Questions & Answers on licence application DIR 198 – Clinical trial of a genetically modified alphavirus (Getah virus) for cancer treatment

What is this application for?

VRT Pharmaceutics Pty Ltd is seeking approval for a clinical trial of genetically modified (GM) Getah virus as a cancer treatment. The GM virus has been designed to preferentially multiply in and kill cancer cells, and the trial would evaluate its safety and tolerability. The GM virus would be manufactured overseas and imported into Australia. Up to 12 adults with cancer that is locally advanced or has spread throughout the body would receive multiple doses of the GM virus via intravenous infusion. The trial would take place at clinical trial sites in South Australia.

How has the GM virus has been produced?

The GM virus is based on the Getah virus M1 strain (variant M1-c6). The M1 strain of Getah virus has been shown to preferentially target cancer cells. For this clinical trial, the variant M1-c6 of the M1 strain has been genetically modified by making two small changes to its genetic code, enhancing its ability of replicating in cancer cells.

What other regulatory processes apply to this clinical 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 trial would require ethics approval, and must be conducted in accordance with the *Guidelines for Good Clinical Practice*. Import of the GM Getah virus treatment will also require approval from the Department of Agriculture, Fisheries and Forestry. In addition, the applicant will require approval by the relevant State and Territory authorities prior to importing the GM virus and conducting the trial.

Has the GM treatment been previously tested or used?

This is the first clinical trial to be conducted with this GM virus. However, the GM virus has been administered to 27 patients under compassionate use in China with no serious adverse events reported.

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 and moderate risks to the environment. To manage this risks, draft licence conditions require trial participants to remain in the hospital during treatment with the GMO and until the GM virus is no longer detected in their blood. In addition, 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 virus. 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 198 are available on the OGTR website or via the contacts listed below. You are invited to submit your written comments (including email) 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 **05 October 2023.**

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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