

Unique iMg Testing



Prime+ is the only Blood Gas Analyser in Australia to test for iMg

What is iMg?

- Ionised magnesium (iMg) is the physiologically active form of magnesium available for cellular activity¹
- It is not possible to accurately calculate iMg. Instead, it must be directly measured²⁻⁵

Why iMg?

- Compared to iMg, total magnesium (tMg) cannot distinguish between its three forms: protein bound, ligand complexed, and ionised⁶
- Clinical decisions should be based on the ionised fraction rather than tMg levels¹
- iMg can be measured in whole blood at the patient's bedside, whereas tMg is tested only in the central laboratory





Clinical Significance of iMg Testing

iMg measurement is essential for the management of critically ill patients. The monitoring of iMg has been shown to improve patient outcomes and reduce length of stay in:

Cardiopulmonary bypass patients

Who showcased significantly reduced iMg levels despite an increase in tMg levels⁷

Severe head trauma patients

Who demonstrated significant decreases in iMg but not tMg⁸

Critically ill children •

With 60% of the children showing low iMg, despite 60% of them having also showing normal tMg levels⁹

Patients with intestinal and liver disease

14% were false positive with respect to functional hypomagnesaemia (low tMg, normal iMg)¹⁰

Patients with renal disease

20% displayed a false positive result with respect to functional magnesaemia¹¹



we understand the Point of Care

AMSL Point of Care (POC) Division specialises in point of care testing and diagnostic technologies used in hospitals by healthcare professionals throughout Australia.

For more information, please contact us on 1300 845 762 or at poc@amsl.com.au



point of care

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