Author's response to reviews

Title: Outcomes of sustained low efficiency dialysis versus continuous renal replacement therapy in critically ill adults with acute kidney injury: A cohort study

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Dear Editors:

It is a pleasure to submit our manuscript, *Outcomes of sustained low efficiency dialysis versus continuous renal replacement therapy in critically ill adults with acute kidney injury: A cohort study* for consideration of publication in *BMC Nephrology*. Sustained low efficiency dialysis (SLED) is being increasingly used in the setting of acute kidney injury and hemodynamic instability. The purported benefits of SLED include less hemodynamic disturbance when compared to intermittent hemodialysis and reduced resource demands as compared to CRRT. However, despite these potential benefits, there remains limited data on clinical outcomes – including mortality and renal recovery – associated with SLED.

The accumulated experience at our centre, St. Michael’s Hospital in Toronto, Canada, which concurrently offers both SLED and CRRT to critically ill patients, provides a unique opportunity to compare outcomes for SLED vs CRRT. Since 2007 we have maintained a rich dataset of all patients initiating renal replacement therapy for AKI within our ICUs. This has allowed us to conduct one of the largest studies comparing these modalities with adjustment for a number of clinically relevant covariates. Moreover, unlike previous studies comparing SLED and CRRT (including an RCT), the parameters of the SLED therapy that we provided is congruent with its traditional description in the literature thereby enhancing the generalizability of our findings.

Our findings support similar outcomes for patients treated with SLED vs CRRT. Notwithstanding the inherent limitations our study, we feel that our observations are novel and clinically important thereby making this a valuable addition to the existing literature. It is our hope that this study will add to the impetus for
definitive trials comparing these two modalities. As such, we believe that it will be of considerable interest to the readership of *BMC Nephrology* and we hope that you will find our manuscript suitable for publication.

Thank you for your consideration,

Sincerely,

Ron Wald, MDCM MPH FRCPC