



Dr Test Doctor (Test Doctor) Test Clinic. 123 Test Street, Test Suburb Victoria 3125

Lab ID
Patient ID P000004
Ext ID 26087-0001

Test Patient

Sex: Female • 18yrs • 20-Sep-07
123 Home Street, Test Suburb VIC 3125

RECEIVED
28-Mar-26

URINE MYCOTOXINS

Specimen type - Urine, Spot

Collected

20-Mar-26

OCHRATOXINS GROUP

Ochratoxin A

TEST	RESULT	H/L	INTERPRETATION	REFERENCE	UNITS
Ochratoxin A	8.770	H	PRESENT	(<1.800)	ppb

AFLATOXINS GROUP

Aflatoxin B1, Aflatoxin B2, Aflatoxin G1, Aflatoxin G2

TEST	RESULT	H/L	INTERPRETATION	REFERENCE	UNITS
Aflatoxin Group	0.630		Not Present	(<0.800)	ppb

TRICOTHECENES GROUP

Roridin A, Roridin E, Roridin H, Roridin L-2, Verrucarin A, Verrucarin J, Satratoxin G, Satratoxin H, Isosatratoxin F

TEST	RESULT	H/L	INTERPRETATION	REFERENCE	UNITS
Tricothecenes Group	0.040		EQUIVOCAL	(<0.070)	ppb

GLIOTOXINS GROUP

Gliotoxin Derivative

TEST	RESULT	H/L	INTERPRETATION	REFERENCE	UNITS
Gliotoxin Derivative	0.630	H	EQUIVOCAL	(<0.500)	ppb

ZEARALENONE GROUP

Zearalenone

TEST	RESULT	H/L	INTERPRETATION	REFERENCE	UNITS
Zearalenone	0.340		Not Present	(<0.500)	ppb

Reference Ranges Interpretation

MYCOTOXIN GROUP	Not Present	EQUIVOCAL	PRESENT
Ochratoxin Group	< 1.80 ppb	1.80 - 2.00 ppb	> 2.00 ppb
Aflatoxin Group	< 0.80 ppb	0.80 - 1.00 ppb	> 1.00 ppb
Tricothecenes Group	< 0.04 ppb	0.04 - 0.08 ppb	> 0.08 ppb
Gliotoxins Group	< 0.50 ppb	0.50 - 1.00 ppb	> 1.00 ppb
Zearalenone Group	< 0.50 ppb	0.50 - 0.70 ppb	> 0.70 ppb

Testing performed at Real Time Labs, Carrollton, TX, USA.

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28-Mar-26**Mycotoxins Comment****GLIOTOXINS GROUP ELEVATED (URINE):**

Elevated urinary gliotoxins reflect exposure to immunosuppressive mycotoxins produced primarily by *Aspergillus fumigatus*. Gliotoxin detection may indicate active mould exposure or colonisation in susceptible individuals.

Clinically, gliotoxins are associated with immune suppression, increased susceptibility to infections, fatigue, and impaired inflammatory regulation. They may also interfere with macrophage and neutrophil function, contributing to chronic or recurrent illness.

From a functional medicine perspective, interpretation should include assessment of immune status, chronic inflammatory conditions, and possible ongoing environmental exposure. Management emphasises exposure control, immune system support, optimisation of antioxidant defences, and consideration of antifungal strategies where clinically indicated and appropriately supervised.

Treatment: Eliminate mold exposure, use immune modulators (zinc, vitamin D, beta-glucans), and upregulate glutathione pathways.

OCHRATOXINS GROUP ELEVATED (URINE):

Elevated urinary ochratoxins, most commonly ochratoxin A, indicate exposure to mould-derived nephrotoxic mycotoxins produced by *Aspergillus* and *Penicillium* species. Urinary detection reflects recent exposure and renal clearance, while ochratoxins are also known to accumulate in tissues with prolonged exposure.

Clinically, ochratoxin exposure is associated with renal tubular stress, oxidative damage, immune dysregulation, and potential endocrine disruption. Reported symptoms may include fatigue, brain fog, polyuria, increased thirst, and susceptibility to recurrent infections. Chronic exposure has been linked to nephrotoxicity and carcinogenic risk in animal and epidemiological studies.

From a functional medicine perspective, management should prioritise source identification and removal, including assessment of indoor water damage, mould contamination, and dietary exposure (e.g. grains, coffee, dried fruits). Supportive strategies commonly include optimisation of hydration to promote renal clearance, nutritional support for antioxidant capacity (e.g. glutathione pathways), and use of evidence-based binders where clinically appropriate to reduce enterohepatic recirculation. Renal function should be considered when implementing detoxification strategies.

Treatment: Antioxidants (grape seed extract, NAC), phase II detox support, avoid high-risk foods (e.g., coffee, processed meats, wine).

Methodology

Enzyme-Linked Immunosorbent Assay (ELISA)