Reply to Antinori et al

To the Editor—We appreciate the additional experience and considerations of Antinori et al, including the occurrence of arthritis as an adverse event of benznidazole and Strongyloides coinfection. The prevalence of chronic Chagas disease in the United States is nearly 1 in 1000 [1], placing it outside of the National Institute of Health definition of rare diseases [2]. Yet the chagasic population remains largely undiagnosed, and therapeutic advancement remains hindered by the lagging development of sensitive and
timely markers for successful palliation or cure.

Indices of treatment efficacy worthy of further investigation include novel serum biomarkers as well as localized modalities such as cardiac magnetic resonance imaging and positron emission tomography [3]. Meanwhile, the disease burden in the pauciendemic and nonendemic areas of North America and Europe, respectively, largely affects adults [1], in whom benznidazole and nifurtimox are less well tolerated. Dosing adjustments may conceivably alter the risk of toxicity, changing the threshold for therapy [4, 5], and perhaps enable treatment of patients with renal or hepatic dysfunction. Still, there remains no commercially available level testing for either drug. Although we look forward to publication of pharmacokinetic data from ongoing studies, we believe it will be wise to adopt a standardized method for benznidazole serum level monitoring to employ in routine treatment as a means to protect our patients and garner collective experience. Additionally, combination regimens may widen the therapeutic window [6]. We hope that community outreach, increased physician awareness, and blood bank screening will continue to increase capture of this at-risk population.

**Note**

**Potential conflicts of interest.** All authors: No potential conflicts of interest.

All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

David A. Miller,1 Mahmoud M. Traina,2 and Sheba K. Meymandi2

1LA BioMed and the Division of Infectious Diseases, Harbor-UCLA Medical Center, Torrance, and 2Center of Excellence for Chagas Disease, Olive View-UCLA Medical Center, Sylmar, California

**References**


Correspondence: David A. Miller, MD, MPH, Division of Infectious Diseases, Harbor-UCLA Medical Center, 1000 W Carson St, Box 466, Torrance, CA 90509 (dmiller.harbor@gmail.com).