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ASIA EDITION

Australia lays focus on nanotechnology to improve odds in treating aggressive breast cancers

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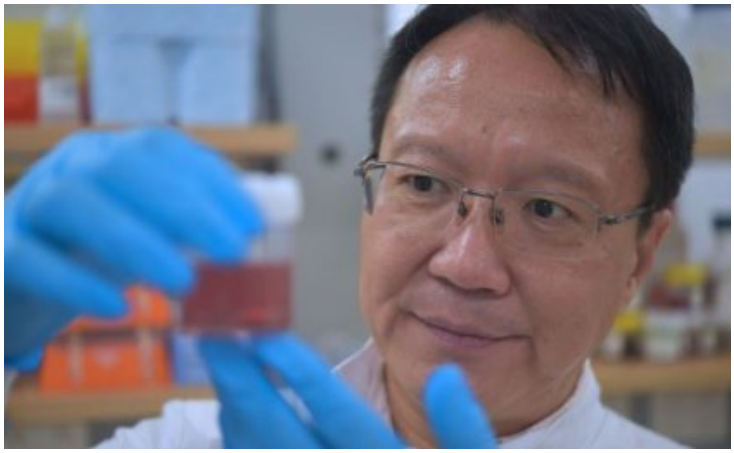
With the hope that nano-adjuvant will be able to improve the efficacy of immunotherapy treatment



University of Queensland researchers are designing nanotechnology they believe could improve how we treat the most aggressive form of breast cancer.

Professor Chengzhong (Michael) Yu and his team are developing novel nanoparticles that could dramatically increase the effectiveness of immunotherapies when treating triple-negative breast cancer (TNBC).

TNBC is aggressive, fast-growing and accounts for 30 per cent of all breast cancer deaths in Australia each year, despite making up only 10 to 15 per cent of new cases.

Aided by a $3 million Investigator grant from the National Health and Medical Research Council (NHMRC), Professor Yu aims to design a nanoparticle to bolster TNBC patients' immune response to treatments. This 'nano-adjuvant' would work at a sub-microscopic scale to boost the performance of T-cells, the white blood cells used by the immune system to fight disease.

Professor Yu said the 5-year research project would hopefully kickstart clinical translation to fill a critical gap in the treatment of serious cancers.