



# Novogen Limited

An emerging oncology drug  
developer with two clinical-stage  
programs

October 2017

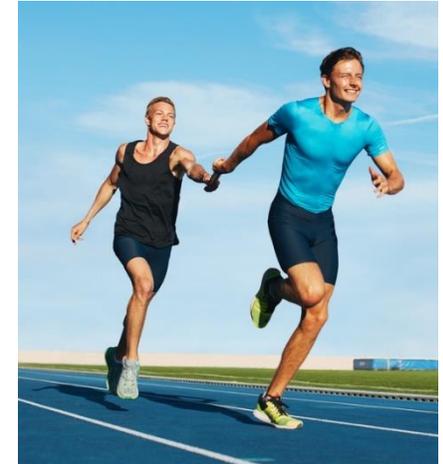
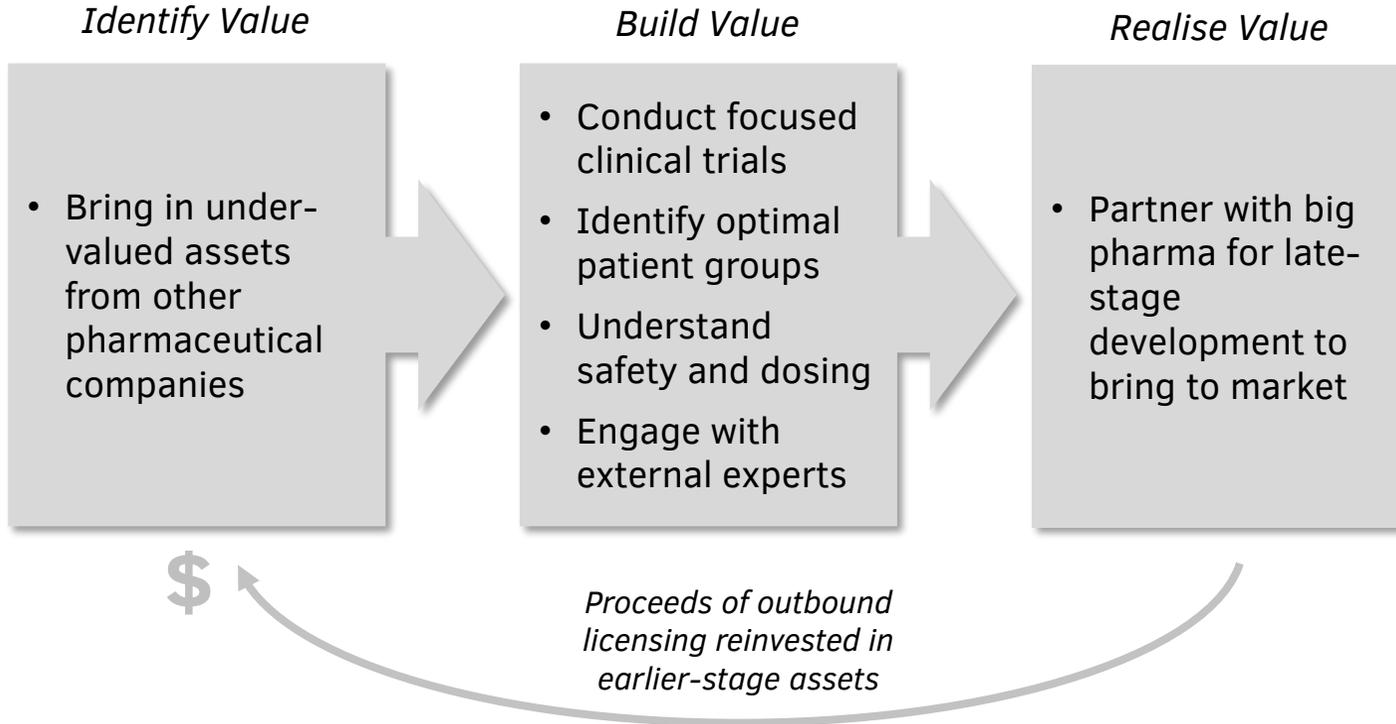
 ASX    NRT

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# Forward-Looking Statements

This presentation contains “forward-looking statements” within the meaning of the “safe-harbor” provisions of the Private Securities Litigation Reform Act of 1995. Such statements involve known and unknown risks, uncertainties and other factors that could cause the actual results of the Company to differ materially from the results expressed or implied by such statements, including changes from anticipated levels of customer acceptance of existing and new products and services and other factors. Accordingly, although the Company believes that the expectations reflected in such forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct. The Company has no obligation to sales, future international, national or regional economic and competitive conditions, changes in relationships with customers, access to capital, difficulties in developing and marketing new products and services, marketing existing products and services update the forward-looking information contained in this presentation.

# Novogen seeks to develop a focused portfolio of oncology assets, ultimately self-financing



**Reduce cycle time and accelerate returns: 2-4 years to get to value inflection**

**Improve portfolio strength: access the best global innovation**

**Mitigate risk: bring in assets which already partially de-risked**

# A strong team brings international experience in big pharma and biotech

## Management Team



**Dr James Garner**  
Chief Executive Officer  
& Executive Director

*Physician / MBA; Extensive drug development experience*



**Dr Gordon Hirsch**  
Chief Medical Officer

*Physician / MBA; 20 years of pharma industry experience*



**Dr Peng Leong**  
Chief Business Officer

*18 years of BD and investment banking experience*



**Kate Hill**  
Company Secretary

*Chartered accountant, and former audit partner at Deloitte*



## Scientific Advisory Board



**Professor Sir Murray Brennan**  
Emeritus Chairman of Cancer  
Surgery at Memorial Sloan Kettering  
Hospital, New York



**Dr Karen Ferrante**  
Former Chief Medical Officer at  
Millennium Pharmaceuticals



**Professor Peter Gunning**  
Head of School of Medical Sciences  
at University of New South Wales



**Professor Alex Matter**  
Former Global Head of Oncology  
Research at Novartis



## Board



**Iain Ross**  
Chairman

*Executive and Board roles in pharma and small biotech*



**Bryce Carmine**  
Deputy Chairman

*36 years executive experience in Eli Lilly*



**Steven Coffey**  
Non-Executive Director

*Chartered accountant with extensive governance experience*

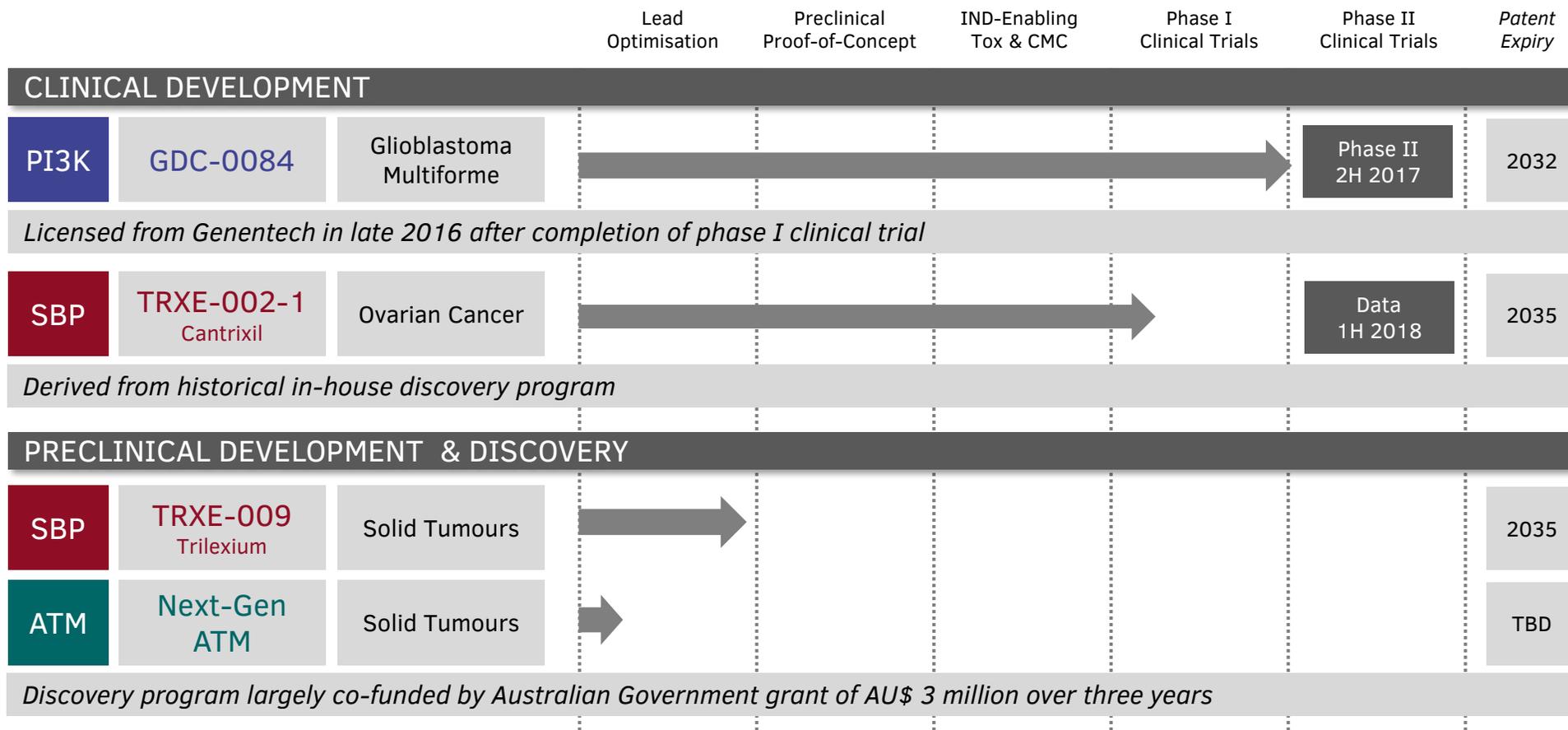


**Dr James Garner**  
Chief Executive Officer  
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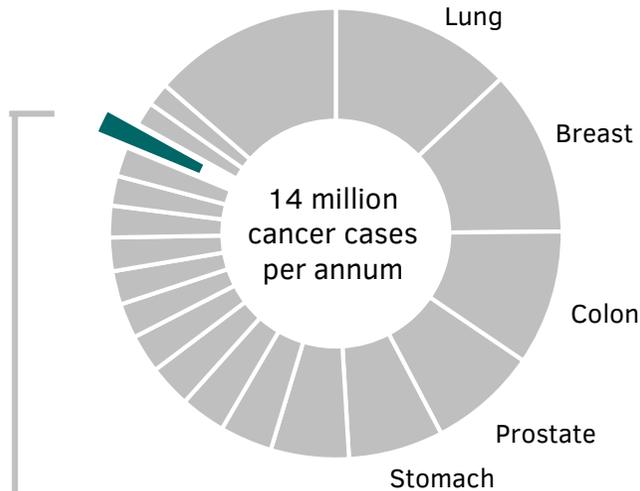
*Physician / MBA; Extensive drug development experience*



# Novogen has a well-diversified portfolio of assets, stretching from preclinical to mid-stage clinical



# Glioblastoma Multiforme (GBM) is the most common form of primary brain cancer



## Glioblastoma Multiforme

133,000 cases per annum worldwide

Indicative Market Opportunity

**US\$ 1 billion**

**No clear cause**  
or strong risk factors

**3-4 months**  
untreated survival

**12-15 months**  
average survival with treatment

Any age, but most common in  
**60s**

Five-year survival  
**3 – 5%**  
(breast cancer: 90%)

Most common drug treatment is temozolomide (Temodar®), used after surgery and radiotherapy

**Ineffective in approximately two-thirds of patients**

# Genentech's phase I study established a dose of 45mg and demonstrated acceptable safety

## Safety

- Phase I safety trial conducted by Genentech
- 47 patients enrolled with advanced glioma (grade 3/4)
- Most common adverse events were oral mucositis and hyperglycemia (common effects of PI3K inhibitors)
- No evidence of liver, bone marrow, kidney toxicity, or mood disturbances
- Data presented at American Society for Clinical Oncology annual meeting in Chicago, June 2016

## Efficacy Signals

**GDC-0084**

**Arresting  
Tumour  
Growth**

**40%**  
Achieved  
'stable disease'

**Potentially  
Delaying  
Progression**

**21%**  
Remained on study  
for >3 months

**Slowing  
Tumour  
Metabolism**

**26%**  
Showed 'metabolic  
partial response' on  
FDG-PET

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University of California, Los Angeles

THE UNIVERSITY OF TEXAS  
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Making Cancer History<sup>®</sup>



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 **Vall d'Hebron**  
Institut de Recerca

# Brain metastases from non-CNS tumors represent long-term upside potential

## Overview

- Estimated 100,000 - 200,000 cases/year in US
- ~10-25% adult cancer patients develop symptomatic brain mets
- Lung, breast and melanoma represent the majority of brain mets
- Frequency of brain mets increasing with better systemic control and longer survival
- Few (if any) drugs available to treat brain metastasis

## Example: Breast Cancer

- ~30-44% of metastatic HER2-positive metastatic breast cancer patients have brain metastases
- Brain metastases represent the cause of death in ~50% of HER2-positive breast cancer patients
- ~40-50% of breast cancer brain metastases have disordered PI3K pathway
- Therapies that are effective for the primary tumor (e.g. Herceptin) are often ineffective for brain metastases

## Next Steps

- Use GBM as a 'gateway indication', with the potential to explore registration post-phase II via accelerated approval / breakthrough designation, subject to clinical results
- Meanwhile, conduct preclinical exploration of brain metastases in partnership with identified researchers to demonstrate preclinical proof-of-concept and augment economic value of the asset

Source: E Lim & N Lim (2012). *Oncology*. 26(7):652-9; PK Brastianos, SL Carter, S Santagata, et al. (2015). *Discovery* 5:1164

# Investment Summary

## High-Quality Pipeline

- Lead asset in-licensed from Genentech after successful phase I

## Clear Development Plans

- Multiple value-driving catalysts between now and 2Q 2019

## Careful Risk Management

- Two active clinical programs providing diversification

## Proven Team

- Board and management brings international big pharma experience

## Sustainable Corporate Strategy

- Ambition to source additional assets and to aggressively seek partnering opportunities with big pharma

