

Taiwan brings hope for breast cancer patients with new epigenetic drug

28 July 2021 | News

New clinical trial by Taiwan's GNT Biotech & Medicals Corporation (GNTbm) combines therapeutic options for more effective treatment of breast cancer

Currently, estrogen-receptor-positive breast cancer accounts for about 70% of all breast cancers, with hormone therapy (or endocrine therapy) being the main treatment. However, patients with recurrent or progressive disease often exhibit resistance to hormone therapy, calling for better alternative therapies.

GNT Biotech & Medicals Corporation (GNTbm), a Taiwan-based biotechnology company, decided to focus on other treatment options against breast cancer.

In treatment-resistant cancer, "epigenetic" abnormalities (changes unrelated to our genetic sequences) are common. These abnormalities can often be found in enzymes that act on "histones"—proteins that support the DNA structure. Thus, these enzymes can be targeted to suppress tumor growth in breast cancer.

An example is "chidamide/tucidinostat," a benzamide-based selective inhibitor of "histone deacetylase" (HDAC; a histone-modifying enzyme that is seen to be overexpressed in certain cancers). This motivated GNTbm to collaborate with Shenzhen Chipscreen Biosciences (a drug development company in China) and conduct a phase III clinical trial in Taiwan and China.

"The current clinical study is the first to explore the effects of an HDAC inhibitor combined with exemestane. The findings show progression-free survival benefit in hormone-receptor (HR)-positive endocrine treatment-resistant patients with breast cancer, hopefully, leading to better survival rates for patients in the future," said Dr Chia-Nan Chen, President of GNTbm.