

# Regulation of cell and gene therapies in Australia

George Vuckovic
Scientific Evaluation Branch
Australian Government Department of Health, TGA
ARCS Annual Conference 2022





#### **Session Overview**

Regulatory pathways for gene therapy products in Australia

- Available regulatory pathways
- Project updates
- Recent inquiries and report





#### **Biological and Biological Medicines**

#### **Biological**

- tissue-based products
- cell-based products
- immunotherapy products containing human cells
- autologous human cells and tissue products (including stem cells)
- gene-modified cell therapies

#### **Biological Medicines (prescription medicines)**

- vaccines (that do not contain viable human cells)
- recombinant products
- plasma derived products (or that contain plasma derived products)
- gene-therapy vectors alone



# Regulatory pathways for gene therapy products

Type of gene therapy	Example	Regulatory pathway	Further information
Ex vivo (gene is delivered to cells outside of the body, which are then transferred back into the body)	CAR-T cells (human cells)	Class 4 biological	Australian regulatory guidelines for biologicals (ARGB)
In vivo (gene is transferred to cells inside the patient's body)	Adeno- associated virus	Prescription medicine	Australian Regulatory Guidelines for Prescription Medicines (ARGPM)



### **GMP** pathways for gene therapy products

Product type	Example Regulatory pathway	Further information	
Gene therapy vector	GMP clearance pathway (API)  MRA pathways available	Manufacturing therapeutic goods	
Biological product (human cells and tissues)	GMP certificate for manufacturing site (GMP clearance for Sponsor) This includes sites that conduct donor testing and release testing of biological product	Manufacturing biologicals  Australian code of good manufacturing practice for human blood and blood components, human tissues and human cellular therapy products	



### Pathways and provisions for gene therapy products

Pathway	Biological	Medicine
Standard review pathway	Yes	Yes
Priority review pathway	Consultation complete	Yes
Orphan status	No	Yes
Provisional review pathway	No	Yes
Comparable Overseas Regulator (COR)	No	Yes
Export-only pathway	Consultation complete	Yes



### Priority review pathway for biologicals

- Priority pathways are currently available for prescription medicines and medical devices
- Comparative Overseas Regulators already have similar pathways
- There is only one standard evaluation process for class 2-4 biologicals:
  - the standard 255 working day timeframe applies
  - an informal process is used for innovative and lifesaving biologicals to expedite the approval
- Calls from stakeholders to introduce a priority review process for biologicals:
  - submissions made to the House of Representative Inquiry (process for approval of new drugs and novel medical technologies in Australia)
  - recommendations from a TGA-commissioned MTPconnect report into regulatory framework for gene,
     cell and tissue therapies in Australia
  - submissions from stakeholder consultation into Priority Review pathway for biologicals closed April 2022



#### Objectives of the proposed pathway

- Faster access to innovative new biologicals for life-threatening conditions:
  - target timeframe three months shorter than the standard pathway
  - for medicines in 2020-21: standard pathway average. 169 days versus average. 131 days for priority pathway
- Alignment with other overseas regulators that offer expedited review for biologicals, such as the European Medicines Agency (EMA) Accelerated Assessment Pathway
- Consistency with other therapeutic goods in terms of the availability of an expedited pathway for products that represent breakthrough technologies
- A predictable and transparent mechanism to formalise a Priority Review process for sponsors and TGA



# Where we are up to?

#### **Stakeholder Consultation –**

- Priority Review pathway for biologicals:
  - feasibility
  - potential
  - eligibility criteria and
  - determination process.

### Stakeholder consultation

- In February 2022 the TGA initiated a public consultation process to determine if wider stakeholders:
  - support the introduction of a new Priority Review pathway for biologicals
  - support the proposed eligibility criteria for accepting applications for evaluation under the proposed pathway
  - support the process for determining eligibility
- The consultation closed in April 2022 and the feedback is currently being reviewed by the TGA.





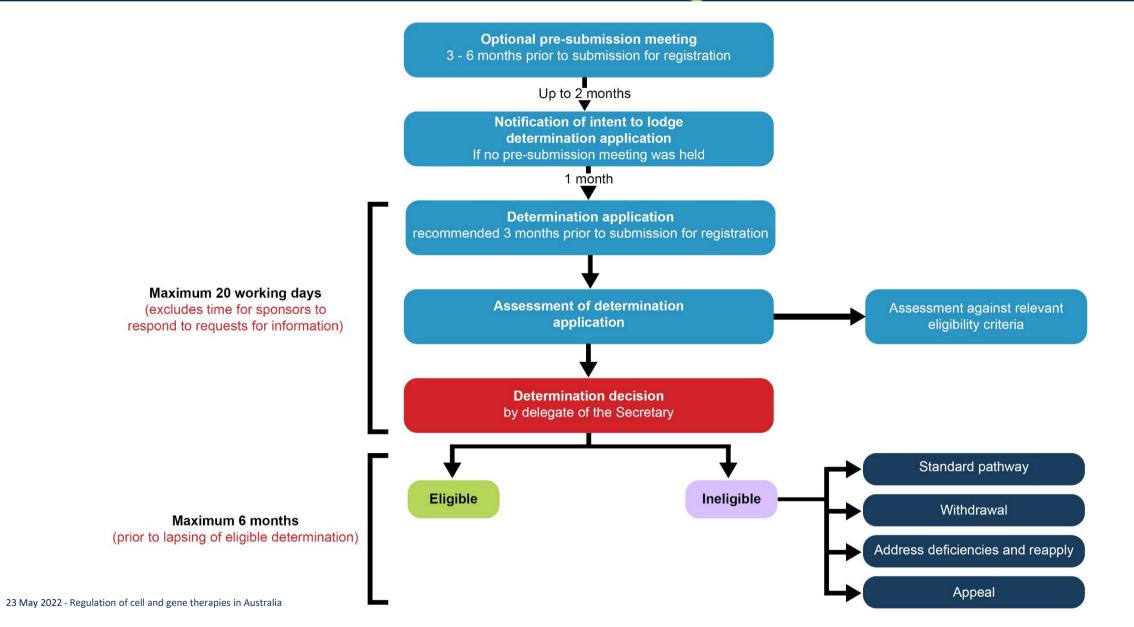
#### Potential eligibility criteria

- Criteria for accepting an application under a priority pathway considered similar pathways followed by COR's and the pathways implemented for both prescription medicines and medical devices
- There are four (4) potential eligibility criteria for the applications to satisfy prior to be accepted for evaluation under priority pathway
  - Criterion 1 New biological or new use
    - the biological is either a new biological for entry in ARTG or an already registered biological with a new use
  - Criterion 2 Life-threatening disease or seriously debilitating condition
    - the biological is to be used for treatment, prevention or diagnosis of a life threatening disease or seriously debilitating condition (as described by the TGA)



#### Potential eligibility criteria

- Criterion 3 Fulfils an unmet clinical need or clinically significant improvement over already approved therapeutic goods
  - no therapeutic goods that are intended to treat, prevent or diagnose the condition are entered on or included in the ARTG; or
  - there is substantial evidence demonstrating that the biological provides a clinically significant improvement in the safety or efficacy of the treatment, prevention or diagnosis of the condition compared to therapeutic goods already included in the ARTG
- Criterion 4 Major therapeutic advantage
  - there is substantial evidence demonstrating that the biological provides a major therapeutic advantage in patient outcomes when compared to existing treatments as defined by a magnitude well beyond the minimum threshold of clinical significance





# **Next steps:**

- Summarise the stakeholder feedback finalise and publish the outcome of the consultation
- Seek incoming Government's approval to make regulatory and/or legislative changes, as necessary – keeping key stakeholders informed
- Update internal documents and processes as required
- Communicate the changes to the stakeholders and publish information including guidance material, as required



#### **Export-only biologicals**

#### Consultation

Consultation closed in December 2021

#### We sought feedback on:

- potential options for the creation of a new regulatory pathway for export only biologicals
- suitability of current standards and Good Manufacturing Practice (GMP) requirements for biologicals for export only goods.

#### Feedback

- support for the introduction of an export-only pathway
- issues raised with both options presented in the consultation paper

#### Next steps

- agreement from Minister on final design of pathway
- amendments needed to both the TG Act and TG Regulations
- expected completion by Q4 2022





#### Recent inquiries and reports

- House of Representatives Inquiry into approval processes for new drugs and novel medical technologies in Australia (Zimmerman) covered:
  - the communication in the different regulatory processes, parallel regulation and reimbursement processes, the TGA-OGTR interface and clinical trial pathways, priority and provisional access pathways, research and development and rare diseases
  - report is available at <a href="https://www.aph.gov.au/Parliamentary\_Business/Committees/House/Health\_Aged\_Care\_and\_Sport/Newdrugs/Report">https://www.aph.gov.au/Parliamentary\_Business/Committees/House/Health\_Aged\_Care\_and\_Sport/Newdrugs/Report</a>
  - the government in process of responding to recommendations stemming from the Inquiry
- Cell, Gene and Tissue Regulatory Framework in Australia (MTP Connect):
  - a stakeholder engagement report on Advanced Therapies prepared for the Therapeutic Goods Administration
  - the government is in the process of responding to recommendations



# Questions

- Request for advice on biologicals
  - https://www.tga.gov.au/form/request-advice-biologicals
- Contact us
  - bloodandtissues@health.gov.au
  - biological.medicines@health.gov.au

