

# Review of Evidence Supporting IDSA Guidelines EM Treatment in US



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The IDSA guidelines for Lyme disease contain 2 recommendations for antibiotic therapy for patients with erythema migrans (EM) rashes. The first recommendation identified which antibiotics were preferred and the second specified therapy duration.

In “Evidence-Based, Patient-Centered Treatment of Erythema Migrans in the United States,” *Antibiotics* 2021, author Elizabeth L. Maloney, MD, reviews the US trial evidence on EM rashes, problems of the IDSA recommendations considering that evidence, and provides evidence-based patient-centered strategies for managing patients with EM. “The EM rash is the hallmark finding of early disease,” along with other symptoms. “In light of the physical and financial costs, identifying and promoting highly effective therapeutic interventions for US patients with erythema migrans (EM) rashes that return them to their pre-infection health status should be a priority.”

The paper states “when promptly diagnosed and appropriately treated with antibiotics, early Lyme disease is curable.” Untreated and inadequately treated infections can progress to long-term sequelae. Patient-centered care—defined by the

National Academy of Medicine—"...is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions. Patient-centered outcomes are outcomes that matter to patients, such as reductions in symptoms or improvements in quality of life." In recent times, patient-centered outcomes are becoming part of trial designs.

Dr. Maloney uses a Medline search with specified criteria to identify the trials conducted in the US for the named antibiotics recommended by IDSA Lyme guidelines. There were 25 results of which 8 met the search criteria, other 17 were EM trials in Europe, disseminated disease in Europe, European antibiotic retreatment, culture difficulty, and tick bite prophylaxis. The US trials were old, were small, and 2 had high non completion rates of 40%+ and two others had single arm with 20%+ non-completion, thus Dr. Maloney indicates these should not be included to determine treatment efficacy.

The paper goes on to examine the remaining US trials, several of which used disease centered endpoints, not patient centered endpoints, and all those trials used what is currently considered outdated statistical methodology, pointing out the weaknesses of the evidence used by IDSA. In the conclusion, Dr. Maloney highlights the need for more research.

**[Click here to read the entire study](#)**

**[Click here to read Johns Hopkins Lyme Research Center Challenges IDSA Guidelines & Addresses Lyme-COVID](#)**

**[Click here to see video of Bransfield & Smith Discuss IDSA Guidelines](#)**