Pathogenesis, Microbiology


PATHOGENESIS AND HOST RESPONSE MECHANISMS

**Mouse Model and Host Response**


**OspA vaccine**


**OspA, OspC Gene Regulation**


**Lyme Borreliosis and Systemic Associations**

**Arthritis**


**Carditis**
http://circ.ahajournals.org/content/127/7/e451.full

**Chronic Lyme, PTLSD and other controversies**


Shapiro ED. Repeat or persistent Lyme disease: persistence, recrudescence or reinfection with Borrelia Burgdorferi? F1000Prime Rep. 2015 Jan 5;7:11. 
Clinical diagnosis/testing


The CDC used two-tiered testing on sera from Lyme patients, healthy donors, and patients with “look-alike” diseases. Results corroborate the need for improved diagnostics, particularly for earlier stages of infection.


This review describes the laboratory diagnostics for Lyme disease (with a focus on the U.S.) and discusses current recommendations and new developments in the field.


This research compared two-tier tests and the C6 peptide ELISA method prospectively in patients with Lyme, other illnesses, and in healthy subjects.

CDC Lyme Panel. **Supplemental Table S1. Repository inclusion and exclusion criteria for Lyme disease patients.** Supplemental Table S2. Repository inclusion and exclusion criteria for negative control healthy donors Supplemental Table S3. Repository inclusion and exclusion criteria for negative control disease patients. [http://jcm.asm.org/content/suppl/2014/09/15/JCM.01409-14.DCSupplemental/zjm99093774sa1.pdf](http://jcm.asm.org/content/suppl/2014/09/15/JCM.01409-14.DCSupplemental/zjm99093774sa1.pdf)

Tables showing inclusion and exclusion criteria for Lyme disease patients, healthy donors, and negative control disease patients.


This chapter reviews two-tiered serology, ELISAs vs immunoblots, exclusion of OspA and OspB, IgM, newer serological tests, and direct assays.


Treatment


Engstrom SM, Shoop E, Johnson RC. Immunoblot interpretation criteria for serodiagnosis of early Lyme disease. Clin Microbiol. 1995 Feb;33(2):419-27. https://www.ncbi.nlm.nih.gov/pubmed/7714202 In this study, patients with early Lyme disease and erythema migrans were monitored for antibody responses until one year after antibiotic therapy. A relational database management system was used to analyze the results and provide criteria for early disease immunoblot interpretation.

Additional