

ASX ANNOUNCEMENT

BENITEC ROADSHOW INVESTOR PRESENTATION

Sydney Australia, 15 March 2014 Benitec Biopharma Limited (ASX: BLT) is pleased to release a copy of the presentation that Dr Peter French, CEO and Managing Director will deliver to investors during March.

The updated presentation:

- Provides additional detail on the recent capital raising undertaken and how funds will be applied to transforming Benitec to a company with multiple clinical assets, and
- Outlines the case for shareholders to approve the second tranche of shares at the upcoming general meeting on 10th April at 11:00am.

For further information, please contact the persons outlined below, or visit the Benitec website at www.benitec.com.

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About Benitec Biopharma Limited:

Benitec Biopharma Limited is an ASX-listed biotechnology company (ASX Code: BLT) based in Sydney, Australia. The company has a pipeline of in-house and partnered therapeutic programs based on its patented gene-silencing technology, ddRNAi. Benitec is developing treatments for chronic and life-threatening human conditions such as Hepatitis C, Hepatitis B, wet age-related macular degeneration, cancer-associated pain, drug resistant lung cancer and oculopharyngeal muscular dystrophy based on this technology. In addition, Benitec has licensed ddRNAi technology to other biopharmaceutical companies who are progressing their programs towards the clinic for applications including HIV/AIDS, retinitis pigmentosa and Huntington's disease. For more information on Benitec refer to the Company's website at www.benitec.com.

Investor briefing: capital raising

March 2014



Forward looking statement



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 Biopharma 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.

This document does not constitute an offer, solicitation or recommendation in relation to the subscription, purchase or sale of securities in any jurisdiction. Neither this presentation nor anything in it will form any part of any contract for the acquisition of securities.



2013 Highlights

- ✓ NIH's Recombinant DNA Advisory Committee (RAC) provides positive recommendation on TT-034 trial design for Hepatitis C
- ✓ Agreement with Regen Biopharma brings total out-licensing deals to four in the last two years
- ✓ Licensee Calimmune commences Phase I/IIa clinical trials in HIV
- ✓ \$10.7 million capital raise secures funding for next stage of lead programs
- ✓ 25:1 Share consolidation
- ✓ Market Cap increased to > \$50 Million post the capital raising
- ✓ Expansion of Benitec's Board with appointment of Dr Peter French and Kevin Buchi
- ✓ IND for TT-034 application completed



2014 company highlights to date

- Phase I/IIa TT-034 clinical trial recruitment commenced
- Secured \$31.5 m in commitments from global institutional investors
- Funding delivers the ability to:
 - Allow Benitec to take HCV trial to completion of Phase IIb – where optimal shareholder value can be derived
 - Transform Benitec to a company with multiple clinical assets

- Market value grown from A ~\$27m to ~\$200m in 12 months

- Commencement of Phase I/IIa trial in HCV program (TT-034)





Company Financial Snapshot

Key Metrics	March 2013*	March 2014
Share Price as at close of trade 11 March:	AUD \$0.30	AUD \$1.85
Market Capitalisation (fully diluted) as at 11 March:	\$13.12 million	\$185.21 million
Issued Securities as at 11 March:		
Ordinary shares	<u>43,716,840</u>	<u>100,115,987</u>
Options	<u>10,279,331</u>	<u>18,477,742</u>

* Reflects post consolidation data

Benitec Biopharma Limited (ASX Code: BLT) (12 Month Share Price Performance)



24th February - announced AUD\$31.5M capital raise to US institutional investors



Fund raise



➤ Summary

- A \$31.5m committed by 10 US and international institutional biotech and healthcare funds
- ✓ First tranche (T1) of A \$15.748 m automatically approved, under listing rule 7.1A
- Second tranche (T2) of A \$15.748 m to be approved at a General Meeting, to be held in Sydney

GM - key dates

- Voting entitlement date: 8 April at 7pm AEST
- Proxies received by 8 April at 11am AEST
- General meeting held 10 April at Grant Thornton Australia Level 17, 383 Kent St, Sydney on 10th April at 11 am

➤ Key investors

RACapital



PERCEPTIVEADVISORS

SPECIAL SITUATIONS FUNDS



Raise structure

Tranche	Value	Activity	Status
T1	\$15.748 m	✓ Secured capital ✓ Issued shares	Completed
T2	\$15.748 m	✓ Commitment secured • Tranche approved by existing shareholders • Shares issued	Completed Subject to shareholder approval Subject to shareholder approval

Long term support by major institutions for T1 issued capital relies upon shareholder approval of T2.

T2 will secure Benitec's ability to advance its pipeline programs towards and into the clinic, in order to realise shareholder value.



Benitec's program comparison: T1 versus T2



Use of funds: activity pipeline



Indication	Proof of Concept	Pre Clinical	Phase I/IIa	Phase IIb
Hepatitis C	[Grey arrow from Proof of Concept to Phase I/IIa] [Red arrow from Phase I/IIa to Phase IIb]			
Hepatitis B	[Grey arrow from Proof of Concept to Pre Clinical] [Red arrow from Pre Clinical to Phase I/IIa]			
Age-related macular degeneration	[Grey arrow from Proof of Concept to Pre Clinical] [Red arrow from Pre Clinical to Phase I/IIa]			
Lung Cancer	[Grey arrow from Proof of Concept to Phase I/IIa]			
Pain & OPMD	[Red arrow from Proof of Concept to Phase I/IIa]			
Platform development	[Red arrow from Proof of Concept to Pre Clinical] [Red arrow from Pre Clinical to Phase I/IIa]			
Other	[Red arrow from Proof of Concept to Phase I/IIa]			

 Activities proposed under Tranche 1 funding plan
 Activities proposed under Tranche 2 funding plan



T1 versus T2



If only T1 is approved...

- The first \$15 million will be used mainly to advance AMD and hepatitis B through *in vivo* pre clinical studies, and the lung cancer and hepatitis C through to the end of Phase I/IIa trials
- A Phase IIb hepatitis C trial will not be possible
- Pain, OPMD, platform technology development and research into other targets will not be able to be advanced;
- Lung cancer application will be taken through a phase I/IIa clinical trial.

If both T1 and T2 are approved

- TT-034 will be able to **complete Phase IIb** clinical trial in Hepatitis C
- Pending successful trial completion, the program will be significantly more valuable to Benitec for potential pharma company partnering
- AMD and Hepatitis B applications will be advanced towards and potentially into clinical trial stage.
- Pain and OPMD will be progressed; and platform technology development and research into other applications will commence

The \$31.5 million placement will allow Benitec to complete Phase IIb trials in HCV, while also delivering value through other clinical programs.



Hepatitis C

Lead Program: TT-034



- 170 Million people globally infected with Hepatitis C
- 1 in 100 Americans infected¹
- Anticipated to be an \$18 Billion therapeutic market by 2017²

➤ **TT-034 is an RNAi therapeutic that is intended to achieve complete elimination of virus with a single infusion**

- DNA construct delivered via an AAV8 vector
- Continuously produces replenishing pool of shRNAs for over 180 days
- shRNA target three separate, well conserved regions of HCV RNA genome
- Capability for near complete liver transduction
- Very low toxicity in animal studies

➤ **Competitive advantages**

- Eliminates long treatments and patient compliance issues
- Potential for combination with small molecules therapies
- Potential pricing and compliance would be attractive to healthcare providers

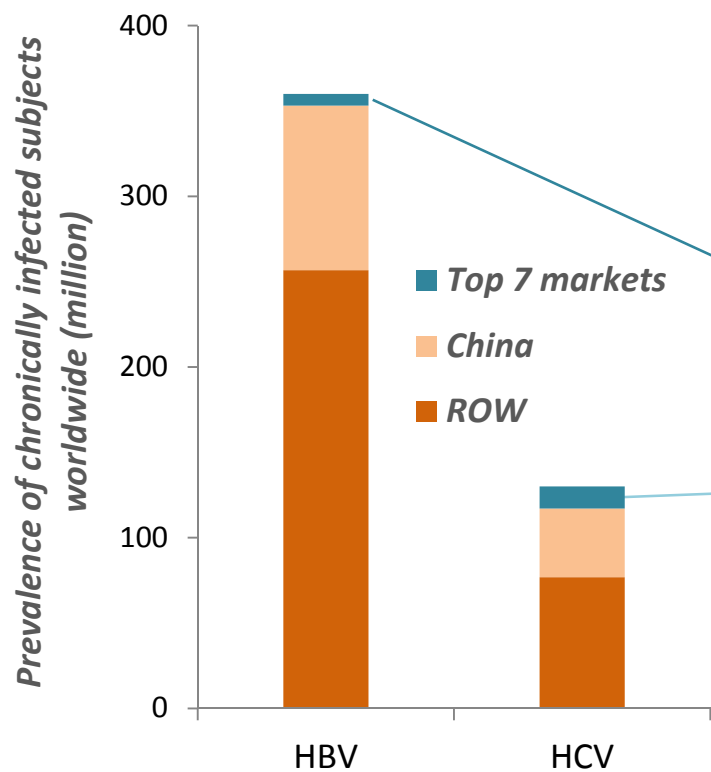


Hepatitis C and B

Significant Commercial Opportunities

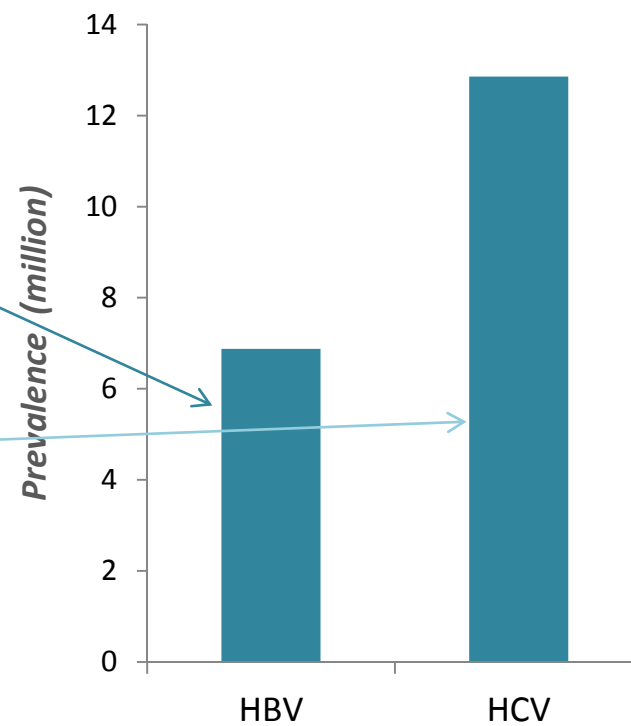
Worldwide, HBV is three times more prevalent than HCV

Chronic HBV and HCV prevalence worldwide



In the top Western markets HCV is two times more prevalent than HBV

HBV and HCV prevalence in top 7 markets*





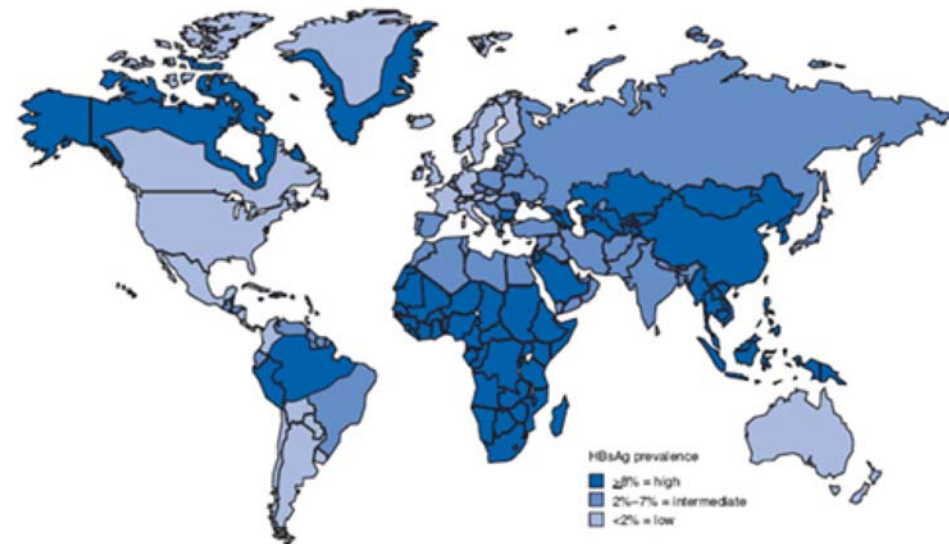
Chronic Hepatitis B market overview

Despite the existence of a vaccine against the HBV, the prevalence rate in the population remains high. HBV infection ranks second only to tobacco as a known human carcinogen.

Chronic HBV Infection Incidence and Prevalence

- 2,000 million people alive today have been infected with HBV at some time in their lives and of these about **350 million remain chronically infected** and become carriers of the virus.
- In the USA alone there are over 1.25 million people living with the consequences of chronic active HBV, and over 60,000 new cases per year.
- Persons with chronic HBV infection have a 12-300 times higher risk of **developing hepatocellular carcinoma** than non-carriers and globally HBV causes 60-80% of the world's primary liver cancers.
- Every year about 25% of the over 4 million acute clinical cases (i.e. 1 million people worldwide) **die from chronic active hepatitis, cirrhosis or HBV-induced liver cancer**.

Geographic distribution of chronic HBV infection



Approximately 1 in 3 people get infected with HBV during their lifetime

Source: http://world-children.org/hepb/silentkiller_eng2.htm



The rationale for RNAi in HBV Therapy

Of the emerging novel antiviral treatment modalities currently being developed for chronic hepatitis B, RNAi is one of the most promising.

HBV is susceptible to RNAi because it replicates via an RNA intermediate and a large number of studies have described an antiviral effect of RNAi against HBV *in vitro* and *in vivo**.

Exclusion of potentially toxic off-target effects and also development of efficient methods of hepatotropic nucleic acid delivery are important prerequisites before RNAi can be used successfully for anti-HBV treatment.

*e.g. McCaffrey et al, 2003. Inhibition of hepatitis B virus in mice by RNA interference. *Nature Biotechnol* 21(6):639-44.

Benitec's ddRNAi Platform Technology

- Benitec's novel ddRNAi technology allows for **long-term gene silencing from a single treatment**.
- The technology can be targeted to silence a **specific gene or multiple selected genes**.
- Unlike current treatments for chronic HBV infection, this product is long-lasting and has been shown to have the **potential to be curative with minimal toxicity and eliminate the risk of inducing viral drug resistance**.
- The ddRNAi product is **delivered through an AAV-based vector construct**, which specifically targets the liver where it transfects almost 100% of the hepatocytes.

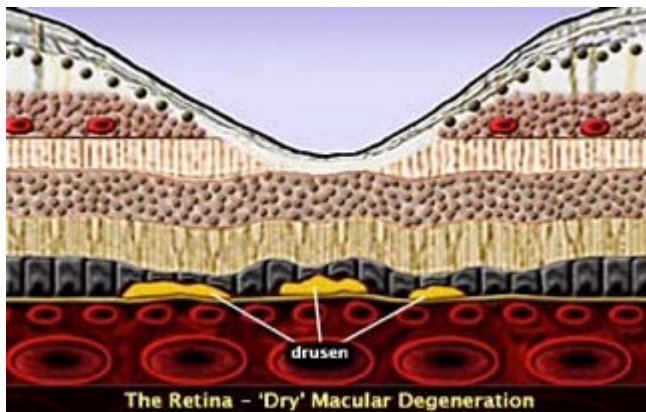


Age related Macular Degeneration (AMD)

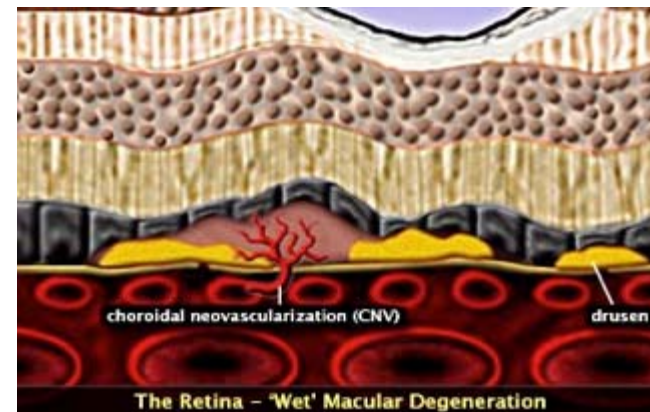
AMD is the leading cause of irreversible vision loss in the US – estimated 1.75M people

Age related – 10% of people between 60 and 75 and 25% of people >75 years old

In Dry AMD, drusen deposits start to degrade vision



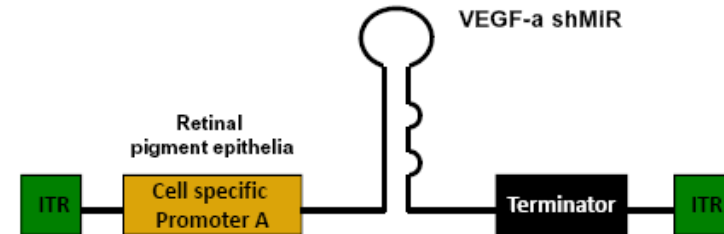
In Wet AMD, an inflammatory response sets off a cascade of events that further degrades vision through neovascularization





Ophthalmology program overview

- TT-211 – An AAV-encapsidated construct that expresses a single shRNA modeled into a miRNA backbone that inhibits the expression of VEGF-A for the treatment of Wet AMD and DR



- TT-231 – A follow-on product in which an AAV-encapsidated construct expresses three shRNA modeled into three miRNA backbones and inhibit the expression of Target V, Target P, and Target C for the treatment of wet and dry AMD





Unmet needs in non small cell lung cancer treatment

- Lung cancer is the most common cancer worldwide
- With around 65% of patients dying within one year of diagnosis, non-small cell lung cancer is the leading cause of cancer-related deaths worldwide (1.3 million deaths p.a.)
- The rapid emergence of drug resistance cancer cells provides a major challenge in the treatment of non small cell lung cancer.
- The efficiency of existing chemotherapeutic agents is restricted by dose limiting systemic toxicity. A significant opportunity therefore exists for treatments that enhance the effect of therapeutic drugs and are capable of reducing side effects.



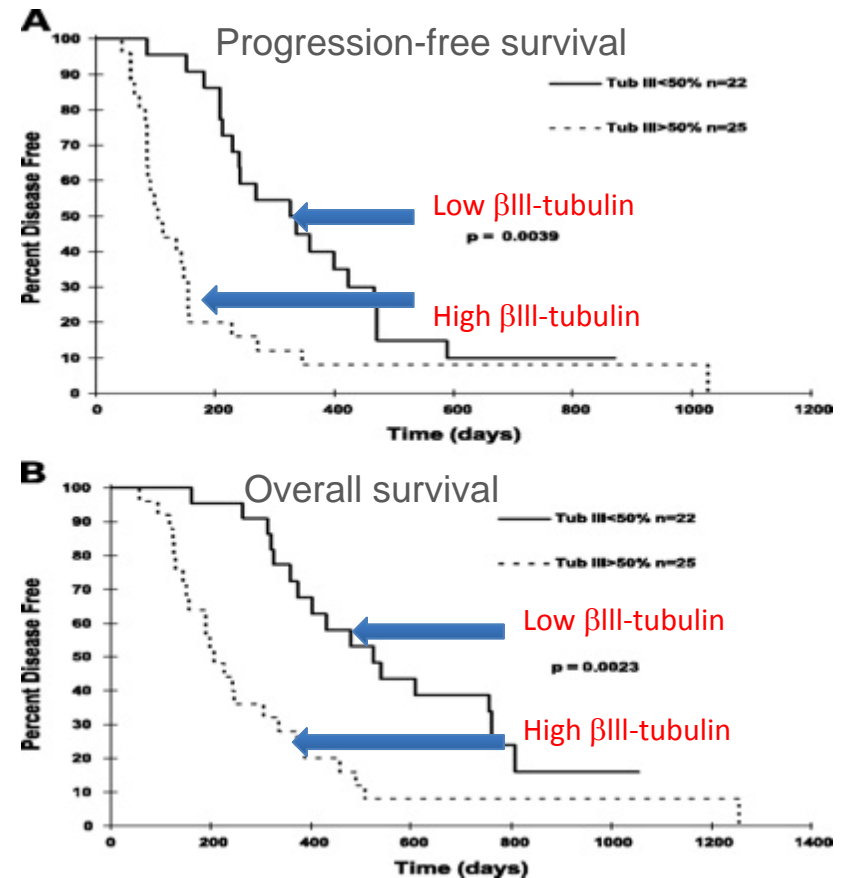
A significant need exists for a therapy capable of restoring and/or improving the effect of therapeutic drugs in resistant cell lines and minimizing side effects associated with chemotherapy treatment.

β III-tubulin gene

- Inhibition of β III-tubulin expression has been shown to restore sensitivity to drug-induced killing of tumor cells.

It has been demonstrated that chemoresistance to TBAs and DDAs is strongly associated with over-expression of β III-tubulin, (encoded by the *TUBB3* gene) which appears to act as a tumour pro-survival factor (Kavallaris *et al.*, 2010).

Thus, inactivation of *TUBB3* can restore chemo sensitivity.



Source: Seve *et al.*, 2005. *Mol Cancer Ther.*

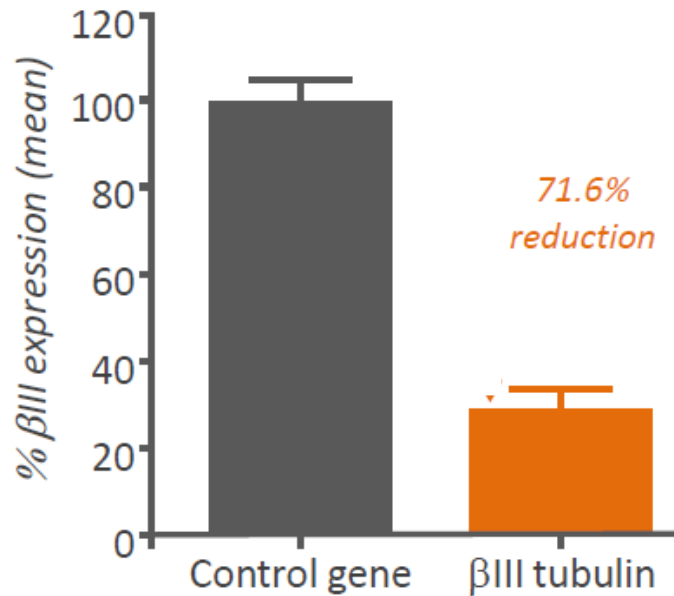


Drug resistant lung cancer: Tribetarna™

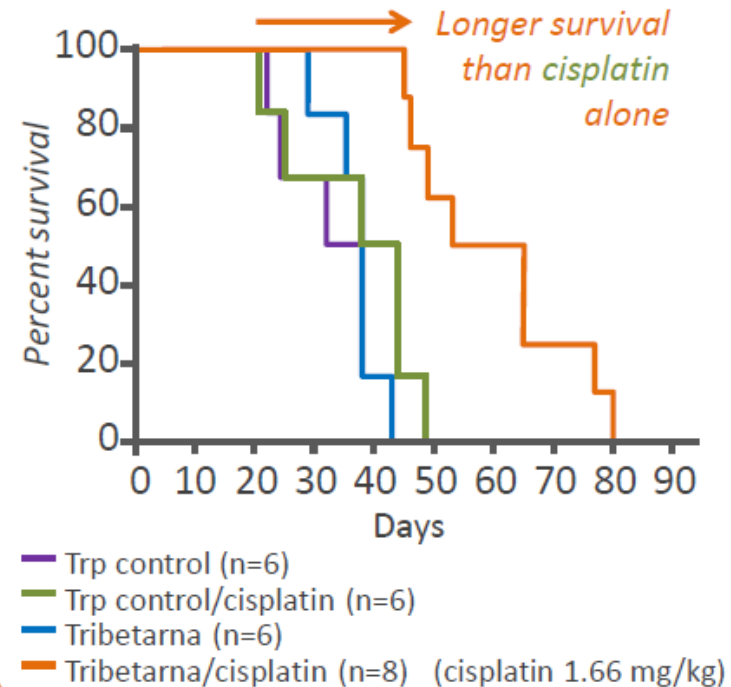


Proof-of-principle is established:

A single injection of Tribetarna effectively silences the β III tubulin gene in vivo and in vitro



Tribetarna™ significantly enhances survival in a preclinical model of lung cancer in combination with chemotherapy





Pain and OPMD



Tranche 1

In vitro

Optimise construct efficacy *in vitro* and *in vivo*

Test in *in vitro* model

Tranche 2

In vivo / proof of concept

Pre clinical





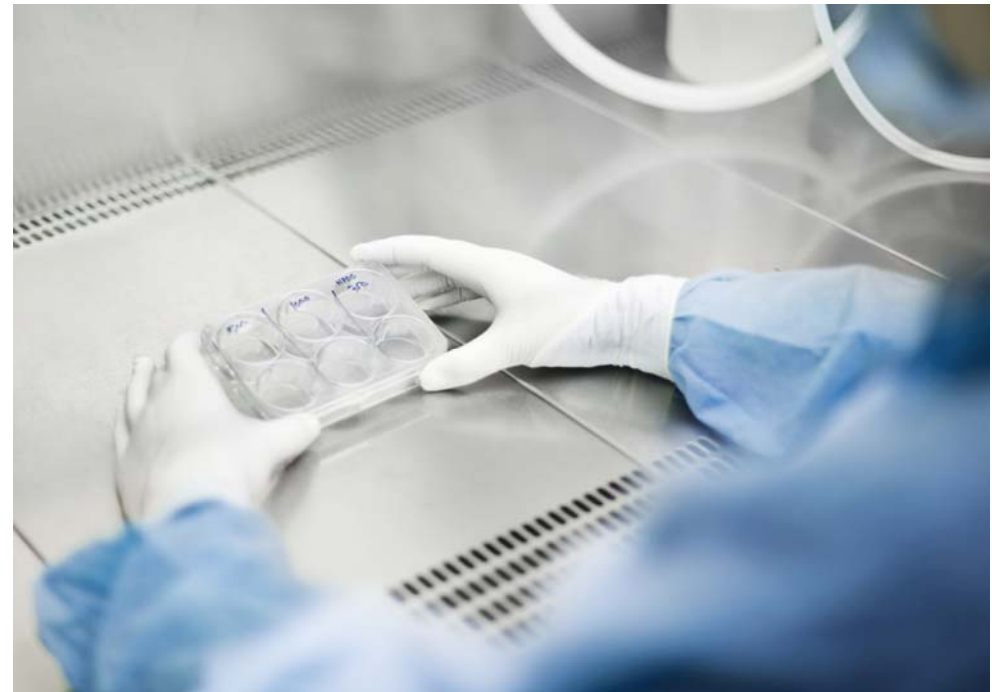
Other disease targets



Tranche 2

Diversification

Provides Benitec with the opportunity to seek alternate disease targets attractive to pharma, through acquisition, to diversify portfolio and further deliver value to shareholders





Platform development

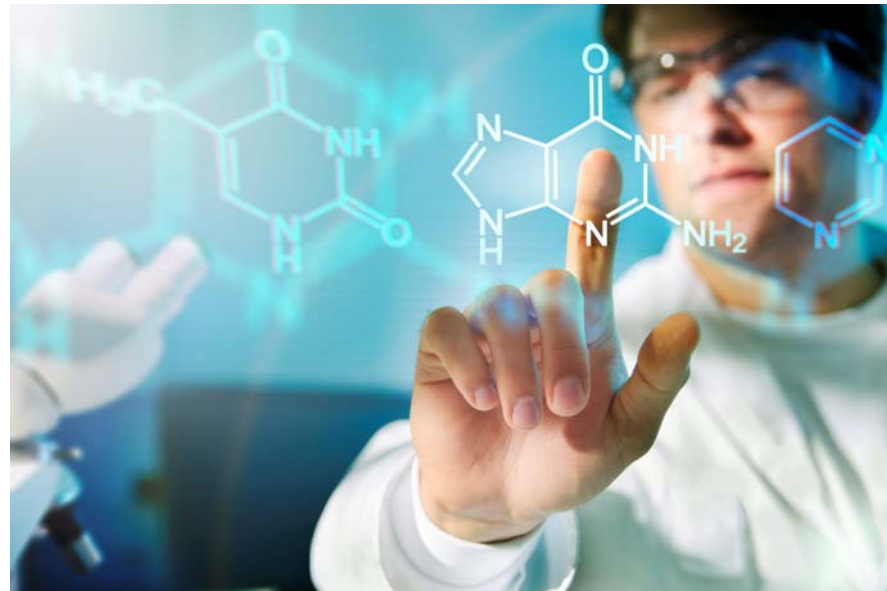


Tranche 2

Improvement of ddRNAi construct design and triggers - combination of in-house lab work and collaborations (external experts)

Further develop promoter understanding

Improvement of delivery vectors





Summary

- The full funding delivers the potential to secure the best partnering value:
 - ✓ Transforms Benitec to a company with multiple clinical assets
 - ✓ Allows Benitec to take HCV trial to completion of Phase IIb – where optimal shareholder value could be derived
 - ✓ Confirms US-based and international institutional health fund support
 - ✓ Benitec will be able to negotiate from a strong position with potential partners for optimal value for the HCV and other programs
 - ✓ Will advance all other value adding programs