caused by several factors; therefore, both infectious and non-infectious aetiologies should be considered. To limit the debate to Lyme disease alone is highly unproductive, because this disease is unlikely to be the universal explanation of our patients' persisting ailments. These syndromes with possible microbial involvement should be investigated with the best available tests and with a fresh and open-minded scientific approach.

I declare that I have no conflicts of interest.

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Paul Auwaerter and colleagues[1] are among the handful of individuals who have controlled the Lyme disease research agenda for decades and ultimately which data have been reported. Why is it that, in my experience, many people in New Hampshire have been severely debilitated by Lyme disease or know someone who has, whereas Auwaerter and co-workers claim that the disease is easily diagnosed and treated with a short course of antibiotics? Seven states have now passed legislation to protect clinicians who treat late-stage Lyme disease with long-term antibiotics (CT, MA, MN, NY, NH, RI, and TX) and support groups exist in nearly every state, with 19 in Pennsylvania alone.

The ELISA first-line screening test produces false-negative results and patients are told they do not have Lyme disease. A follow-up western blot test that is much more sensitive is not allowed when the ELISA test is negative. In a two-tiered testing algorithm, western blots can only be used after a positive ELISA test to rule out a false-positive result. Therefore, we have no way to rule out a false negative. Clinicians who exclusively treat Lyme disease no longer use the ELISA test.[2–4] The German Borreliosis Society has recognised that the two-tier system we presently use for Lyme disease testing is inadequate.[5]

Misinterpretation of laboratory results is the main reason why the medical community is dismissive of patients with Lyme disease and their symptoms. Faulty diagnostic tests create confusion, causing physicians to miss the small period in which they can give successful short-term treatment. As a result, many patients have late-stage Lyme disease. Since we only test for antibodies against the infection and not the bacteria itself, we have no way to rule out active, continuing infection.

If the Infectious Diseases Society of America and the Centers for Disease Control and Prevention are correct with their single-treatment approach for all stages of Lyme disease and two-tier method of testing, why do we have so much legislation involving Lyme disease?

I declare that I have no conflicts of interest.

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Authors' reply

Although we support efforts to educate clinicians and the public alike with high-quality, evidence-based information about infection with *Borrelia burgdorferi*, the comments from Stella Huyshe-Shires regarding our Personal View misleadingly suggest that the UK is untainted by antiscience concerns. A report by Cottle and colleagues[1] showed that most patients referred to an infectious diseases unit in Liverpool, UK, for Lyme disease (n=115) did not have the disorder. Of 38 patients with chronic fatigue syndrome, 45% were incorrectly labelled as having chronic Lyme disease by alternative practitioners. These patients had received unnecessary antibiotics instead of other targeted management strategies, supporting the case that overdiagnosis and inappropriate management of Lyme disease also occurs in the UK and reinforcing concerns cited by the British Infection Association.

Both Christian Perronne and Carl Tuttle believe that present serological testing for *B burgdorferi* is inaccurate. Although the human immune system can take 2–3 weeks to produce detectable concentrations of antibodies in the early phases of Lyme disease, this delay is also reported in many other bacterial infections. This delay in no way negates the usefulness of two-tier

serology, which has reliable results in later symptoms of Lyme disease including arthritis and neurological presentations. Rather than asking people to defend this well validated approach that has been used for more than 15 years, critics should have to provide quality evidence that supports either their diagnosis or treatment of chronic Lyme disease.[2] Additionally, recommendations for Lyme disease in the Infectious Diseases Society of America (IDSA) guidelines are not based on expert opinion but rather on level I evidence from randomised controlled trials for important clincial questions, such as defined course therapy for early or late Lyme disease and poor antibiotic effectiveness for post-Lyme disease syndrome.

After the IDSA 2006 guideline for the diagnosis and management of Lyme disease was challenged, a scientific independent review panel decided that the recommendations should stand unchanged.[3] There is little clinical or scientific support for the notion of chronic Lyme disease, which rightly has not gained traction with most practising physicians. For example, in Connecticut only 2% of primary care providers use this diagnosis despite Lyme disease being endemic to the state.[4] Therefore, physicians recognise the value of scientific evidence when compared with state-based legislative efforts and political posturing.

We encourage sound scientific debate of questions about Lyme disease, but we feel strongly that unscientific practices that put patients at risk with little benefit should be neither encouraged nor condoned. Vague symptoms such as chronic pain, fatigue, and neurocognitive complaints are poorly understood by modern medicine but are the focus of this debate. The allure of an inaccurate diagnosis of chronic Lyme disease that can be cured by antibiotic treatment prevents rational approaches to diagnosis and treatment, even when that entails mainly supportive rather than definitive therapies. As Perronne contends, energies should be directed towards understanding of these persisting, probably heterogeneous conditions and the development of successful treatments proven by well-designed trials.

PGA has participated in expert testimony in two medicolegal suits about possible Lyme disease. RJD is part owner of and has stock in Biopeptides Corporation, has received grant support from the National Institutes of Health for the development of new serological assays for diagnosis of Lyme disease, and holds one patent and one patent pending for a peptide diagnostic agent for Lyme disease. JJH has served as an expert witness in several medicolegal cases concerning Lyme disease and has equity in Abbott, Bristol-Myers Squibb, Johnson and Johnson, and Merck; no products from these companies are referred to in this letter. RBN served as an expert witness in malpractice litigation involving Lyme disease and acted as a consultant for Guidepoint Global, providing advice about Lyme disease. SO has provided unpaid expert testimony to a fitness of practice hearing for the General Medical Council. EDS and GPW have been expert witnesses in malpractice cases involving Lyme disease and are unpaid board members of the America Lyme Disease Foundation. GPW has received research grants from the Centers for Disease Control and Protection, the National Institutes of Health, Immunetics, BioRad, DiaSorin, and Biomerieux; has equity in Abbott (not known to have any approved product for Lyme disease); and was an expert witness in a disciplinary action for the Missouri Board of Registration for the Healing Arts. The other authors declare that they have no conflicts of interest.

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Post-disaster assessment in Brazzaville, Congo

According to several corroborating witness statements, on March 4, 2012, between 0800 h and 1100 h, explosions from the arms depot of the armoured regiment of the Congolese Armed Forces razed to the ground hundreds of houses in Brazzaville. The power of the shock wave, propagated by the Congo River, shook buildings 8·5 km away in Kinshasa. The explosions caused extensive damage. Troops from the Congolese armed forces are securing the most sensitive sites. The entire neighbourhood of Mpila and surrounding areas including Ouenze are devastated (figure). A provisional assessment by the inter-ministerial crisis committee of the Congolese government suggests that more than 200 people were killed, and thousands injured. Senior civilian and military officials have stated, anonymously, that hundreds of people were mutilated or amputated by projectiles and shells. More than 15 000 Brazzaville inhabitants are now homeless because they have been displaced to secured areas. Many families are still searching for their close relatives.

Commissioned by the Organization for the Coordination of the fight against Endemic Diseases in Central Africa, I help to take stock of microbiology, hygiene, and sanitation of the disaster areas and sites intended for displaced people, set up an epidemic response plan, and establish a schedule of action.