



Letter to Butyrylcholinesterase is a potential biomarker for Sudden Infant Death Syndrome

Jürgen Durner^{a,b*}

^aDepartment of Conservative Dentistry and Periodontology, University Hospital, LMU Munich Ludwig-Maximilians-University of Munich, Goethestr. 70, 80336 Munich, Germany

^bLaboratory Becker and Colleagues, Führichstr. 70, 81671 München, Germany

Dear Editor,

The article “Butyrylcholinesterase is a potential biomarker for Sudden Infant Death Syndrome” was not only well received by experts but also by social media and the lay press and implied an already currently available advance in newborn screening (NBS).

As a result, there were queries from newborn screening laboratories as well as from clinicians as to whether the analyte butyrylcholinesterase is already available and why not yet.

In the discussion, mainly papers are cited in which the analyte is increased or decreased. In this context, it would also have been desirable to go into the principles of NBS and to show what performance an analyte must have for this, since it is indirectly implied that such a parameter should (optionally) be added to the NBS.

Thus, when looking at the figures, it can be seen that there are overlapping cases and no clear cut off. This raises the question, would one unnecessarily unsettle parents? An important principle of the NBS that the healthy population should not be touched does not fulfil this point.^{1,2}

Another point to be discussed is that there is no therapeutic approach so far, but this is considered a crucial ethical point for the NBS.³ Should the testing reveal an increased risk of SIDS, what is the consequence? Will the child be hooked up to a monitor with cables before sleeping or will a special mattress or socks that measure

blood flow (both already commercially available) suffice? What would a clinical study on this look like? One thing is clear: parents cannot personally take over the monitoring of the child's sleep over a longer period of time; they need technical help.

Adding this perspective would further round out the work.

With best regards

Prof. Dr. Dr. Jürgen Durner

Contributors

Jürgen Durner is the sole author responsible for the writing of the letter- original draft and editing, formal analysis, conceptualization, supervision and validation.

Declaration of interests

There is no conflict of interest.

References

- 1 Kerruish NJ, Robertson SP. Newborn screening: new developments, new dilemmas. *J Med Ethics*. 2005;31:393–398.
- 2 Avarad D, Vallance H, Greenberg C, Potter B. Newborn screening by tandem mass spectrometry: ethical and social issues. *Can J Public Health*. 2007;98:284–286.
- 3 Huckaby Lewis M, Botkin JR. Newborn screening in the United States: ethical issues. In: Mastroianni AC, Kahn JP, Kass NE, eds. *The Oxford Handbook of Public Health Ethics*. Oxford: Oxford Press; 2019.

eBioMedicine 2022;82:
104172
Published online xxx
<https://doi.org/10.1016/j.ebiom.2022.104172>

DOI of original article: <http://dx.doi.org/10.1016/j.ebiom.2022.104171>, <http://dx.doi.org/10.1016/j.ebiom.2022.104041>

*Correspondence to. Department of Conservative Dentistry and Periodontology, University Hospital, Ludwig-Maximilians-University Munich, Goethestrae 70, 80336 Munich, Germany.

E-mail address: j.durner@labor-becker.de

© 2022 The Author(s). Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)