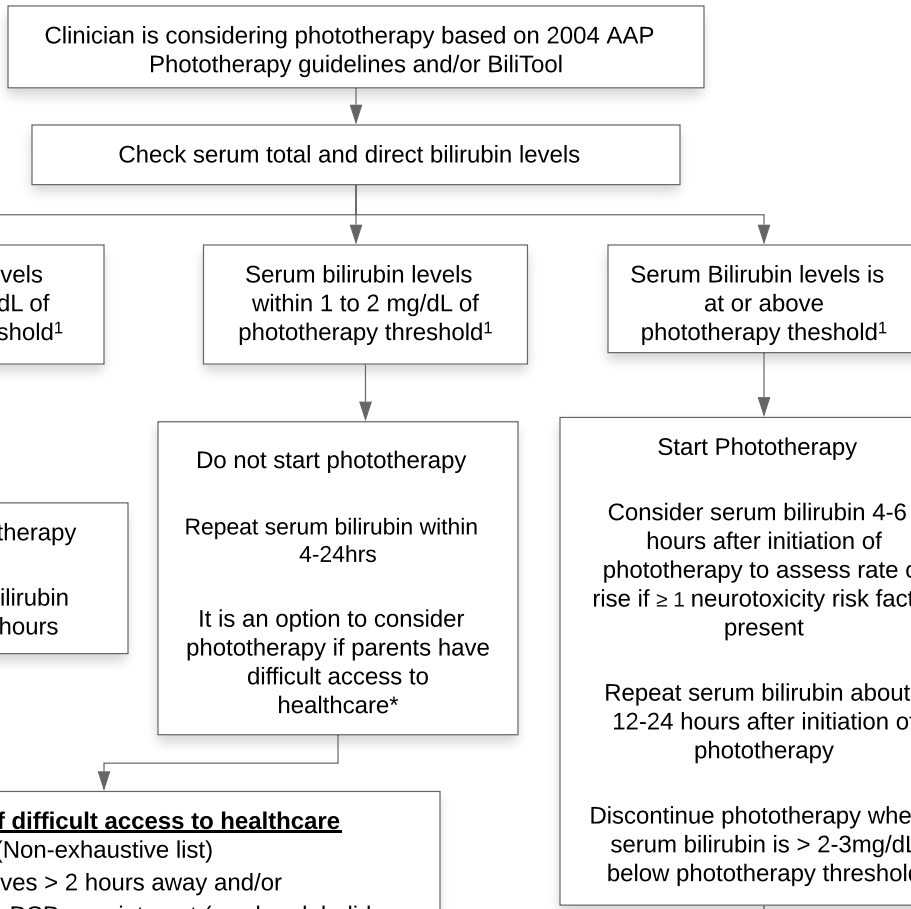


# Phototherapy for Late Preterm and Term Infants in the Newborn Nursery



**Hyperbilirubinemia Risk Factors<sup>5</sup>**  
 TSB/TcB in high-risk zone  
 Jaundice in first 24 hours  
 ABO incompatibility with positive direct Coombs, known hemolytic disease, or elevated ETCO  
 Gestational age 35-36 weeks  
 Prior sibling had phototherapy  
 Cephalohematoma or bruising  
 Exclusive breastfeeding, esp. with poor feeding or weight loss  
 East Asian Race

**Neurotoxicity Risk Factors<sup>5</sup>**  
 Isoimmune Hemolytic Disease  
 G6PD deficiency  
 Asphyxia  
 Significant lethargy  
 Temperature instability  
 Sepsis  
 Acidosis  
 Albumin < 3.0 g/dL

**BiliTool**



SCAN ME

bilitool.org

**Rebound Hyperbilirubinemia Calculator<sup>3</sup>**



SCAN ME

jscalculator.org/calculator/68NNiF57iTMZhZY

**\*Examples of difficult access to healthcare**  
 (Non-exhaustive list)  
 Family lives > 2 hours away and/or  
 Unable to schedule PCP appointment (weekend, holiday etc...) and/or  
 Transportation issues

**Alternative approach for ordering rebound TSB: Indications<sup>6</sup>**  
 Hemolytic jaundice  
 Prematurity (<37 weeks GA)  
 If phototherapy is discontinued sooner than 2-3 mg/dL below the phototherapy initiation threshold  
 If phototherapy was started prior to 48 hours  
 Timing: 6-24 hours

Use Rebound Hyperbilirubinemia Calculator to evaluate risk of rebound hyperbilirubinemia<sup>3</sup> (QR code bottom right)  
 If rebound hyperbilirubinemia risk is >4%, check serum bilirubin 4-6 hours after discontinuation of phototherapy

**Adverse Effects/Associations of Phototherapy<sup>2,4</sup>**

**Acute**  
 Temperature dysregulation  
 Maternal-infant separation  
 For cholestatic infants - skin reactions including bronze baby syndrome, bullous and purpuric rashes

**Delayed**  
 Possible association with childhood leukemia<sup>4</sup>  
 Possible association with epilepsy<sup>2</sup>

**Transcutaneous bilirubin measurements are unreliable after phototherapy**

**References**  
 1) Choosing Wisely. Pediatric Hospital Medicine. Published 1/11/2021 2) Pediatrics. 2018 Oct;142(4):e20180648. doi: 10.1542/peds.2018-0648. 3) Pediatrics. 2017 Mar;139(3):e20162896. doi: 10.1542/peds.2016-2896. 4) Pediatrics. 2016 Jun;137(6):e20151353. doi: 10.1542/peds.2015-1353. 5) Pediatrics. 2004 Jul;114(1):297-316. doi: 10.1542/peds.114.1.297. 6) NCNC neonatal hyperbilirubinemia guideline