

Practice Change: Bilirubin Orders and Results

Starting **March 7, 2023 @ 10:30:**

C&W Lab is getting new equipment and **Bilirubin Conjugated and Unconjugated** are no longer orderable. **Bilirubin Total, Bilirubin Direct, Bilirubin Total and Direct**, will be available instead.

Definitions:

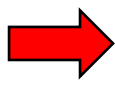
Total Bilirubin replaces the sum of **Bilirubin Conjugated** and **Unconjugated**. It detects all types of bilirubin in the blood. **Total bilirubin** is the measurement that gets plotted in the Bhutani nomogram for newborns.

Direct Bilirubin replaces **Conjugated Bilirubin**. Direct Bilirubin assays can detect conjugated as well as albumin-bound bilirubin, thus in some patients, Direct Bilirubin results will be higher and persist for longer than Conjugated Bilirubin results.

ORDERS:

Before

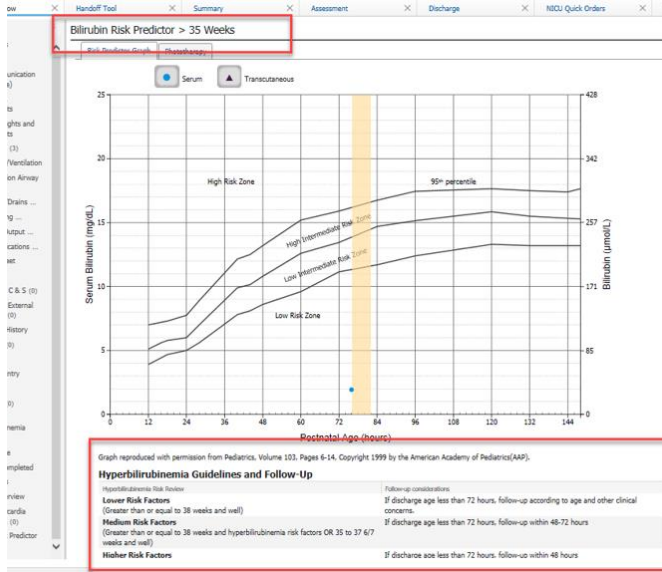
Component	Day 1 Future Pending *Est. 23-Jan-2023 12:4...	Actions
<input checked="" type="checkbox"/> Ca/Mg/PO4 Blood, once, Order for future visit	Planned	
<input checked="" type="checkbox"/> Alanine Aminotransferase Blood, once, Order for future visit	Planned	
<input checked="" type="checkbox"/> Bilirubin Conjugated and Unconjugated Blood, once, Order for future visit	Planned	



After

Component	Day 1 Future Pending *Est. 23-Jan-2023 12:3...	Actions
<input checked="" type="checkbox"/> Ca/Mg/PO4 Blood, once, Order for future visit	Planned	
<input checked="" type="checkbox"/> Alanine Aminotransferase Blood, once, Order for future visit	Planned	
<input checked="" type="checkbox"/> Bilirubin Total Blood, once, Order for future visit	Planned	
<input checked="" type="checkbox"/> Bilirubin Direct Blood, once, Order for future visit	Planned	
<input checked="" type="checkbox"/> Urinalysis Macroscopic (dipstick) with Microscopic if in... Urine, once, Order for future visit	Planned	

RESULTS: Reference intervals will be updated within CST Cerner. The phototherapy and hyperbilirubinemia risk threshold remains the same and are reflected in the unchanged graphs.



Bilirubin Risk Predictor > 35 Weeks

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Hyperbilirubinemia Guidelines and Follow-Up

Hyperbilirubinemia Risk Factor: Follow-up considerations

Lower Risk Factors
(Greater than or equal to 38 weeks and well) If discharge age less than 72 hours, follow-up according to age and other clinical concerns.

Medium Risk Factors
(Greater than or equal to 36 weeks and hyperbilirubinemia risk factors OR 35 to 37 6/7 weeks and well) If discharge age less than 72 hours, follow-up within 48-72 hours

Higher Risk Factors If discharge age less than 72 hours, follow-up within 48 hours



Infant Hyperbilirubinemia Treatment

35 - 37 +6/7 weeks

Risk Predictor

Risk	Age	Threshold	Recommendation
High	35-37 weeks	10.0 mg/dL	Phototherapy
Intermediate	35-37 weeks	12.0 mg/dL	Phototherapy
Low	35-37 weeks	15.0 mg/dL	Phototherapy

Labs

Chemistry	Today
Bilirubin Total	umol/L 33 *
Bilirubin Direct	umol/L 66 *

* Displaying recent results up to 24 columns of information

Additional Resources:

- [New chemistry instrumentation and bilirubin methods March 2023](#)
- [Memo: C&W Lab New chemistry analyzer implementation](#)