



Aus Bio Limited Company Profile

Overview

Aus Bio is an Australian biotech company focusing on developing new and novel Influenza antiviral therapeutics and other therapeutics in areas of Clinical need. Aus Bio's principal activities are in the areas of Influenza, Inflammatory Respiratory Conditions (ie. COPD) and Diabetes Mellitus.

Influenza – Development of Novel Antivirals a Disruptive Technology

Aus Bio's influenza results continue to impress. In vitro results are greater than 3.5 logs more potent than currently used antivirals. Murine and ferret studies confirmed potency. Not a neuraminidase inhibitor.

Key Design Advantages include:

- Novel design.
- Novel MOA: Early /Immediate interruption Influenza Virus Life Cycle.
- Improved Antiviral Potency: Very High Potency "in vitro" and "in vivo" (mice and ferrets).
- Improved Therapeutic Performance: Pre and Post Infection Murine Models - 1 dose only. Weight loss recovery commences day 3-4. Preventative and Therapeutic Indications anticipated. Possible once only oral inhalation dose.
- Broad Spectrum Anti-Viral Activity: "Pan Strain Efficacy" Flu A and B strains Oseltamivir resistant High Path Strains (Avian Flu Strains H7N9 H5N1) (NIAID/NIH support continues).
- Extended Duration of Efficacy Extended: Supported by Preclinical Data. May offer a "Bridge to Vaccination".
- Low Propensity for Drug Resistance: Anticipated Low Drug Resistance due to MOA.
- Safety: No observed Tox issues yet. This work is ongoing. Preliminary in vitro safety screen including 450 "off target" enzyme and cardiovascular screening at physiologically relevant concentrations indicates that 2 representative flu compounds are suitable for further development as anti - influenza agents delivered to the lung.

Inflammatory Respiratory Conditions eg. COPD

COPD is the third most common cause of death worldwide. There are essentially no effective treatments that reverse the changes seen in COPD. Aus Bio has shown in a murine smoking study that MD990 ameliorates the early pathogenesis of cigarette smoke induced experimental COPD.

Following a peer reviewed published protocol mice were exposed for 10 weeks to cigarette smoke. The controls developed changes consistent with early COPD. This early data suggests that intranasal administration of MD990 during the term of exposure to chronic cigarette smoke in a murine model had beneficial effects in ameliorating the development of COPD in those mice.



Treatment with MD990 partially protected against the neutrophilic airway inflammation and completely protected against development of excess mucus production and airway remodeling and reduced the early developmental changes of emphysema collectively these results suggested that MD990 may have a role in protection against a number of measures of impaired lung function in COPD. This work continues.

Diabetes Mellitus

The Aus Bio MD960/961 drug candidates have, as to date, the following characteristics based on preclinical results:

- Hyperglycaemia normalised in two rodent models
- Insulin sensitizer – non PPAR
- Reduces insulin levels in mouse model (db/db)
- Inhibition of PTP'ase, not PTP1B but LAR
- Induction of nitric oxide
- Positive vascular effects, important to FDA
- Reduces BP (in vivo rabbit model)
- Anti-inflammatory activity
- Orally bioavailable, good safety profile.

Speaker profile

Dr Peter J. Jenkins, M.B. B.S., F.R.A.C.P. – Executive Director, Management



Dr Jenkins has been a Director since the date of incorporation of the company on 3 March 2000.

Dr Jenkins is a consultant physician and gastroenterologist and has held both Clinical Research positions at a leading Melbourne based Tertiary Hospital and also Research Positions at the Baker Medical Research Institute, Melbourne. He has been Clinical Dean at the Alfred Hospital for the Monash University Faculty of Medicine and also Chairman of the Committee of Chairman Senior Medical Staffs of Major Victorian Hospitals.

Dr Jenkins is a Director of a number of private and public biotechnology companies, and is a former Director of the ASX listed Starpharma Limited where he was Deputy Chairman. He is a former Director and Chairman of Immuron (formerly Anadis Limited).

Dr Jenkins is a former judge of the Australian Technology Awards. He is experienced in the issues and problems that face biomedical research and development companies.

For more information, please visit: ausbio.com.au