

Aluminium

Synonyms

Clinical Indication

Oral aluminium binders are infrequently used as phosphate binders in dialysis patients. The ingestion of aluminium-containing phosphate binders by patients who cannot excrete it may lead to accumulation and toxicity. In patients prescribed aluminium binders, aluminium concentrations are monitored every 3 months to screen for toxicity. In recent years magnesium salts have replaced aluminium hydroxide as an intestinal phosphate binder and most dialysis units have reverse osmosis units to purify water for dialysis prior to use. High aluminium concentrations are less common in CRF patients now but continued monitoring is required.

Requested by Consultant Renal Physicians.

Part of Profile / See Also

Request Form

Combined Pathology manual Blood form or ICE request

Availability / Frequency of Analysis

Analysed by Trace Metals Laboratory, King's College Hospital ([Synnovis 9067](#)) if specific criteria met.

Turnaround Time

1 month

Patient Preparation

None required

Sample Requirements

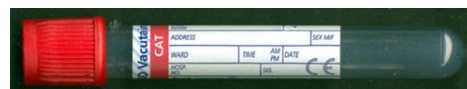
Specimen Type

Serum


Volume


2 ml

Container



Red top (serum) sample

Or  Paediatric lithium heparin (Orange top – Sarstedt tube) and an empty tube of the same lot number (to test contamination)

Or  Paediatric plain tube (BD Microtainer tube)

Reference Range & Units

Less than 0.4 umol/L.

To convert from umol/L to ug/L multiply by 26.95

Interferences

Interpretation & Clinical

Decision Value (if applicable)

Less than 0.4 umol/L.

Levels greater than 2.2 umol/L indicate increased accumulation in a renal patient. Aluminium concentration in dialysis fluid should not exceed 1.1 umol/L.

References

<https://www.synnovis.co.uk/our-tests/aluminium>

Test code

AL

Lab Handling

Aliquot 500ul and store in referrals rack at 4C. Sent daily by courier to King's College, London – [part of Synnovis](#)



9067

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ISO 15189:2012