



University of Colorado Hospital

ANSCHUTZ MEDICAL CAMPUS

Test Update

Addition of Oxygen Index (OI) to Blood Gas Reporting

Effective January 18, 2012, the UCH Clinical Laboratory will add Oxygen Index (OI) to the Arterial Blood Gas (ABG) test group. This calculated value can be used to assess the effectiveness and safety of the patient's mechanical ventilation. Elevated OI values may indicate a need to modify current ventilation settings or method.

The Oxygen Index will be reported on any ABG sample that is submitted with a Mean Airway Pressure (PAW) value noted on the laboratory ABG zebra label. Any ABG sample submitted without a PAW value will not have the OI reported.

The following two parameters will display when the OI is reported as part of the Arterial Blood Gas test group:

Mean Airway Pressure (PAW): The clinician submits this value for mechanically ventilated patients, in the same way that FiO₂ and patient temperature are provided, by writing the value on the laboratory ABG zebra label or testing requisition. The PAW value should be submitted in cmH₂O. Submission of PAW, FIO₂ and patient temperature is not mandatory for obtaining current arterial blood gas results.

Oxygen Index (OI): If a PAW is provided, the OI will be calculated and reported along with current arterial blood gas results. The reference range for the OI is <20.0 cmH₂O/mmHg.

Because of zebra label format constraints, the TEMP prompt on the zebra label will be replaced with the new PAW prompt and will look like the label below. If the optional temperature correction of the arterial blood gas is needed, please write the patient's temperature on the label.



Please call Ron Lepoff, M.D. at 720-848-7044 if you have any questions or visit our website at <http://www.uch.edu/for-healthcare-professional/Clinical-Laboratory/index.aspx> for additional information.

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Clinical Laboratory
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