ASX Announcement
5 November 2020

Investor Presentation

Invex Therapeutics Ltd (**Invex**, ASX: **IXC,** or the **Company**) a clinical-stage biopharmaceutical company focused on the development and commercialisation of Presendin™ (Exenatide) for neurological conditions relating to raised intracranial pressure, today provides an updated investor presentation to ASX as the Company undertakes a series of investor briefings and presentation to the NWR Small Caps Conference to be held today at 12:30pm AEDT.

The NWR event is free and investors can register online to view the presentation here: https://us02web.zoom.us/webinar/register/WN_Iv797nT-T-uDF7ukmSurew

This release dated 5 November 2020 has been authorised for lodgement to ASX by the Board of Directors of Invex Therapeutics and lodged by Narelle Warren, Company Secretary.

ENDS

For more information, please contact:

Company/Investors
Dr Thomas Duthy
Executive Director
tduthy@invextherapeutics.com
+61 402 493 727

Media
Margie Livingston
Ignite Communications
margie@ignitecommunications.com.au
+61 438 661 131

To subscribe to Invex email alerts, please visit www.invextherapeutics.com and follow us on Twitter **@InvexThera_ASX**

About Invex Therapeutics Ltd

Invex is a biopharmaceutical company focused on the repurposing of an already approved drug, Exenatide, for efficacious treatment of neurological conditions derived from or involving raised intracranial pressure, such as Idiopathic Intracranial Hypertension (IIH), acute stroke and traumatic brain injury. Invex has trademarked its repurposed Exenatide as Presendin™. www.invextherapeutics.com.

Invex Therapeutics

Investor Presentation

5 November 2020

ASX Code: IXC

Disclaimer

This presentation (**Presentation**) is issued by Invex Therapeutics Ltd (ASX:IXC) (the **Company** or **IXC**). The information presented in this Presentation may contain predictions, estimates and other forward-looking statements. Although the company believes that its expectations are based on reasonable assumptions, it can give no assurance that its goals will be achieved. This Presentation is not a disclosure document and is provided to the Recipient for the sole purpose of providing information relating to the investment opportunity described in this Presentation (**Purpose**). The Company will not be liable to compensate the Recipient for any costs or expenses incurred in reviewing, investigating or analysing any information, or in making an offer or otherwise. This Presentation is not to be taken to be an offer by any of the Investors to sell any or all of securities in the Company. This Presentation is provided for information purposes only and does not purport to contain all the information that may be required by each Recipient to evaluate any transaction in relation to the Purpose. In all cases, the Recipient should conduct its own investigation and analysis and should check the accuracy, reliability and completeness of the Information and obtain independent and specific advice from appropriate professional advisers. The information contained in this Presentation has been furnished by the Company and other sources deemed reliable but no assurance can be given by the Parties as to the accuracy or completeness of this information. To the full extent permitted by law: no representation or warranty (express or implied) is given; and no responsibility or liability (including in negligence) is accepted, by the Parties as to the truth, accuracy or completeness of any statement, opinion, forecast, information or other matter (whether express or implied) contained in this Presentation or its appendices or as to any other matter concerning them.

Company Snapshot

Company	
Repurposed Proven Drug	Presendin™ (Exenatide)
Clinical Stage	Entering Phase III
Orphan Disease Focus	Idiopathic Intracranial Hypertension (IIH)
Orphan Designation Granted	USA + EU
Total Addressable Market	$1.6 billion annually (US/EU)
Valuation Drivers	Clinical, regulatory, patent

Capital	
Shares on Issue	75.2 million
Unlisted Options	3.9 million
Cash (30 Sep-20)	$33.9 million
Market Capitalisation (30 Oct-20) [1]	$63.9 million
Enterprise Value (30 Oct-20)	$30.0 million

Major Shareholders	
Directors / Management	16.8%
Tattarang	11.8%
Tisia Nominees Pty Ltd	5.3%
JK Nominees Pty Ltd	5.0%
University of Birmingham	2.7%
Top 20 Shareholders	**63.8%**

Board of Directors	
Dr Jason Loveridge	Chairman
Professor Alexandra Sinclair	Executive Director & Chief Scientific Officer
Mr David McAuliffe	Non-Executive Director
Dr Tom Duthy	Executive Director

[1] Based on closing price of $0.85 as at 30 October 2020

Invex Therapeutics - Executive Summary

Clinical stage drug development Company targeting the orphan disease Idiopathic Intracranial Hypertension (IIH)

Attractive Market Dynamics

- IIH Total Addressable Market (TAM) in the US and Europe of **A$1.6 billion** per annum and growing at **3.4% per annum**
- Unencumbered drug therapy market – no approved treatments, no new treatments in clinical trials
- Urgent market need, chronic administration required

Supportive Clinical Data

- Strong Phase II clinical data - clear statistical and clinical evidence of efficacy in primary and secondary endpoints demonstrating a strong and sustained drug effect in the IIH population
- No significant safety concerns over 12 weeks of treatment
- Plan to commence Phase III registration trial in 1H CY2021

Significant Barriers to Competition

- Orphan drug designation in US (7 years exclusivity) and Europe (10 years exclusivity)
- Issued and pending patents for use of Exenatide in IIH. Formulation patents filed Q1 2020

What is Idiopathic Intracranial Hypertension (IIH)?

The Disease[1]

- >90% of cases are overweight women of childbearing age, with no known cause (idiopathic): approx. 4.7 per 100,000
- >90% suffer headaches that are progressively more severe and frequent: major cause of morbidity
- Up to 25% suffer permanent vision loss due to elevated intracranial pressure (ICP) effect on optic nerve function

The Impact[2]

- Invasive surgical and/or device interventions to temporarily lower ICP and preserve vision (significant side effects)
- 40% of patients have repeat hospital admissions, with average stays of 2.7 days
- Significant impact on quality of life and rapidly rising healthcare costs e.g. £462M in UK by 2030 (5x increase on 2017)

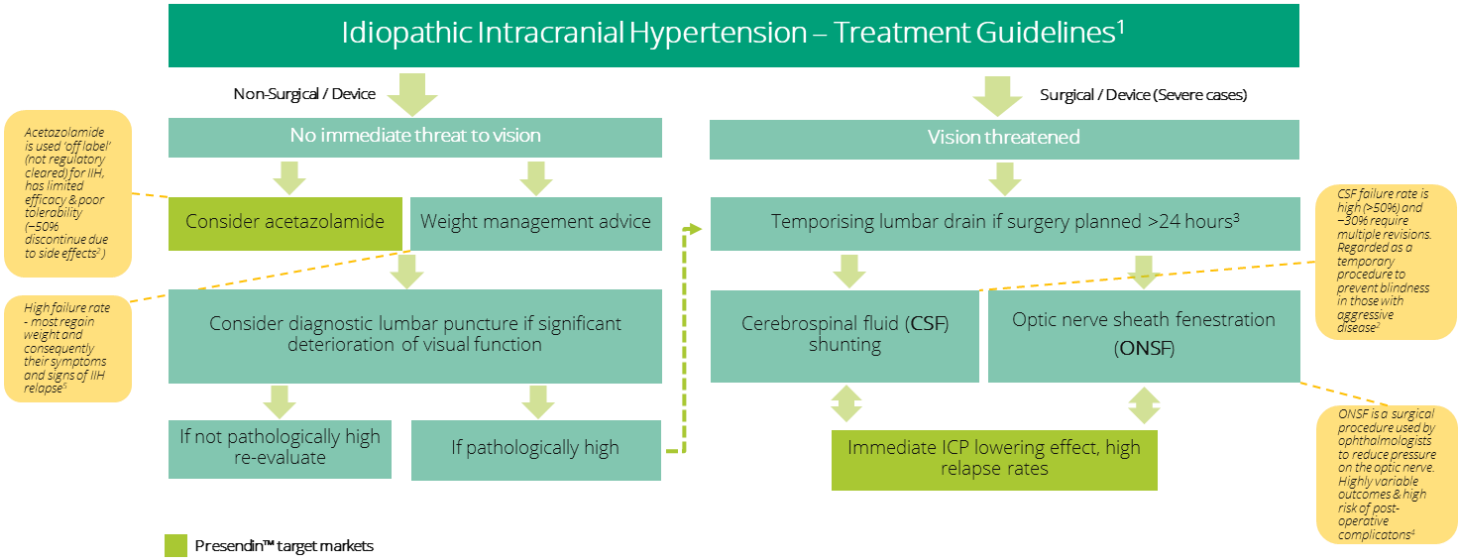
The Solution

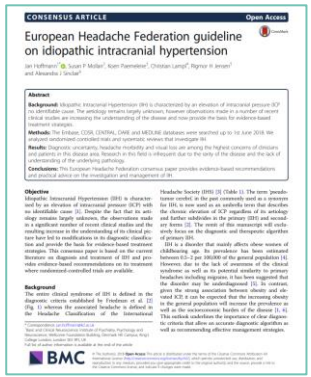
- Prof. Alex Sinclair (Invex CSO & Exec. Director) first to demonstrate glucagon like peptide 1 (GLP-1) receptor agonists commonly used in diabetes treatment (Exenatide formulated as Byetta® or Bydureon®) act on the choroid plexus in the brain to lower cerebral spinal fluid secretion and as a consequence, ICP
- Exenatide - strong scientific basis for benefit, well defined mechanism of action, patents secured - re-purposing opportunity to improve safety & efficacy → Presendin™
- Invex Phase II study in IIH - first clear demonstration of safety & efficacy in IIH

1. Corbett JJ, et al. Arch Neurol. Visual loss in pseudotumor cerebri. Follow-up of 57 patients from five to 41 years and a profile of 14 patients with permanent severe visual loss; Markey et al., Understanding idiopathic intracranial hypertension: mechanisms, management, and future directions (2016).
2. Mollan et al., EYE. The expanding burden of idiopathic intracranial hypertension (2019)

Current treatments for IIH are limited

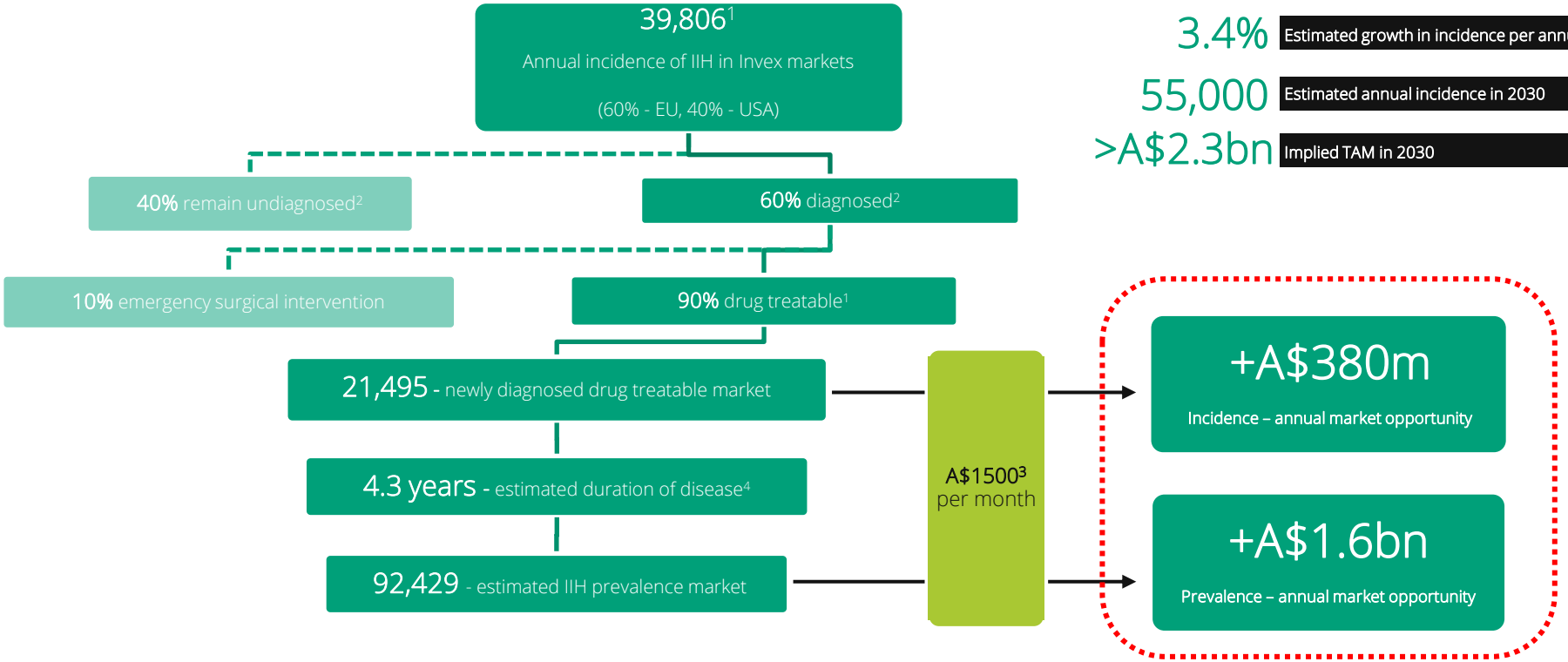
- Diagnostic criteria (2013) and treatment guidelines (2017/8) now well defined
- Recent IIH consensus guidelines written by Prof. Alex Sinclair & colleagues
- Treatment guidelines highlight the lack of a standard drug therapy in IIH and opportunity for rapid incorporation into treatment guidelines post regulatory clearance
  - Drives clinical use, important for payer coverage





1. Mollan SP, et al. Idiopathic intracranial hypertension: consensus guidelines on management (2018); 2. Ball et al., A randomised controlled trial of treatment for IIH (2011), Wall et al, The IIH treatment trial: clinical profile as baseline (2014); 3. Thurtell et al., IIH recognition, treatment and ongoing management (2013); 4. Sergott et al., Optic nerve sheath decompression: a clinical review..(1990); Banta and Farris, Pseudotumor cerebi and optic nerve sheath decompression (2000); 5. Li et al., Meta-analysis: pharmacologic treatment of obesity (2005), Ko et al., Weight gain and recurrence in idiopathic intracranial hypertension (2011)

IIH Total addressable market (TAM)



3.4% Estimated growth in incidence per annum[5]

55,000 Estimated annual incidence in 2030

>A$2.3bn Implied TAM in 2030

1. Mollan et al., EYE. The expanding burden of idiopathic intracranial hypertension (2019) incidence rate of 4.7/100,000 general population, n =23,182 . Targets markets are EU 27(& UK) + USA
2. Mollan SP, et al. Idiopathic intracranial hypertension: consensus guidelines on management (2018) ; Invex estimate re % presenting headache severity
3 Simoens et al., "what price do we pay for repurposing drugs for rare diseases"? (2016) – average 66x & Invex initial pricing analysis => pricing subject to change
4. D. Friesner et al., Idiopathic intracranial hypertension in the USA: the role of obesity in establishing prevalence and healthcare costs (2010)
5. Assumes average of obesity growth rates in UK (https://www.oecd.org/els/health-systems/Obesity-Update-2017.pdf) and historical incidence growth rate

Key clinician pathways in the management of IIH

No Immediate Threat to Vision

Optometrists

- Often patients with vision issues consult an optometrist, who in turn are primary referrers to ophthalmologists
- ~37,000 optometrists in the USA[1]

Ophthalmologists

- ~19,000 ophthalmologists in the USA[1]
- **~260** specialise in neuro-ophthalmology, specifically treating IIH patients[2]

Neurologists

- ~19,000 neurologists in the USA who see patients with significant headaches[1]
- **~1,500 to 2,000** sub-specialise as certified headache specialists[2]

Threat to Vision

- Hospitalisation and surgical / device intervention
- CSF shunting, ONSF to reduce pressure

1. Optometrist estimates: https://www.bls.gov/oes/2018/may/oes291041.htm; other specialist estimates: https://www.aamc.org/data-reports/workforce/interactive-data/active-physicians-largest-specialties-2017,
2. American Migraine Foundation and https://journals.lww.com/jneuro-ophthalmology/Fulltext/2018/03000/A_Profile_of_Neuro_Ophthalmic_Practice_Around_the.11.aspx

Invex Phase II trial – design & outcomes

Study Purpose

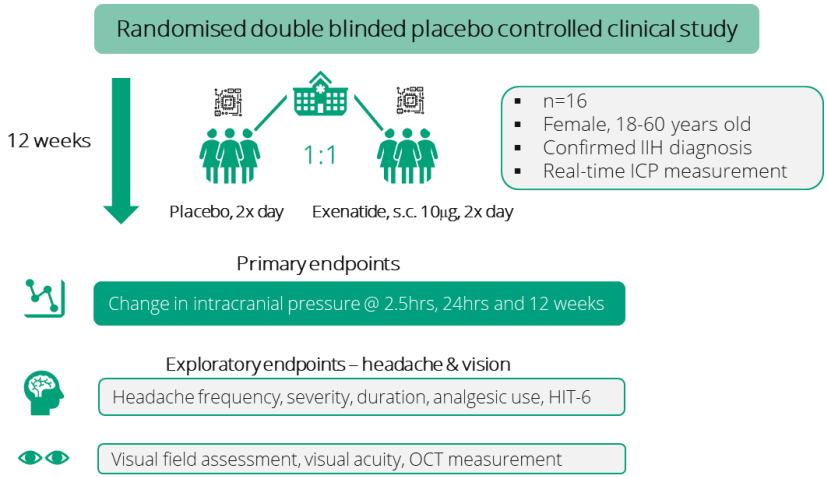
- Obtain first clinical proof of concept for Exenatide in IIH and provide a basis to move into pivotal Phase III trial by leveraging orphan drug status in Europe and the United States

Efficacy Outcomes

- Primary Endpoint (reduction in ICP) Met – 18-21% reduction across three time points; statistically significant and clinically meaningful
- Secondary Endpoint (Headache) Met – statistically significant & clinically meaningful reduction in headache days
- Secondary Endpoint (Vision) Met – statistically significant & clinically meaningful improvement in visual acuity

Safety Results

- No serious adverse events (SAEs) were observed related to the use of Exenatide
- Overall, adverse events were relatively low, with nausea the most common seen in >85% of patients treated with Exenatide
- Nausea is a known and the most frequent AE of sub-cutaneous administration of this formulation of Exenatide (Byetta®)

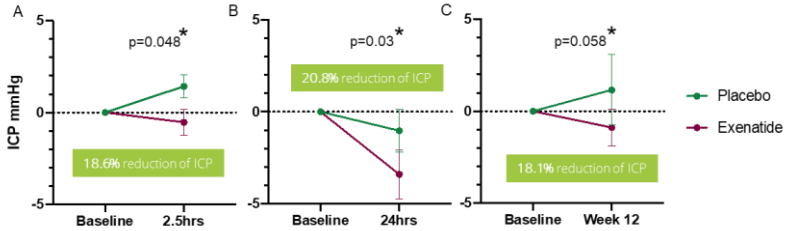


Conclusion

- Strength of the outcomes for both primary & key secondary clinical endpoints from the Phase II study implies a clear & strong drug effect in the IIH population & supports progression to a Phase III clinical trial for registration in the USA and Europe.

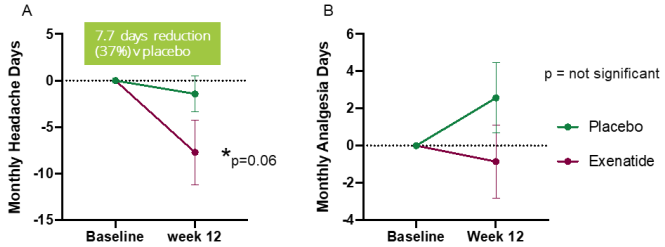
Invex Phase II Trial results (reported Q2 2020)

Primary Endpoint ICP @ 2.5hr, 24hr & 12 weeks – Exenatide Reduces ICP in IIH Patients (pre-specified sig. level of p<0.10)



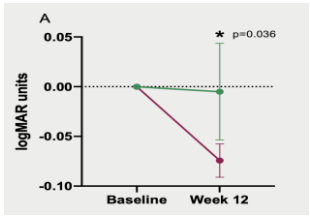
- Exenatide achieved a reduction in ICP of between **18.1%-20.8%** in IIH patients versus placebo over the study duration
- The observed reduction in ICP was double the pre-study hurdle of **10%**
- Significantly exceeds what is considered clinically meaningful (**16.5%**) in IIH

Secondary Endpoint Headache - Exenatide Reduces Headache Frequency (pre-specified sig. level of p<0.10)



- A reduction of **7.7** days would be clinically meaningful in migraine
- IIH headaches share many features with migraine where the accepted minimal clinically important reduction is **1.5-2** headache days per month[1]
- A reduction in Monthly Headache Days is a well recognised and validated endpoint by regulators in headache studies

Secondary Endpoint Vision - Exenatide Improves Visual Acuity (pre-specified sig. level of p<0.10)

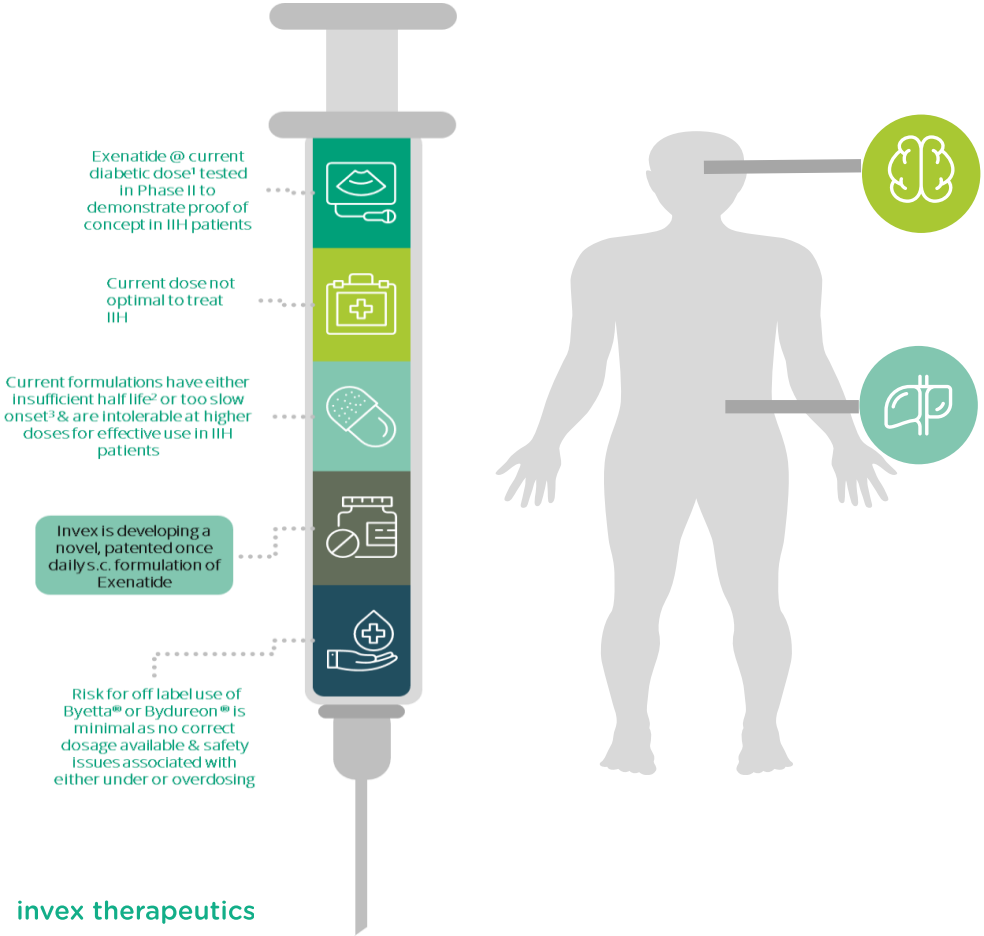


1 line improvement in acuity at 12 weeks v placebo

- An improvement equivalent to a whole line (-0.1) on the acuity chart is a sig. change for an IIH patient & considered a "clinically relevant recovery" by KOLs
- For patients, such an improvement could mean the difference between being able to drive or not (for example)

Mitchell et al., 2020. A randomised, placebo controlled, double blind trial of the effect of the GLP-1 receptor agonist Exenatide on intracranial pressure in Idiopathic Intracranial Hypertension (IIH: Pressure Trial). 14th European Headache Federation Congress.

Reformulation and re-purposing strategy



Exenatide - IIH

- Invex has demonstrated GLP-1 receptors are expressed in the choroid plexus region of the brain and that in animal models:
  - Exenatide can bind to these receptors
  - Provides fast onset of action (within 60 mins)
  - 50% reduction in ICP over 6 days in animal models
  - Reduce cerebrospinal fluid secretion (CFS)
- Validated in humans in a Phase II study completed Q2 2020

- Exenatide was approved in 2005 in the US & 2006 in the EU for the treatment of Type II diabetes
- Currently marketed by AstraZeneca in two dosage formulations
- In its Byetta® form, Exenatide is administered as a twice-daily, sub-cutaneous injection or as Bydureon®, as a once weekly injection [combined sales US$650M in CY2019]
- Exenatide is well tolerated and considered a standard of care in Type II diabetic patients
- Current formulations provide an exposure that is either too short or too long to effectively treat IIH

[1]10mg pre-filled injection pens, [2] Byetta® [3] Bydureon®

Reformulation & manufacturing update

Reformulation

- Successfully completed a series of animal pharmacokinetic (PK) studies in CY2020 with proprietary formulations
- Final formulation decision delayed due to COVID-19 impacts on access to laboratory personnel and testing facilities
- Current expectation on a final formulation candidate for planned clinical studies will be made in Q4 CY2020
- Formulations are subject of additional patent filings made by Invex in Q1 CY2020

Manufacturing

- Critical decision, dependent on final formulation
- Discussions with several potential manufacturers are well-advanced
- Final sign off for supply of Good Manufacturing Practice (GMP) Presendin™ expected Q4 CY2020

Tolerability and human PK trial update

Tolerability*

- All Presendin™ formulation excipient(s) have been used in already approved drugs and have a well-established safety profile - hence Invex only required to undertake one additional safety study to assess local tolerability at the injection site (in animals)
- Study expected to commence in 1H CY2021

Human PK Study*

- As a reformulation of an existing approved drug, a Phase I human PK study required
- Single and repeated sub-cutaneous doses in healthy (obese) volunteers
- Total amount of bioavailable drug must not exceed that approved for reference Exenatide drug product Byetta®
- Study expected to commence in 1H CY2021

* Subject to availability of GMP grade Presendin™

Regulatory update

Strength of the outcomes for both primary & key secondary clinical endpoints from the Phase II study implies a clear & strong drug effect in the IIH population & supports progression to a Phase III clinical trial for registration in the USA and Europe

European Medicines Agency (EMA)

July 2020: First Response to Protocol Assistance

- One well controlled study providing compelling evidence of safety and efficacy required for marketing authorisation application (MAA) in EU
- CHMP[1] recommended ICP as primary endpoint versus placebo
- Noted headache would also be a clinically meaningful endpoint
- Broad acceptability of Invex's pre-clinical package and human PK study plans

October 2020: Second Protocol Assistance Request

- Follow up submission for advice lodged in October 2020
- Ascertain acceptability of headache based primary endpoint for Phase III trial
- Following feedback in late Q4 CY2020, Invex intends to submit a Clinical Trial Application (CTA) within select European countries in 1H CY2021
- Single pivotal clinical trial for registration of Presendin™ in EU expected to commence thereafter

US Food and Drug Administration (FDA)

July 2020: First Response to Protocol Assistance

- Initial submission asked for advice on either headache or vision as the preferred primary endpoint – reviewed by Division of Ophthalmology
- Requested a complete protocol and statistical analysis plan prior to detailed scientific advice
- Reduction in headache days of moderate to severe headaches a clinically meaningful endpoint
- Broad acceptability of Invex's pre-clinical package

Q1 2021: Pre-IND Meeting

- Detailed protocol assistance to be sought post-response from CHMP
- Although outside Invex's control, with headache-based endpoint, it is logical to expect a pre-IND / type B meeting with Division of Neurology
- Pre-IND meeting expected Q1 CY2021

CHMP[1] – Committee for Medicinal Products for Human Use

Summary & Outlook

- Large, growing market for IIH with no approved medical interventions
- **Orphan Drug Designation in the USA and EU** provides expedited, cost-effective clinical trial recruitment, reporting and approval/registration as well as commercial exclusivity for up to 10 years
- Strong Phase II clinical data established
- **Financial:**
  - **$33.9M** in cash following capital raise in Q2 CY2020 – expected to fully fund completion of a Phase III clinical trial in IIH
  - Very attractive **$30.0M** Enterprise Value (EV) considering stage of development and market attributes
  - Large EV discount to ASX-listed orphan (ASX:CUV, ASX:NEU, ASX:RAC), ophthalmic (ASX:OPT) and re-purposing (ASX:PAR) companies
- **12 Month Milestones:**
  - Response from EMA expected late Q4 CY2020
  - Final Formulation Q4 CY2020
  - Appointment of contract manufacturer Q4 CY2020
  - Pre-IND Submission / Type B Meeting with FDA expected Q1 CY2020
  - Subject to availability of GMP Presendin™
    - Human PK study to commence 1H CY2021
    - Animal tolerability study to commence 1H CY2021
    - Filing of a CTA in Europe for Phase III clinical trial 1H CY2021

invex
THERAPEUTICS

Thank you

Contacts

INVESTORS

Dr Tom Duthy
Executive Director

+61 402 493 727
tduthy@invextherapeutics.com

MEDIA

Margie Livingston
Ignite Communications

+61 438 661 131
margie@ignitecommunications.com.au

To subscribe to Invex email alerts, please visit www.invextherapeutics.com
Follow us on Twitter **@InvexThera_ASX**