Shareholder update
August 2020

PYC THERAPEUTICS

Call's participants

Douglas Huey (MBA (Hons))

Executive Director & CEO (Boston)

Extensive experience across Strategy, Finance and Operations; previous partner at McKinsey & Co, where he led global multi-disciplinary teams.

Dr Rohan Hockings (MBBS (Hons), JD GDLP)

Executive Director & MD Australia (Perth)

Experience across both clinical and commercial roles including Private Equity, Commercial Law, and Strategy, prior to joining PYC

Professor Sue Fletcher (PhD, BSc)

Chief of Research and Development (Perth)

Leading global expert in RNA therapeutics. Very well regarded for her role as co-inventor of Exondys-51 and Vyondys-53, both commercialised by Sarepta

Kaggen Ausma (LLB, BEcons)

Chief Business Officer (Perth)

Previous roles in McKinsey & Co across Strategy, Commercial, VC and PE, and CLSA Asia-Pacific

Dr May Orfali (MD)

Chief Medical Officer (Boston)

20+ years experience in all aspects of clinical development, specialising in rare disease, including senior leadership roles within Pfizer's rare disease unit

Today's messages

1

PYC's lead drug program is on track for an IND filing with the FDA by 2H21

Two important milestones to enable this will occur in the next 6 months:

- Proof of efficacy across novel mutations in patient-derived models
- Acute toxicity studies in Rabbits and Monkeys

2

PYC is leveraging our drug delivery tech to create new drug candidates

CPP-ASO technology is highly scalable when delivery is validated

- 6 potential targets under investigation, high potential lead by 2H20
- Building out rare and common disease targets – focused on highest 'rNPV'

3

PYC is building world class drug discovery and development capabilities

Combined world class discovery and clinical expertise with Prof Sue Fletcher and Dr May Orfali

1. PYC's lead drug is on track for an IND filing with the FDA by 2H21

PYC's lead drug targets a 1-2B USD p.a. rare disease market

Retinitis Pigmentosa is a genetic, blinding eye disease

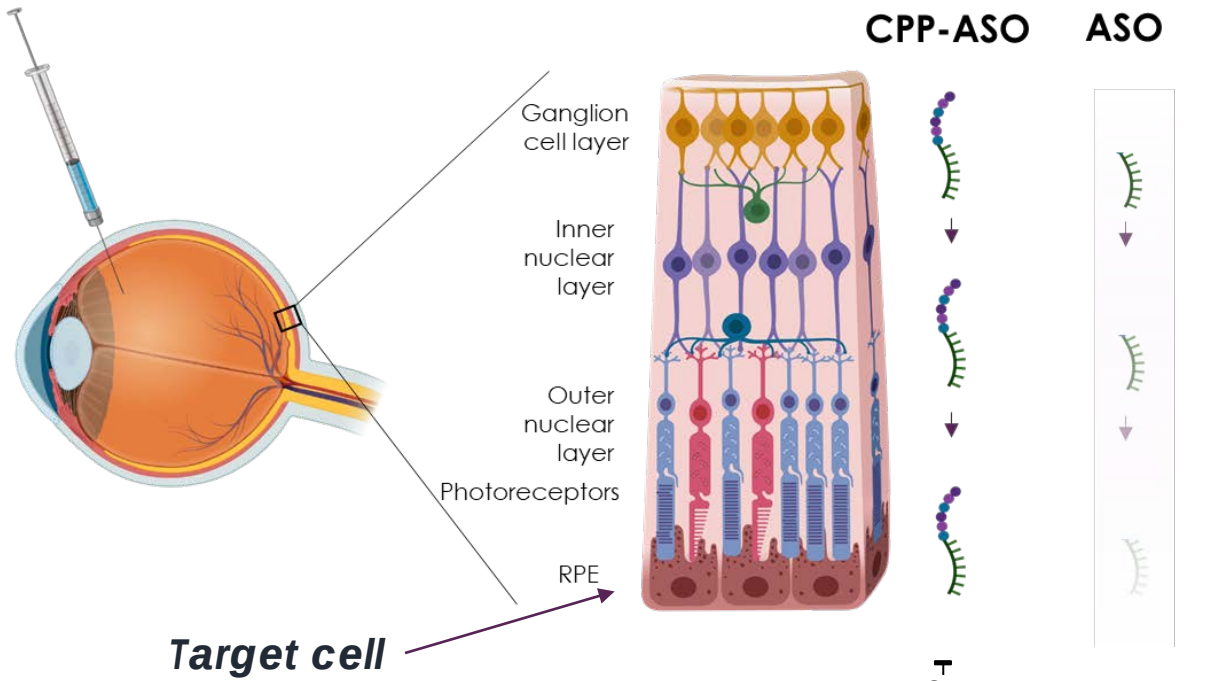
- VP-001 will treat Retinitis Pigmentosa Type 11 (RP11)
  - **Severe, progressive blinding eye disease**
  - Onset between the ages of 10 and 20
  - Leads to blindness between 40-50 years of age
- There is **no treatment in market or in clinical development**

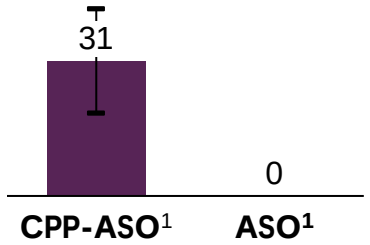
RP11 represents a 1-2B USD p.a. treatment market

- **4,000-8,000** patients in the western world
- **~250,000 USD p.a.** orphan drug pricing
- **1-2B USD p.a. market**
- Straightforward and low cost sales and distribution channel

PYC's lead drug has a clear competitive advantage over alternative approaches to RP11 - it treats the entire eye

Treating the disease requires a delivery technology to reach the deepest cells at the back of the eye



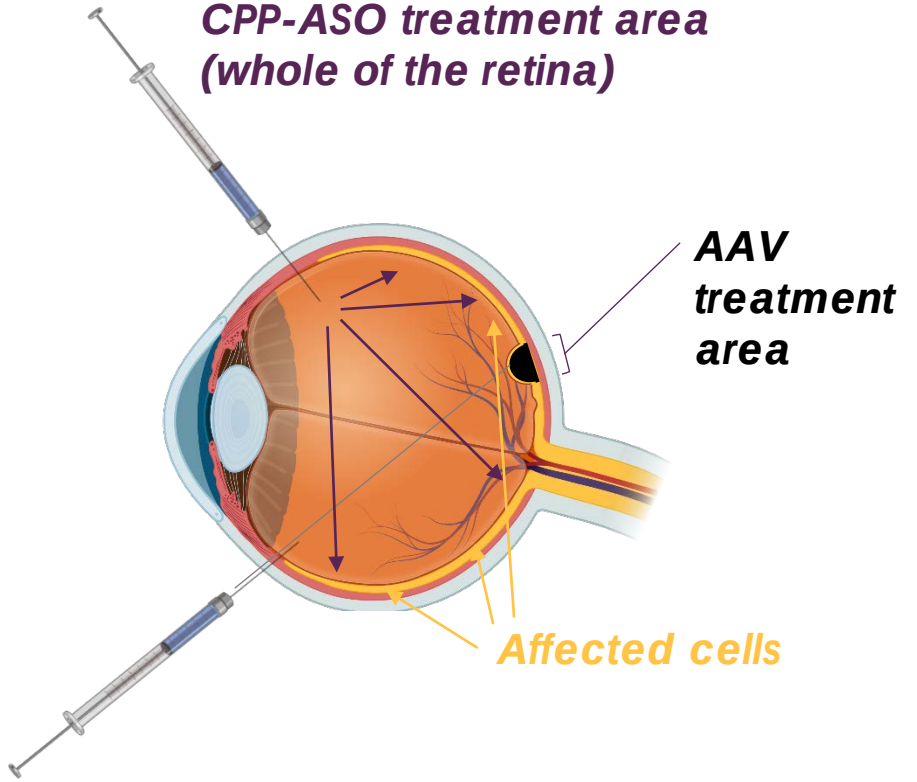


PYC's technology delivers the drug where others cannot – the cells where treatment is needed

1 Exon skipping at day 5 post 1.6μg Intravitreal administration in the mouse eye.

Breadth of delivery is also required to treat the entire eye

- Cells degenerate across the entire retina causing it to 'leak' and the cells to die
- An effective treatment must treat a majority of the cells to prevent significant vision loss

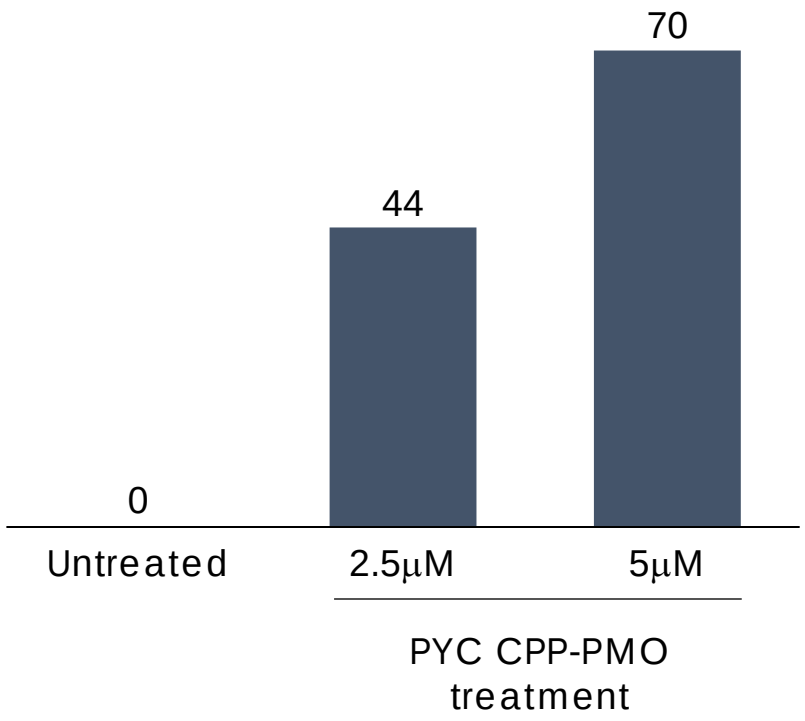


FY20 saw PYC prove the efficacy of VP-001 and commence IND-enabling studies

VP-001 'hits' target effectively and safely

Exon skipping, Retinal Pigment Epithelial

Day 5, single treatment

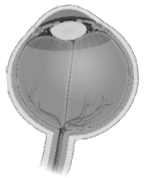


VP-001 restores function in patient-derived models of disease

	Healthy	RP11	Impact of RP11	Restoration with VP-001
Phagocytosis			▪ Lower 'phagocytosis' of outer segments (lower ability of the RPE to dispose of the toxin)	✓
Cilia length			▪ Shorter and less frequent cilium on the RPE, showing poor RPE health	✓
Transepithelial resistance			▪ RPE cells are not tightly joined and become 'leaky', causing retinal degeneration	TBD
Microvilli health			▪ Short, less functional microvilli, which are the 'arms' that collect the outer segments during phagocytosis	TBD
Polarity			▪ RPE loses polarity – or simply the cell becomes 'disordered'	TBD

1 See ASX announcement 1 April 2020

The next 6 months will see two key milestones for VP-001:
Further patient-derived models and Rabbit Dose-Range Finding studies

	Milestone	What does it mean?	Why does it matter?	When is it?
	**Deliver additional readouts in patient-derived models** *Expand set of efficacy results to additional patients and mutations*	PYC will understand the drug's performance across different types of patients with different 'genetic backgrounds'	**We will be able to design a better clinical trial, increasing our chances of seeing a clinically meaningful response in patients**	**Late Q4 2020**
	**Prove safety in most sensitive species** *Toxicity studies in rabbits (most sensitive) followed by studies in monkeys*	Determines the maximum starting dose we can use in clinical trials	**The better the safety profile, the greater chance we have of reaching the clinically meaningful dose in a patient**	**Q4 2020**

Post-IND, VP-001 has several advantages in moving through clinical trials to reach market

Precedent for measuring drug performance (endpoints)
Other drugs treating similar retinal diseases have ‘paved the way’ through clinical development, and we will be able to leverage the learnings

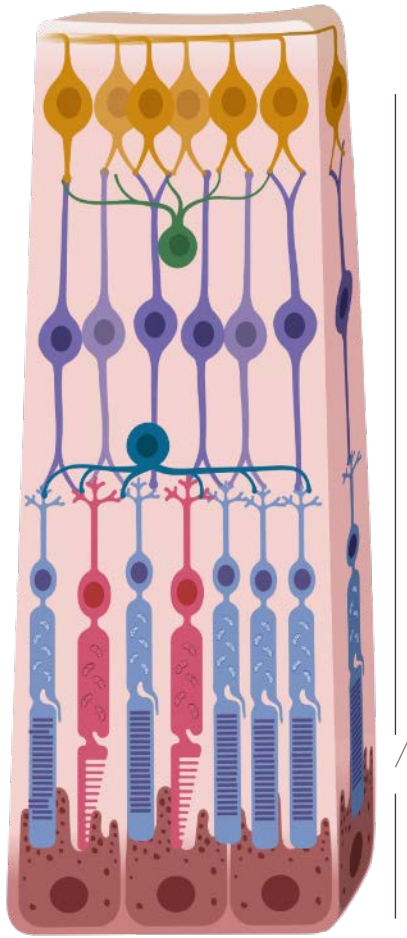
Patient data availability
With genetic testing and strong patient advocacy groups, we will be able to leverage existing data to guide our clinical plans

Opportunity to seamlessly transition between phases
Utilizing innovative and seamless clinical trial designs will enable us to maximize efficacy data while building long term safety data – ultimately shortening time to market

2. Leveraging the retinal delivery tech in new drug candidates

Advancing our lead program into the clinic will validate our drug delivery platform for retinal disease

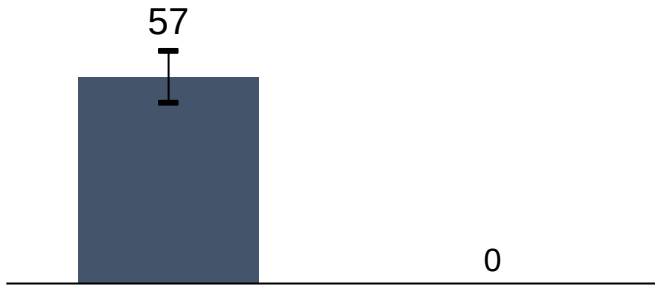
The Retina is a high value target

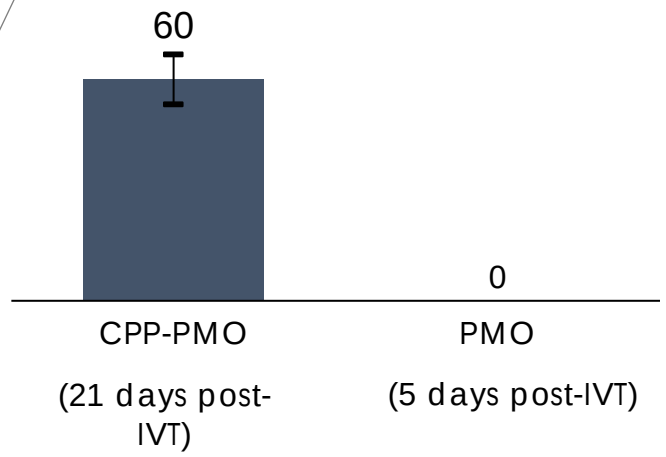


Proven Delivery in the Eye

1.6ug IVT injection in mice

% truncated SMN1 transcript





Develop Further Applications

Diseases primarily affecting the Photoreceptors

- Glaucoma
- Usher Syndrome
- Rhodopsin RP (most prevalent adRP in the US)
- >10 commercially viable Inherited Retinal Diseases

Diseases primarily affecting the RPE

- Diabetic retinopathy
- Wet age-related macular degeneration (wAMD)
- Dry age-related macular degeneration (dAMD)
- >5 commercial Inherited Retinal Diseases

PYC has the capability to rapidly scale its technology in the retina

Right Biology

Right Indication

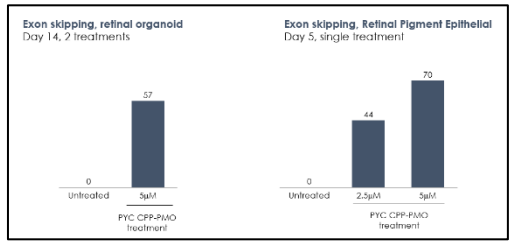
Right Commercials

Does the drug engage the target safely?

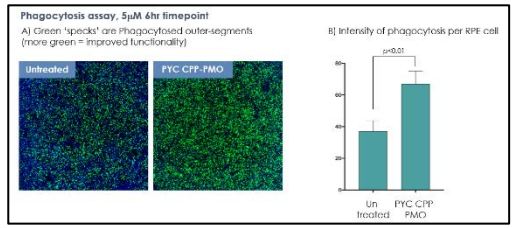
Does the drug alter the disease in a functional model?

Do we progress to IND-enabling studies?

PYC's 'RNA hub'



4-6 weeks

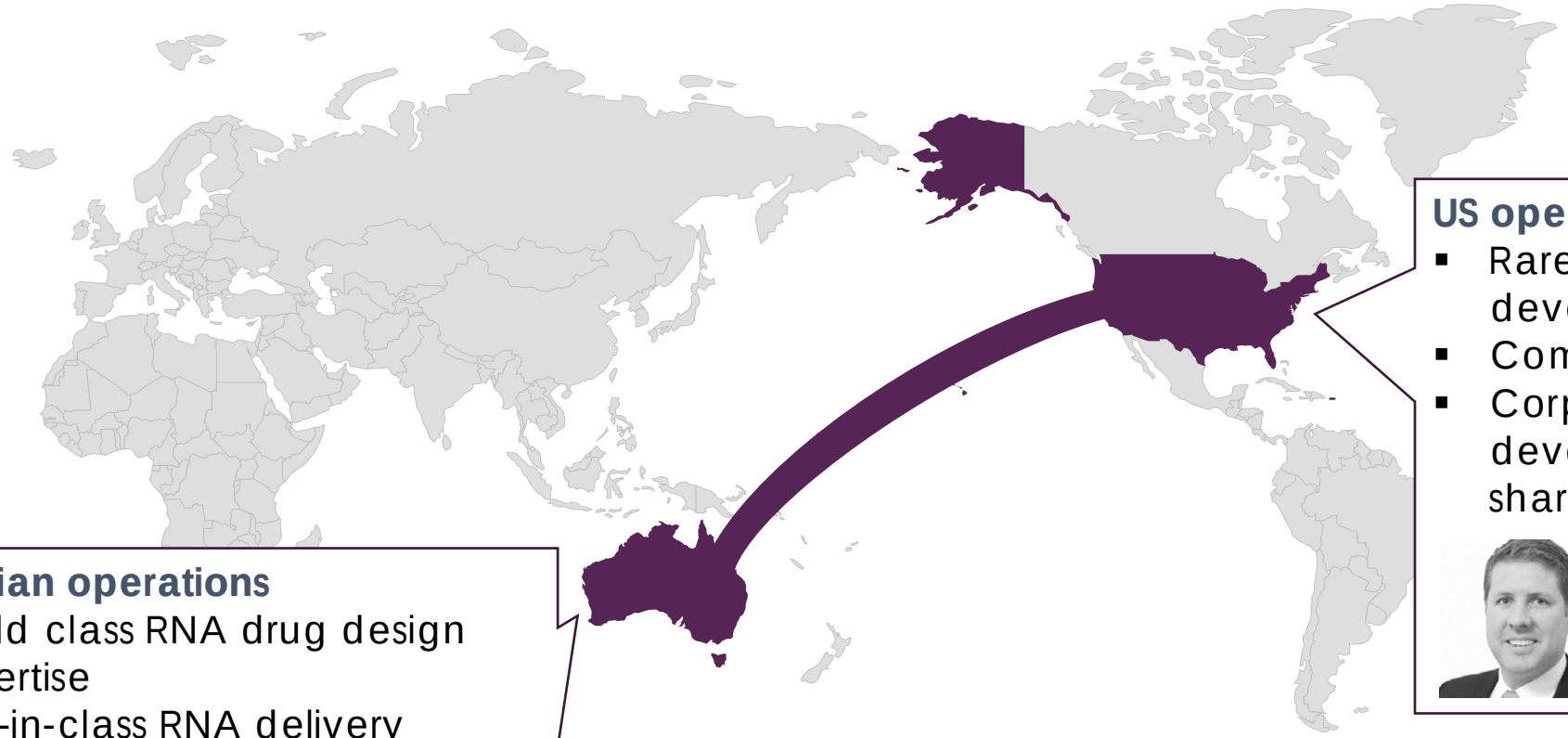


<6 months

6-12 months

3. Building world class drug discovery and development capabilities

Bringing world class science to commercialisation



US operations

- Rare-disease clinical development expertise
- Commercialisation pathway
- Corporate and business development to drive shareholder value

Australian operations

- World class RNA drug design expertise
- Best-in-class RNA delivery platform



PYC Corporate Snapshot (ASX: PYC)

Financial Information (7 August 2020, AUD)

Share price	**$0.12**
Number of shares	2,930M
Market Capitalisation	**$352M**
Cash (30-Jun-20)	$25M
Debt (30-Jun-20)	Nil
Enterprise Value	**$327M**

Board of Directors

Alan Tribe – Chairman
Doug Huey – Executive Director
Dr Rohan Hockings – Executive Director
Dr Bernard Hockings – Non-Executive Director

Top Shareholders (7 August 2020)	%
Alan Tribe	30.1%
Sietsma Holdings	9.2%
Dr Bernard Hockings	9.0%
Anthony Barton	6.0%

Share Price Performance (12 months)

PYC trades at a substantial discount to its US peers

	Market Cap. USD M[1]	Cash, USD M[2]	Stage	IND date	Platform	Lead target
PYC THERAPEUTICS	240	18	Pre-clinical	2H 21	RNA delivery	Rare Ocular
AVIDITY BIOSCIENCES	1,050	345	Pre-clinical	2H 21	RNA delivery	Rare Muscle
STOKE THERAPEUTICS	830	215	IND	1H 20	RNA targets	Rare Neuro
PassageBio	720	380	IND	1H 20	DNA delivery	Rare Neuro
generation bio	900	340	Pre-clinical	2H 22	DNA delivery	Rare Liver

1 As at 5th August 2020, AUD:USD of 0.7
2 From SEC 10-Q and S-1 filings

PYC Therapeutics

PYC is part of the ‘precision medicine revolution’ targeting rare diseases…

…with a differentiated technology…

…a lead program treating a rare disease in the eye (a >US$1Bn p.a. market)…

…and a pipeline of further programs

Safe harbour statement:

Before we begin today's call, I would like to make the following Safe harbour statement, reminding you that today's discussion will contain forward-looking statements that involve risks and uncertainties.

These risks and uncertainties are outlined in our filings with the Australian Securities Exchange. As such, actual results may differ materially from what we discuss on today's call.

We disclaim any obligation or intention to update these statements in the future.

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