

Life Sciences and Clinical Trials in Queensland, Australia

Introduction

Recently, Australia has received significant international attention and recognition due to a number of breakthroughs including a cervical cancer vaccine discovered by Professor Ian Frazer from the University of Queensland's Centre for Immunology and Cancer Research in Brisbane and the prostate cancer vaccine developed by a team led by Professor Derek Hart of the Mater Medical Research Institute in Brisbane, Queensland. Recently approved by the FDA, the cervical cancer vaccine has shown very encouraging results in the prevention of cervical cancer in clinical trials, whilst the prostate vaccine is still in early phase clinical development.

Queensland State Government

Queensland is known in Australia as the Smart State. In Queensland, the success of the medical innovations is underpinned by the long-term strategy initiated by Queensland State Government and the support from the Australian Federal Government. Since 1999, investment in research and development in life sciences by the Queensland Government alone has reached approximately 500 million Australian dollars (AUD) or approximately 382 million US dollars. With this investment, Queensland entities are able to service all aspects of the research and development value chain for life sciences, and Queensland's strategic plan for 2005 – 2015 (www.smartstate.qld.gov.au) foresees in additional investments to further boost the life sciences sector with continued emphasis on biotechnology (www.biotech.qld.gov.au), education and commercialization efforts.

Australian Federal Government

The Federal Government announced in May 2006 to increase funding to 905 million AUD (~690 million US dollars) for health and medical research, strong protection for intellectual property, and the maintenance of an operating environment conducive to encouraging investment by the local and international biopharmaceutical industry. Australia has a thriving biotechnology and medical device industry with 421 core biotechnology companies and 612 medical device companies. In Queensland alone there are more than 75 biotechnology companies of whom 55 are active in health and medical biotechnology research.

Clinical Development Options

The costs of developing new medicinal entities are very high necessitating organisations to re-address the way in which they set up their clinical development programs in order to reduce time to market and contain development expenses. As a consequence top management urges to find alternative pathways for clinical development. Organisations now increasingly outsource clinical development to CROs, perform more studies in the Asia-Pacific region, involve modern techniques to analyse the patient genetic make-up in relation to a clinical response to therapy (pharmacogenomics), specialise in certain disease areas or a combination of these options.

Clinical Development in Australia

Australia and Queensland in particular have an interesting offering for overseas organisations involved in developing new biologics, drugs or medical devices. It consists of access to highly qualified researchers, clinicians and advanced clinical and analytical laboratory facilities, a modern and efficient regulatory and legal environment, low costs of performing clinical trials, access to first world comparator drugs, disease tracking programs for notifiable disease outbreaks and populations highly concentrated in urban areas.

This claim was substantiated by a 275-page report by the Economist Intelligence Unit which amongst others compared quantitative and qualitative aspects of performing clinical trials in Australia, Singapore, India, Germany, UK, USA or Japan (www.industry.gov.au). Overall, Australia finished ranked number one in terms of cost/benefit/risk analysis including a substantial cost advantage over the Japan, USA, UK and Germany.

Queensland Clinical Trials Network Inc. (QCTN)

In 2005 the Queensland Government established QCTN as an independent entity in order to have a primary point of contact for overseas organisations wishing to undertake clinical research in Australia and to help them to identify and connect with the appropriate institutions, CROs and other service providers active in the field of clinical trials.

QCTN will hold its annual clinical research conference on October 23-25, 2006. For more details about the conference, please visit www.ausclinres.iamevents.com.au or visit our website at www.qctn.com.au