

19 January 2015

**INVION ANNOUNCES POSITIVE INTERIM DATA FROM ITS
PHASE II CLINICAL TRIAL OF ORAL INV102 (NADOLOL)
IN SMOKING CESSATION**

Invion Limited (ASX: IVX) is pleased to announce positive interim data from its phase II double-blind placebo-controlled randomised clinical trial in patients with chronic cough or established COPD who are trying to quit smoking but have failed multiple times previously.

The interim data is generated from an assessment of sputum (phlegm) samples collected from patients upon reaching (i) a maximum tolerated dose of drug (visit 6), and (ii) four weeks of maximum tolerated dose treatment (visit 7).

The blind-broken analysis shows clinically relevant changes in four biomarkers of inflammation in INV102 (nadolol) treated patients compared to placebo. For those patients receiving INV102 (nadolol):

- IL-8, a powerful chemoattractant for inflammatory cells, was stable between visits 6 and 7, with a median decrease in IL-8 levels compared to placebo which showed a median increase in IL-8 levels;
- ERK2, a biomarker for the beta arrestin pathway, showed a greater median decrease than placebo-treated patients resulting in a lower median value at visit 7 (487 v 1,910 pg/mL);
- MUC 1, a glycoprotein that lines the surface of epithelial cells in the lung, showed a modest median decrease in patients receiving nadolol and placebo; and
- Neutrophils, the white blood cells that are the hallmark of inflammation of chronic bronchitis decreased 7% (mean) versus a mean increase of 1.4% in placebo patients.

Dr Mitchell Glass, Executive VP of R&D and Chief Medical Officer said: "These results are exciting to Invion and this field of research for three primary reasons. First, we have clear and clinically meaningful separation between subjects treated with nadolol versus placebo in four areas of biomarker investigation. Second, the pattern of individual neutrophil changes from visit 6 to visit 7 indicates a response to nadolol treatment. Third, ERK1/2 is a hallmark of the beta arrestin pathway, the blockade of which is central to our hypothesis concerning the unique mechanism of action of nadolol. Analysis is ongoing of MUC5AC, the abnormal mucin which is specific to COPD, which will further inform us about airway healing."

"We recognize that we must interpret these results with caution, given their interim nature, the sample size, and the variability that naturally occurs in sputum analysis. However the results support our hypothesis regarding the clinical, regulatory and commercial potential of INV102 (nadolol), and also provide a strong foundation to our inhaled INV102 program, which is approaching a major development milestone."

Laboratory analyses were performed at Washington University, St Louis, MO, USA under the supervision of Dr Mario Castro, the Principal Investigator of the smoking cessation trial.

Investors can hear Dr Mitchell Glass on BRR as he discusses today's announcement and results, via this link: <http://webcasting.brmedia.com/broadcast/133437>

FOR MORE INFORMATION CONTACT: Managing Director and CEO, Dr Greg Collier
P: + 61 7 3295 0500 E: greg.collier@inviongroup.com

About Invion Limited

Invion is a life sciences company focussed on the development of treatments for major opportunities in respiratory disease and autoimmune disease. The Group has three drug assets in development, three phase II clinical trials and two clinical feasibility programs currently underway. **INV102 (nadolol)**, a beta blocker (beta adrenergic inverse agonist) currently used to treat high blood pressure and migraine, is being repurposed to treat chronic inflammatory airway diseases, including asthma and chronic obstructive pulmonary disease (COPD). **INV104 (zafirlukast)** is a leukotriene receptor antagonist (LTRA) or anti-leukotriene that reduces inflammation, constriction of the airways, and the build-up of mucus in the lungs. **INV103 (ala-Cpn10)** is a modified, naturally occurring human protein which has been proposed as a founding member of the Resolution Associated Molecular Pattern (RAMPs) family hypothesised to maintain and restore immune homeostasis. Invion is an ASX listed company (ASX:IVX), with operations in Brisbane, Australia and Delaware, USA.