TEST CHANGE

2002348, VITD2D3TMS

Specimen Requirements:

Patient Preparation:

| Collect:          | Plain red or serum separator tube. Also acceptable: Green (sodium heparin), lavender (EDTA), or pink (K2EDTA). |
| Specimen Preparation: | Transfer 0.5 mL serum or plasma to an ARUP Standard Transport Tube. (Min: 0.15 mL) |

Transport Temperature: Refrigerated.

Unacceptable Conditions: Room temperature specimens older than 24 hours.

Remarks:

Stability: After separation from cells: Ambient: 24 hours; Refrigerated: 1 week; Frozen: 6 months

Methodology: Quantitative High Performance Liquid Chromatography-Tandem Mass Spectrometry

Performed: Sun-Sat

Reported: 1-54 days

Note: ARUP is unable to provide reliable results for specimens from infants (less than one year of age), since highly specialized test methodology is required. ARUP will refer all infant specimens to a laboratory that is able to perform this methodology. U.S. Patent No. 8,349,613

CPT Codes: 82306

New York DOH Approval Status: This test is New York DOH approved.

Interpretive Data:

Total Concentrations of 25-hydroxyvitamin D2 and 25-hydroxyvitamin D3:
Deficiency: Less than 20 ng/mL
Insufficiency: 20-29 ng/mL
Optimal Level: 30-80 ng/mL
Possible Toxicity: Greater than 150 ng/mL

Separate values for Vitamin D2 and D3 are reported in addition to the total.
This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Reference Interval:

Effective May 16, 2011

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Deficiency</th>
<th>Optimum Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-17 years</td>
<td>Less than 20 ng/mL</td>
<td>Greater than or equal to 20 ng/mL*</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Age Group</th>
<th>Deficiency</th>
<th>Insufficiency</th>
<th>Optimum Level</th>
<th>Possible Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 years and older</td>
<td>Less than 20 ng/mL</td>
<td>20-29 ng/mL</td>
<td>30-80 ng/mL</td>
<td>Greater than 150 ng/mL</td>
</tr>
</tbody>
</table>

*(Holick MF et al. JCEM 2011; 96:1911-30)*