AptBCis1 as novel therapeutics for cancer

PI：Prof. Pan-Chyr Yang
Department of Internal Medicine, College and School of Medicine, National Taiwan U.

Experience:
https://www.mc.ntu.edu.tw/intmed/Vcard.action?q_type=A03&q_itemCode=568&struts.token.name=token&token=1OA618X2SATG1ZKGB4HJRO0W4EQ7YPXQ

Market Needs:
Therapy for leptomeningeal carcinomatosis (LM) remains challenging partly due to the biological nature of blood-brain-barrier (BBB). Cisplatin is of limited effect on LM and is notorious for its neurotoxicity. The AptB1 is a BBB-penetrating and cancer-targeting DNA aptamer identified via *in vivo* SELEX using a cancer LM orthotopic mouse model. The AptBCis1 is an aptamer-cisplatin conjugate that exhibits promising tumor suppressive effect in cancer with leptomeningeal metastasis at lower cisplatin concentration. The AptB1/AptBCis1 bind to EAAT2, Nucleolin and YB-1; the interactions may play roles in the anti-tumor function. There is no known aptamer or therapeutics possessing the same characteristics as the AptB1/AptBCis1.

Our Technology:
1. AptB1 is a guiding molecule for targeted delivery in cancer therapy and molecular imaging.
2. AptBCis1 is a novel therapeutic for leptomeningeal carcinomatosis.
3. AptBCis1 is a novel therapeutic effective at lower platinum concentrations for solid tumors, of which platinum-based regimens stand as the standard-of-care.

Strength:
1. AptB1 is a guiding molecule for targeted delivery in cancer therapy and molecular imaging.
2. AptBCis1 is effective for leptomeningeal carcinomatosis at lower cerebrospinal fluid platinum concentration.
3. AptBCis1 possesses tumor-targeting effect and inhibits tumor growth at lower systemic platinum concentration.

Competing Products: None

Intellectual Properties:
The team has years of experiences in cancer research. The current invention is now in the process of PCT application.

Contact (do not need to fill out):

Center for Industry-Academia Collaboration, NTU
Tel: 02-3366-9945, E-mail: ordiac@ntu.edu.tw

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