

Licence for dealings involving an intentional release of a GMO into the environment

Licence No.: DIR-210

Licence Holder: Doherty Clinical Trials Ltd (DCT)

Clinical trials of controlled infection with seasonal Influenza viruses

Issued: 2 April 2025

Office of the Gene Technology Regulator

Gene Technology Regulation in Australia

Australia's gene technology regulatory system operates as part of an integrated legislative framework. The *Gene Technology Act 2000* (Cth) and corresponding State and Territory legislation form a substantial part of a nationally consistent regulatory system controlling the development and use of genetically modified organisms.

This licence is issued by the Gene Technology Regulator (the Regulator) in accordance with the *Gene Technology Act 2000* and, as applicable, corresponding State law.

In assessing applications for dealings involving the intentional release of genetically modified organisms into the Australian environment, the Regulator is required to consult with, and take into account advice from, a range of key stakeholders, including other regulatory authorities, on risks to human health and safety and to the environment in assessing applications for dealings involving the intentional release of genetically modified organisms into the Australian environment.

Other agencies that also regulate genetically modified organisms or GM products include Food Standards Australia New Zealand, Australian Pesticides and Veterinary Medicines Authority, Therapeutic Goods Administration, Australian Industrial Chemicals Introduction Scheme and the Department of Agriculture, Water and the Environment. Dealings conducted under any licence issued by the Regulator may also be subject to regulation by one or more of these agencies. It is recommended that the licence holder consult the relevant agency (or agencies) about their regulatory requirements.

The licence authorises the licence holder and persons covered by the licence to conduct specified dealings with the genetically modified organism(s) listed in **Attachment A** of this licence.

Further information on licence DIR 210

More information about the decision to issue this licence is contained in the Risk Assessment and Risk Management Plan prepared in connection with the assessment of the application for the licence. This document can be obtained from the <u>Office of the Gene Technology Regulator (OGTR) website</u> or by telephoning the Office on 1800 181 030.

CONDITIONS OF THIS LICENCE

Section 1 Interpretations and Definitions

1. In this licence:

- (a) unless defined otherwise in this licence, words and phrases used in this licence have the same meaning as they do in the Act and the Gene Technology Regulations 2001;
- (b) words importing a gender include every other gender;
- (c) words in the singular number include the plural and words in the plural number include the singular;
- (d) expressions used to denote persons generally (such as "person", "party", "someone", "anyone", "no one", "one", "another" and "whoever"), include a body politic or corporate as well as an individual:
- (e) references to any statute or other legislation (whether primary or subordinate) are a reference to a statute or other legislation of the Commonwealth of Australia as amended or replaced from time to time and equivalent provisions, if any, in corresponding State law, unless the contrary intention appears;
- (f) where a word or phrase is given a particular meaning, other grammatical forms of that word or phrase have corresponding meanings;
- (g) specific conditions prevail over general conditions to the extent of any inconsistency.

2. In this licence:

'Act' means the Gene Technology Act 2000 (Commonwealth) or the corresponding State law under which this licence is issued.

'Analytical facility' means a laboratory in Australia accredited to undertake testing of human diagnostic Samples, such as a medical testing laboratory accredited by the National Pathology Accreditation Advisory Council (NPAAC).

'Clinical trial site' means DCT clinical trial facility located at 2 St Andrews Place, East Melbourne, Victoria 3002.

'Decontaminate' (or 'Decontamination') means, as the case requires, kill the GMOs by one or more of the following methods:

- (a) chemical treatment;
- (b) autoclaving;
- (c) high-temperature incineration; or
- (d) a method approved in writing by the Regulator.

Note: 'As the case requires' has the effect that, depending on the circumstances, one or more of these techniques may not be appropriate.

'Excluded persons' means:

- Persons with household contacts at higher risk for influenza-related complications, including persons ≥65 years of age or <5 years of age, history of chronic pulmonary disease;
- persons who display any evidence of an active infection with influenza viruses;
- persons who are breastfeeding or are pregnant.

'External service provider' means a person engaged by the licence holder solely in relation to transport, storage and/or disposal of the GMOs, and who is not undertaking any dealings with the GMOs that are not for those purposes.

'GM' means genetically modified.

'GMO' means the genetically modified organisms that are the subject of the dealings authorised by this licence.

'NLRD' is a Notifiable low risk dealing. Dealings conducted as an NLRD must be assessed by an institutional biosafety committee (IBC) before commencement and must comply with the requirements of the Gene Technology Regulations 2001.

'OGTR' means the Office of the Gene Technology Regulator.

'Personal information' has the same meaning as in the *Privacy Act 1988*. Personal information means information or an opinion about an identified individual, or an individual who is reasonably identifiable:

- (a) whether the information or opinion is true or not; and
- (b) whether the information or opinion is recorded in a material form or not.

'Pharmacy' means a location within the Clinical trial site, where authorised staff store, prepare, and dispense medications in a medical environment.

'Regulations' means the Gene Technology Regulations 2001 (Commonwealth) or the corresponding State law under which this licence is issued.

'Regulator' means the Gene Technology Regulator.

'Risk group 2 organism' means an organism that satisfies the criteria in AS/NZS 2243.3:2010 for classification as Risk Group 2.

'Sample' means any biological material collected from a treated trial participant for analysis as part of the trial

Section 2 General conditions and obligations

Holder of licence

3. The licence holder is Doherty Clinical Trials Ltd (DCT)

Remaining an Accredited Organisation

4. The licence holder must, at all times, remain an accredited organisation.

Validity of licence

This licence remains in force until it is suspended, cancelled or surrendered. No dealings with the GMO are authorised during any period of suspension, or after the licence has been cancelled or surrendered.

Note: Although this licence has no expiry date, the duration of preparation and administration of the GMOs is restricted in accordance with Condition 24.

Persons covered by this licence

- 6. The persons covered by this licence are:
 - (a) the licence holder, and any employees, agents (or External service providers engaged by the licence holder); and

- (b) the project supervisor(s); and
- (c) other persons who are, or have been, engaged or otherwise authorised by the licence holder or the project supervisor to conduct any of the dealings authorised by this licence.
- 7. To the extent that any activity by a trial participant may be considered to be a dealing with the GMO as described in **Attachment A** for purposes of the Act, that dealing is authorised by this licence.
- 8. The licence holder must keep a record of all persons covered by this licence, and must keep a record of the contact details of the project supervisor(s) for the licence.

Note: Where External service providers are used, it is sufficient to record the company name and the position or job title of the person(s) conducting the dealing.

9. The licence holder must provide information related to the persons covered by the licence when requested to do so in writing by the Regulator and must provide the information within a time period stipulated by the Regulator.

Description of GMOs covered

10. The licence authorises specified dealings in respect of the GMOs identified and described in **Attachment A**.

Dealings authorised by this licence

- 11. The licence holder and persons covered by this licence may conduct the following dealings with the GMOs:
 - (a) conduct the following experiments with the GMOs:
 - i) prepare the GMO for administration
 - ii) administer the GMO to clinical trial participants, one dose in each nostril by nasal spray;
 - iii) collect Samples from trial participants;
 - (b) transport the GMOs for disposal;
 - (c) dispose of the GMOs;

and may possess, supply, use or store the GMO for the purposes of, or in the course of, any of these dealings.

12. Supply of the GMOs for the purposes of dealings by a person or organisation not covered by this licence is only authorised by this licence if the Regulator provides prior written approval to the licence holder.

Note: For approval to be granted, the receiving person or organisation must have an appropriate authorisation to conduct dealings with the GMOs. This is likely to be a NLRD or a licence issued by the Regulator.

13. This licence does not apply to dealings with the GMOs conducted as an NLRD or pursuant to another authorisation under the Act.

Conditions imposed by the Act

Note: The Act mandates the following 3 conditions.

Informing people of licence conditions (section 63)

- 14. The licence holder must inform any person covered by the licence, to whom a particular condition of the licence applies, of the following:
 - (a) the particular condition, including any variations of it; and
 - (b) the cancellation or suspension of the licence; and
 - (c) the surrender of the licence.

Note: No particular conditions of this licence apply to trial participants; therefore, Condition 14 does not apply to trial participants.

Monitoring and audits (section 64)

15. If a person is authorised by this licence to deal with the GMOs and a particular condition of this licence applies to the dealing by that person, the person must allow the Regulator, or a person authorised by the Regulator, to enter premises where the dealing is being undertaken, for the purposes of auditing or monitoring the dealing.

Additional information to be given to the Regulator (section 65)

- 16. The licence holder must immediately inform the Regulator, if they become aware of:
 - (a) additional information about any risks to the health and safety of people, or to the environment, associated with the dealings authorised by the licence; or
 - (b) any contraventions of the licence by a person covered by the licence; or
 - (c) any unintended effects of the dealings authorised by the licence.

Note 1: For the purposes of this condition:

- (a) The licence holder is taken to have become aware of additional information if they were reckless as to whether such information existed; and
- (b) The licence holder is taken to have become aware of contraventions, or unintended effects, if they were reckless as to whether such contraventions had occurred, or such unintended effects existed.

Note 2: Contraventions of the licence may occur through the action or inaction of a person.

Note 3: Additional information includes any changes at a Clinical trial site, which might increase the likelihood of unintentional exposure of people or release of the GMO into the environment.

Note 4: An example of informing immediately is contact made at the time of the incident via the OGTR free call phone number 1800 181 030.

Informing the Regulator of any material changes of circumstance

- 17. The licence holder must immediately, by notice in writing, inform the Regulator of:
 - (a) any relevant conviction of the licence holder occurring after the commencement of this licence;
 - (b) any revocation or suspension after the commencement of this licence, of a licence or permit held by the licence holder under a law of the Commonwealth, a State or a foreign country, being a law relating to the health and safety of people or the environment;
 - (c) any event or circumstances occurring after the commencement of this licence that would affect the capacity of the licence holder to meet the conditions in it.

18. The licence holder must provide information related to the licence holder's ongoing suitability to hold a licence when requested to do so in writing by the Regulator, and must provide the information within a time period stipulated by the Regulator.

Further conditions with respect to informing persons covered by the licence

19. If a particular condition, including any variation of it, applies to an External service provider covered by this licence, the licence holder must not permit that person to conduct any dealings unless the person has been informed of the condition, including any variation of it.

Note: Information required under Condition 19 may be provided to External service providers who are engaged solely for transport of the GMO through labelling of the outermost container of the GMOs in accordance with Condition 39(a).

- 20. If a particular condition, including any variation of it, applies to a person with respect to any dealing, other than to an External service provider, the licence holder must not permit a person covered by this licence to conduct that dealing unless:
 - (a) the licence holder has obtained from the person a signed and dated statement that the person:
 - i) has been informed by the licence holder of the condition and, when applicable, its variation; and
 - ii) has understood and agreed to be bound by the condition, or its variation; and
 - iii) has been trained in accordance with sub-condition 20(b) below; and
 - (b) the licence holder has trained that person in a manner which enables them to conduct the dealings in accordance with the conditions of this licence.
- 21. The licence holder must notify all persons covered by the licence, from whom Personal information relevant to the administration and/or enforcement of the licence is collected by the licence holder, that such Personal information may be disclosed to the Regulator.
- 22. The licence holder must ensure that a copy of the licence is readily available to all persons covered by the licence, other than External service providers, who are conducting dealings with the GMO.

Note: The licence may be made available electronically.

Section 3 Limits and control measures

Limits on clinical trials conducted under this licence

- 23. The clinical trials must be carried out in the clinical trial facility.
- 24. The GMO may be administered to a maximum of 150 trial participants.
- 25. The preparation and administration of the GMO must be completed within 5 years from the date of issuing of the licence.

Preparation and administration of the GMOs

26. Administration of the GMO to trial participants must not commence prior to approval by a Human Research Ethics Committee.

Conditions relating to clinical trial site

27. The licence holder must ensure that administration of the GMOs is conducted within isolation rooms at the DCT facility.

- 28. The licence holder must ensure that isolation rooms are equipped with a portable air cleaner that features HEPA filters and operates at all times. Air cleaners may be turned off for a maximum of 2 hours during air sampling in the room.
- 29. The licence holder must ensure that each isolation room is equipped at all times with a GMO labelled waste bin, decontaminant, gloves, N95 masks, spill kits, and hand sanitiser.

Conditions relating to trial participants

- 30. The licence holder must notify each trial participant, from whom Personal information relevant to the administration and/or enforcement of the licence is collected by the licence holder, that such Personal information may be disclosed to the Regulator.
- 31. The licence holder must ensure that exclusion criteria used in selecting trial participants include (though are not limited to) Excluded persons as defined in this licence;
- 32. Before GMOs are administered to any trial participant, the licence holder must obtain written agreement from the trial participant that they will:
 - (a) remain at the Doherty Clinical Trials Unit for 7 days after administration of the GMO
 - (b) agree to wear surgical masks for an additional 1.5 hours after administration to limit the spread of droplets and aerosols
 - (c) agree to take antiviral medication if they are shedding the GM virus at day 6 after administration of the GMO, as confirmed by tests conducted on nasal specimens.
 - (d) agree to isolate at home and avoid contact with people at higher risk for influenzarelated complications, including: Persons ≥65 years of age or <5 years of age, or pregnant or breastfeeding person if tested positive for the GMO 7 days after administration of the GMO.
- 33. The licence holder must inform the trial participant of the potential consequences resulting from exposure to the GMO by vulnerable people as a result of withdrawing from the clinical trial.

Conditions related to the conduct of the dealings

- 34. Conditions that apply to dealings with GMOs do not apply to samples collected from trial participants, or other materials or waste, that are reasonably expected not to contain the GMO. The licence holder must provide to the Regulator upon request, a written justification for this expectation.
- 35. The licence holder must ensure that dealings are only conducted in a manner which:
 - (a) does not compromise the health and safety of people; and
 - (b) minimises the exposure of persons conducting the dealings to the GMO, other than intended exposure of trial participants.

Note: The licence holder may achieve this by only engaging or otherwise authorising persons to conduct dealings who are required to adhere to appropriate standards and guidelines. For example, standards developed by the National Pathology Accreditation Advisory Council for pathology practices, the Australian Guidelines for the Prevention and Control of Infection in Healthcare, Guidelines for Good Clinical Practice and the National Safety and Quality Health Service (NSQHS) Standards, or the behavioural requirements for dealings conducted in OGTR certified facilities.

- 36. The licence holder must ensure that procedures are in place to account for the GMO from import to destruction/export, and records must be made available to the Regulator on request.
- 37. The licence holder must ensure that DCT staff conducting dealings:

- (a) have been informed of the risks associated with an exposure to the GMOs for persons ≥65 years of age or <5 years of age, or pregnant or breastfeeding person.
- (b) have a current seasonal influenza vaccination.

Work practices at Clinical trial sites

- 38. For the purposes of Condition 35, work practices and behaviours within a Clinical trial site must include, but are not limited to, the following:
 - (a) All DCT staff entering the isolation room must wear appropriate PPE including fitted N95 mask, gown, disposable face shield, gloves, and shoe coverings.
 - (b) During the clinical trial, access to the isolation rooms must be restricted to people authorised under this licence.
 - (c) Prior to exiting the isolation room, all PPE must be removed except for the N95 facemask; first the gown, then face shield and shoe covers and then the gloves. The door handle surface must be-Decontaminated and lastly, hands must be Decontaminated. The facemask must be removed in the hallway once the isolation room door is closed and disposed in the GMO waste bin.
 - (d) All PPE must be disposed in GMO-labelled bins.
 - (e) all work surfaces within the isolation room must be decontaminated after administration of the GMO;
 - (f) equipment used for dealings with the GMOs must be decontaminated after use;
 - (g) preparation and administration of the GMO must be conducted by suitably qualified and trained staff
 - (h) following the departure of the trial participant from the isolation room, all bedding and potentially contaminated surfaces must be Decontaminated.

Transport, storage and disposal of the GMOs

- 39. The licence holder must ensure that transport and storage of the GMOs within the DCT facility follows these sub-conditions:
 - (a) GMOs must be contained within a sealed, unbreakable primary and secondary container(s), with the outer packaging labelled to indicate at least:
 - i) that it contains GMOs; and
 - ii) that it contains biohazardous material as designated by a biohazard label; and
 - iii) instructions to notify the licence holder in case of loss or spill of the GMOs; and
 - (b) the external surface of the primary and secondary container must be Decontaminated prior to transport; and
 - (c) access to the GMOs is restricted to authorised persons for whom Condition 19 or Condition 20 has been met (i.e. the GMOs are within a locked unit or an area which has restricted access). This includes situations where containers are left for collection in a holding area, or left unattended prior to Decontamination; and

Note: All stored GMOs remain the responsibility of the licence holder.

(d) if the GMO is being transported or stored with a coolant (e.g. dry ice, liquid nitrogen or any other coolant) which will release a gas, a mechanism to allow the escape of the gas must be included. If water ice is used as a coolant then the outer packaging should be

constructed so as to prevent any leakage. All containers must be able to withstand the temperatures to which they will be subjected; and

Note: When transporting and storing with coolants, it is preferable for coolants to be used outside of the secondary container.

- (e) a consolidated record of all GMOs being stored under this condition is maintained and made available to the Regulator upon request.
- 40. The licence holder must ensure that all GMOs and waste reasonably expected to contain the GMOs are decontaminated:
 - (a) prior to disposal, unless the method of disposal is also a method of Decontamination; and
 - (b) before or upon suspension, cancellation or surrender of the licence, unless covered by another authorisation under the Act, or exported; and
 - (c) by autoclaving, chemical treatment, high-temperature incineration or any other method approved in writing by the Regulator.
- 41. Where transport is conducted by External service providers for the purpose of destruction, the licence holder must ensure that the GMO, or waste reasonably expected to contain the GMO, is disposed in bin labelled as containing GMOs and Decontaminated via autoclaving or high-temperature incineration.

Note: In the event of a spill during transport by an External service provider, compliance with relevant State or Territory legislation and regulations to manage clinical or biohazardous spills is sufficient.

Contingency plans

- 42. The licence holder must ensure that any person (other than a trial participant) exposed to the GMOs is offered prompt medical attention. The clinician must be provided with any relevant information about the GMO, including any drugs to which it may be effective or resistant.
- 43. In the event of an exposure to the GMOs and a person authorised under this licence displays influenza symptoms, the licence holder must ensure
 - (a) They are tested for the GMO currently used in the facility: and
 - (b) If the GMO is detected, they must isolate and be treated with antiviral medication.
- 44. If there is a spill or an unintentional release of the GMOs at the Clinical trial site or during transport, the following measures must be implemented:
 - (a) the GMOs must be contained to prevent further dispersal; and
 - (b) persons cleaning up the GMO must wear appropriate PPE; and
 - (c) the exposed area must be Decontaminated with an appropriate chemical disinfectant effective against the GMOs, such as 80% (v/v) ethanol.
 - (d) any material used to clean up the spill or PPE worn during clean-up of the spill must be Decontaminated; and
 - (e) the licence holder must be notified as soon as reasonably practicable.

Section 4 Reporting and Documentation

Note: The following licence conditions are imposed to demonstrate compliance with other conditions and facilitate monitoring of compliance by staff of the OGTR. Notices and reports may be emailed to OGTR.M&C@health.gov.au. A summary of notification and reporting requirements is provided at Attachment B.

- 45. At least 14 days prior to first administering each GMO, or a timeframe agreed to in writing by the Regulator, the licence holder must provide the Regulator with a Compliance Management Plan, specifying:
 - (a) the details of the GMO, including but not limited to the name of the variant,
 - (b) the number of trial participants enrolled,
 - (c) the type of studies conducted in association with the GMO (test of a vaccine, an antiviral drug or infectivity study).
 - (d) that the Institutional Biosafety Committee (IBC) associated with the site (if any) has been notified of the trial and have been consulted regarding site specific procedures;
 - (e) the expected date of first administration.
 - (f) how compliance with Condition 35 will be achieved in relation to preparation of participant Samples for analysis subsequent to administering the GMO.

Note: For the purpose of finding out whether the Act has been complied with, an OGTR inspector may, if entry is at a reasonable time, enter a facility occupied by the licence holder or a person covered by the licence and exercise monitoring powers.

- 46. The licence holder must notify the Regulator, in writing, no later than 30 days after:
 - (a) the final dose being administered; or
 - (b) the decision that no further trial participants will be treated at that site.
- 47. The licence holder must inform the Regulator as soon as reasonably possible:
 - (a) in the event of a loss or spill of the GMO;
 - (b) in the event of the exposure of a person other than a trial participant, to the GMO; and
 - (c) if a trial participant has not followed the procedures described in the instructions provided by the licence holder.
- 48. Upon request from the Regulator, the licence holder must provide any signed records or documentation collected under a condition of this licence, within a time period stipulated by the Regulator

Attachment A

DIR No: 210

Title: Clinical trials of controlled infection with seasonal Influenza viruses

Organisation Details Doherty Clinical Trials Ltd (DCT)

Postal address: 2 St Andrews Place

East Melbourne

Victoria 3002

GMO Description

GMOs covered by this licence:

Recombinant influenza virus A and B as listed in Table 1

Parent Organisms:

Common Name: Influenza Virus

Scientific Name: Influenza Virus A and B (Orthomyxoviridae family)

Modified traits:

Categories: Human therapeutic

Description: The GMOs are influenza viruses (A and B) produced through reverse genetics and are similar to

naturally circulating influenza viruses as described in Table 1.

Table 1. Nucleic acid responsible for conferring the modified traits

Genetic modifications	
Source, identity, nature of modification	Modified trait description

Rescue of infectious influenza viruses (GMO) from cloned cDNA. The genetically modified organism is genetically similar to the seasonal influenza virus, which is the parent organism. No deliberate changes are made to the genetic material in the GMO.

Purpose of the dealings with the GMOs:

The initial aims are to evaluate the safety and infectivity of recombinant seasonal human influenza viruses in healthy volunteers. These GM viruses will then be used to assess the effectiveness of therapeutic drugs or vaccine candidates to prevent and control influenza infection.

Trial participants and route of administration of the GMOs

In this clinical trial, healthy participants will receive a single dose of the GMOs intranasally using an atomiser fitted with a syringe.

Attachment B – Summary of reporting requirements*

Prior to the c	ommencement of the trial	Condition	Timeframe for reporting
(a)	npliance Management Plan for each Clinical trial site: the details of the GMO, including but not limited to the name of the variant,	45	At least 14 days prior to the first administration of the GMO at each Clinical trial site, or a timeframe agreed to in writing by the Regulator
	the number of trial participants enrolled, the type of studies conducted in association with the GMO (test of a vaccine, an antiviral drug or infectivity study).		
(d)	that the Institutional Biosafety Committee (IBC) associated with the site (if any) has been notified of the trial and have been consulted regarding site specific procedures;		
(e)	the expected date of first administration.		
(f)	how compliance with Condition 34 will be achieved in relation to preparation of participant Samples for analysis subsequent to administering the GMO.		
Information to be provided at any time during the clinical trial		Condition	
Any additional information related to the health and safety of people and the environment associated with the dealings covered by the licence, or any unintended effects of the dealings authorised by the licence		16(a), (c)	Immediately
Information r	elated to any contravention of the licence by a person be licence	16(b)	Immediately
Any relevant	conviction of the licence holder	17(a)	Immediately
	on or suspension of a licence or permit held by the licence a law of the Commonwealth, a State or a foreign country	17(b)	Immediately
•	circumstances that would impact the licence holder eet the licence conditions	17(c)	Immediately
	cation to the Regulator, in writing, of the final GMO n of the last trial participant at each Clinical trial site	46(a)	Within 30 days of the decision to cease GMO administration at that particular Clinical trial site.
Any loss or sp participant to	ill of the GMO, or exposure of a person other than the trial the GMO	47(a), (b)	As soon as reasonably possible
	ere a trial participant has not followed the procedures he instruction provided by the licence holder	47(c)	As soon as reasonably possible

Information related to the persons covered by the licence	9	Within a timeframe stipulated by the Regulator
Information related to the licence holder's ongoing suitability to hold a licence	18	Within a timeframe stipulated by the Regulator
Copies of signed and dated statements and training records	20	Within a timeframe stipulated by the Regulator
Any signed records or documentation collected under a condition of this licence	48	Within a timeframe stipulated by the Regulator

^{*} Notifications and documents to be sent to OGTR.M&C@health.gov.au