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CORRECTION

Correction to: Metabolic relevance for *N*-hydroxy L-arginine reduction in estrogen-negative breast cancer cells

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We found a unit error with our LC–MS lower limit of quantitation (LLOQ) measurement in the Amino Acids Journal article https://doi.org/10.1007/s00726-018-2603-x.

Units should be nM instead of pM, and µM instead of nM. The correct version is shown below:

Method

Our LC–MS methodology was selectively adopted from Nemkov et al. (2015).

For our study, culture supernatant fractions were assessed using a 150 mm × 2.1 mm Alltima HP HILIC 3 µm column, based on isocratic separation with 20% mobile phase A (i.e., water containing 0.05% trifluoroacetic acid) and 80% mobile phase B at a flow rate of 0.1 mL/min for 6 min using Agilent Technologies 1200 series HPLC system. The $[M+H]^+$ ions were analyzed in the multiple reaction-monitoring mode of the Agilent Technologies 6460 triple quadrupole mass spectrometer equipped with an electrospray ion (ESI) source. The spray voltage was set at 4.5 kV. The flow rates of nebulizer gas (N_2) and curtain gas (N_2) were maintained at 9 Arb and 7 Arb, respectively. Fragmentation occurred at collision gas pressure of 1.5 mTorr. Based on this methodology, the LLOQ is between 1.5 and 5 nM, on a linear standard curve. The highest concentration (of standard mixture) tested by this methodology was 25 mM.

Result

The change in the LLOQ has not altered the overall outcome and scope of the manuscript. However, it resulted in altering the units for both Fig. 1a, c to ng/µg protein. While circulating L-arginine has been found to be at least 100-fold or greater (i.e. ≥ 100-fold) than circulating *N*-hydroxy L-arginine (NOHA), our study shows that, at a cellular level, the molar ratio between L-arginine and NOHA are in the range of 10,000.

Reference

Nemkov T, D'Alessandro A, Hansen KC (2015) Three-minute method for amino acid analysis by UHPLC and high-resolution quadrupole orbitrap mass spectrometry. Amino Acids 47(11):2345–2357. https://doi.org/10.1007/s00726-015-2019-9

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