

**Acquisition of Tacere Therapeutics &  
lead hepatitis C (HCV) program**

**October 11, 2012**

*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.*

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## Company overview

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- Benitec Biopharma (ASX:BLT) is an ASX-listed biotechnology company based in Sydney, Australia
- The company holds a dominant global intellectual property position in gene silencing technology that utilizes DNA Directed RNAi (ddRNAi) ;
- The ddRNAi Technology:
  - “Turns off” (silences) disease-causing genes by delivering short hairpin RNA (shRNA) that binds to a specific target gene sequence in a target cell;
  - Uses a gene vector that causes the patients’ cells to continuously manufacture the silencing shRNA
  - Provides long term silencing with a single administration; conventional “delivered” siRNA approaches requires repetitive administration of therapeutic entity.
- Developing a pipeline of in-house and partnered therapeutic programs selected for fit with technology and to fulfill critical unmet medical needs.

## Tacere transaction

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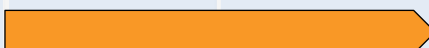

- Benitec Biopharma has acquired Tacere Therapeutics, including all non-cash assets, in an all share transaction.
- Tacere history:
  - Established in 2006 with a license to Benitec’s ddRNAi technology for a Hepatitis C virus therapeutic, TT-034
  - Partnered with Pfizer in 2008 to further develop the program
  - Pfizer invested significant resources in developing the program over 3 year period to near to Phase I/II ready
  - TT-034 remained a high priority pre-clinical program for Pfizer prior to global reorganization in 2011
  - Pfizer closed its UK facility in 2011 and the program was subsequently put on hold
  - In 2012 all rights reverted to Tacere with no further financial obligations
- Opportunity to acquire Tacere reflects Benitec’s unique understanding of the assets and the original licensing agreement entered into in 2006
- Commercial terms
  - US\$1.5 million in BLT shares
  - Royalty payable on future licensing revenue received

# Tacere transaction

Assets include two ddRNAi-based programs:

- Phase I/II a ready hepatitis C therapeutic, TT-034, along with extensive preclinical data demonstrating an excellent safety and toxicity profile; and
- Advanced preclinical program for the eye disease Age-Related Macular Degeneration

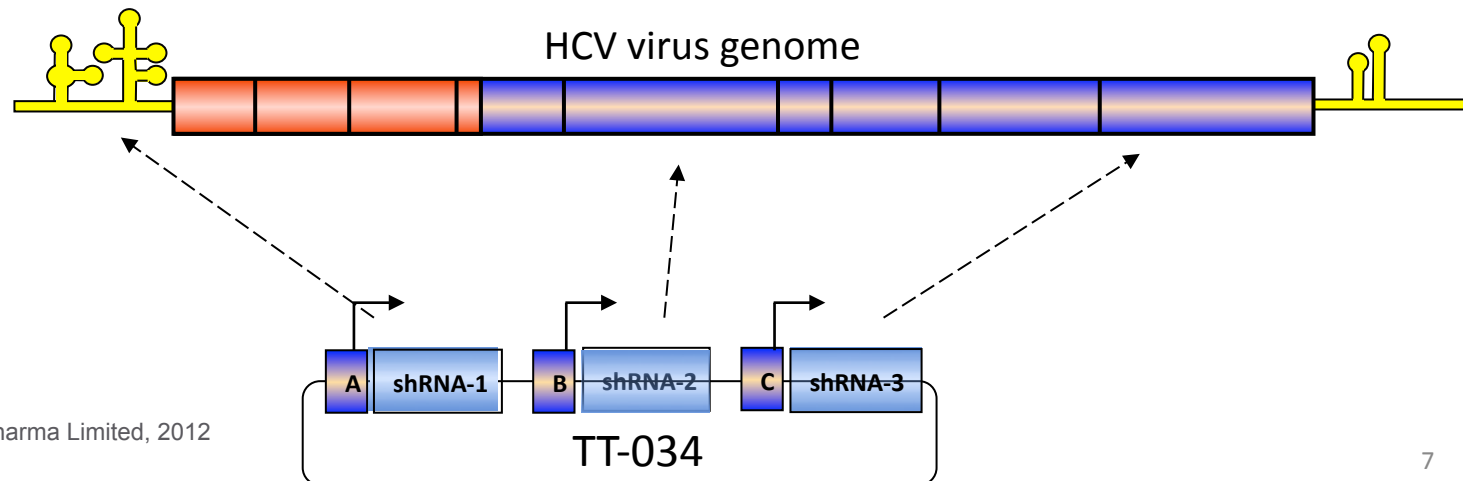
Tacere Pipeline

Indication	Discovery	Pre-clinical	Clinical
Hepatitis C			
Age-Related Macular Degeneration			

- Secured Tacere’s Chief Scientific Officer Dr David Suhy in new role, Senior Vice President R&D for Benitec Biopharma

## Description of Key Asset – TT034

- TT-034 is a next generation therapeutic designed to be superior to emerging HCV drugs
  - A “one shot monotherapy cure”; Intended to clear HCV with a single injection
  - May also be used in combination with existing and new small molecule drugs
- TT-034 was a high priority program at Pfizer - it was developed to very high standards
  - Significant investment was made by Pfizer in the program
- TT-034 is ready to enter a first in man phase I/IIa study subject to final regulatory approval
  - All safety and toxicology studies required have been conducted with an excellent safety profile
- TT-034 comprises **three shRNAs** targeting three separate, highly conserved regions on the HCV virus genome
- Inhibits HCV resistance development, while maintaining target specificity, high efficacy and low off-target effects.
- Mainly targeted to genotype 1, the most prevalent and underserved HCV genotype



## Hepatitis C Market Opportunity

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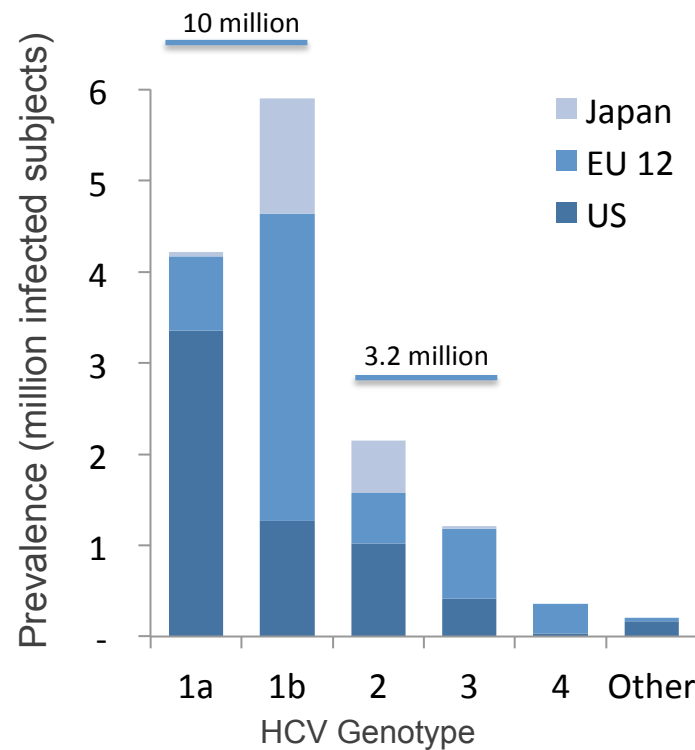
- There are over 170 million HCV infected people worldwide and HCV is a leading cause of cirrhosis, hepatocellular carcinoma, and liver transplantation
- There are three genotypes (GT) - 1, 2 & 3
  - 75% of all cases are genotype 1 (GT1)
  - GT 2 & 3 are comparatively well-served by the current standard of care
  - GT1 is the most prevalent genotype in China and dwarfs western markets in numbers of patients
- Current therapies only address approximately 40% of GT1 patients
- Current therapies use a combination of interferon, ribavirin and protease inhibitors
  - interferon side effects severely limit long time use.
- Emerging drugs are predicted to improve cure rates to 70% in previously treated GT1 patients, BUT this leaves over 3,000,000 patients in USA, Europe and Japan with unmet medical need
- **TT034 has high specificity for HCV GT1, therefore has the potential to fill this current poorly met medical need.**



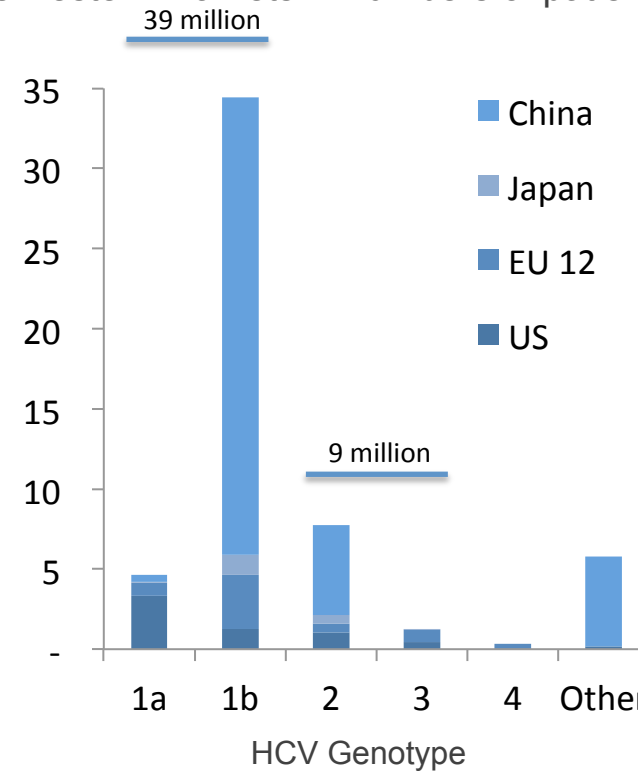
# HCV Genotype 1: A significant opportunity

- There are over 170 million HCV infected people worldwide and HCV is a leading cause of cirrhosis, hepatocellular carcinoma, and liver transplantation; 75% of all cases are genotype 1 (GT1)
- The HCV drug market is expected to reach \$20 billion by 2020

GT1 is the most prevalent genotype in the largest western markets



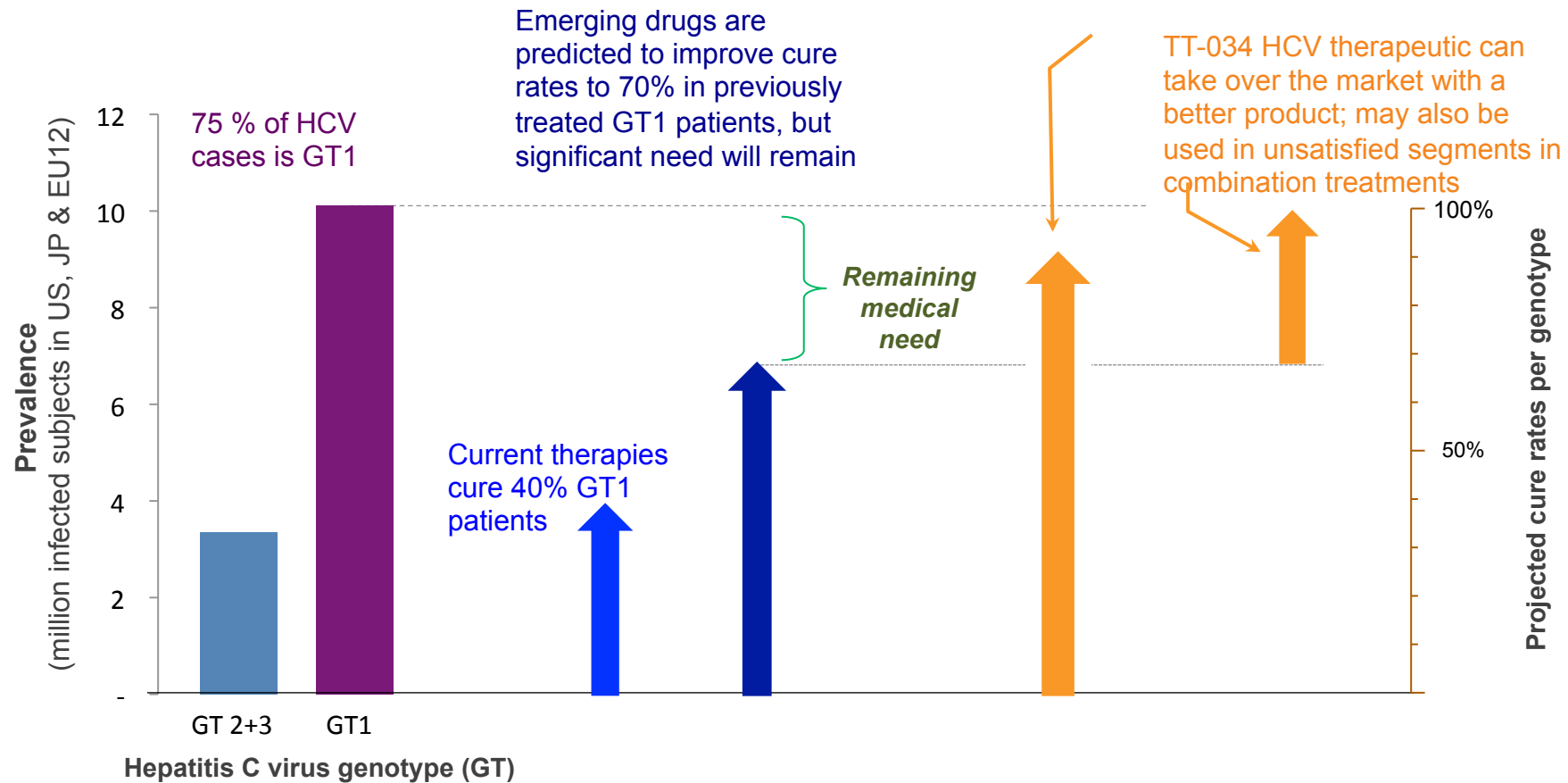
GT1 is the most prevalent genotype in China and dwarfs western markets in numbers of patients



# TT-034 positioning in the HCV market

If successful, TT-034 could achieve a competitive share of the HCV market

## HCV prevalence and projected cure rates in key Western markets



## Clinical trial opportunity in 2013

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- First in man Phase I/IIa clinical trial intended to be conducted in 2013 in US HCV patients permitting the acquisition of safety and efficacy data in humans
- All safety and toxicology studies have been completed
- Pre-IND meetings with FDA have been held
- Sufficient GMP material has been produced to initiate clinical trials
- Key next steps:
  - Meeting with the FDA Recombinant Advisory Committee
  - Filing of the IND
  - Dosing of first patient

## Benitec Pipeline Post Tacere Acquisition

Acquisition accelerates Benitec Biopharma clinical and pre-clinical pipeline

- In-house – opportunity to commence two Phase I/IIa trials in HCV and Pain in 2013
- Partnered – Calimmune commencing Phase II trial in HIV/AIDS in late 2012

Clinical trials expected to provide significant value inflection point for investors

Indication	Partners/ Collaborators	Discovery	Pre-clinical	Clinical
HIV/AIDS	Calimmune			
Hepatitis C	<b>Addition from Tacere</b>			
Drug resistant lung cancer	University of New South Wales			
Cancer-associated neuropathic pain	Stanford University			
Hepatitis B	Biomics Biotechnologies			
Oculopharyngeal muscular dystrophy	Royal Holloway, University of London			
Age-Related Macular Degeneration	<b>Addition from Tacere</b>			
Retinitis Pigmentosa	Genable			

## Summary of acquisition

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- Tacere's TT-034 is a highly compatible program that complements and enhances current Benitec Biopharma pipeline
- Relatively low risk acquisition given Benitec Biopharma's unique understanding of assets, underpinning ddRNAi technology and clinical development, together with comprehensive data set
- Attractive commercial terms reflecting knowledge of assets and original licensing of ddRNAi technology
- Advances clinical development program with Phase I/II ready asset in high value lead indication