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AIBN partners with Biosceptre to create cancer mABs

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Australian nanotech institute partners with Biosceptre to create monoclonal cancer antibodies

Singapore: The Australian Institute for Bioengineering and Nanotechnology (AIBN) entered into a research collaboration with Sydney-based Biosceptre International to develop a process for the production of monoclonal antibodies to treat cancer. AIBN's National Biologics Facility will characterise candidate therapeutic monoclonal antibodies that bind to Biosceptre's novel cancer target, known as nf-P2X7.

The R&D will include antibody and cell line development; bioprocess development; and recombinant protein production in pre-commercial quantities ahead of preclinical trials. UniQuest, the University of Queensland's main commercialization company, facilitated the research and antibody production agreement. The collaboration was made possible with support from investment company Medigen.

AIBN director Professor Peter Gray said, "We are recognised as one of the leading mammalian cell expression labs in Australia, able to produce quality and quantity."

UniQuest Managing Director David Henderson said the partnership with Biosceptre reflected an AIBN commitment to work closely with private industry to discover new potential cancer therapies."Biosceptre's recognition of the AIBN's capabilities demonstrates the value industry places on working with Australian university researchers to optimise the outcomes from both publicly and privately funded research for the benefit of the wider community," he said.

Biosceptre chief executive officer Dr Cliff Holloway said the research collaboration was a critical step towards preclinical and human clinical trials involving its monoclonal antibody targeting the non-functional form of P2x7, a major cellular receptor responsible for apoptosis (the process of normal cell death). "Our long-term goal is to develop a therapeutic monoclonal antibody capable of specifically detecting non-functional P2X7 and inducing cancer cell death without affecting normal healthy cells," Dr Holloway said.

"Having evaluated a number of national and international providers of such antibody services, we have been impressed with the advanced equipment and quality of the infrastructure at the AIBN National Biologics Facility. The technical expertise of Dr David Chin, NBF operations manager, and his team in our pre-deal evaluation has already delivered value for Biosceptre," said Dr Holloway.