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CORRECTION

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Correction: High-resolution magic-angle spinning NMR metabolic profiling with spatially localized spectroscopy under slow sample spinning

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Correction for 'High-resolution magic-angle spinning NMR metabolic profiling with spatially localized spectroscopy under slow sample spinning' by Alan Wong, *Anal. Methods*, 2023, **15**, 6302–6308, https://doi.org/10.1039/D3AY01812A.

The authors apologize for errors in the spectral interpretation and want to bring them to attention. Since the Zangger–Sterk pulse of the SLS experiment was acquired with low bandwidth (615 Hz), the presence of chemical-shift displacement[1] artifacts must be considered in all spectral analyses, particularly when acquiring the 2D SLS with a spatial offset (*i.e.*, slice resolution) smaller than that of the chemical shift displacement. In Fig. 3, the slice resolution is 0.34 mm as compared to the 0.51 mm spatial offset by the chemical-shift displacement (*i.e.*, [slice resolution] × {[peak separation]/[bandwidth]}, for a peak separation of 3000 Hz). Despite the presence of the artifacts, the spectral profiles of the 1D CPMG spectra (in Fig. S3b) of the individual tissue, cortex and medulla, are similar to the corresponding SLS spectra, especially the biomarkers (betaine, GPC, and PC). This indicates that the analysis in Fig. 3b of the significant metabolite peaks is still valid, but should be approached with caution.

Despite the chemical shift displacement mishap in the spectral interpretations, the main objective of the experimental method demonstrated in the study remains unaffected. The method provides a simple approach for localized profiling under slow sample spinning HRMAS. To avoid artifacts, a solution would be to use a large RF bandwidth and, for 2D SLS acquisition, ensure the slice resolution is greater than the possible spatial offset caused by artifacts.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

References

1 H. Watanabe and N. Takaya, *Magn. Reson. Med. Sci.*, 2018, **17**, 244, DOI: **10.2463/mrms.mp.2017-0062**.

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