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**The Lancet**

Re: Submission of “**Are prognostic type 2 diabetes risk prediction algorithms racially biased?**” for The Lancet’s call for papers ‘*Advancing racial and ethnic equity in science, medicine, and health’*

Dear Reviewing Editors,

We are pleased to answer The Lancet’s call on “*Advancing racial and ethnic equity in science, medicine, and health*”, by submitting our research paper reporting on racial bias in existing type 2 diabetes prediction algorithms.

Briefly, despite the rising abundance of prediction models that aim to support health decision-making in terms of treatment and preventive measures, there is a paucity of evaluation of such decisive tools across different racial and ethnic groups. Using public nationwide data, we show that existing validated type 2 diabetes prediction algorithms published in the literature might perform differentially across various racial groups. Specifically, our analysis shows that existing algorithms tend to overestimate the risk of type 2 diabetes within dominant racial groups in the US, while they tend to underestimate this risk within minority groups.

In this work, we undertook a comprehensive study addressing multiple perspectives suggested for The Lancet’s special issue on racial and ethnic equity. Especially, we addressed:

* Analyses of healthcare processes that perpetuate inequities with concrete proposals for change;
* Understanding the processes that maintain the status quo and whether there are incentives for people and institutions that currently benefit from it to change

We believe that our findings have the potential to instigate change in the status quo, and thus, this report is of high importance for the Journal and its readership.

We declare no competing interests. All authors approve this submission for The Lancet’s call.

We look forward to hearing from you.

Sincerely,

*Tibor V. Varga, on behalf of all co-authors*