

**TEST NAME: MycoTOX Profile**

**Mycotoxin Profile**

Creatinine Value: 224.09 mg/dl

Metabolite	Results (ng/g creatinine)	Normal Range *	Abnormal Range
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**Aspergillus**



**Penicillium**



\* The normal range was calculated using the median + 2 times the standard deviation

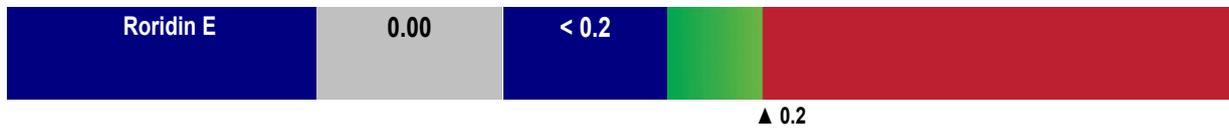
The Great Plains Laboratory has developed and determined the performance characteristics of this test. The test has not been evaluated by the U.S. Food and Drug Administration. The FDA does not currently regulate such testing.

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**Mycotoxin Profile**

Metabolite	Results (ng/g creatinine)	Normal Range *	Abnormal Range
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**Stachybotrys**



**Fusarium**



**Chaetomium globosum**

\* The normal range was calculated using the median + 2 times the standard deviation



PATIENT: XXXXXXXXXXXXXXXX

TEST REF: TST-NL-XXXXX

TEST NUMBER: T-NL-XXXXX (XXXXX)

COLLECTED: 08/18/20XX

GENDER: XXXXX

PRACTITIONER:  
XXXXXXXXXXXXXXXXXX

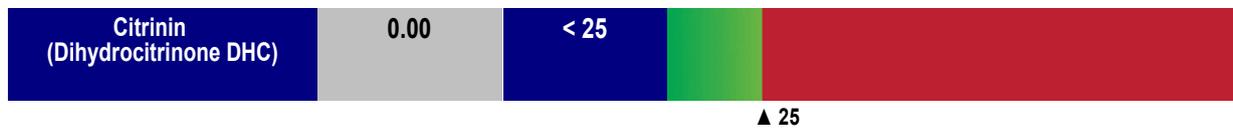
AGE: XX

XXXXXXXXXXXXXXXXXX

## TEST NAME: MycoTOX Profile



### Multiple Mold Species



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**Ochratoxin:**Ochratoxin A (OTA) is a nephrotoxic, immunotoxic, and carcinogenic mycotoxin. This chemical is produced by molds in the Aspergillus and Penicillium families. Exposure is done primarily through water damaged buildings. Minimal exposure can occur through contaminated foods such as cereals, grape juices, dairy, spices, wine, dried vine fruit, and coffee. Exposure to OTA can also come from inhalation exposure in water-damaged buildings. OTA can lead to kidney disease and adverse neurological effects. Studies have shown that OTA can lead to significant oxidative damage to multiple brain regions and is highly nephrotoxic. Dopamine levels in the brain of mice have been shown to be decreased after exposure to OTA. Some studies have hypothesized that OTA may contribute to the development of neurodegenerative diseases such as Alzheimer's and Parkinson's. Treatment should be aimed at removing the source of exposure. Agents such as oral cholestyramine, charcoal, and phenylalanine can help prevent the absorption of these toxins from food. Antioxidants such as vitamins A, E, C, NAC, rosmarinic acid, and liposomal glutathione alone or in combination have been shown to mitigate the oxidative effects of the toxin. Bentonite or zeolite clay is reported to reduce the absorption of multiple mycotoxins found in food, including OTA. Studies have also shown that OTA is present in sweat, which supports the use of sauna as a treatment to increase the excretion of OTA. Retesting is recommended after 3-6 months of treatment.

(PMID 17195275, 16293235, 27521635, 22069626, 24792326, 22253638, 16140385, 2467220, 16844142, 19148691, 22069658, 16019795, 18286403, 15781206, 11439224, 17092826, 32710148)

**Zearalenone:**Zearalenone (ZEA) is mycotoxin that is produced by the mold species Fusarium, and has been shown to be hepatotoxic, haematotoxic, immunotoxic, and genotoxic. ZEA exposure is mostly through water damaged buildings, although ZEA is commonly found on several foods in the US, Europe, Asia, and Africa. The foods known to be contaminated with ZEA include wheat, barley, rice, and maize. ZEA has estrogenic activity and exposure to ZEA can lead to reproductive changes. ZEA estrogenic activity is higher than that of other non-steroidal isoflavones (compounds that have estrogen-like effects) such as soy and clover. ZEA exposure can result in thymus atrophy and alter spleen lymphocyte production, as well as impaired lymphocyte immune response, which leads to patients being susceptible to disease. ZEA is deactivated primarily through glucuronidation; individuals with impairments to this pathway will be much more susceptible to this compound even at very low levels. Treatment with the antioxidants lycopene and resveratrol has been beneficial in negating the harmful effects of ZEA in several studies. Retesting is recommended after 3-6 months of treatment.

(PMID: 17045381, 19330061, 11384734, 1387742, 698923, 1599403, 2276698, 22645433, 24632555, 6239410, 6235161, 24503513, 25682699, 27489133, 15781206, 11439224, 17092826, 16095665, 16782537, 17561436, 11245394)