Receptor Targeted Therapy for Triple Negative Breast Cancer

[2018-115]

THE UNIVERSITY OF SYDNEY

Pharmaceuticals

> Pre-Clinical

Problem

Triple Negative Breast Cancer (TNBC) constitutes 15 – 20% of all breast cancers. It is highly aggressive, relapsing within 3 – 5 years of chemotherapy in young women. Therapeutic progress in TNBC has been limited to chemotherapy in the past several decades. There is therefore a need for the development of targeted therapeutics with increased selectivity and efficacy and decreased toxicity for the treatment of those suffering from TNBC.

Solution

This is a targeted TNBC therapy formed of an antineoplastic agent and an LHRH (Leuteinising hormone release hormone) peptide derivative which has been conjugated to an anti-mitotic agent. This therapeutic drug targets LHRH receptors, which are overexpressed in 70-100%TNBCs. The targeting and anti-mitotic agent combination will efficiently identify the target cells/tumours and prevent mitosis of the cancerous cells.

Commercial Opportunity

An entirely new class of cancer drugs with a demonstrated efficacy in targeting Triple Negative Breast Cancer (TNBC) may be acquired.

Intellectual Property Status

Patent application pending AU/JP/EP/US

PCT/AU2020/050429.

Potential Commercial Applications

– Sole therapy in the treatment of TNBC
– Therapy for multiple cancer types that overexpress LHRH.

Inventors

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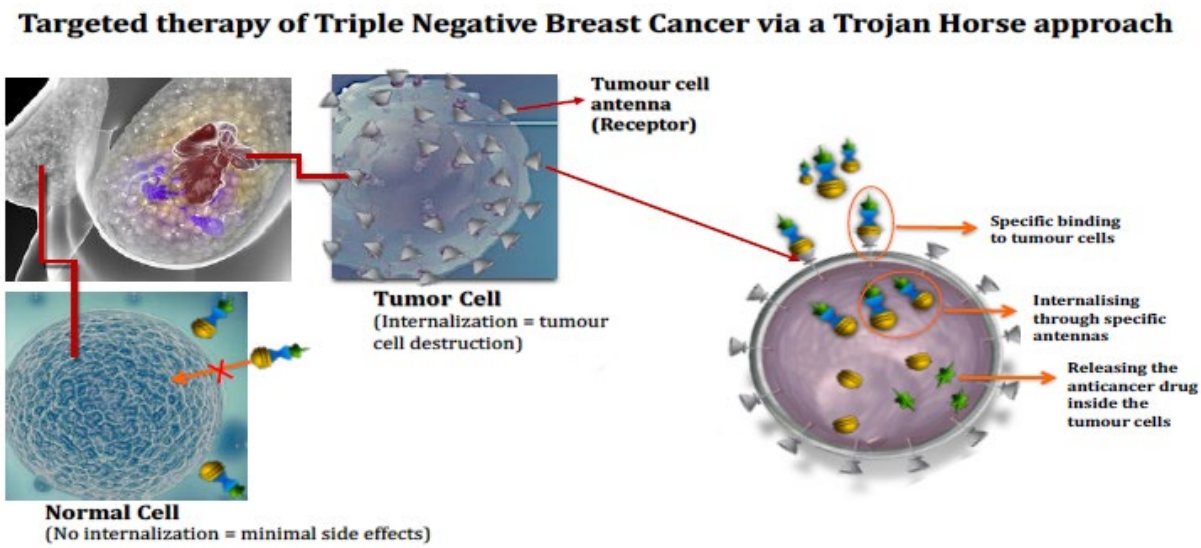

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