



Letter Re: Butyrylcholinesterase is a potential biomarker for sudden infant death syndrome

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Dear Editor, Prof Durner,

Thank you for highlighting the overlap of low BChE levels between our SIDS and non-SIDS groups as one factor limiting the capacity for this measurement to be introduced into any newborn screening program. Our call for further research also recognised the prematurity of this idea.

In 1968 WHO outlined the guiding principles of any newborn screening programme.¹ In summary: the condition should be a significant problem with known natural history, an agreed policy on whom to treat and the availability of diagnostic and treatment facilities; there should be a suitable, acceptable test; and the cost of case-finding should be economically balanced in relation to medical costs as a whole.²

These principles guided the recent inclusion of spinal muscular atrophy into our newborn screening programme in NSW. Notwithstanding the fact that presymptomatic intervention with approved treatments resulted in better outcomes for affected individuals³ this benefit had to be balanced against numerous ethical considerations including introducing harms from unnecessary detection and treatment, particularly where some individuals may only have benign or mild disease associated with the abnormality.²

As we highlighted, outstanding questions pertaining to our findings include our inability to relate this to specific levels of BChE in the newborn period, associated phenotypic characteristics, availability of appropriate diagnostic pathway(s) and the lack of knowledge regarding potential treatment interventions.

We trust that these limitations do not blind people to our novel finding which offers a new possibility for the identification of infants at risk for SIDS prior to their death. We are pleased to hear that others have taken an interest in our work and also support more research in this area to fully understand the implications of our new findings.

With best regards,

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Contributors

CH drafted the initial manuscript, with further contributions from KW. CH, NA, and KW reviewed successive drafts, and all authors approved the final version of the manuscript.

Declaration of interests

CH, NA, and KW declare no competing interests.

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