We are pleased to note the response of Onuigbo et al. to our article demonstrating an increase in acute kidney injury (AKI) associated with angiotensin axis blockade (AAB) in major orthopedic surgery. Like Onuigbo et al., we also noted that intraoperative hypotension and AAB are associated with AKI. In addition, we found that AAB-associated AKI occurred independently of intraoperative hypotension. Because of our findings, we withhold angiotensin-converting enzyme inhibitors and angiotensin receptor blockers on the day of surgery in all patients presenting for major orthopedic surgery whose blood pressure is well controlled preoperatively. We were concerned that this practice might increase the incidence of pre- and postoperative hypertension in such patients, but we have been reassured by a recent article demonstrating that this does not occur in outpatient surgical patients.

We caution, however, that the common sense approach of stopping AAB preoperatively to avoid possible AKI still requires evaluation by a properly conducted randomized controlled trial. Because of the prolonged systemic half-life and duration of tissue activity (>24 hours) of many AAB agents, the required preoperative cessation period of AAB may vary considerably.

References