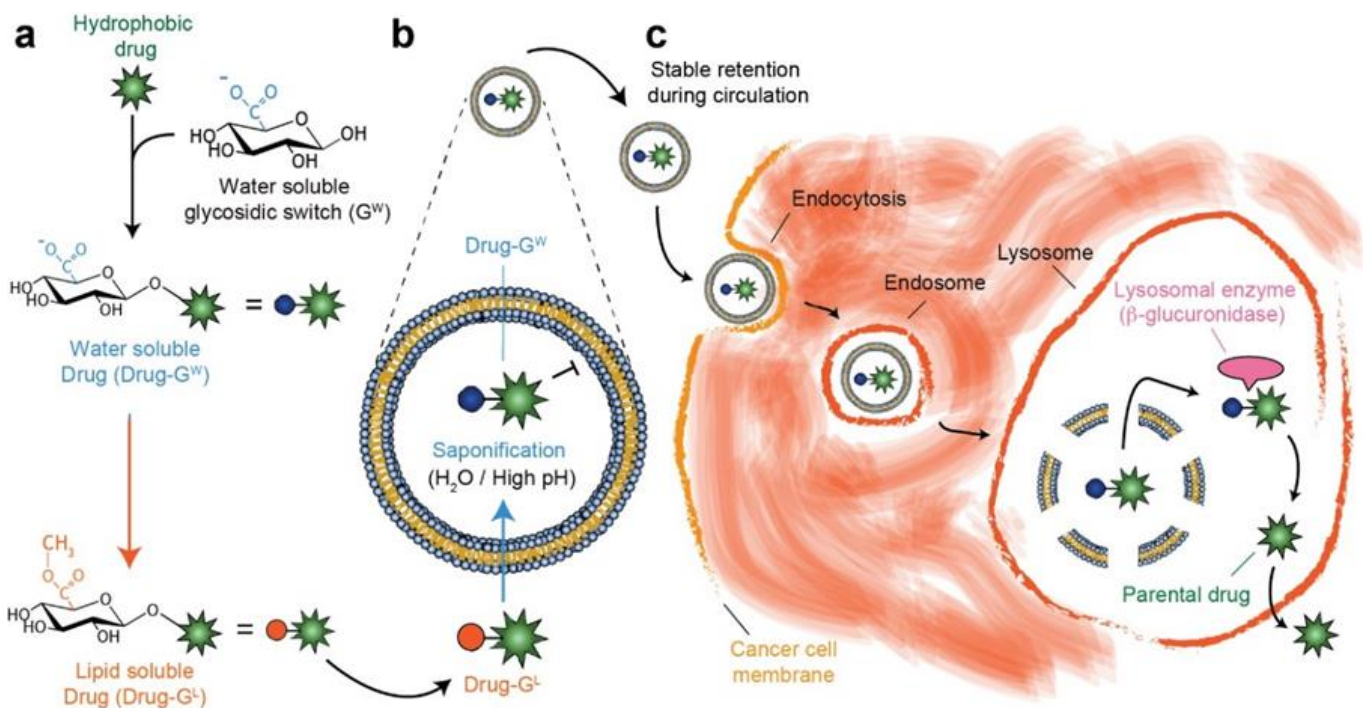
## Advantages

This platform technology represents a general method to create nanoliposomes encapsulating previously difficult to formulate drugs as well as multiple drug combinations.

## Patent status

Granted: United States, Taiwan

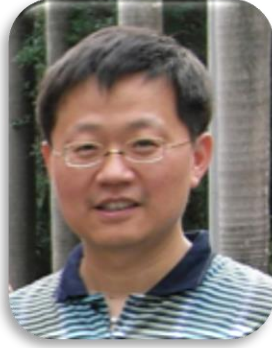
Pending: European Patent Office, China



## 計畫主持人 Project PI



呂玉玲



林俊宏



Steve Roffler,  
羅傳倫

## 計畫成員 Member



林偉琪



楊世弘



唐璽揚

- **Contact person: Steve Roffler, PhD.**
- **TEL: +886-2-2652-3079**
- **Email: [sroff@ibms.sinica.edu.tw](mailto:sroff@ibms.sinica.edu.tw)**