



Published in final edited form as:

Transplantation. 2018 February ; 102(2): e87. doi:10.1097/TP.0000000000001997.

The Authors' Reply

Miklos Z. Molnar, MD, PhD^{1,2}, Csaba P. Kovesdy, MD^{1,3}, and Kamyar Kalantar-Zadeh, MD, PhD⁴

¹Division of Nephrology, Department of Medicine, University of Tennessee Health Science Center, Memphis, TN, United States

²Department of Transplantation and Surgery, Semmelweis University, Budapest, Hungary

³Nephrology Section, Memphis VA Medical Center, Memphis, TN, United States

⁴Harold Simmons Center for Chronic Disease Research and Epidemiology, Division of Nephrology and Hypertension, University of California-Irvine, Orange, CA, United States

We thank Wang and colleagues for their interest in our article.[1] One of the most challenging decisions for transplant nephrologists and surgeons is to select the transplant candidate who has the highest chance for best outcomes pertaining to both kidney allograft and patient survival. Each piece of information which could help to make an appropriate decision should be taken advantage of. Prediction scores are means to that end. Several predictive scoring systems including risk estimations have been developed in the last decades to assist transplant physicians and surgeons. Most of these scores are based on data which are available after renal transplantation. Whereas these scores are useful to establish the risk of outcomes in patients who have already received a kidney transplant, they are not very useful at the time when a transplant recipient has to be risk-stratified and selected from among potential candidates. In this study, our main goal was to develop a clinically useful prediction score which can be used prior to the time of transplantation to inform both the transplant team and the patient about the most likely outcome, if the transplant is to be performed (<http://www.transplantscore.com/>).[2] We agree with Wang and colleagues that including intra- and postoperative variables would likely increase the discrimination ability of our score. However, including these variables would make our score amenable to the major limitations for assessment of the predicted longevity of the graft and patient survival at or before the time of the transplantation. It should be reiterated that we used only pretransplant variables to create our prediction model, while the prior scoring tools included posttransplant variables; yet the discrimination ability of our score was comparable or even better than these others. We also agree that the C-statistics of our and of the other scores, [3-5] indicates only modest discrimination ability. More granular data before transplantation, including data used for cardiovascular risk assessment, medication adherence, and comprehensive assessment of malignancy and infectious risks could increase the discrimination ability of future scores. Despite its modest discrimination ability, our score

Corresponding author: Miklos Z Molnar, M.D., Ph.D., FEBTM, FERA, FASN Division of Nephrology, Department of Medicine, University of Tennessee Health Science Center, 956 Court Ave, Suite B216B, Memphis, TN, 38163, USA, Phone: 1-901-448-5372, Fax: 1-901-448-5513, mzmolnar@uthsc.edu.

Author Contributions: Drafting of the manuscript and approval of the final version: MZM, CPK and KKZ.

remains one of the best available tools to be used prior to kidney transplantation to evaluate potential candidates and to assess expected outcomes in different kidney transplant candidates.

Acknowledgments

Funding Sources: The work in this manuscript has been performed with the support of grant R21AG047306 (MZM, KKZ, and CPK). The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.

References

1. Wang S, Xue F, Yang G. Developing A Risk Score to Predict Long-Term Adverse Outcomes After Kidney Transplantation. *Transplantation*. 2017 in press.
2. Molnar MZ, Nguyen DV, Chen Y, et al. Predictive Score for Posttransplantation Outcomes. *Transplantation*. 2017; 101:1353–64. [PubMed: 27391198]
3. Kasiske BL, Israni AK, Snyder JJ, Skeans MA, Peng Y, Weinhandl ED. A simple tool to predict outcomes after kidney transplant. *Am J Kidney Dis*. 2010; 56:947–60. [PubMed: 20801565]
4. Patzer RE, Basu M, Larsen CP, et al. iChoose Kidney: A Clinical Decision Aid for Kidney Transplantation Versus Dialysis Treatment. *Transplantation*. 2016; 100:630–9. [PubMed: 26714121]
5. Proposal to substantially revise the national kidney allocation system. *Organ Procurement and Transplantation Network*. 2012:1–59.