

Editorial Policy Checklist

This form is used to ensure compliance with Nature Portfolio editorial policies related to research ethics and reproducibility. For further information, please see our [editorial policies](#) site. All relevant questions on the form must be answered.

Competing interests

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In the interest of transparency and to help readers form their own judgements of potential bias, Nature Portfolio journals require authors to declare any competing financial and/or non-financial interest in relation to the work described in the submitted manuscript.

Competing interests declaration

- ☐ We declare that none of the authors have competing financial or non-financial interests as defined by Nature Portfolio.
- ☒ We declare that one or more of the authors have a competing interest as defined by Nature Portfolio.

Provisional Patent filed by AWD, JJR, MTG, JT, MRD, DK-S, and LP at the University of Pittsburgh (Application No 63/420,030), related to the creation and use of NO-ferroheme.

Authorship

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All authors are encouraged to provide an "Inclusion & Ethics" statement where relevant.

- ☐ We have provided an "Inclusion & Ethics" statement.

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Data availability statement

All manuscripts must include a [data availability statement](#). This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A description of any restrictions on data availability
- For clinical datasets or third party data, please ensure that the statement adheres to our [policy](#)

- ☒ We have provided a full data availability statement in the manuscript.

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Confirm that all relevant data are deposited into a public repository and that accession codes are provided.

- ☐ All relevant accession codes are provided ☐ Accession codes will be available before publication ☒ No data with mandated deposition

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Code availability statement

For all studies using custom code or mathematical algorithm that is deemed central to the conclusions, the manuscript must include a statement under the heading "Code availability" describing how readers can access the code, including any access restrictions. Code availability statements should be provided as a separate section after the data availability statement but before the References.

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For all data presented in a plot, chart or other visual representation confirm that:

n/a | Confirmed

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- ☐ ☒ The format shows data distribution clearly (e.g. dot plots, box-and-whisker plots)
- ☒ ☐ Box-plot elements are defined (e.g. center line, median; box limits, upper and lower quartiles; whiskers, 1.5x interquartile range; points, outliers)
- ☐ ☒ Clearly defined error bars are present and what they represent (SD, SE, CI) is noted

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Additional policy considerations

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Does not apply	Involved in the study
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☒	☐ Human embryos, gametes and/or stem cells
☐	☒ Human research participants
☒	☐ Clinical data
☒	☐ Archaeological, geological, and palaeontological materials

Research animals

Policy information about [studies involving animals](#); [ARRIVE guidelines](#) recommended for reporting animal research

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- ☒ We have complied with all relevant ethical regulations and include a statement affirming this in the manuscript.

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- ☒ We have disclosed the name(s) of the board and institution that approved the study protocol in the manuscript.

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Policy information about [studies involving human research participants](#)

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Confirm that the manuscript states the name(s) of the board and/or institution that:

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☒ We have obtained informed consent from all participants and this is noted in the manuscript.

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For publication of identifiable images of research participants, confirm that consent to publish was obtained and is noted in the Methods.

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I certify that all the above information is complete and correct.

Typed signature Anthony DeMartino

Date Jan 11, 2023

