STRIDER NZAus

Newsletter 28, July 2016

A Randomised Controlled Trial of **S**ildenafil **T**herapy **I**n **D**ismal Prognosis **E**arly-Onset Intrauterine Growth **R**estriction

Welcome to the **Townsville Hospital team!**

Well done to Audra Davis and Dr David Watson for working through the local requirements to get STRIDER up and running. We are looking forward to your first recruit.



The first clinical trial of **sildenafil in preeclampsia** was reported in 2006 led by Phil Baker. This small placebo controlled trial of sildenafil in women with preeclampsia at 24-34 weeks used an escalating dose (20mg-80mg tds). (Samangaya *Hyperten Preg* 2009; 28(4): 369-82). In the 35 women studied there was no significant prolongation of pregnancy (4 days vs 4.5 days). Phil then worked with Peter von Dadleszen in Canada where they conducted a small observational study of sildenafil in **severe, early onset IUGR** and demonstrated an **increase in fetal growth** (n=10) compared to matched case controls (n=17) (Von Dadleszen *BJOG* 2011;118(5): 624-28-82). As you all know this finding led to the **STRIDER NZAus and the STRIDER IPD group trials** that are now underway.

Hypertension: Original Research

Perinatal and Hemodynamic Evaluation of Sildenafil Citrate for Preeclampsia Treatment

A Randomized Controlled Trial

The potential for sildenafil to delay delivery for women with preeclampsia has been revisited in a newly published trial (Trapani et al. *Obstet Gynecol.* 2016 Aug;128(2):253-9.

This double blind placebo controlled trial involved 100 women at 24-33 weeks and compared 50mg sildenafil to placebo tds.

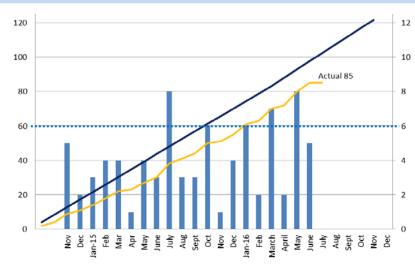
Primary endpoint: prolongation of pregnancy from randomisation to delivery.

Result: increased pregnancy duration of 4 days with sildenafil (14.4 days vs placebo 10.4 days, p=.008). Sildenafil was well tolerated but under-powered to detect a difference in neonatal outcome. The authors suggest that a larger sample size, higher start dose and earlier start of treatment in their study (31.4 vs 29.1 weeks) may have contributed to the difference in outcome when compared to the trial presented by Samangaya & Baker.

Is there a role for sildenafil in the management of preeclampsia? The STRIDER IPD trials are likely to be able to address this question as well assessing its effect on growth and neonatal outcome.

Recruited to date 85 / 122

There were **NO NEW PARTICIPANTS** enrolled in July. After several great months this was disappointing. The **contribution from each and every one of our sites is vital** in completing this important trial. Let's all aim to recruit in August!!



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