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The effectiveness of surgery as a non-pharmacological intervention in management of adult OSA is under-presented☆,☆☆

To the Editor

Design and execution of systematic review/meta-analyses are important. Whilst well-intentioned, the paper by Papageorgiou et al. [1] is flawed in excluding multiple high level randomized trials, particularly in airway surgery [2–4], because of "prior therapy" – this negates an understanding of the role of all non-PAP non-pharmacological therapies, as these should *only* be implemented after failed "prior therapy" (CPAP).

Adult OSA primary therapy is CPAP, and all other treatments are predominately employed after failed CPAP (which occurs in 17–54 % of the population), so excluding trials executed after "prior therapy" meets the definition of medical nihilism.

Peer reviewed adult OSA surgery trials, where surgical therapy is appropriately implemented in CPAP failure, have shown large and meaningful reductions in surrogate disease parameters and patient reported quality of life improvements [1–3]. These such trials re-enforce long term sleep surgery observational study findings of significant mortality and morbidity mitigation, whilst also being cost-effective, and Surgical Position Statements have included multiple papers supporting a role for surgery across these varied domain outcomes [5].

We suggest the inclusion, rather than exclusion, of high-quality surgical trials in the adult OSA systematic review literature to provide a holistic assessment of the available evidence. Informed decision making based on current evidence in the setting of CPAP failure, which occurs in a large proportion of patients, is key to managing a major burden of otherwise untreated disease.

CRediT authorship contribution statement

Stephen Shih-Teng Kao: Writing – review & editing, Writing – original draft. **Nuwan Dharmawardana:** Writing – review & editing. **Stuart Grayson Mackay:** Writing – review & editing, Conceptualization.

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Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Prof Mackay was a principal investigator in SAMS randomized clinical trial (ACTRN12614000338662) funded by the National Health and Medical Research Council of Australia (1059510).

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