

## Impression Acquires CBD Inhalers as a Method of Delivery and Relevant to Lung Inflammation

### Highlights:

- Impression acquires CBD pressurised metered dose inhalers for distribution under the SAS
- A preferable CBD delivery application for patients with certain conditions
- Preliminary evidence for the use of CBD inhalers to support those with lung inflammation and acute lung injury experienced by patients with Asthma and COPD
- Medical Advisory team to research CBD inhalers relevant to symptoms associated with COVID-19
- Pressurised metered dose inhalers are a safe and effective delivery system for CBD whilst avoiding the dangers of smoking or vaping.

Impression Healthcare Limited ('Impression', 'IHL' or the 'Company'), developer of four unique medicinal cannabis products and owner of INCANNEX™ cannabis oils, is pleased to announce that it has placed an initial order for 500 cannabidiol ('CBD') pressurised metered dose inhalers ('PMDI' or 'inhalers') from cGMP pharmaceutical manufacturer, Entourage Therapeutics LLC ('Entourage'). In consideration for the placement of the initial order, Entourage has granted IHL exclusivity over their product to be sold in Australia under the Special Access Scheme ('SAS') and to facilitate further discussions. The expected revenue to IHL from this order is expected to be circa \$125,000.

IHL considers the purchase significant to the medicinal cannabis industry because there are currently no other suppliers in Australia. CBD inhalers are a preferable delivery application for patients with certain conditions currently being treated with CBD oils, potentially facilitating a significant competitive advantage to IHL. Those advantages include:

- Inhaled CBD is delivered to the blood almost immediately. Maximum blood concentrations are achieved in around 10 minutes versus 1-4hrs for oral CBD
- Bioavailability of inhaled CBD (<45%) is higher than oral CBD (<15%), meaning that lower dosages are required and more doses per unit volume are available to the patient
- Side effects of inhaled CBD are minimised versus high-dosage oral CBD administration.

There is also an existing preliminary but promising body of research that the powerful anti-inflammatory properties\*<sup>Notes 1,2,3</sup> of CBD may be applied to treat lung inflammation, with inhalation devices delivering CBD to the site of inflammation.

Pre-clinical and in-human pilot studies support the potential for CBD in treating inflammation associated with pneumonia and acute lung injury ('ALI'), experienced by patients with Asthma and Chronic Obstructive Pulmonary Disease ('COPD'). It is clear that some patients with COVID-19 will develop pneumonia and ALI through inflammatory processes so IHL's medical advisory board will investigate the potential of CBD inhalers to assist with patient recovery.

PMDI's and the excipients used in them are an established method of drug delivery with a long history of safe use, primarily as asthma inhalers. They provide an extremely precise and effective method of delivering a target substance into a person's lungs and bloodstream, by avoiding what's known as "first pass metabolism" through the stomach and other digestive organs.

**CEO and Managing Director, Mr Joel Latham, said;** "We're delighted to be the first mover in offering a CBD inhalation administration device to the Australian medicinal cannabis market. We predict that CBD inhalers will become the preferred delivery method for many patients. We're also excited at the prospect of opening new unregistered therapies for those suffering conditions associated with lung inflammation.

In addition to today's update, I'd like to take the opportunity to reiterate that we do not expect any material delays to our clinical programs for OSA and TBI resulting from current Governmental restrictions".

**ENDS**

\*1. Cannabidiol improves lung function and inflammation in mice submitted to LPS-induced acute lung injury.

<https://www.ncbi.nlm.nih.gov/pubmed/25356537>

\*2. Cannabidiol reduces airway inflammation and fibrosis in experimental allergic asthma. <https://www.ncbi.nlm.nih.gov/pubmed/30481497>

\*3. Cannabinoid effects on ventilation and breathlessness: a pilot study of efficacy and safety. <https://www.ncbi.nlm.nih.gov/pubmed/21436223>

### About Impression Healthcare Limited (ASX: IHL)

Impression Healthcare Limited (IHL.ASX) is a first-in-class innovator and developer of a diversified mix of medicinal cannabis pharmaceutical products for global export potential. The Company is currently undertaking clinical programs to develop 4 uniquely formulated medicinal cannabis products for the treatment of Obstructive Sleep Apnoea (OSA), Traumatic Brain Injury/Concussion, Temporomandibular Joint Disorder and Periodontitis (Gum Disease).

Each indication represents major global markets with significant yearly sales. 3 of the 4 indications currently have no existing registered pharmacotherapy (drug) treatment, raising the possibility of patients receiving Government subsidies for products that demonstrate suitable safety and efficacy profiles in clinical trials.

There is an established body of research validating the hypothesis for the cannabinoids being used in Impression's chosen therapeutic areas and IHL has a strong patent filing strategy (as announced "IHL files cannabinoid patent over IHL-216A for TBI" 04<sup>th</sup> October, 2019 and "IHL Files Patent over IHL-42X for OSA" 06<sup>th</sup> of December, 2019) as it develops its products in conjunction with its medical advisory board of global key opinion leaders.

Further to its clinical programs, Impression also has its Australian licenses in place to import, export and distribute medicinal cannabis products and has launched a line of EU GMP approved CBD oil products under the brand, "INCANNEX". The INCANNEX cannabis-based oils are sold under Impression's product supply and distribution agreement with Cannvalate Pty Ltd, which is the largest network of cannabis medicine prescribers in Australia.

Yielding growing revenues to Impression is its customised oral devices manufacturing business. The oral devices division delivers high-quality products both direct to the consumer and via a growing B2B preferred practitioner network of dentists.

**Investors:** [investors@impression.healthcare](mailto:investors@impression.healthcare)

**Website:** [www.impression.healthcare](http://www.impression.healthcare)