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the range observed in the general population.⁴ Thus far, data from more than 2000 propranolol-treated infants in clinical studies and a compassionate-use program in France have been reassuring, but we agree that there is a need for large studies assessing longer-term outcomes.

To date, propranolol is by far the best-studied beta-blocker in infants. We believe that any assessment of its benefits and potential risks should take into account that the efficacy and safety profiles of alternative drugs used for this condition are not as well documented.

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1. Button KS, Ioannidis JPA, Mokrysz C, et al. Power failure: why small sample size undermines the reliability of neuroscience. *Nat Rev Neurosci* 2013;14:365-76.
2. Phillips RJ, Penington AJ, Bekhor PS, Crock CM. Use of propranolol for treatment of infantile haemangiomas in an outpatient setting. *J Paediatr Child Health* 2012;48:902-6.
3. Gonski K, Wargon O. Retrospective follow up of gross motor development in children using propranolol for treatment of infantile haemangioma at Sydney Children's Hospital. *Australas J Dermatol* 2014;55:209-11.
4. Boyle CA, Boulet S, Schieve LA, et al. Trends in the prevalence of developmental disabilities in US children, 1997-2008. *Pediatrics* 2011;127:1034-42.

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Preoperative Testing in Patients Undergoing Cataract Surgery

TO THE EDITOR: I read the article by Chen et al. (April 16 issue)¹ with interest, because I have had several discussions with ophthalmologists at my institution about requests for unnecessary preoperative evaluations and testing (complete blood count, blood chemical profile, electrocardiography) before cataract extraction. The response has been, "Yes, I know they are not needed or recommended, but the hospital will not let me operate without them." At least in some situations, what looks like a provider-related practice pattern could be the result of institutional requirements that should be changed but so far have not been.

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No potential conflict of interest relevant to this letter was reported.

1. Chen CL, Lin GA, Bardach NS, et al. Preoperative medical testing in Medicare patients undergoing cataract surgery. *N Engl J Med* 2015;372:1530-8.

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the practice patterns of individual providers. Other authors have reported that physicians order testing because of tradition, medicolegal concerns, or the belief that another physician expects testing before cataract surgery.^{1,2} Although it may be difficult to change institutional dogma and entrenched practice patterns, we believe that physicians should feel empowered to question and update policies and protocols that have not kept up with current evidence-based recommendations in order to provide better and higher-value care to their patients. In 2000, the American Academy of Ophthalmology issued a clinical statement recommending against the use of routine preoperative testing in patients undergoing cataract surgery, and the organization updated this statement in 2014.³ For low-risk elective ambulatory procedures such as cataract surgery, patients in their usual state of health should be allowed to proceed to the operating room without any further workup.³⁻⁵

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THE AUTHORS REPLY: We agree with Saver that the ongoing use of routine preoperative testing in patients undergoing cataract surgery may result from institutional requirements rather than

Since publication of their article, the authors report no further potential conflict of interest.

1. Bass EB, Steinberg EP, Luthra R, et al. Do ophthalmologists, anesthesiologists, and internists agree about preoperative testing in healthy patients undergoing cataract surgery? *Arch Ophthalmol* 1995;113:1248-56.
2. Brown SR, Brown J. Why do physicians order unnecessary preoperative tests? A qualitative study. *Fam Med* 2011;43:338-43.
3. American Academy of Ophthalmology. Routine pre-operative laboratory testing for patients scheduled for cataract surgery: clinical statement. January 2014 (<http://www.aao.org/clinical-statement/routine-preoperative-laboratory-testing-patients-s>).
4. Apfelbaum JL, Connis RT, Nickinovich DG, et al. Practice advisory for preanesthesia evaluation: an updated report by the

American Society of Anesthesiologists Task Force on Preanesthesia Evaluation. *Anesthesiology* 2012;116:522-38.

5. Fleisher LA, Fleischmann KE, Auerbach AD, et al. 2014 ACC/AHA guideline on perioperative cardiovascular evaluation and management of patients undergoing noncardiac surgery: executive summary: a report of the American College of Cardiology/American Heart Association Task Force on practice guidelines: developed in collaboration with the American College of Surgeons, American Society of Anesthesiologists, American Society of Echocardiography, American Society of Nuclear Cardiology, Heart Rhythm Society, Society for Cardiovascular Angiography and Interventions, Society of Cardiovascular Anesthesiologists, and Society of Vascular Medicine Endorsed by the Society of Hospital Medicine. *J Nucl Cardiol* 2015;22:162-215.

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Clostridium difficile Infection

TO THE EDITOR: The review article on *Clostridium difficile* infection by Leffler and Lamont (April 16 issue)¹ updates previous reviews and will serve as a valuable reference. The authors address the association between acid suppression and the risk factors for *C. difficile* infection. We would suggest that evidence of the association of the use of proton-pump inhibitors (PPIs) with *C. difficile* infection is more compelling than posited. In addition to biologic plausibility, a large, prospective, observational study by Loo et al.² showed a strong association between PPI use and the development of infection due to *C. difficile*, and this association has been recognized by the Food and Drug Administration.³ Observational studies also have shown that continuous PPI use is common in patients with *C. difficile* infection (in 40 to 60% of patients) and may be associated with an increased risk of recurrence.^{4,5} Furthermore, approximately half of PPIs in patients with *C. difficile* infection are prescribed continuously without an evidence-based indication.⁵

We recognize the limitations of observational studies. However, it seems reasonable to acknowledge this potential association and discontinue the unnecessary use of PPIs in patients who are at risk for a first or recurrent *C. difficile* infection.

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No potential conflict of interest relevant to this letter was reported.

1. Leffler DA, Lamont JT. *Clostridium difficile* infection. *N Engl J Med* 2015;372:1539-48.
2. Loo VG, Bourgault AM, Poirier L, et al. Host and pathogen factors for *Clostridium difficile* infection and colonization. *N Engl J Med* 2011;365:1693-703.
3. Food and Drug Administration. FDA Drug Safety Communication: *Clostridium difficile*-associated diarrhea can be associated with stomach acid drugs known as proton pump inhibitors (PPIs) February 8, 2012 (<http://www.fda.gov/drugs/drugsafety/ucm290510.htm>).
4. Linsky A, Gupta K, Lawler EV, Fonda JR, Hermos JA. Proton pump inhibitors and risk for recurrent *Clostridium difficile* infection. *Arch Intern Med* 2010;170:772-8.
5. McDonald EG, Milligan J, Frenette C, Lee TC. Continuous proton pump inhibitor therapy and the risk of recurrent *Clostridium difficile*. *JAMA* 2015;175:784-91.

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TO THE EDITOR: Leffler and Lamont do not mention the potential therapeutic role of nontoxigenic strains of *C. difficile* in the prevention of recurrent *C. difficile* infection. Results of previous studies involving hamsters and small samples of patients¹⁻³ spurred a recent randomized, controlled trial that showed a significantly lower rate of recurrence of *C. difficile* infection among patients who received the oral nontoxigenic *C. difficile* strain M3 than among those who received placebo (11% vs. 30%, $P=0.006$).⁴

The mechanism of action is probably due to the competition between nontoxigenic strains of *C. difficile* and toxigenic strains of *C. difficile* for the same metabolic or adherence niche in the gastrointestinal tract. This mechanism was shown by the high correlation between fecal colonization