

## Editorial Policy Checklist

This form is used to ensure compliance with Nature Research 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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#### Competing interests declaration

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

We declare that none of the authors have competing financial or non-financial interests as defined by Nature Research.

We declare that one or more of the authors have a competing interest as defined by Nature Research.

K.V currently receives research funding from Cepheid and collaborates with Optra Health. V.E.V. is a founder of Delfi Diagnostics and Personal Genome Diagnostics, serves on the Board of Directors and as a consultant for both organizations, and owns Delfi Diagnostics and Personal Genome Diagnostics stock, which are subject to certain restrictions under university policy. Additionally, Johns Hopkins University owns equity in Delfi Diagnostics and Personal Genome Diagnostics. V.E.V. is an advisor to Bristol-Myers Squibb and Takeda Pharmaceuticals. Within the last five years, V.E.V. has been an advisor to Genentech, Merck, Daiichi Sankyo, Janssen Diagnostics, and Ignyta. These arrangements have been reviewed and approved by the Johns Hopkins University in accordance with its conflict-of-interest policies.

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Prior to submission all listed authors must agree to all manuscript contents, the author list and its order and the author contribution statements. Any changes to the author list after submission must be approved by all authors.

We have read the Nature Research Authorship Policy and confirm that this manuscript complies.

### Data availability

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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 list of figures that have associated raw data
- A description of any restrictions on data availability

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

#### Mandated accession codes ([where applicable](#))

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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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.

We have provided a full code availability statement in the manuscript

## Data presentation

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Typed signature Nilanjan Chatterjee

Date Apr 12, 2021

