## INTERPRETATION OF IGENIX WESTERN BLOT FROM A LLMD (LYME-LITERATE MD) WITH 24 YEARS EXPERIENCE TREATING CHRONIC LYME DISEASE

## WESTERN BLOT RESULTS SUMMARY FOR INTERPRETATION

There are two test result interpretations enclosed. Note one is CDC and one is **XYZ.** The interpretations (positive or negative) of the CDC and XYZ test results may not match. The Western blots interpretation by me, is the following I have typed out for you. Please pay close attention to the ones I have circled or underlined for you.

Please reread the handout I gave you on Western blots at your first office visit. This is just a summary of your results.

**31kDa** is outer surface protein A (ospA). Just like we have proteins in our skin the Borrelia burgdorferi (Lyme disease bacteria) have proteins in their outer-surface. As they have been discovered they have been assigned letters, such as A. To give you an idea how classic the 31 is, that is what physicians actually injected into people as the Lyme vaccine before it was taken off the market. Even though it is one of the hallmark antibodies tightly associated with borreliosis the CDC does not give it any weight. But the CDC criteria are for disease surveillance, not for day-to-day clinical medicine. Sadly many physicians and insurance companies use the CDC criteria to deny treatment of patients.

**34kDa** is outer surface protein B (ospB). This is also a classic hallmark Lyme disease antibody, but excluded from CDC criteria.

**23-25kDa** is outer surface protein C (ospC). The 23, 24, and 25 kDa antibody bands are all ospC. The kDa stands for kilodaltons, which is a weight. Think of it like pounds and ounces, but it is a microscopic weight. These are classic antibodies like the 31 and 34. Patients that have a 31 or 34, or 23-25 have a 97% response rate to antibiotics.

**I8kDa** is outer surface protein D (ospD). In my research on 700 borreliosis patients and Western blots, the 18 was just as significant as the 31, 34, and 23-25. This lab does not put two stars (\*\*) or asterisks in front of the 18. If you have it there is a 97% chance antibiotics will help you feel better. It should not be ignored.

**22kDa** is rarely detected and is probably ospC of different kDa weight.

**28kDa** is outer surface protein E (ospE). Like the 18 it does not have two "\*\*" after it but it is just as significant as the others, with a 97% correlation with antibiotics helping.

**30kDa** is also outer surface protein (ospA), like the 31. It is in the medical literature that they are the same and I have talked to one of the world experts on ospA and she said the 30 and 31 are the same. It is just like the 23, 24, and 25 being the same outer surface protein, but of different weights. This lab does not put two "\*\*" in front of the 30 but it is a classic hallmark Lyme antibody with 97% correlation with antibiotics helping.

**39kDa** is from the inner part of the Borrelia burgdorferi bacteria called the endoplasmic reticulum. It is the reddest flag of the fifteen antibodies on the blot. Other bacteria that are like the Lyme bacteria (Borrelia recurrentis, etc.) do not even have the

genetics to code for this, much less produce it. The 39 appear to be unique to "Lyme" bacteria. It has even been suggested that a 39 by itself is enough to be a positive test.

**4lkDa** is the flagella or tail of the Borrelia burgdorferi, and that is how it moves around, by moving the flagella. It is the most common Lyme antibody of all. Even though different bacteria (E coli etc.) may have flagella and possibly cause a false positive 41 kDa test result, there is a 90% correlation with a 41 and antibiotics helping.

**45kDa** is not known to be significant, yet.

**58kDa** is a heat shock protein that helps the Lyme bacteria survive fever. It was shown at the international borreliosis conference held in Germany in 1999 to be a significant borreliosis antibody. This lab does not put two "\*\*" after it but it should not be ignored. There is a 97% chance antibiotics will help if the 58 is present.

**66kDa** is the second most common antibody found and is also a heat shock protein. It is not given significance because different bacteria may produce it, even though it is the second most commonly found Borrelia burgdorferi antibody.

**73kDa** is not significant, yet.

**83-93kDa** is the DNA, genes, or genetic material of Borrelia burgdorferi. The 83-93 1gM is associated with antibiotic responsiveness, in 97% of borreliosis patients.

**CDC/NYS** recommendations should be ignored. You are not part of disease surveillance. You are a patient in day-to-day clinical medicine. Even if you were part of borreliosis disease surveillance, classic hallmark antibodies are excluded. This makes no sense. When you go to the international conferences, the excluded antibodies are almost always shown during lectures that include Western blot research data.