

NOVOGEN



AusBio
Sept 2005

Patent protection to drive investment – The Novogen Story



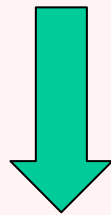
Biotechnology is IP driven



No IP = no business



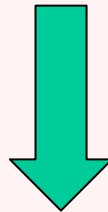
- Patents are the granted government monopoly to prevent others from infringing on your area...
They are not a right to do anything



legal and patent costs are necessary to defend your area



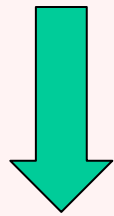
- Novogen spends 17% of its R&D budget on IP.
- This includes patent applications and litigation.



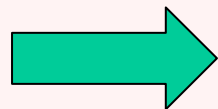
- For Novogen the cost of IP protection for 2004/5 was A\$ 1.7M



- The growth of the IP portfolio and IP protection is a reflection of



- the development stage of the company
- the maturity of the assets of the company



- the future of the company

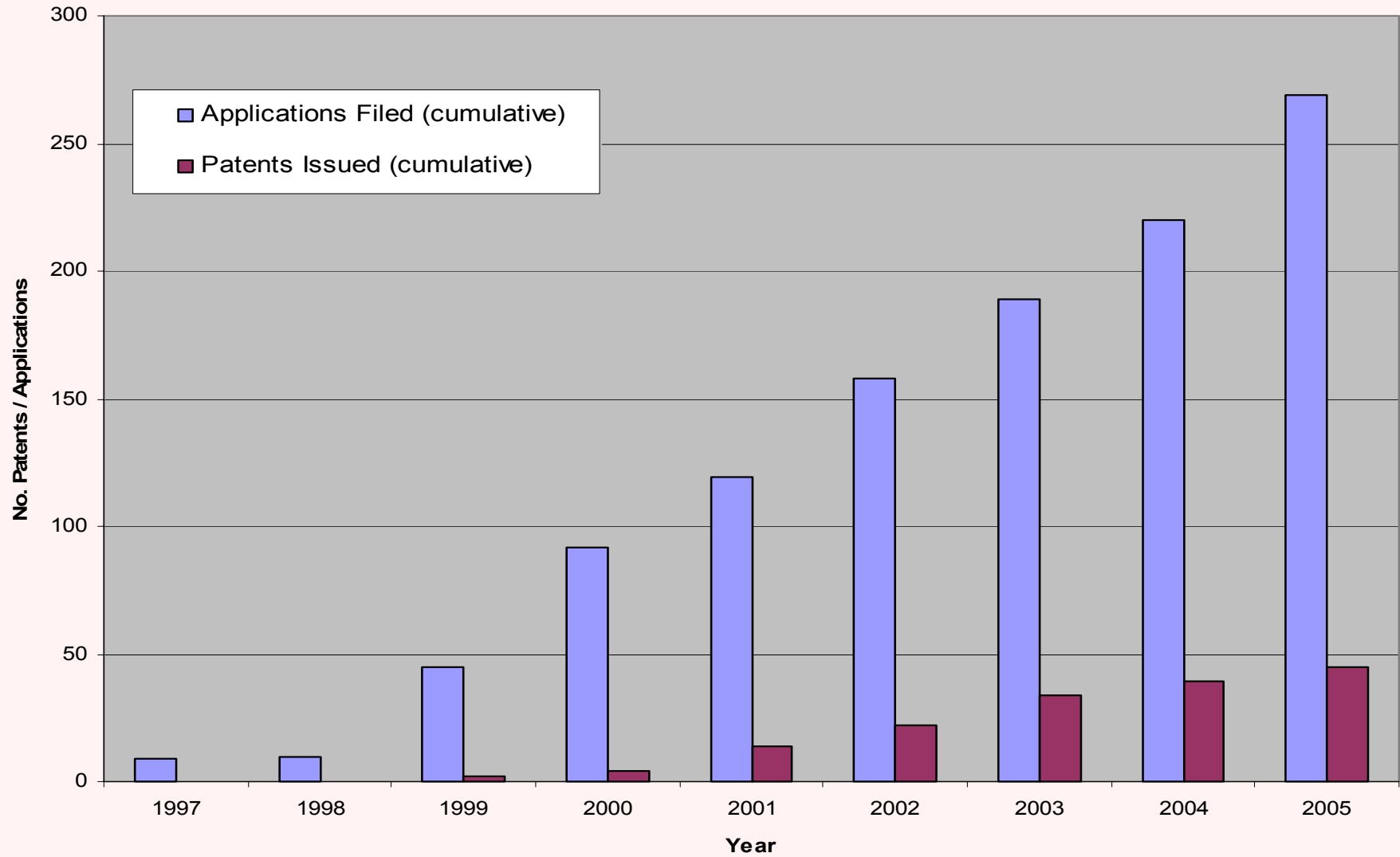


Patent portfolio

- 29 patent families
- 10 new patents granted in each of 2003/4 and 2004/5
- Total of 45 patents now granted world wide
- Over 200 patent applications now in the system
- Expanding portfolio



**Patent Summary (cumulative)
1997 - 2005**





- Novogen has thousands of potential New Chemical Entities covered under its patent portfolio
- Over 160 NCEs already synthesised

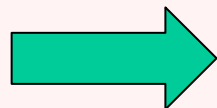
But

- Companies with poor IP may be demonstrating a poor pipeline of opportunities



The use of other companies' IP –

- Try to avoid it
- Its cheaper than cash but...
- It results in royalty stacking, and
- It mortgages the IP



compromises and devalues project

So its not just how much IP you have – its how much is yours.



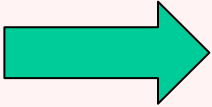
- Novogen approach is to try to avoid the use of other's IP
- Avoid use of other's formulations, compounds, synthetic pathways, or methods.
- If there is an IP blockage, preferable to take the long route around it rather than the quick route through with a licence.
- In-licences may result in too many hands in the royalty pool.



Litigation

- Patents are uncommon in the consumer area.
- Novogen has granted patents for consumer product formulation and uses.
- Litigated in the US against the GNC group
- Litigated in Canada against Jamison

Resulted in:

 cash payments to Novogen as compensation
reinstatement of our products on GNC shelves
European licence for Jamison's supplier

- More litigation in Canada and the US current.



Licensing

- *Australia* – Blackmores – on soy isoflavone product sales for menopause
- *Europe* – Melbrosin – on red clover isoflavone products
- *Canada* – Jamison – on red clover isoflavone products
- *World* – ADM – on soy isoflavone products




Licensing

- “Surplus” soy IP licensed to the DuPont Group for upfront fees plus equity plus annual payments (licence now transferred to ADM).

- Payments received to date: (A\$million)

1997	15.8
1998	3.6
2000	.1
2001	.2
2002	1.7
2003	2.3
2004	.1
2005 to date	1.8

 \$26.6M



Intellectual property drives the corporate structure

- Company is organised and managed along IP lines:
- Basic invention and development of IP
- Clinical development anti-cancer property
- Consumer property –patents, trade marks and designs
- Glucan IP



Novogen Corporate Structure

Novogen Limited NVGN

Pharmaceutical

- **Novogen Research Pty Ltd:**
Australia
USA

Marshall Edwards, Inc. (MSHL)

- Anti-cancer company conducting clinical trials of Phenoxodiol
- LSE AIM (MSH)
NASDAQ (MSHL)

Consumer Products

- **OTC Division:**
 - Australia
 - UK
 - USA
 - Canada
 - Netherlands
- + Production

Glycotex, Inc.

- Glucan wound healing technologies



The value of 'hidden' IP

- It was apparent that the property around the anti-cancer drug phenoxodiol was inherently more valuable than the stock market pricing of the whole company.
- Solution – liberate the IP
- Result - Marshall Edwards Inc (87% owned) has been priced higher than the whole company (which includes the ownership of Marshall Edwards Inc)
- Result for shareholders –
 - before: 1 company priced at A\$480M (as at Sept '05)
 - after: 2 companies priced at A\$1000M in total (Sept '05) *
- The value was always there, but the price placed on the IP increased by over A\$500M *

** As a clarification of the statements made on 2 September, 2005 - this is not intended to be a valuation of Novogen but to reflect the individual market capitalisation of each company*



Commercialisation

- If the object of a program is to out-license - e.g. biotech to large pharmaceutical company – the IP position must be solid.
- The IP is the subject of the sale even if it looks like a drug or a device that is being sold.
- The area of activity is biotechnology
- The action is drug or device development, but



The business is Intellectual Property

A woman with short blonde hair, wearing a white lab coat, is focused on her work in a laboratory. She is looking down at something in her hands. The background is slightly blurred, showing other lab equipment and possibly other people. The entire image has a blue overlay.

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(NRT)

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Novogen