## **Hookworm Infection**

TO THE EDITOR: Hotez et al. (Aug. 19 issue) suggest THE AUTHORS REPLY: Dr. Joven makes the imporwaiting for socioeconomic reforms to eliminate hookworm infection, a condition that afflicts 740 million persons. However, chronic anemia is an enormous handicap and limits the prospects of a better future. We should remember that the fight against hookworm infection began before the economic development of the southern United States in a large-scale philanthropic effort supported by the Rockefeller Foundation. In 1902, Dr. Charles Stiles stated that the poor whites of the South, long considered lazy, were simply enervated by hookworm infection and that "thymol and Epsom salts [magnesium sulfate] would make those men useful citizens in a few weeks."2 In less than three years, the money (\$1 million) used to hire sanitation directors to educate the public and to introduce dispensaries for public health reduced hookworm disease to a minor infection. More important, the locals set up mechanisms to perpetuate the work, and the foundation extended the fight to 52 other countries around the world. Sub-Saharan Africa might benefit from this experience.

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- 1. Hotez PJ, Brooker S, Bethony JM, Bottazzi ME, Loukas A, Xiao S. Hookworm infection. N Engl J Med 2004;351:799-807.
- 2. Chernow R. Titan: the life of John D. Rockefeller, Sr. New York: Random House, 1998:487-91.

tant, and often underappreciated, point that waiting for long-term socioeconomic reforms to control hookworm infection is not a viable option. It was partly for this reason that the World Health Organization implemented its resolution to reduce morbidity from soil-transmitted helminth infections, including hookworm, through large-scale anthelmintic chemotherapy programs. The programs will be largely school-based in order to target schoolchildren at risk for infection. For reasons discussed in our article, we believe that this approach may not, by itself, control hookworm infection worldwide and that new and complementary tools will probably be required, which may include a first-generation recombinant anthelmintic vaccine.1

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1. Hotez PJ, Zhan B, Bethony JM, et al. Progress in the development of a recombinant vaccine for human hookworm disease: the Human Hookworm Vaccine Initiative, Int I Parasitol 2003:33:1245-58.

## **Thiazolidinediones**

TO THE EDITOR: In her otherwise excellent review of thiazolidinediones, Dr. Yki-Järvinen (Sept. 9 issue)<sup>1</sup> states that "the effects of rosiglitazone or pioglitazone on the size of LDL [low-density lipoprotein] particles have not been studied in a double-blind, placebo-controlled trial." That is not quite the case. In a double-blind, randomized trial of pioglitazone as compared with placebo in nondiabetic patients with normolipidemia and hypertension, pioglitazone increased LDL particle size.2 Furthermore, in two open-label studies involving patients with type 2 diabetes, the size of LDL particles was increased by rosiglitazone, as compared with placebo,3 and by pioglitazone, as compared with gliclazide.4

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Dr. Davidson reports having served on the speakers bureau and advisory committee for GlaxoSmithKline and on the speakers bureau for Takeda.

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- 2. Winkler K, Konrad T, Fullert S, et al. Pioglitazone reduces atherogenic dense LDL particles in nondiabetic patients with arterial hypertension: a double-blind, placebo-controlled study. Diabetes Care 2003:26:2588-94.
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- 4. Lawrence JM, Reid J, Taylor GJ, Stirling C, Reckless JP. Favorable effects of pioglitazone and metformin compared with gliclazide on