



Silencing Genes for Life

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*This presentation contains **forward looking statements that involve risks and uncertainties**. Although we believe that the expectations reflected in the forward looking statements are **reasonable at this time**, Benitec can give **no assurance that these expectations will prove to be correct**. **Actual results could differ materially from those anticipated**. Reasons may include risks associated with drug development and manufacture, risks inherent in the regulatory processes, delays in clinical trials, risks associated with patent protection, future capital needs or other general risks or factors.*

Benitec Intellectual Property Portfolio

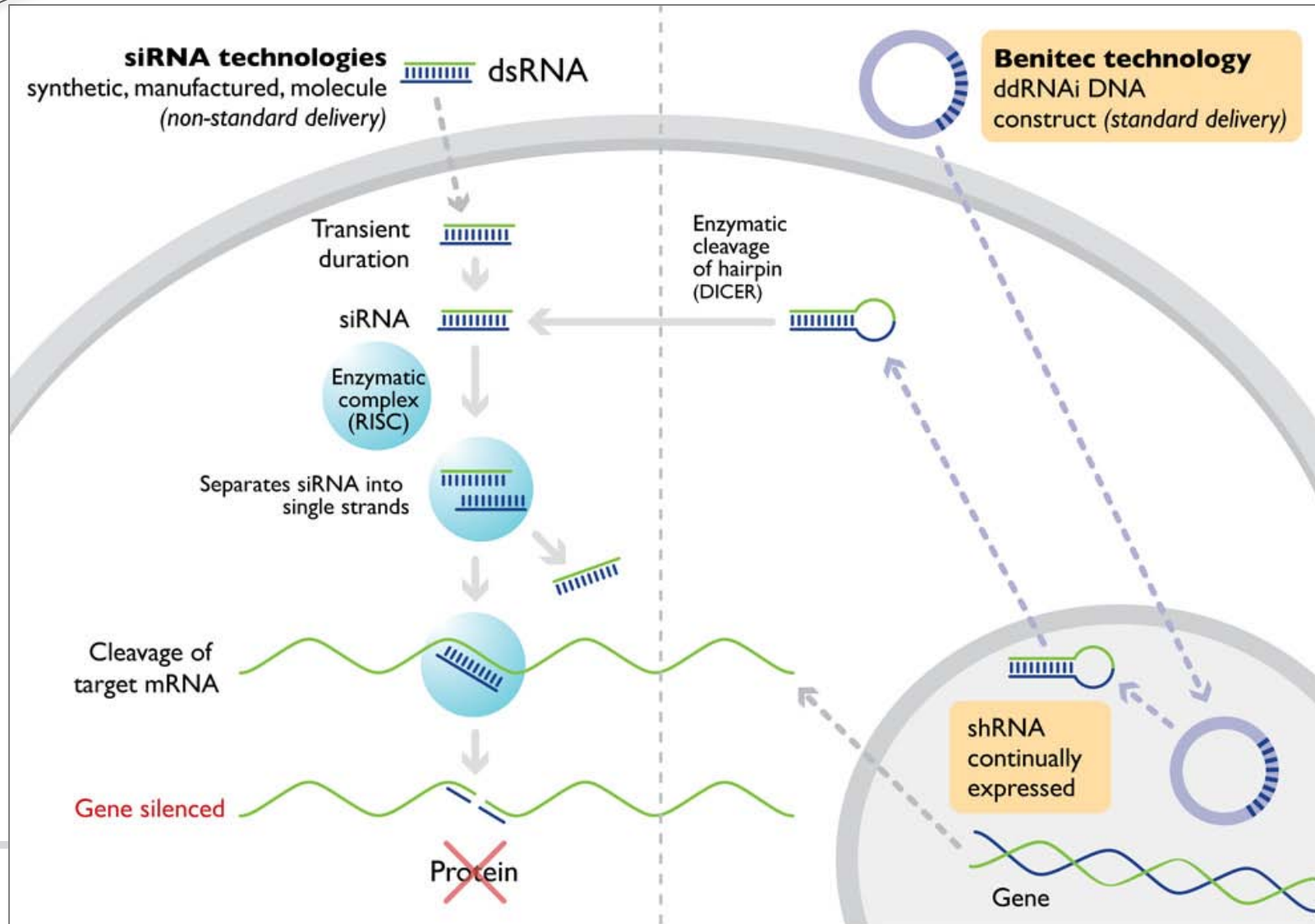


Benitec has an extensive patent estate for the ddRNAi product that spans key pharmaceutical markets with coverage through 2030 with additional exclusivity anticipated for biologic upon launch.

Benitec Patent Portfolio			
Description	Patent Number	Region	Date of Issue
*Genetic constructs for delaying or repressing the expression of a target gene	6,573,099	US	06/03/2003 Re-issue 2011
*Synthetic genes and genetic constructs comprising the same (Graham Family)	7,754,697	US	07/13/2010
	7,855,071		12/21/2010
*Control of gene expression	Various	Various, including Australia, UK, Canada, Japan	Various
Expression cassettes for simultaneous delivery of RNAi agents	7727970	US	06/01/2010
	05727680.0	EU	05/04/2011
	2005222084	Australia	09/22/2005
	550284	New Zealand	04/30/2009
RNAi expression constructs (single promoter)	7803611	US	09/28/2010

* Exclusively licensed from the Commonwealth Scientific and Industrial Research Organization (CSIRO)

Transformational gene silencing technology: DNA-directed RNAi



ddRNAi addressable diseases: a plethora of targets



Potential to block 22,000+ human genes and infectious disease organisms genes

- Cancers
 - lung, breast, liver
- Neurological diseases
 - huntingtons, dementia, glioblastoma
- Infectious diseases
 - HIV/AIDS, Hep B, Hep C , TB
- Autoimmune disease
 - Rheumatoid arthritis
- Other diseases
 - Duchenne muscular dystrophy, cardiovascular, asthma

Platform to Product Strategy: Low Hanging Fruit & Leverage



Pick disease targets with:

- **Large \$ potential markets**
- **Unmet need**
- **Clearly identified gene targets**
- **Low regulatory hurdles**
- **Anticipated faster path to market**

Platform to Product Strategy: Low Hanging Fruit & Leverage



- **Leverage leadership in ddRNAi through strategic partnering.**
- **Your Partners:**
 - **Experts in their disease fields**
 - **Generate new product IP**
 - **Share costs & IP**
 - **Assist to revive your patent estate**

ddRNAi Programs: Chronic Cancer Pain



Benitec is collaborating with TetraQ (Uni Queensland) researchers to develop a ddRNAi-based therapeutic to silence a gene expressing a key molecule in the spinal cord that is responsible for mediating pain to the central nervous system

Cancer Pain Program

Rationale:

- Pain is treated the same way as it was 40 years ago, with opioids the major treatment option. A new focus and novel approach to pain relief is needed.
- Benitec has developed their gene silencing technology for the treatment of pain in terminal cancer patients
- Unlike current treatments for pain, this product is long-lasting and has the potential to cause only minimal side effects.

Market Size:

- Opioid sales increased by 627% over the last 10 years.
- 65% of all cancer patients experience pain - **80% affected in terminal stage cancer, 30% suffering from breakthrough pain.**
- The global market for cancer-associated pain products is valued at \$2 billion. Annual cost of all chronic pain in the US is \$100 bn.

Collaborator: TetraQ

Status:

Two target molecules have been identified for this approach and proof of concept of has been demonstrated pre-clinically Working with researchers to gather data to be able to conduct a clinical trial on terminally ill cancer patients.

"No one med is overwhelmingly efficacious for neuropathic pain. In studies it's about 30% of the time that you're going to target that pain effectively. It's usually polypharmacy, which also is a challenge." —Palliative Care Specialist

"This product sounds exciting, if you can turn off the protein that is being produced that is turning the cell on or basically sensitizing it, you know it has so much more potential, not only for cancer pain but other types of neuropathic pain, even for opioid-induced hyperalgesia." —KOL in Pain Research

ddRNAi Programs: Drug Resistant NSCLC



Benitec is collaborating with University of New South Wales researchers to develop a ddRNAi-based therapeutic targeting a gene associated with chemotherapy resistance.

Non-small Cell Lung Cancer (NSCLC)

Rationale:

- β III-tubulin has been shown to be associated with drug resistance in non-small cell lung cancer (NSCLC).
- Silencing β III-tubulin using ddRNAi increases the killing of NSCLC cells by chemotherapy agents.

Market Size:

- Lung cancer is the leading form of cancer worldwide in terms of incidence and mortality.
- NSCLC account for >80% of all lung cancers and has a high mortality rate due to rapid development of resistance to chemotherapy drugs.

Collaborator:



Status:

- Researchers are using Benitec's technology to develop a ddRNAi-based therapy to overcome chemotherapy resistance in NSCLC cells.

In vitro results show highly effective silencing of β III-tubulin and effective targeting of NSCLC cells with the ddRNAi construct.

ddRNAi Programs: Hepatitis B (HBV)



The ddRNAi technology is also being developed for HBV under collaboration with Biomics.

Hepatitis B (HBV)

Rationale:

- Successful ddRNAi delivery to the liver has been demonstrated.
- The targeted enzyme is key to HBV replication.
- The strategy provides treatment of the existing infection and long-lasting protection from re-infection.

Market Size:

- There are about 400 million people worldwide with chronic HBV infection.
- Carriers of HBV are up to 300 times more likely to develop liver cancer than non-carriers, and HBV causes 60-80% of the world's primary liver cancers.

Collaborator:



Status:

- Benitec is working with Biomics to evaluate RNAi candidates for hepatitis B silencing for preclinical testing and a China-based clinical trial.

Of 5000 potential sequences, 14 RNA sequences have been identified by Biomics that provide $\geq 70\%$ knockdown of HBV gene mRNA.

ddRNAi Product Development Timeline



Benitec has a pipeline of ddRNAi-based therapeutics targeted for indications where their technology provides a significant competitive advantage.

Indication	Discovery	Pre-clinical	Human Clinical	Collaborator/ Licensee	Collaboration Status
Cancer-associated pain				University of Queensland (Australia)	Benitec has contracted with TetraQ to generate data to be able to conduct a clinical trial on terminally ill cancer patients suffering from pain.
Drug resistant lung cancer				University of New South Wales (Australia)	Researchers are collaborating with Benitec to develop a ddRNAi-based therapy to overcome chemotherapy resistance in non-small cell lung cancer.
Hepatitis B				Biomics (China)	Benitec is working with Biomics to develop ddRNAi candidates for hepatitis B silencing for preclinical testing and a China-based clinical trial.
Hepatitis C				Tacere (Pfizer) (US)	Benitec's preclinical hepatitis C program was outlicensed to Tacere in 2006, and then outlicensed by Tacere to Pfizer in 2008. In 2010, Pfizer exercised an option to further develop and commercialize Tacere's Hepatitis C compounds as a result of favorable primate and mouse efficacy and toxicity studies. The companies observed no maximum tolerated dose, no safety signals, viral inhibition and >90% penetration of human hepatocytes.



Benitec funded programs



Partnered program

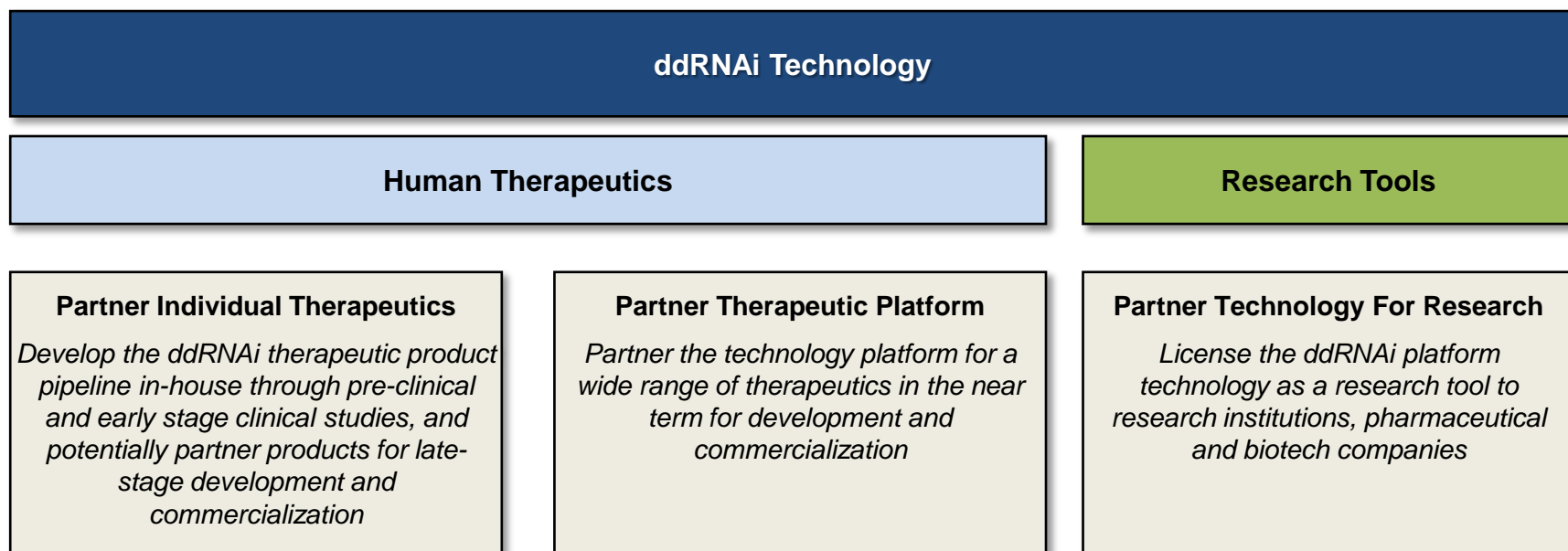


Licensed program

Benitec Corporate Strategy to Build Value



Benitec has a value-building strategy based on to partnering its proprietary ddRNAi technology with pharmaceutical and biotechnology companies both as research tools and as potential therapeutics.



Partnering and Licensing

Therapeutic use of ddRNAi



Research reagent



Research freedom to operate



Cross-licensing

Carnegie Institute



Benitec Senior Leadership Team



Benitec's management team has demonstrated experience and expertise in developing and licensing novel therapeutic technology.

CEO

Peter French, PhD

Cell and molecular biologist with an MBA in Technology Management. Founder of stem cell storage company Cryosite Ltd, launched six new probiotic-based products with Probiomics.

CFO, Company Secretary

Greg West

Chartered Accountant, Director and audit committee chairman of ITC Ltd, IDP Education Pty Ltd, Education Australia Ltd, and Sydney International Film School Pty Ltd.

Board of Directors

Peter Francis LLB Grad Dip (Intellectual Property) Non- executive Chairman

Partner at Francis Abourizk Lightowlers (FAL), a legal specialist in the areas of intellectual property and licensing and provides legal advice to a large number of corporations and research bodies.

Mel Bridges BAppSc FAICD Non-executive Director

More than 30 years experience in the global biotechnology and healthcare industry. During this period, he founded and managed successful diagnostics, biotechnology and medical device businesses.

John Chiplin PhD Non-executive Director

His most recent accomplishment was the corporate reengineering of Arana Therapeutics, a world leading Antibody developer, which resulted in the acquisition of the company by Cephalon for a significant premium to market.

Iain Ross BSc ChD Non-executive Director

Over 30 years experience in the international life sciences sector. Following a career with Sandoz, Fisons, Hoffman La Roche, and Celltech he has undertaken and had input to a number of company turnarounds and start-ups

Benitec Summary



Business Overview

Based in Sydney, Australia, Benitec is a biopharmaceutical company developing a **novel DNA-directed RNA interference (ddRNAi) platform** for therapeutic use. The company is listed on the Australian stock exchange (ASX: BLT) with a market cap of ~AU\$25M and AU\$7M cash at hand.

Business Strategy

Focus on large markets, lower reg. hurdles & speed to market. The novel, **proprietary ddRNAi platform** is currently being developed across multiple therapeutic areas where there is a **significant unmet need** including oncology, neuropathic pain, and hepatitis. Potential 22,000+ human gene and disease causing organism gene targets.

Product Strategy

The lead product in development internally at Benitec is targeted to terminal patients with cancer for the **treatment of neuropathic pain** and has the potential for commercialization with other painful conditions. Benitec also has in-house programs in lung cancer and hepatitis B, and a partnered program in hepatitis C.

Intellectual Property

Benitec has a **dominant and robust global patent portfolio** protecting platform technology with potential **patent coverage extending through 2030**.

Management Team

Benitec has a strong management team with **deep scientific and clinical resources** and extensive experience with the commercialization of biological intellectual property.

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