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Authors' reply

With great respect we read the correspondence of Stefan Huber-Wagner and colleagues. The REACT-2 trial¹ included many patients without polytrauma (Injury Severity Score [ISS] <16), possibly not the population benefitting most from total-body CT scanning. Sole inclusion of patients with an ISS of 16 or more would be preferable, but in daily practice ISS scores are partly based on imaging—the very subject of our randomised controlled trial. We cannot use the results of imaging before we decide which imaging to use, therefore 35% of patients not having polytrauma is the reality to deal with. We continue our work in refining patient selection by clinical parameters and challenge the authors to join us.

The authors refer to dose-reduction algorithms to lower radiation doses as proposed in a study protocol by Stengel and colleagues.² However, the dose reduction of 50% without loss of diagnostic value still has to be proved. The total radiation dose is multifactorial and variable in individual patients despite equal scanning parameters. For this reason, we chose to calculate representative radiation doses as described in our Article. If we had used a lower radiation dose, it would have affected both groups. Because the difference between groups was tested for significance with the sum of ranks of the radiation doses, we think that the reported results are rather robust.

The absolute 5% reduction of mortality risk from an estimated 12% baseline level at the time of study design was a defensible margin for clinicians, researchers, health economists, patient representatives, and insurer representatives who were invited as reviewers of our study proposal by the Netherlands Organisation for Health Research and Development, the public funding agency behind our trial. Total-body CT scanning increases the minimum radiation dose in almost all patients and insufficient reduction of mortality raises the debate whether Dutch society would be better off spending limited health-care resources on other promising topics in health care with even more potential for health improvements or saving of lives.

The authors address the many total-body CT scans performed in the standard work-up group, which will indeed have reduced the difference between groups. We kindly refer to the first paragraph of the limitations section of our Article. In the second paragraph, we describe alternatives for our study design, all including drawbacks. Doctors indeed happen to regard total-body CT scanning as an integral part of trauma management, which is exactly why we think our study was needed. When we started our trial in 2010, total-body CT scanning was rapidly finding its way into daily clinical practice without level 1 scientific evidence. The important lesson from REACT-2 is that we ought to be selective with this procedure to prevent unnecessary high radiation doses.

We declare no competing interests.

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Iran's research needs to be more noticed

Mohammad Saeid Rezaee-Zavareh and colleagues (July 2, p 29)¹ criticised the quality of Iranian scientific publications during international trade sanctions against Iran, which aimed to restrict Iran's nuclear programme by targeting Iran's oil and gas export, banking, and financial sectors. Although we share the authors' concerns regarding research misconduct, our analyses portray the situation differently and encourage taking further in-depth approaches.

To investigate Iran's citation impact, we compared citation counts in Scimago between 1996 and 2014, and found an improvement in Iran's global ranking from 56th to 22nd. Furthermore, using a method explained elsewhere,² we assessed Iran's publication performance in biomedical and public health research and our preliminary findings showed that Iran's h-index in these fields was nearly doubled every 5 years between 1996 and 2010, rising from 23 to 82.

Iranian research publication count was low in Scopus during the early years of the period that Rezaee-Zavareh and colleagues studied (1996–2014). Subsequently, the mean number of publications was reduced, and therefore the conclusions based on average citations and h-indices from the whole period were flawed. More importantly, use of citation-based bibliometrics to measure research impact is disputable,³ let alone its use to assess quality.³ There is evidence that using journal impact factors for quality assessment should be avoided.⁴ It would be better that research growth is assessed by a combination of indices, and not being limited to citations.



For more on citation counts in Scimago see <http://www.scimagojr.com/countryrank.php>

We believe in Iran's post-sanctions era existing international collaborations should be strengthened and new ones created to produce high-quality research addressing global challenges.⁵ We also hope Iran's improved economy will be accompanied by a stronger research governance that will lead to increased investments in national priorities and will result in a wider impact of research on the country—impacts beyond citations.

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Authors' reply

We are very grateful for Parisa Mansoori and colleagues comments on our Correspondence. We agree that a combination of scientometric indices should be considered for assessment of research quality and growth. We also confirm that in the period of 1996–2014, Iran's global ranking for total citations has improved annually. However, there are some challenging issues regarding subject selection and time period that they have analysed for Iranian biomedical and public health papers.

First, most of Iranian-published papers are not in the fields of biomedical and public health research.¹ We did not limit our analyses to some specific subjects of research, but Mansoori and colleagues only analysed publications in Iran in these two fields. Second, the related referenced article is only for papers of public health² and their method for searching biomedical papers is unclear—we encourage the publication of their approach and results. Likewise, the time period of their analyses only cover a few years of the sanctions against Iran. Therefore, currently there is no valid evidence to generalise their idea to Iran's citation impact.

Otherwise, research misconduct in Iran, which is also mentioned by Mansoori and colleagues, can reasonably influence research quality of Iran. It has been reported that roughly 10% of all awarded masters and PhD theses in Iran are prepared by external medical writers of theses and research papers for a fee, which affects the reputation of Iran's research.³

Now, although the removal of sanctions has provided a unique opportunity for Iranians,⁴ Iran's research quality needs more attention.

We declare no competing interests.

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- 4 Rezaee-Zavareh MS, Karimi-Sari H, Alavian SM. Iran, sanctions, and research collaborations. *Lancet* 2016; **387**: 28–29.

Department of Error

Henao-Restrepo AM, Camacho A, Longini IM, et al. Efficacy and effectiveness of an rVSV-vectored vaccine in preventing Ebola virus disease: final results from the Guinea ring vaccination, open-label, cluster-randomised trial (Ebola Ça Suffit!). *Lancet* 2016; **389**: 505–18—In this Article, the following corrections have been made: axes corrected in figure 2, reordered reference listing at the end of the paper, duplicated 'that' word removed from page 1 and page 8, the number '46.6%' changed to '65.6%' on page 7, the words '30 days' changed to '32 days' on page 9, and the word 'vaccines' changed to 'vaccinees' on page 11. The first corrected version appeared at thelancet.com on Dec 23, 2016, and the printed Article is correct.

Henao-Restrepo AM, Camacho A, Longini IM, et al. Efficacy and effectiveness of an rVSV-vectored vaccine in preventing Ebola virus disease: final results from the Guinea ring vaccination, open-label, cluster-randomised trial (Ebola Ça Suffit!). *Lancet* 2016; **389**: 505–18—In this Article, the UK Government through the Department for International Development should be included in the list of funders. Additionally, some of the reference number assignments have changed, and some names have been added to the Acknowledgments section. The second corrected version appeared at thelancet.com on Feb 2, 2017, and the printed Article is correct.