## National Health Amendment (Pharmaceutical Benefits) Bill 2015 [Provisions] Submission 11

## To Whom It May Concern:

I wish to convey my serious concerns regarding 1 issue embedded in the above proposed legislation. The bill will facilitate the health minister to permit "a" flagging of biosimilar medicines. This element should not be supported as it is not supported by scientific evidence and carries a significant risk of potential major harm to treated patients. The potential harms include increased risk of infusion/administration reactions (such as anaphylaxis), risk of opportunistic infections (such as reactivated tuberculosis), risk of thromboembolism (leg and lung blood clots) and also loss of treatment efficacy (in a group of patients already refractory to conventional treatment with severe chronic disease like rheumatoid arthritis).

The "a" flagging of CT-P13 (Inflectra, a biosimilar version of infliximab) will set a dangerous precedent for the many upcoming listings of biosimilar medicines over the next 5-7 years. More information is required before this should be implemented.

The institution of "a" flagging will allow the potential for interchangeability of biosimilar medicines at the pharmacy dispensing level, often without the knowledge of the treating/prescribing clinician. Switching means transitioning between the originator biologic drug and a biosimilar medicine. Interchangeability refers to the switching back and forth between the originator biologic and 1 (or more) biosimilar drugs over time (depending on what's available & comparative pricing). In a patient responding to treatment, these drugs are continued indefinitely as the medical condition is chronic and lifelong. At present, some patients have been successfully receiving their original biological treatment for up to 15 years.

The scientific evidence supporting a single treatment switch (and then maintenance of that switched therapy) for CT-P13 is limited to a total of 227 adult subjects with either rheumatoid arthritis or ankylosing spondylitis who were switched after 12 months of Remicade (originator form of infliximab) to CT-P13 and then followed for 12 months. After a single switch in treatment, there was no difference in adverse effects between 52 and 108 weeks of therapy between the patients switched to CT-P13 at week 52 versus those who received CT-P13 for a continuous period of 2 years. The trial did not look at interchangeability (ie 2 or more treatment switches over time). No trial has ever looked at the safety and sustained efficacy of interchangeability.

Biosimilar medicines are not bio-generics or bio-identicals (like we see with conventional generic medicines eg blood pressure or cholesterol lowering medicines). They are inherently different because they are sourced from biological sources (cultured viruses in animal systems). Small differences in chemistry (eg commonly differences in glycosalation – ie attached sugars to the main molecule) result in different rates of immunogenicity within the same patient. Immunogenicity refers to the formation of anti-drug antibodies. Immunogenicity results in side-effects (eg infusion reactions) and loss of treatment effect (the body clears the drug much faster, so the drug loses its effect). Because of these differences, biosimilar medicines cannot be managed in the same way as conventional generic medicines in terms of providing safe and affordable community access to treatments (via the PBS subsidy scheme in Australia).

The implementation of "a" flagging is contrary to independently produced Australian guidelines (eg recently released by CATAG) and reputable international regulatory medicine access practice (eg Britain and Ireland, Germany and several Scandanavian countries, to name a few). The proposal would be contrary to our own guidelines on the Quality Use of Medicine (safe, affordable, accessible and judicious use of medicines).

Yours truly, Dr Paul Kubler (Director of Rheumatology and Clinical Pharmacologist, Royal Brisbane & Women's Hospital).

I declare that I have no potential conflicts of interest in making this statement (ie I have not received payment for advice and speaking on behalf of pharmaceutical companies involved with biologic medicines). I have been external clinical advisor to the TGA in assessing medicine registration applications for >10 years.