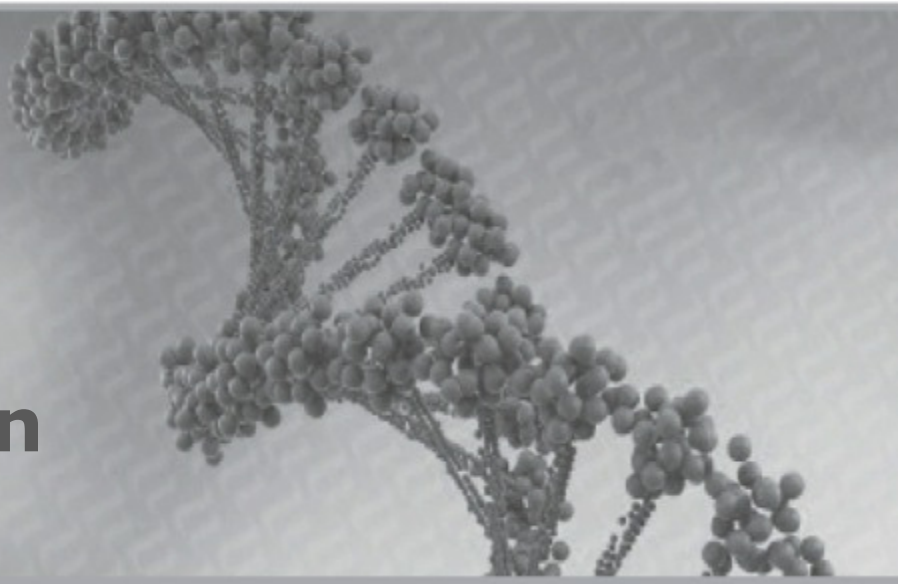
BENITEC BIOPHARMA

silencing genes for life™



Corporate Presentation

October 2013

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.

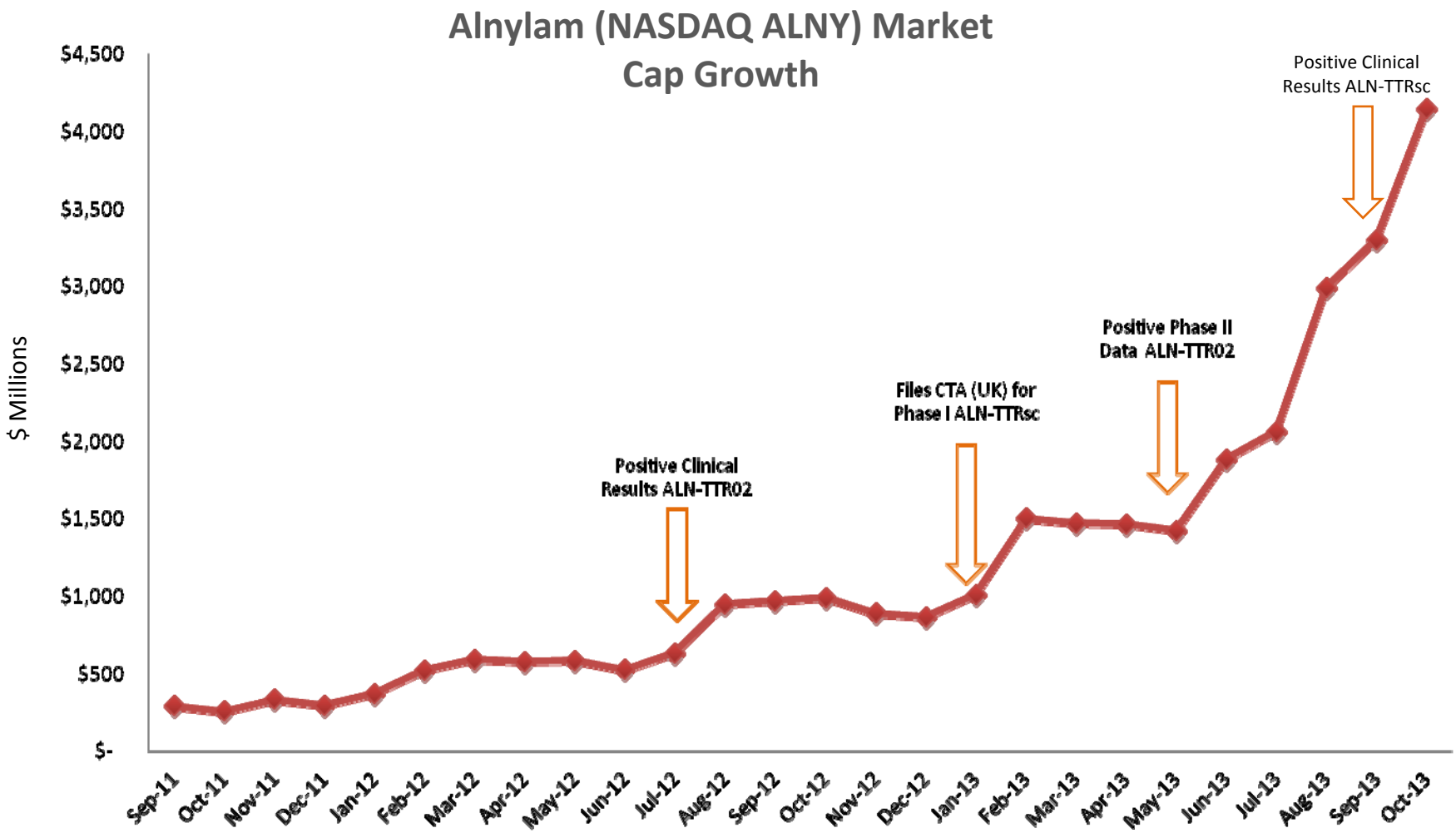
Actual results could differ materially from those anticipated. Reasons may include risks associated with drug development and manufacture, risks inherent in the regulatory processes, delays in clinical trials, risks associated with patent protection, future capital needs or other general risks or factors.

Benitec investment case

- Developing game changing gene silencing technology as a treatment and **single shot cure** for a range of diseases
- Poised to commence Phase I/II clinical trials in two significant diseases:
  - Hepatitis C (TT-034)
  - Drug-resistant lung cancer (Tribetarna™)
- Successful trials should generate significant interest and investment by potential industry partners
- Currently earning revenues from a number of licensing deals for Benitec's technology in multiple disease areas
- Significant valuation uplift noted and industry partnerships forged in peer companies with novel therapies (e.g. Mesoblast, Alnylam) following positive clinical data

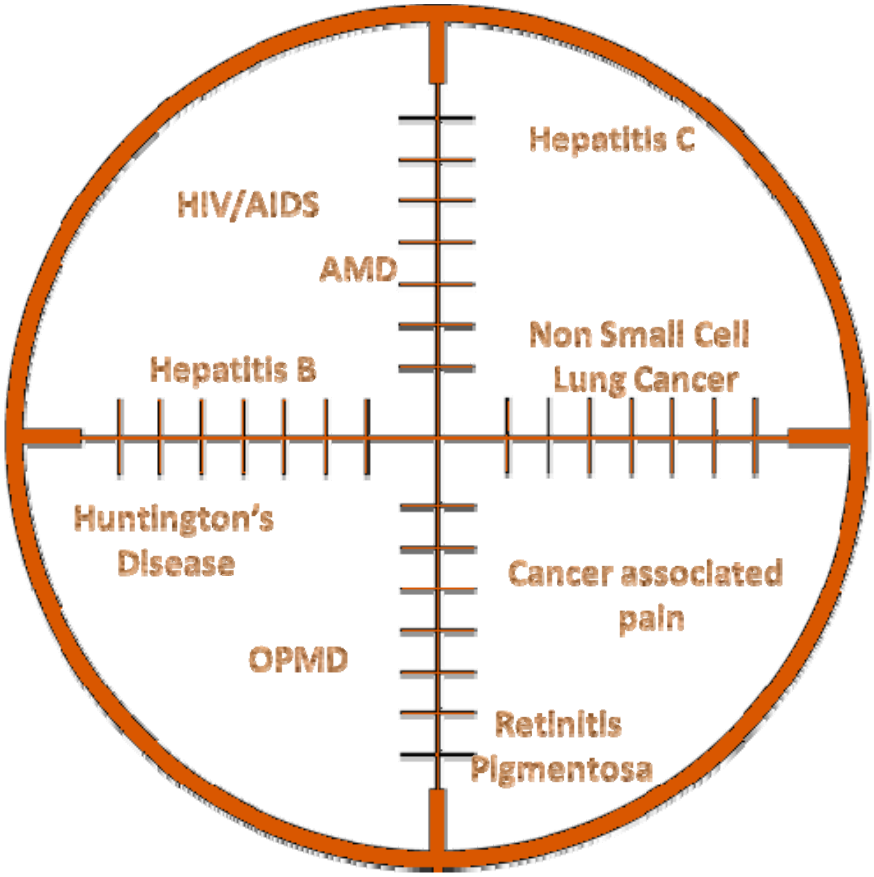
The commencement of first in-man clinical trials in 2013 marks a significant turning point for the company

Positive Clinical Data Drives Value

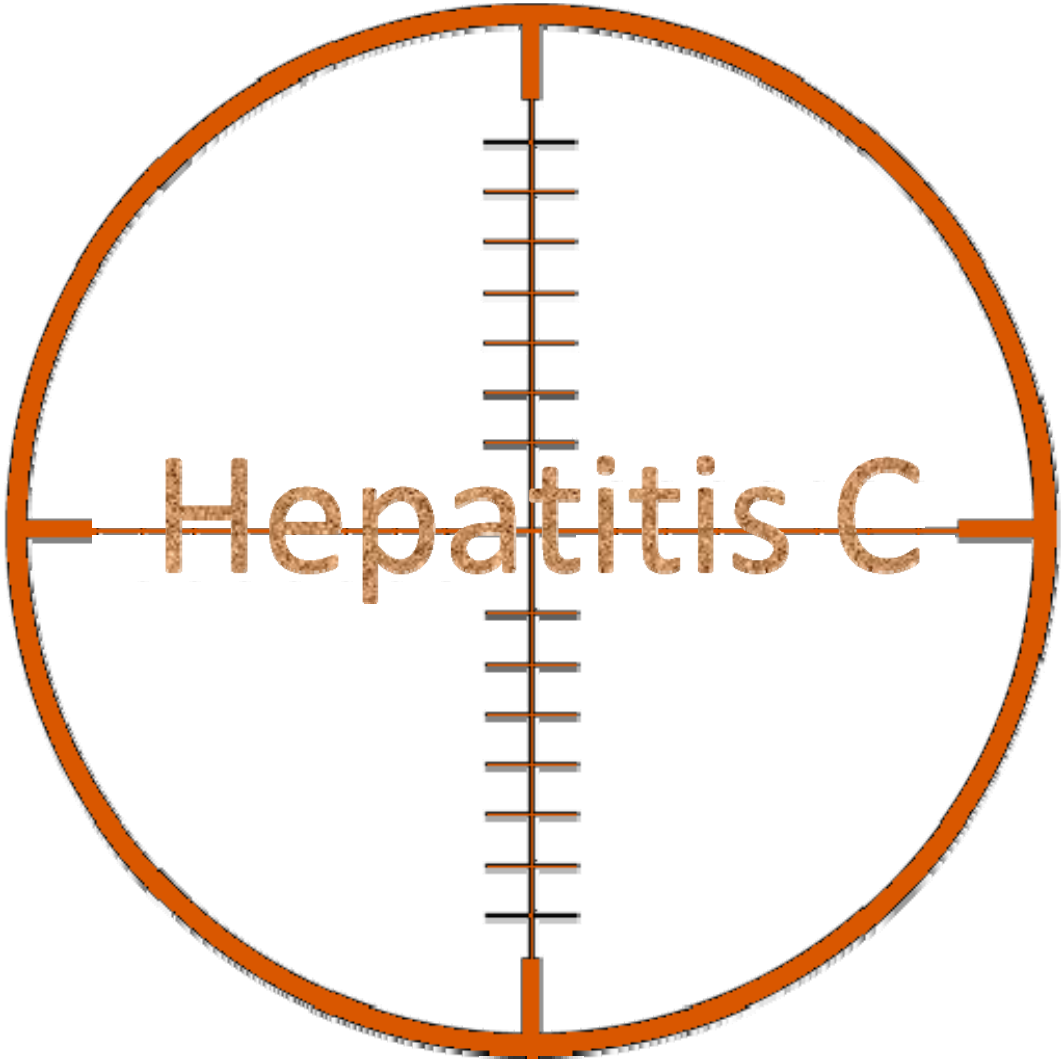


One Weapon: Many possible targets

- A novel and valuable platform technology with the potential to treat a wide range of infectious, chronic and life-threatening diseases
- Pipeline incorporates infectious diseases, cancer, pain, ocular and orphan genetic diseases
- Benitec has prioritised two programs based on market opportunity, solid proof of concept data and potential to maximise the unique advantages of ddRNAi
  - Hepatitis C (TT-034)
  - Drug-resistant lung cancer (Tribetarna™)

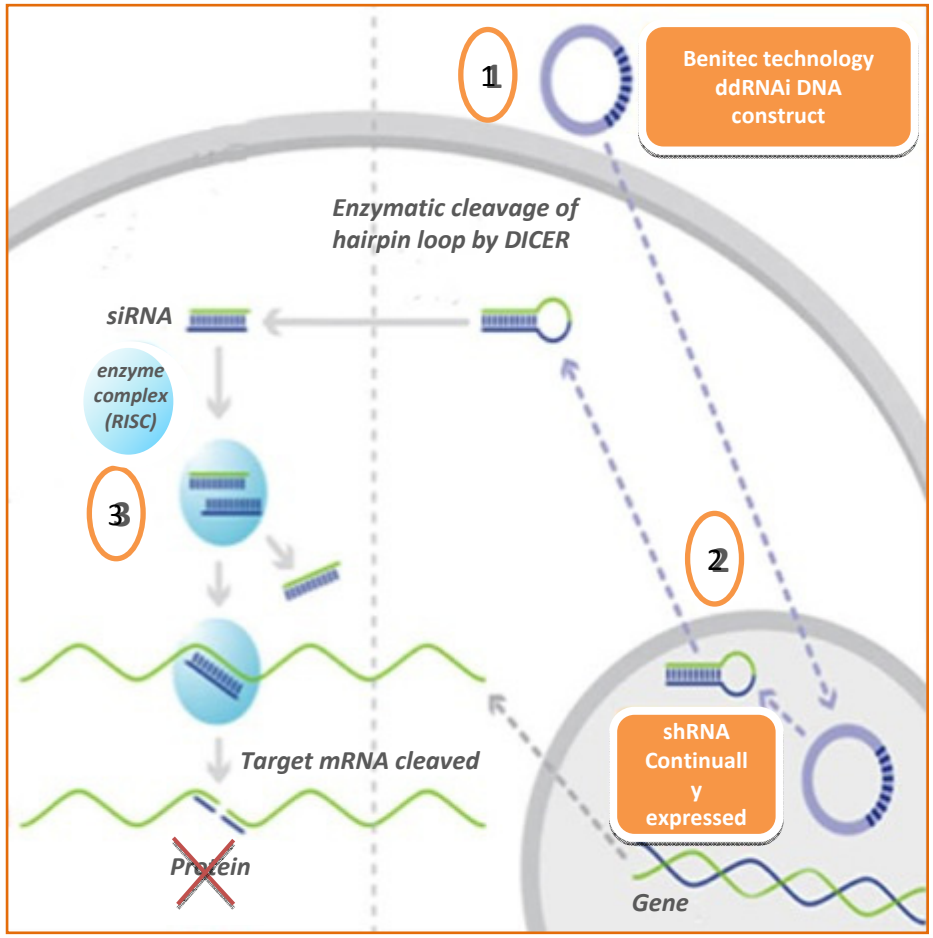


Target Focus: Hepatitis C



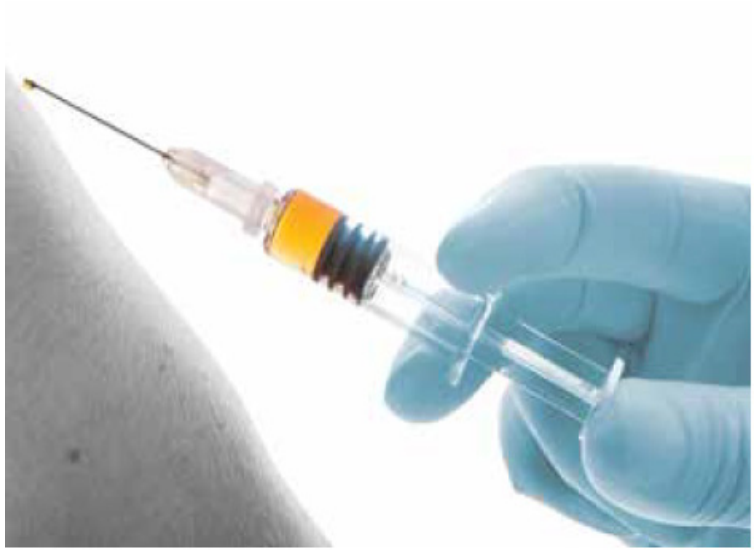
ddRNAi Technology
The next revolution in gene silencing

- **A specific and long lasting method for turning off disease-associated genes**
- **ddRNAi technology utilises the power and specificity of RNAi while avoiding many of its problems**
  - Specific delivery to target cells
  - Fewer side effects
  - Lasting benefits – therapy generates silencing molecules for months or years, creating the potential for a 'one shot cure'
  - Multiple therapy in a single molecule - can be engineered to silence a specific gene, multiple sites on a gene or multiple genes
- **Protected by a dominant, global patent estate - over 100 patents covering ddRNAi and specific disease targets**



Lead program (TT-034): Hepatitis C Therapeutic

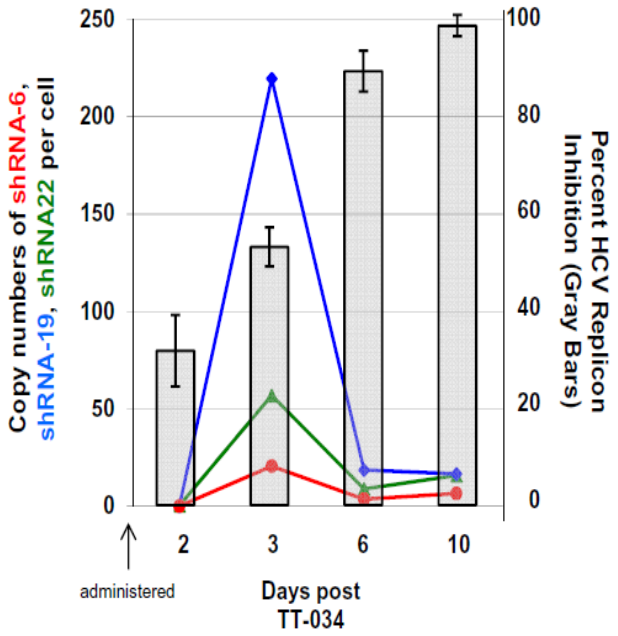
- A “molecular monotherapy” intended to treat and cure HCV infection with a single injection
- Many advantages over existing treatments:
  - ‘One Shot Cure’ eliminates patient compliance issues making it more attractive to payors (reimbursers)
  - Design prevents formation of drug resistant mutants
- Key milestones:
  - Comprehensive pre-clinical safety and efficacy data generated by Pfizer/Tacere
  - NIH Recombinant DNA Advisory Committee (RAC) favourable review of clinical protocol
  - Phase I/IIa trial planned for Q4 2013



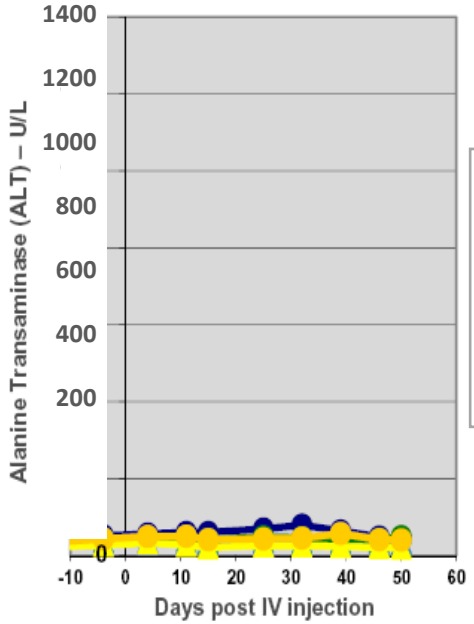
TT-034:
Pre-clinical efficacy and safety

- Clinically relevant doses of TT-034 produce sustained levels of HCV inhibition without toxicity

Quantities of shRNA/cell required for HCV Replicon Inhibition



Assessment of liver toxicity in cynomolgus monkeys



shRNA/cell in cynomolgus monkey livers at day 50

	shRNA-6	shRNA-22	shRNA-19
$1.25x10^{11}$ vg/kg	18	66	9
$1.25x10^{11}$ vg/kg			
$1.25x10^{12}$ vg/kg	782	1223	196
$1.25x10^{12}$ vg/kg			
$6.25x10^{12}$ vg/kg	8350	6090	1463
$6.25x10^{12}$ vg/kg			

Avg. from dose cohort

Hepatitis C
Phase I/IIa Clinical Trial

- **US-based open-label dose-escalation Phase I/IIa trial**
  - Regulatory activity:
    - ✓ All required safety and toxicology studies have been conducted with an excellent safety profile
    - ✓ Protocol completed and successfully reviewed by NIH RAC June 2013
    - ✓ US FDA IND submission in preparation
- **Trial sites**
  - Duke Clinical Research Unit, North Carolina (Dr Keyur Patel)
  - University of California, San Diego (Dr David Wyles)
- **Design**
  - Efficacy and safety study
  - Patients who have failed current standard of care for HCV
  - Interim reads
- GMP clinical product has been manufactured, filled and finished

Unique mechanism of action and dosing regimen (single shot) could be a "game changer" for treatment of HCV

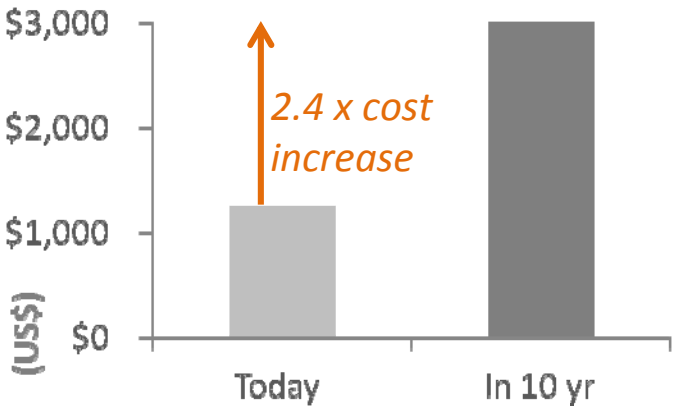
Hepatitis C
Market Environment for TT-034

- Hepatitis C is predicted to be a $20 billion market by 2020[1]

- The latest therapies, Incivo (telaprevir – Incivek in the US) and Victrelis (boceprevir):
  - Do not achieve cure in up to 25% of patients[2]
  - Require 12 and 24 weeks of therapy, respectively[2]
  - Cost between US$66,000-US$118,000 per patient in the US[2]

TT-034 will be competitively priced and offer significant clinical and compliance advantages

Health costs per hepatitis C patient per month are expected to increase by 2.4 times over the next decade due to increases in liver-related complications[2]



1. *Bloomberg.com Media Release 16/10/2012 Available http://www.bloomberg.com/news/2012-10-15/abbott-s-hepatitis-c-drugs-clear-virus-in-99-of-patients.html*
2. *2.* Table from *Medtrak Services Report – New Hepatitis C Treatments June 2012;*
   3.Australian Government Pharmaceutical Benefits Scheme Feb 2013

TT-034's Place in the HCV Market

- Even with promising new drugs coming onto the market, HCV will remain a "Problem Not Solved".

- As a "single shot cure," TT-034 will supersede small molecule cocktails
  - Superior compliance, side effect profile and efficacy

TT-034 is a "Disruptive Technology" in a market that will remain very large

TT-034:
2013 Clinical Trial Implications

- Clinical success with TT-034 (efficacy and safety) should be a significant value inflection milestone for Benitec
- Clinical demonstration of a “game changer” for treatment of HCV
- Stimulates collaboration, partnering, licensing or acquisition interest
- Positive implications for Benitec’s other pipeline programs

Moves Benitec from a pre-clinical to a clinical stage company

Benitec Biopharma: Pipeline

Indication	Partners/Collaborators	Discovery	Pre-clinical	Clinical
Hepatitis C				*Acquired from Tacere/Pfizer*
Non Small Cell Lung Cancer *	University of New South Wales			
Cancer associated pain	Stanford University			
Hepatitis B	Biomics Biotechnologies			
OPMD**	Royal Holloway, University of London			
AMD***			*Acquired from Tacere*	
Retinitis Pigmentosa	Genable		*Out-licensed*	
HIV/AIDS	Calimmune			*Out-licensed*
Huntington's Disease	uniQure	*Out-licensed*		

and other chemotherapy-resistant cancers
****Oculopharyngeal Muscular Dystrophy, an orphan disease***
*****Age-Related Macular Degeneration***

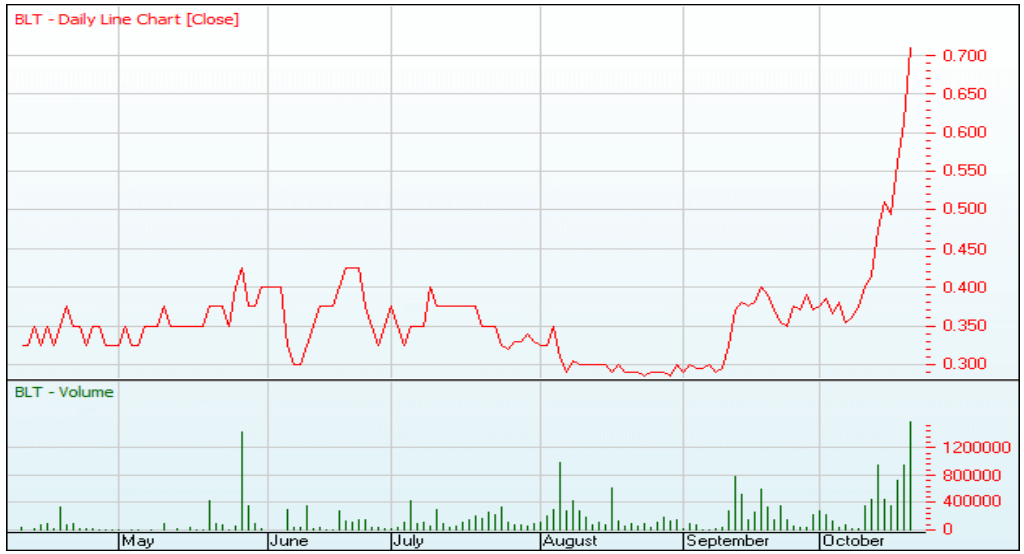
Big Pharma are doing big deals in Benitec's program areas

Companies	Condition	Stage	Deal	When
Gilead/ Pharmasset	Hep C	Phase II	Gilead acquired Pharmasset for **$10.8billion**	Nov 2011
Bristol-Myers/ Inhibitex	Hep C	Phase II	Bristol-Myers paid **$2.5 billion** to acquire Inhibitex, which was developing BMS-986094	Jan 2012
Enanta/ Novartis	Hep C	Phase I	$35 million up front, as much as $404 million more on clinical, regulatory, and commercial milestones	March 2012
Gilead/ GlobeImmune	Hep B	Phase Ia	Undisclosed upfront payment plus additional milestone payments and potentially, royalties	Oct 2011
Xenon/ Genentech	Pain	Phase II	A$646 million deal – undisclosed upfonts and milestones	Jan 2012
Avila/ Clovis	Non small cell lung cancer	Pre clinical	Unspecified upfront and regulatory and sales milestones to $209 million	May 2010

Benitec Biopharma: Financial Profile

Key Financials	ASX:BLT
Price per share at 21st October 2013	AUD 0.71
Market capitalisation at 21st October	AUD 60.46 million
Issued equity: ordinary shares at 21st October 2013	83,960,907
Options on issue at 21st October 2013	19,797,734
Cash balance at 30 June 2013	AUD 1.58 million
Capital Raised since June 30 2013	AUD 10.7 million
Monthly burn rate	AUD 231,000

Benitec six month share price chart



Commercially-focused Management and Board

Management

- **MD and CEO: Peter French, MBA, PhD**
- **CSO: Michael Graham, PhD**
  - Inventor of ddRNAi technology
  - CSIRO, Benitec founder
- **CBO: Carl Stubbings, BSc**
- **SVP R&D: David Suhy, PhD**
  - Tacere Therapeutics
- **CFO: Greg West, CA**

Board

Chairman:

- **Peter Francis**
- **Directors:**
- **Mel Bridges, BAppSc, FAICD**
- **John Chiplin, PhD**
- **Iain Ross, BSc, CH.D.**
- **Kevin Buchi**

Milestones

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 commenced Phase I/IIa clinical trials in HIV
- $10.7 million capital raise secures funding for next stage of lead programs

Upcoming Milestones and Value Creating events

- Hepatitis C first-in-man Phase I/IIa trial to commence in 2013
  - ✓ IND Filing – Q4 2013
  - ✓ First patient dosing – expected before end of CY2013 (pending acceptance of IND)
- Advancement of lung cancer program
  - ✓ Toxicology studies to be completed 2014
  - ✓ Phase I/IIa clinical trial to commence - 2014
- Additional out-licensing agreements for other disease areas

Summary

The commencement of first in-man clinical trials in 2013 marks a significant turning point for the company – Benitec moves from a preclinical company to a clinical company