

Surviving Mold *Actinobacteria* Update
8/25/2021

For readers of Surviving Mold who have noticed the recent onslaught of new information stemming from use of GENIE about the role of *Actinobacteria* in CIRS, I would like to remind all our readers that in 2005 I wrote **Mold Warriors**, and in 2010, I wrote **Surviving Mold**. The **Surviving Mold** website has been up since 2010 telling everyone who would listen that those filamentous fungi can be a health threat and yet now, I am talking about the health hazards created by exposure to indoor-dwelling *Actinobacteria* (actinos) in 2020 and 2021!

What is this science about that shows actinos causing CIRS and not just mold?

Based on new, published and confirmed information and newer testing, we have been able to expand the concept of specific causation of CIRS, a crucial step in diagnosis, and in litigation, to exposure to endotoxins using GENIE. We now have expanded specific causation, also called precise immunoreactivity, for patients exposed to *Actinobacteria* found in dust samples processed by EnviroBiomics.com. The two recently published papers, found on www.survivingmold.com, are revolutionary in their scope.

And there is more. A new wrinkle was added to the assessment of *Actinobacteria* in July 2021; we call the diagnostic aid the Actinobacteria Index. There actually are two indices. One is called the **Dominance Index**, which looks at the *number of species* of actinos coming from human carriage i.e., human habitat, versus those *Actinobacteria* species coming from a soil habitat. Anecdotally, the skin carriage creates much more of a problem with inflammation in illness, and the potential for seeding actinos indoors, then the soil carriage does. The question is, of course, why?

We think we know why, as will be discussed in a paper we will submit for publication soon.

The second index is a **Prevalence Index** that looks at the number of Bacterial Equivalents per milligram (BE/mg) of dust or the number of organisms found in the top 5 human habitat *Actinobacteria* organisms versus soil habitat organisms. When the ratio is <2.0 for either or both indices, adverse health effects rarely occur. When the ratio is higher than 2.0, almost all of the adverse health effects occur. We also have noted that MAPKs are elevated if the Dominance Index is over 2.0 in untreated patients. We also see that TGFβ1 receptor (TGFβR) is elevated in those untreated patients whose Prevalence Index is greater than 2.0. Specific causation, indeed.

Fortunately, treatment with the SM protocol corrects the immunoreactivity!

The significance of immunoreactivity for both Dominance Index and Prevalence Index cannot be understated. The immunoreactivity acquired following specific exposure to *Actinobacteria* will be discussed in much greater detail in the upcoming paper.

For now, we know that exposure to filamentous fungi (mold) creates a health risk that cannot be ignored. HERTSMI-2 elevation measures the potential for illness acquired following mold exposure. Far more serious and far more common are adverse health effects acquired following exposure to bacterial endotoxins also with its measurement that is done directly by EBI. Finally, the most common source of CIRS is *Actinobacteria*.

The current measurements from EBI of pathogenic *Actinobacteria*, the *Actinobacteria* score and the indices give physicians adequate information to treat this problem, understanding that novel methods of remediation based on the indices are already showing promise. There will be much more discussion about treatment of environmental conditions as the carriage in skin means that the inner sanctum of homes, bedrooms, bathrooms, sitting rooms and the like are more likely to be harboring *Actinobacteria* than areas in direct contact with the outdoors.

These are exciting times. Stay tuned for more information. As always, Surviving Mold is the only source of accurate, cutting-edge CIRS science, all based on published, peer-reviewed data.