Questions & Answers on licence application DIR 192 – Clinical trial of a genetically modified (GM) chimeric Orthopoxvirus as a cancer treatment

What is this application for?

Medpace Australia Pty Ltd is seeking approval for a clinical trial of a genetically modified (GM) chimeric Orthopoxvirus as a cancer treatment. The GM virus, known as CF33-hNIS, has been designed to preferentially multiply in and kill cancer cells, and the trial would evaluate its safety and efficacy. The GM virus would be manufactured overseas and imported into Australia. It would be administered to up to 18 patients with solid cancer that is locally advanced or has spread throughout the body. The trial would take place at clinical trial sites and hospitals in Australia.

How has the GM virus has been produced?

The GM treatment is based on a chimeric Orthopoxvirus, which is genetically similar to the *Vaccinia virus* used as a vaccine during the global smallpox eradication campaign. It has been modified by deletion of a gene so that it preferentially multiplies in and kills cancer cells. Additionally, a gene derived from humans has been introduced to facilitate the visualisation of the GMO after administration to patients by medical imaging.

What other regulatory processes apply to this trial?

Clinical trials must be conducted in accordance with requirements of the Therapeutic Goods Administration (TGA), which address the safety of trial participants. Before commencing, the trials would require ethics approval, and must be conducted in accordance with the *Guidelines for Good Clinical Practice*. Import of the GMO will also require approval from the Department of Agriculture, Fisheries and Forestry.

Has the GM treatment been previously tested or used?

The GM treatment is currently in a Phase 1 clinical trial in the United States.

What controls are proposed for this release?

The consultation Risk Assessment and Risk Management Plan (RARMP) prepared for this application concluded that the clinical trial poses negligible risks to people or the environment. However, as this is a clinical trial under limited and controlled conditions, a number of licence conditions have been drafted to restrict when and where the trial can take place, limit the size of the trial, and restrict the spread and persistence of the GM treatment. For example, there are conditions relating to preparation and administration of the treatment, secure transport and storage of the treatment and appropriate waste disposal. Full details of the draft licence conditions are available in the consultation RARMP.

How can I comment on this application?

The full consultation RARMP and a summary of the RARMP for application DIR 192 are available on the What's New page of the OGTR website or via the contacts listed below. You are invited to submit your written comments on the consultation version of the RARMP, related to any risks to the health and safety of people or to the environment from the proposed clinical trial. Please note that issues such as **patient safety, quality and efficacy of a therapeutic products, and marketability and trade implications** do **NOT** fall within the scope of the evaluations conducted under the *Gene Technology Act 2000* as these are the responsibility of other agencies and authorities. Comments must be received by the close of the consultation period on 18 August 2018.

What are the next steps in the evaluation process?

The RARMP will be finalised, taking into account submissions related to the protection of people or the environment. A de-identified summary of all comments received and consideration of those comments will be included in the Appendices to the final RARMP. The finalised RARMP will inform the Regulator's decision on whether or not to issue a licence.

The Office of the Gene Technology Regulator

OGTR Website

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