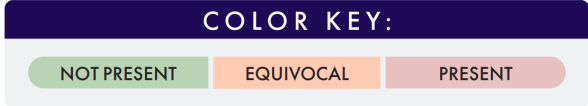


Company:  
Patient:  
External ID:  
Sample Type:

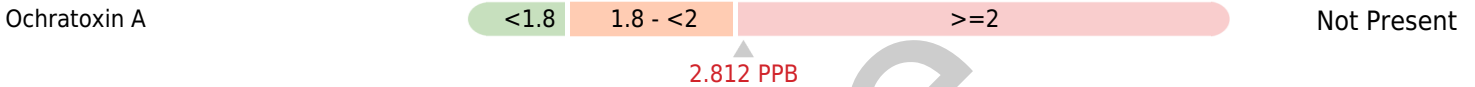
Sex:  
Date of Birth:  
Accession #:

Collected:  
Received:  
Completed:



(PPB: Parts Per Billion DL: Detectable Limit)

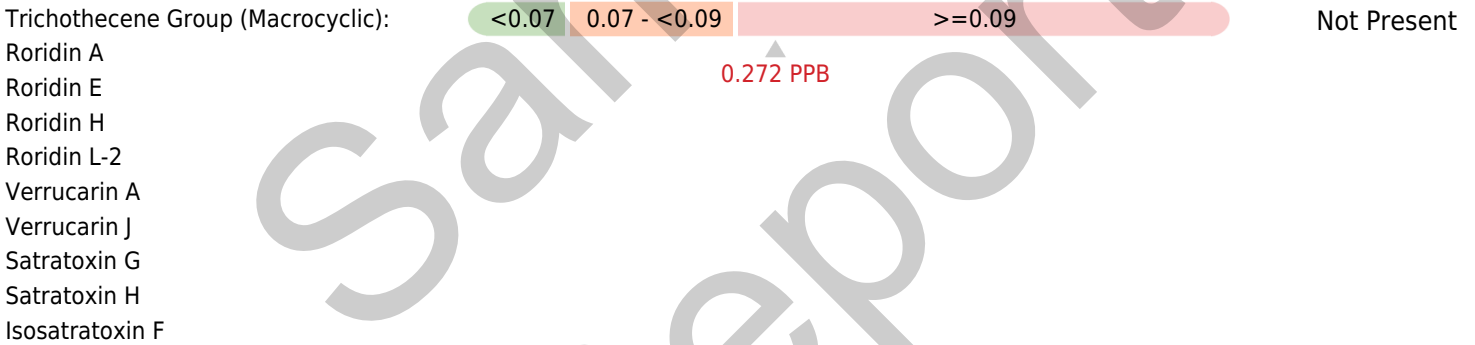
**Ochratoxin** Results Reference Range



**Aflatoxin** Results Reference Range



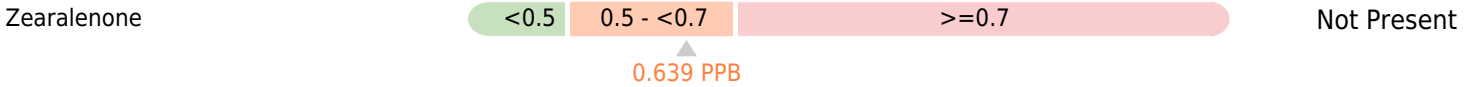
**Trichothecene** Results Reference Range



**Gliotoxin** Results Reference Range



**Zearalenone** Results Reference Range



**Company:**  
**Patient:**  
**External ID:**  
**Sample Type:**

**Sex:**  
**Date of Birth:**  
**Accession #:**

**Collected:**  
**Received:**  
**Completed:**

Test	Result	Value (ppb)	Reference Range
Ochratoxin A	Present	2.812	Not Present <1.8 Equivocal 1.8 - <2 Present >=2
Aflatoxin Group:	Present	1.124	Not Present <0.8 Equivocal 0.8 - <1 Present >=1
Aflatoxin B1			
Aflatoxin B2			
Aflatoxin G1			
Aflatoxin G2			
Trichothecene Group (Macrocyclic):	Present	0.272	Not Present <0.07 Equivocal 0.07 - <0.09 Present >=0.09
Roridin A			
Roridin E			
Roridin H			
Roridin L-2			
Verrucarin A			
Verrucarin J			
Satratoxin G			
Satratoxin H			
Isosatratoxin F			
Gliotoxin Derivative	Present	2.112	Not Present <0.5 Equivocal 0.5 - <1 Present >=1
Zearalenone	Equivocal	0.639	Not Present <0.5 Equivocal 0.5 - <0.7 Present >=0.7

**About These Tests:**

Test results should be evaluated in relation to patient symptoms, clinical history, and other laboratory findings. Individuals should review their results with a healthcare provider.

These tests were developed and the performance characteristics determined by RealTime Laboratories. They have not been cleared or approved by the U.S. Food and Drug Administration (FDA). This laboratory is certified under the Clinical Laboratory Improvement Amendments (CLIA) as qualified to perform high complexity clinical laboratory testing. The New York State (NYS) Department of Health (DOH) has allowed these tests to be offered in the NYS under the current RealTime Laboratories permit. The NYS DOH has not evaluated any test claims nor reviewed the accuracy of these tests.

Mycotoxin	Cellular Activity of Mycotoxin	Symptoms/Other	Association with a "Disease State"
<b>A FLATOXIN FAMILY</b>			
<b>Organisms: <i>Aspergillus flavus</i>, <i>Aspergillus oryzae</i>, <i>Aspergillus fumigatus</i>, <i>Aspergillus parasiticus</i></b> <b>Aflatoxins have been associated with liver cancer [2,3], cirrhosis [4,5], and other health issues</b>			
1	Aflatoxin B1	Binds DNA and proteins [6,7]	Shortness of breath [8], weight loss [10], most potent and highly carcinogenic.
2	Aflatoxin B2	Inhibits DNA and RNA replication [12]	Impaired fetal growth [13,14]
3	Aflatoxin G1	Cytotoxic, induces apoptosis in cells, DNA damage [1]	A flavus is a leading cause of invasive aspergillus in immunocompromised patients [15]
4	Aflatoxin G2	Cancer, neonatal jaundice [2,3,16]	Aflatoxicosis in humans and animals [15]
<b>OCHRATOXIN A</b>			
<b>Organisms: <i>Aspergillus ochraceus</i>, <i>Aspergillus niger</i>, <i>Penicillium species</i></b>			
5	Ochratoxin A	Inhibits mitochondrial ATP, potent teratogen, and immune suppressor [17-19]	Fatigue, dermatitis, irritated bowel [20-22]
<b>MA CROCyclic TRICHOthECENES (Group D)</b>			
<b>Organism: <i>Stachybotrys chartarum</i></b>			
6	Satratoxin G	DNA, RNA, and protein synthesis inhibition [25]	Fatigue [26]
7	Satratoxin H	Inhibits protein synthesis [25]	Fatigue [26]
8	Isosatratoxin F	Immunosuppression [30]	Weakened immune system [30]
9	Roridin A	Immunosuppression [30]	Weakened immune system [30]
10	Roridin E	DNA, RNA, and protein synthesis disruption [25,32]	Weakened immune system [30]
11	Roridin H	Inhibits protein synthesis [25]	Weakened immune system [30]
12	Roridin L-2	Immunosuppression [30]	Weakened immune system [30]
13	Verrucaridin A	Immunosuppression [30]	
14	Verrucaridin J	Immunosuppression [30]	
<b>GLIOTOXIN DERIVATIVE</b>			
<b>Organisms: <i>Aspergillus fumigatus</i>, <i>Aspergillus terreus</i>, <i>Aspergillus niger</i>, <i>Aspergillus flavus</i></b>			
15	Gliotoxin	Attacks intracellular function in immune system [34]	Memory and breathing issues [35,36]
<b>ZEARALENONE</b>			
<b>Organisms: <i>Fusarium species</i></b>			
16	Zearalenone	Estrogen mimic [37,38]	Early puberty, low sperm counts, cancer [39-42]

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# SYMPTOMS OF Mycotoxins

