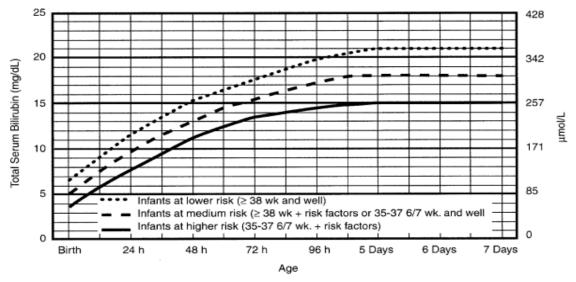


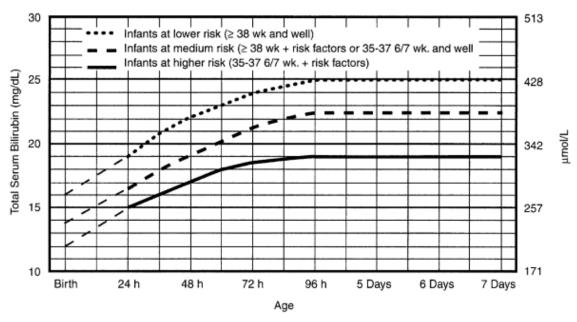
Figure (1): Bilirubin nomogram (BN) [25]

BN shows **3 risk zones** by the percentile tracks, high-risk zone, Intermediaterisk zone, and Low risk zone. The purpose of the BN is to predict which newborn is at high, intermediate, or low risk to develop severe hyperbilirubinemia after discharge from the hospital.



- Use total bilirubin. Do not subtract direct reacting or conjugated bilirubin.
   Risk factors = isoimmune hemolytic disease, G6PD deficiency, asphyxia, significant lethargy, temperature instability, sepsis, acidosis, or albumin < 3.0g/dL (if measured)</li>
- For well infants 35-37 6/7 wk can adjust TSB levels for intervention around the medium risk line. It is an option to intervene at lower TSB levels for infants closer to 35 wks and at higher TSB levels for those closer to 37 6/7 wk.
- It is an option to provide conventional phototherapy in hospital or at home at TSB levels 2-3 mg/dL (35-50mmol/L) below those shown but home phototherapy should not be used in any infant with risk factors.

Fig (2): Guidelines for phototherapy in infants  $\geq$  35 weeks gestation [17]



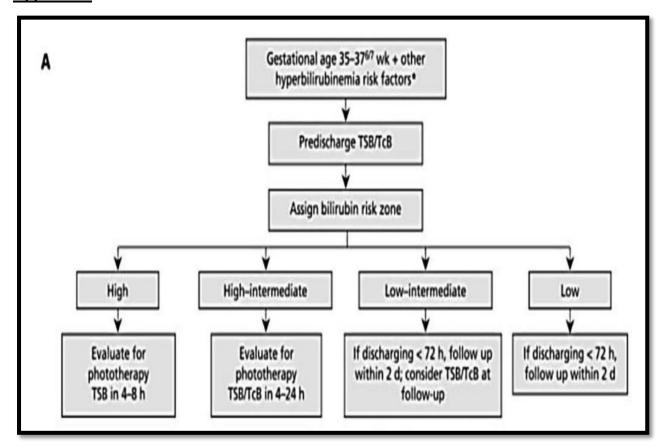
- The dashed lines for the first 24 hours indicate uncertainty due to a wide range of clinical circumstances and a range of responses to phototherapy.
- Immediate exchange transfusion is recommended if infant shows signs of acute bilirubin encephalopathy (hypertonia, arching, retrocollis, opisthotonos, fever, high pitched cry) or if TSB is ≥5 mg/dL (85 μmol/L) above these lines.
- Risk factors isoimmune hemolytic disease, G6PD deficiency, asphyxia, significant lethargy, temperature instability, sepsis, acidosis.
- Measure serum albumin and calculate B/A ratio (See legend)
- Use total bilirubin. Do not subtract direct reacting or conjugated bilirubin
- If infant is well and 35-37 6/7 wk (median risk) can individualize TSB levels for exchange based on actual gestational age.

Fig (3). Guidelines for exchange transfusion in infants  $\geq$ 35 weeks' gestation [17]

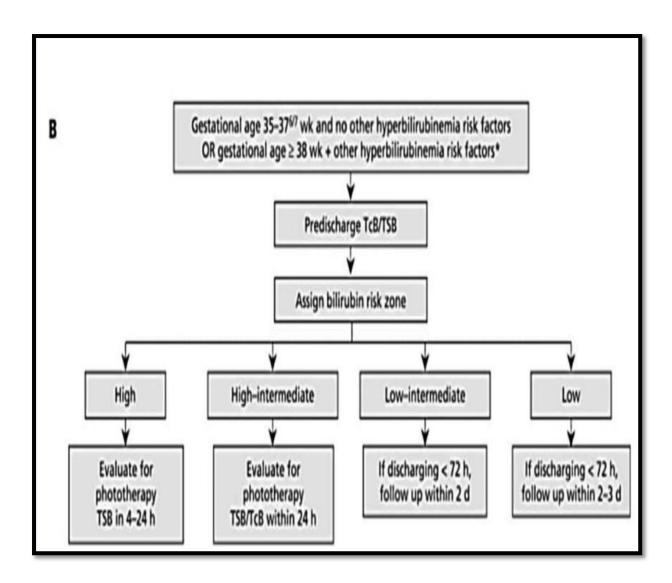
Table I: Clinical assessment of neurotoxicity using the Modified (bilirubin induced neurologic dysfunction (BIND) score

neurologic dysfunction (BIND) score  CLINICAL SIGN	SCORE	CEVEDITY	
MENTAL STATUS	SCORE	SEVERITY	Doto/Timo
Normal	0	None	Date/Time
	U	None	
☐ Sleepy but arousable	1	Mild	
☐ Decreased feeding			
Lethargy		3.6.1	
□ Poor suck and/or	2	Moderate	
☐ Irritable/jittery with short-term strong suck			
□ Semi-coma			
☐ Apnea	3	Severe	
□ Coma			
Total / 3			
MUSCLE TONE	T a		
□ Normal	0	None	
☐ Persistent mild hypotonia	1	Mild	
☐ Moderate hypotonia			
☐ Moderate hypertonia			
☐ Increasing arching of neck and trunk on	2	Moderate	
stimulation without spasms of arms and legs			
and without trismus			
☐ Persistent retrocollis			
□ Opisthotonus			
☐ Crossing or scissoring of arms or legs but	3	Severe	
without spasms of arms and legs and without			
trismus			
Total / 3			
CRY PATTERN	1		
□ Normal	0	None	
☐ High pitched	1	Mild	
□ Shrill	2	Moderate	
☐ Inconsolable crying or			
☐ Cry weak or absent in child with previous	3	Severe	
history of high pitched or shrill cry			
Total / 3			
OCCULOMOTOR OR EYE MOVEMENTS			
□ Normal	0	None, Mild	
☐ Sun-setting	3	Severe	
☐ Paralysis of Upward Gaze	3	Severe	
Total/3			
Total ABE Score / 12			
	•		

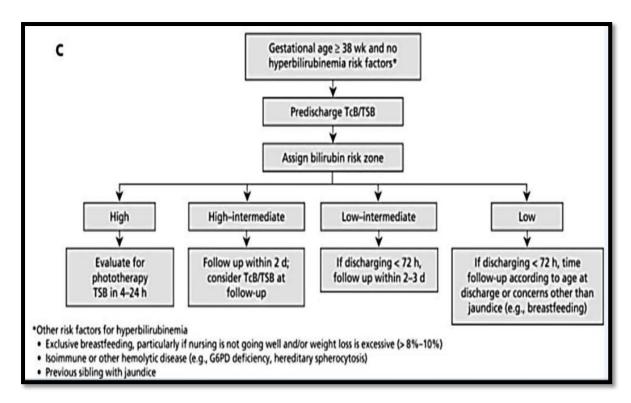
Final score out of 12 (zero: Normal, 1-4: mild encephalopathy, 5-6: moderate encephalopathy, 7-12: severe encephalopathy) [12]



**Figure 4 (A):** Algorithm for management and follow-up according to pre-discharge bilirubin, gestation, and risk factors [17]



**Figure 4 (B):** Algorithm for management and follow-up according to pre-discharge bilirubin, gestation, and risk factors [17]



**Figure 4 (c):** Algorithm for management and follow-up according to pre-discharge bilirubin, gestation, and risk factors [17]