Letter to the Editor regarding article by Yücedağ et al. “The Effects of Nonylphenol on Hearing in Rats”

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Dear Editor,
I read with great interest the recent study by Yücedağ et al. [1] entitled “The Effects of Nonylphenol on Hearing in Rats.” It needs to be specified in the article if the hearing levels of the rats were evaluated before the study or not.

Another point I would like to emphasize is that the hearing levels of the rats after the application of ethanol and nonylphenol were evaluated by distortion product otoacoustic emission (DPOAE). Recent studies suggest that otoacoustic emissions are produced by the electromobility of the outer hair cells (OHCs); however, retrocochlear and sensory pathologies caused by inner hair cell (IHC) damage do not produce DPOAE [2-6]. There are some drugs that cause severe IHC loss without OHC damage and cochlear nerve loss in the absence of hair cell loss [7-13]. There are no other studies demonstrating the otologic effects of nonylphenol. The effects of nonylphenol on hair cells and the cochlear nerve are unclear. IHC damage and retrocochlear pathologies cannot be evaluated by DPOAE; therefore, the hearing levels of the rats should have been evaluated by auditory brainstem response instead of DPOAE.

Peer-review: Externally peer-reviewed.
Conflict of Interest: No conflict of interest was declared by the author.
Financial Disclosure: The author declared that this study has received no financial support.

REFERENCES
5. Brownell WE. Outer hair cell electromotility and otoacoustic emissions. Ear Hear 1990; 11: 82-92. [CrossRef]