6 January 2025

Summary of Licence Application DIR 213

Novotech Australia Pty ltd has made an application under the *Gene Technology Act 2000* (the Act) to conduct a Phase 1 clinical trial using a genetically modified organism (GMO).

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| *Project Title* | Clinical trial of a genetically modified human adenovirus for treatment of Melanoma |
| *Parent organism* | Human adenovirus serotype 6 (HAdV-C6) |
| *Genetic modifications* | Modified human adenovirus (Adze 1.C):* Replacement of HAdV-C6 hexon hypervariable region (HVR) with HVR from HAdV-C57 (facilitates initial immune evasion)
* Deletion within E1A protein (promotes viral replication in tumour cells and facilitates cellular antiviral responses)
* Partial deletion of E3 gene replaced with human CD40L (enhances immune activation in target cells)
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| *Principal purpose* | The proposed trial is a Phase 1 study designed to evaluate the safety, tolerability and dose escalation study of genetically modified Adze 1.C, for the treatment of Australian patients with melanoma.  |
| *Previous clinical trials* | This is a first in human clinical trial |
| ***Proposed limits*** |
| *Proposed location/s* | This trial will include multiple clinical trial sites and hospitals across Australia. The exact sites are yet to be identified.  |
| *Proposed number of participants* | Up to 30 clinical trial participants in Australia with diagnosed metastatic melanoma |
| *Proposed duration* | 3 years |
| *Proposed controls* | * The GMO will be administered to trial participants within a suitable medical facility
* Staff handling the GMO will be trained and will wear personal protective equipment
* Waste that may contain the GMO will be disposed of via the clinical waste stream
* High risk staff will be excluded from handling the GMO
* Participants will be instructed to decontaminate toilets after each dose until 2 weeks after the final GMO administration
* The GMO will be transported and stored according to Transport, Storage and Disposal Guidelines appropriate for PC2 organisms
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### The application

The applicant proposes to administer the GM HAdV (Adze 1.C) to patients with diagnosed melanoma*.* This GM HAdV has been designed to preferentially multiply in and kill cancer cells. Up to 30 patients in Australia would receive up to 7 intra-tumoral doses of the GM HAdV and be observed over a period up to 3 months, with the aim to evaluate the treatment’s safety and efficacy. The proposed clinical trial must meet Therapeutic Goods Administration (TGA) requirements and would need approval from a registered Human Research Ethics Committee prior to commencement.

### Consideration as a limited and controlled release (clinical trial)

This application is considered to be a limited and controlled release application under section 50A of the Act, as the Regulator was satisfied that:

* its principal purpose is to enable the applicant to conduct the clinical trial; and
* the applicant has proposed limits and controls that are such that the Regulator is not required to consult before preparing the consultation version of the RARMP.

### Next steps

The Gene Technology legislation sets out what the Regulator must do, as well as what the Regulator can or must consider, before deciding whether or not to issue a licence for this application.

The Regulator’s staff will prepare a consultation version of the Risk Assessment and Risk Management Plan (RARMP) considering aspects of the application including the proposed limits and controls in accordance with the legislation.

The Regulator will seek comment on the consultation RARMP from the public, as well as a wide range of experts, agencies and authorities. The public and experts will be invited to provide submissions on the risks to human health and safety, and on risks to the environment from the proposed clinical trial.

At this stage, the consultation RARMP is expected to be released for comment in **March 2025**.

After consultation, the Regulator’s staff will finalise the RARMP, taking into account advice on relevant matters. The finalised RARMP will form the basis of the Regulator’s decision whether or not to issue a licence. The consultation and final versions of the RARMP and associated documents will be available on the [OGTR website](http://www.ogtr.gov.au/) when they are released.

### Other information available from the [OGTR website](http://www.ogtr.gov.au/):

* information on Australia’s national scheme for regulation of gene technology and
* information on the DIR application process.

Please use the contact details below, if you:

* would like a copy of the application. Please include the identifier DIR 213.
* have any questions about the application or the legislated evaluation process or
* wish to register on the mailing list.

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