

Nottingham Beyond the Magic Bullet: The Multitargeted Anticancer Drugs Cocktails

Tham, S.Y.¹, Mai, C.W.², Fu, J.Y.³, Loh, H.S.¹

UNITED KINGDOM · CHINA · MALAYSIA

¹School of Biosiences, Faculty of Science, University of Nottingham Malaysia Campus ² Pharmaceutical Chemistry Department, International Medical University ³ Nutrition Unit, Product Development and Advisory Services Division, Malaysian Palm Oil Board

ourstrategy



- Natural compound
- Target cancer from multiple directions
- Avoid resistance development



Our motivation **Chemo**drugs

- Lower dose can be used for same/better therapeutic outcome
- Established mechanism of action

Various combinations of tocotrienol + drugs chemo-drug

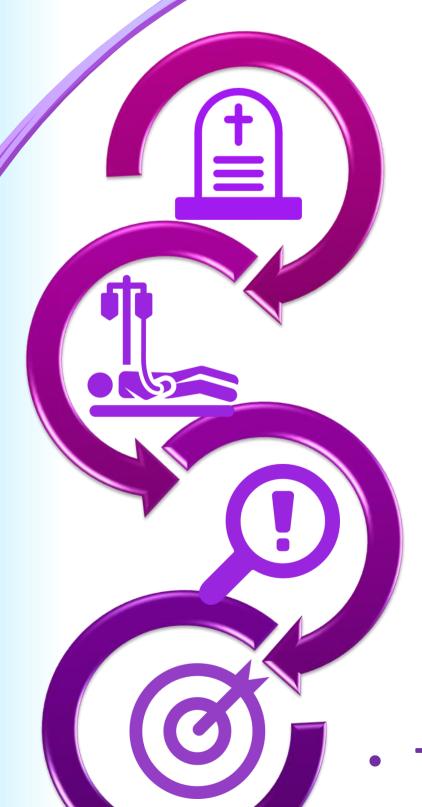
> various cancer cells

Applied to



Identify the most potential drugs cocktails

impacts of the study



- Cancer causes 8.2 million deaths in 2012
- By 2023, expected mortality rate is 24 million
- Chemotherapy, the most common treatment modality
- Problems:
 - High-dose toxicities
 - ©Drug resistance
- To search for an effective cure for cancer



Effective against cancer

Costeffective treatment





Immediate solution