

## Ionized or Total Magnesium levels, What Should We Measure in Critically Ill Patients?

Monitoring and measuring magnesium values are essential to prevent the development of numerous complications in perioperative medicine and critically ill patients. Although current studies suggest that measuring free ionized magnesium ( $Mg^{++}$ ) is more useful for estimating magnesium status, clinicians often still rely on measurement of total serum magnesium (tMg) to determine if supplemental magnesium is needed. Electrolytes ( $Na^+$ ,  $K^+$ ,  $Ca^{++}$ ,  $Cl^-$ ) are all currently measured as ions because that is their only clinically active form. Now  $Mg^{++}$  can be measured in the same way. Just as ionized Ca ( $Ca^{++}$ ) is recognized as the standard for assessing Ca status,  $Mg^{++}$  is now being recognized as vital in assessing magnesium status, especially in critically ill patients. In this webinar we summarize recent literature to describe why it is better to measure  $Mg^{++}$ ; not tMg, when assessing magnesium status. We will review the significance of  $Mg^{++}$  in different clinical scenarios, and its potential to help improve patient care. We will also discuss whether  $Mg^{++}$  predicts clinical outcome, and the advantages and the difficulties in measuring  $Mg^{++}$  levels in intensive care patients.



### Primary Presenter

Giuliana Scarpato, MD  
Department of Medicine, Surgery and Dentistry,  
Scuola Medica Salernitana, Unit of Anesthesiology,  
University of Salerno, Baronissi, Italy

### A Point of Care Method to Measure Ionized Magnesium

The availability of magnesium ion-selective electrode sensor technology with commercial blood gas analyzers now provides reliable measurement of  $Mg^{++}$  in a clinical setting. Stat Profile Prime Plus measures  $Mg^{++}$  as part of a comprehensive critical menu including pH, gases, electrolytes, glucose, lactate, urea, creatinine, hemoglobin and hematocrit, estimated plasma volume.



### Presenter

Germano Ferrari, PhD, MBA  
European Director,  
Medical and Scientific Affairs  
Nova Biomedical

### Webinar Dates:

Thursday, June 9<sup>th</sup>, 2:00 PM ET

Thursday, June 23<sup>rd</sup>, 2:00 PM ET



### Register Now at:

[novabiomedical.com/iMgvstMG](http://novabiomedical.com/iMgvstMG)

### Educational Credits

This program offers 1 hour of P.A.C.E. continuing education credits. Nova Biomedical is approved as a provider of continuing education programs in the clinical laboratory sciences by the ASCLS P.A.C.E.® Program.

This program has been approved by the American Association of Critical-Care Nurses (AACN), for 1.00 CERPs, Synergy CERP Category A, File Number 24144. Approval refers to recognition of continuing education only and does not imply AACN approval or endorsement of the content of this educational activity, or the products mentioned.