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ACTINO INDEX

1. ACTINO-INDEX. How safe the building is for CIRS affected individuals? ACTINO - INDEX:

Dominance index (D.I) LOWER THAN 2.0 Likely safe for CIRS Dominance index (D.I) HIGHER THAN 2.0 Likely not safe for CIRS Prevalence index (P.I) HIGHER THAN 2.0 Likely not safe for CIRS Likely not safe for CIRS

2 .TABLES WITH DETECTED BACTERIA SPECIES:

This section may provide important information about other bacteria species in the sample and provides normal level that helps with the interpretation; please notice the asterisk following bacteria levels be/mg. Streptomyces, Pseudomonas, Enterobacteria and Cyanobacteria, in particular of them, are important for a healthy indoor environment.

(*) 100-Folds higher than normal

(**) 1,000-Fold higher than normal

As part of our ongoing effort to provide more precision regarding pathogenic actino-bacteria, Dr. Shoemaker has developed an Actinobacteria Dominance Index (DI) and a Prevalence Index (PI). Both indices add information to determine if the Actino we identify are of Human Habitat (HH) origin or Soil Habitat (SH) origin. The higher the index, 2.0 for Prevalence and 2.0 for Dominance, the greater the likelihood of exposure to HH-derived Actino as opposed to SH-derived actinobacteria.

The increased exposure to HH organisms has been correlated independently with increased immune dysregulation noted on GENIE that are distinct for dominance compared to prevalence.

Together, the immune biomarkers seen on GENIE give rise to specific immune-reactivity for causation for patients exposed to HH actinobacteria, but, to date, not for SH organisms. If both MAPK and TGFBR are elevated; and Dominance and Prevalence indices are elevated, there will likely be serious adverse human health concerns as shown by research performed by Dr. Ritchie Shoemaker et.al.

Testing options are Swiffer or Vacuum sample collection methods. 7 days Turnaround time.

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ACTINO SCORE

Quantitative detection of Actino microbial content.

Response time: 5-7 days Response time

Sample method Swiffer and Vacuum preferred, 10 mg recommended.

- 1. Avoid hot surfaces.
- 2. Avoid surfaces exposed to biocides,
- 3.Do not sample surfaces from drywall dust, clay dust, or rust.

The most frequent species of bacteria found in buildings damaged by water are Actino. This type of bacteria produces biotoxins like mycotoxin in the mold. In general, the biotoxins of bacteria by weight and mass are much more important than, say, mycotoxins. "This test is based on next-generation DNA sequencing, also known as 16S metagenomics. The test is based on the microbial identification of all bacteria in the sample. The Actino test was developed by selecting the 40 main species of Actino in the sample to create a score of Actino in a Building-related Disease (BRI) situation.

The species included in the score have been reported in multiple studies that link them to BRI

Score System:

Score	Score Range	Interpretation
Q1	9 or below	Indicative of a Healthy Building
Q2	Between 10 to 15	Further investigation needed
Q3	Greater than 15	Suggestive of Building-Related Illness

ACTINO-SKIN

Huaman Host Actino were selected based on toxins producing species and their impact on human health.

QPCR BACTERIA ANALYSIS

The results of the bacteria species detected in the skin sample using qPCR method tabulated as follows:

- * Corynebacterium tuberculostearicum
- * Corynebacterium xerosis
- * Corynebacterium simulans
- * Corynebacterium amycolatum
- * Propionibacterium acnes



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