Lab Dept: Chemistry

Test Name: BILIRUBIN, TOTAL

General Information

Lab Order Codes: TBIL

Synonyms: Total Bilirubin; Nbil; Neonatal Bilirubin

CPT Codes: 82247 – Bilirubin; total

Test Includes: Total bilirubin concentration reported in mg/dL.

Logistics

Test Indications: Bilirubin is the orange-yellow pigment derived from senescent red blood cells. It is extracted and biotransformed in the liver. Bilirubin is screened and monitored for liver disorders, such as jaundice, or liver disease, such as cirrhosis. Total bilirubin measures the entire concentration of bilirubin in the blood.

Lab Testing Sections: Chemistry

Phone Numbers:
- MIN Lab: 612-813-6280
- STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 hour

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container:
- Preferred: Green top (Li Heparin) tube
- Alternate: SST: Red, marble or gold top tube or Green (NaHep) tube

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL plasma/serum

Collection: Routine blood collection
**Special Processing:**
Lab Staff: Specimen must be separated from cells within 2 hours of collection. Centrifuge specimen, remove serum/plasma aliquot into plastic sample cup. Analyze within 2 hours, or protect from light by using foil or an amber tube. Store refrigerated.

When protected from light, samples are stable for 8 hours at room temperature, at 2-8 degrees C for 1 week and at <-20 degrees C for 3 months.

**Patient Preparation:**
Remove photo therapy prior to sample collection.

**Sample Rejection:**
Unlabeled or mislabeled specimen

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**Interpretive**

**Reference Range:**

<table>
<thead>
<tr>
<th>Method Abbott</th>
<th>Reference ranges by Method:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 14 days:</td>
<td>0.2 – 16.6 mg/dL</td>
</tr>
<tr>
<td>15 – 364 days:</td>
<td>0.1 – 0.7 mg/dL</td>
</tr>
<tr>
<td>1 – 8 years:</td>
<td>0.1 – 0.4 mg/dL</td>
</tr>
<tr>
<td>9 – 11 years:</td>
<td>0.1 – 0.6 mg/dL</td>
</tr>
<tr>
<td>12 – 14 years:</td>
<td>0.1 – 0.7 mg/dL</td>
</tr>
<tr>
<td>15 – 18 years:</td>
<td>0.1 – 0.8 mg/dL</td>
</tr>
<tr>
<td>Adult:</td>
<td>0.2 – 1.2 mg/dL</td>
</tr>
</tbody>
</table>

**Critical Values:**

<1 day: >12.0 mg/dL

>1 day: >15.0 mg/dL

**Limitations:**
Exposure to light rapidly and significantly decreases bilirubin.

**Methodology:**
ABBOTT: Diazonium Salt

**References:**
Frequently Asked Questions (March 2008) Dade Behring, Global Products Support

Clinical Significance, Dade Behring Inc., Glasgow Business Community, Mailbox 531, P.O. Box 6101, Newark, Delaware 19714
Architect Total Bilirubin Pkg Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL 60064, February 2017

Alinity Total Bilirubin Pkg Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL 60064, March 2018


Biorad Liquichek Unassayed Chemistry Control Product Insert, Bio-Rad Laboratories, Irvine, CA 92618

Biorad Liquichek Pediatric Control Product Insert, Bio-Rad Laboratories, Irvine, CA 92618

Updates:
2/8/2016: Update alt tube types
9/13/2016: Update "protect from light" requirements
10/18/2019: New backup instrumentation and related reference ranges
11/9/2020: Retired method VISTA, updated containers