

Dr. Horowitz In Vivo Dapsone Combination Therapy Study Published

Richard Horowitz, MD, et al., have published a new case study and retrospective chart review of 40 patients on double dose dapsone combination therapy (DDD CT) in the journal *Antibiotics*.



Dr. Richard Horowitz

The study found that of the 40 patients analyzed, an 8-week course of dapsone combined with doxycycline and rifampin effectively improved symptoms in 98% of patients, as well as led to long-term remission in 45% of the total patients studied, even though most of the individuals were ill for a decade or longer. The research included a segment of 12 patients with the presence of EM rashes. Of these, 100% showed improvement with 58% remaining in remission. The study abstract states, "In conclusion, double-dose dapsone therapy could represent a novel and effective anti-infective strategy in chronic Lyme disease/post-treatment Lyme disease syndrome (PTLDS), especially in those individuals who have failed regular dose dapsone combination therapy (DDS CT) or standard antibiotic protocols."

The above-mentioned dapsone combination therapy study is a follow-up *in vivo* clinical study to the initial groundbreaking *in vitro* culture study published in September 2020, which definitively showed that *Borrelia burgdorferi* (Bb) forms biofilms to shield the organism and that combining antibiotics with the leprosy drug dapsone effectively kills the bacteria by disrupting the biofilm.

Both studies by Horowitz, examining biofilm, and 'persister' forms of Bb, are critical in revealing the underlying cause of resistant chronic Lyme disease symptoms. The most recent follow-up study also demonstrates the importance of accompanying tick-borne infections (TBD), such as *Babesia* and *Bartonella*, and the role these co-infections can play in causing resistant, long-term illness.

What comes next for dapsone combination therapy?

The next step is for Dr. Horowitz and his team to perform a randomized, placebo-controlled trial using DDD CT, done in parallel with studies aimed at finding answers for resistant tick-borne co-infections. Horowitz is hopeful that this will positively demonstrate that the elusive "cure" for Lyme disease, which has evaded researchers and clinicians for decades, may finally be within reach and offer the potential to end a medical debate that has caused suffering in millions of patients worldwide.

Read the most recent *in vivo* clinical study, "Efficacy of Double-Dose Dapsone Combination Therapy in the Treatment of Chronic Lyme Disease/Post-Treatment Lyme Disease Syndrome (PTLDS) and Associated Co-infections: A Report of Three Cases and Retrospective Chart Review" in the journal, *Antibiotics*.

Read the initial *in vitro* study, "Effect of Dapsone Alone and in Combination with Intracellular Antibiotics Against the Biofilm form of *B. Burgdorferi*" in *BMC Research Notes*.