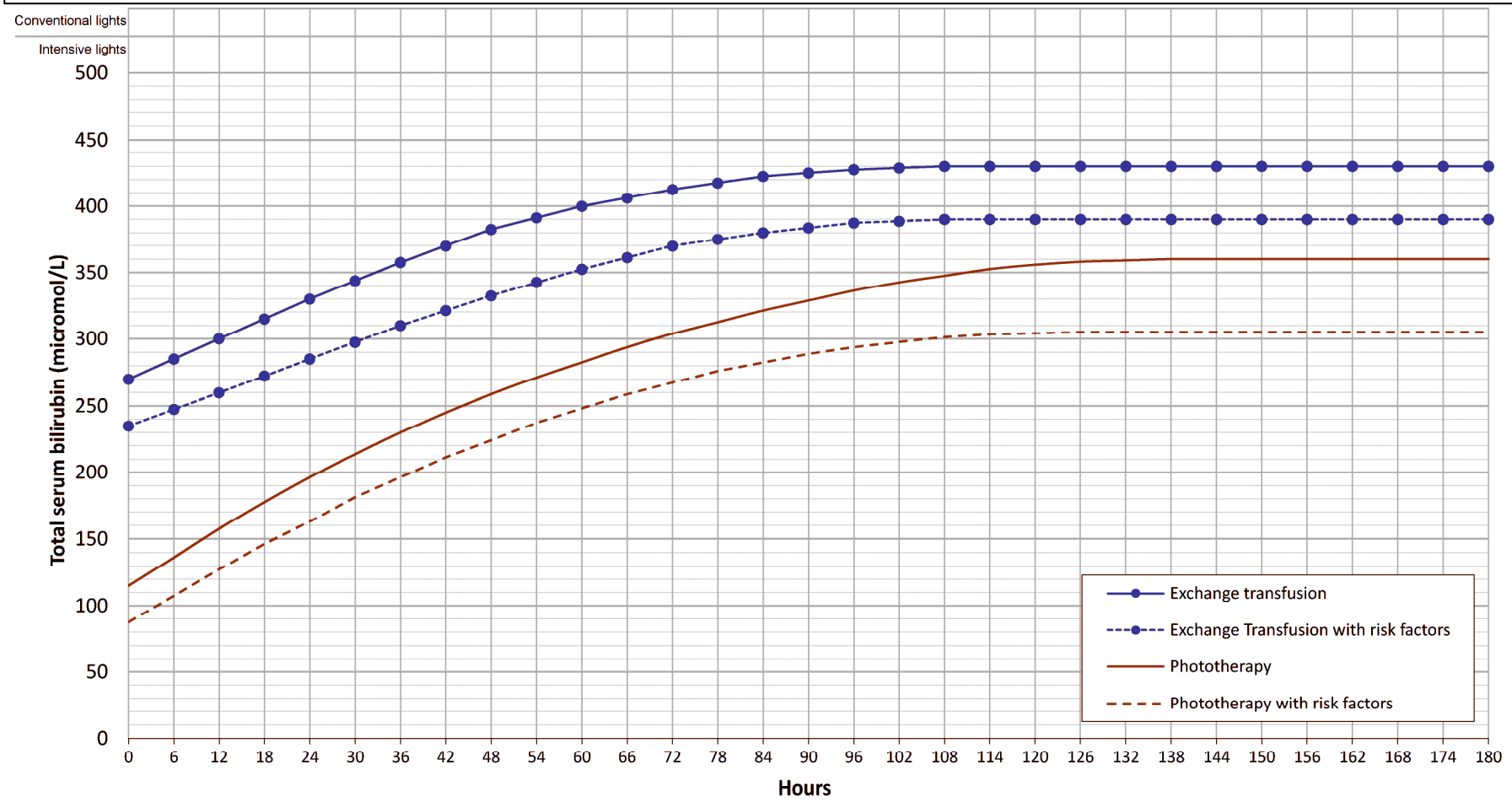
Nomogram: Jaundice management for baby greater than 38 weeks gestation

1. In the presence of risk factors (sepsis, haemolysis, acidosis or asphyxia) use the lower line.
2. If baby is greater than 12 hours old with total serum bilirubin (TSB) 1–50 micromol/L below the line, repeat the TSB within 6–24 hours.
3. Babies under phototherapy:
    a. Consider measuring the TSB 4–6 hourly until the rise of serum bilirubin is known to be controlled, then measure TSB 12–24 hourly.
    b. Stop phototherapy if the TSB is greater than 50 micromol/L below line and recheck in 12–24 hours.
4. If baby presents with TSB above threshold and the TSB is not expected to be below the threshold after 6 hours of intensive phototherapy, an exchange transfusion is indicated.
5. If there are signs of bilirubin encephalopathy an immediate exchange transfusion is recommended.



Date and time	Total Serum Bilirubin

Baby greater than 38 weeks gestation

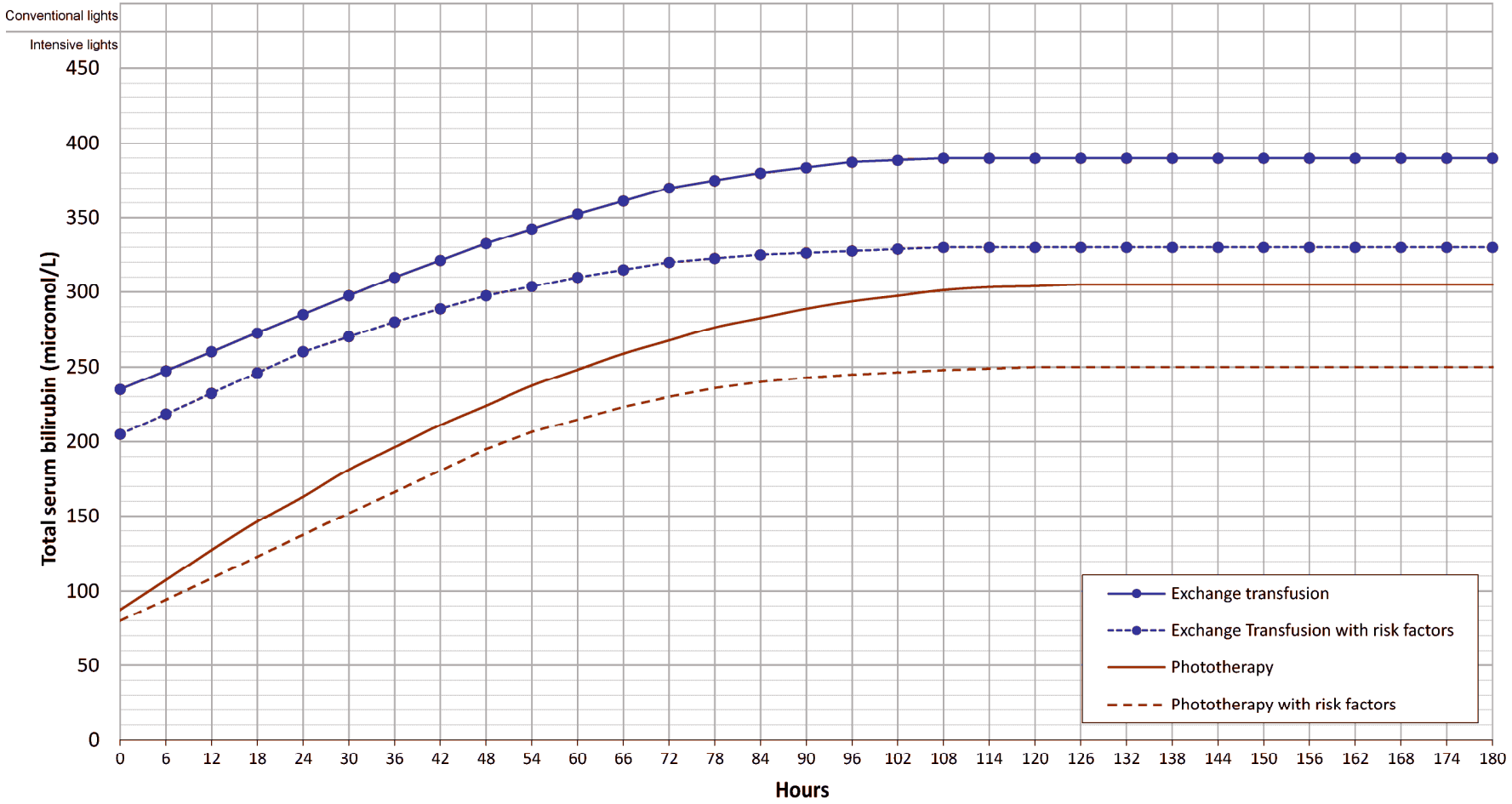
Queensland Clinical Guideline: Neonatal jaundice Flowchart version: F17.7-2-V5-R22

Adapted from: American Academy Pediatrics American Academy of Pediatrics Subcommittee on Hyperbilirubinemia. Clinical Practice Guideline: Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation. Pediatrics. 2004; 114:297–316; Maisels M, Bhutani V, Bogen D, Newman T, Stark A, Watchko J. Hyperbilirubinemia in the newborn infant ≥35 weeks' gestation: An update with clarifications. Pediatrics. 2009; 124(4):1193–1198; Horn A, Kirsten G, Kroon S, Henning P, Moller G, Pieper C, et al. Phototherapy and exchange transfusion for neonatal hyperbilirubinaemia: neonatal academic hospitals' consensus guidelines for South African hospitals and primary care facilities. South African Medical Journal. 2006; 96(9):819–24; Morris BH, Oh W, Tyson JE, Stevenson DK, Phelps DL, O'Shea T et al. Aggressive vs conservative phototherapy for infants with extremely low birth weight. New England Journal of Medicine. 2008;359(18):1885–96.

© State of Queensland (Queensland Health) 2017

Nomogram: Jaundice management for baby 35+0 to 37+6 weeks gestation

1. In the presence of risk factors (sepsis, haemolysis, acidosis or asphyxia) use the lower line.
2. If baby is greater than 12 hours old with total serum bilirubin (TSB) 1–50 micromol/L below the line, repeat the TSB within 6–24 hours.
3. Babies under phototherapy:
    a. Consider measuring the TSB 4–6 hourly until the rise of serum bilirubin is known to be controlled, then measure TSB 12–24 hourly.
    b. Stop phototherapy if the TSB is greater than 50 micromol/L below line and recheck in 12–24 hours.
4. If baby presents with TSB above threshold and the TSB is not expected to be below the threshold after 6 hours of intensive phototherapy, an exchange transfusion is indicated.
5. If there are signs of bilirubin encephalopathy an immediate exchange transfusion is recommended.



Date and time	Total Serum Bilirubin

Baby 35+0 to 37+6 weeks gestation

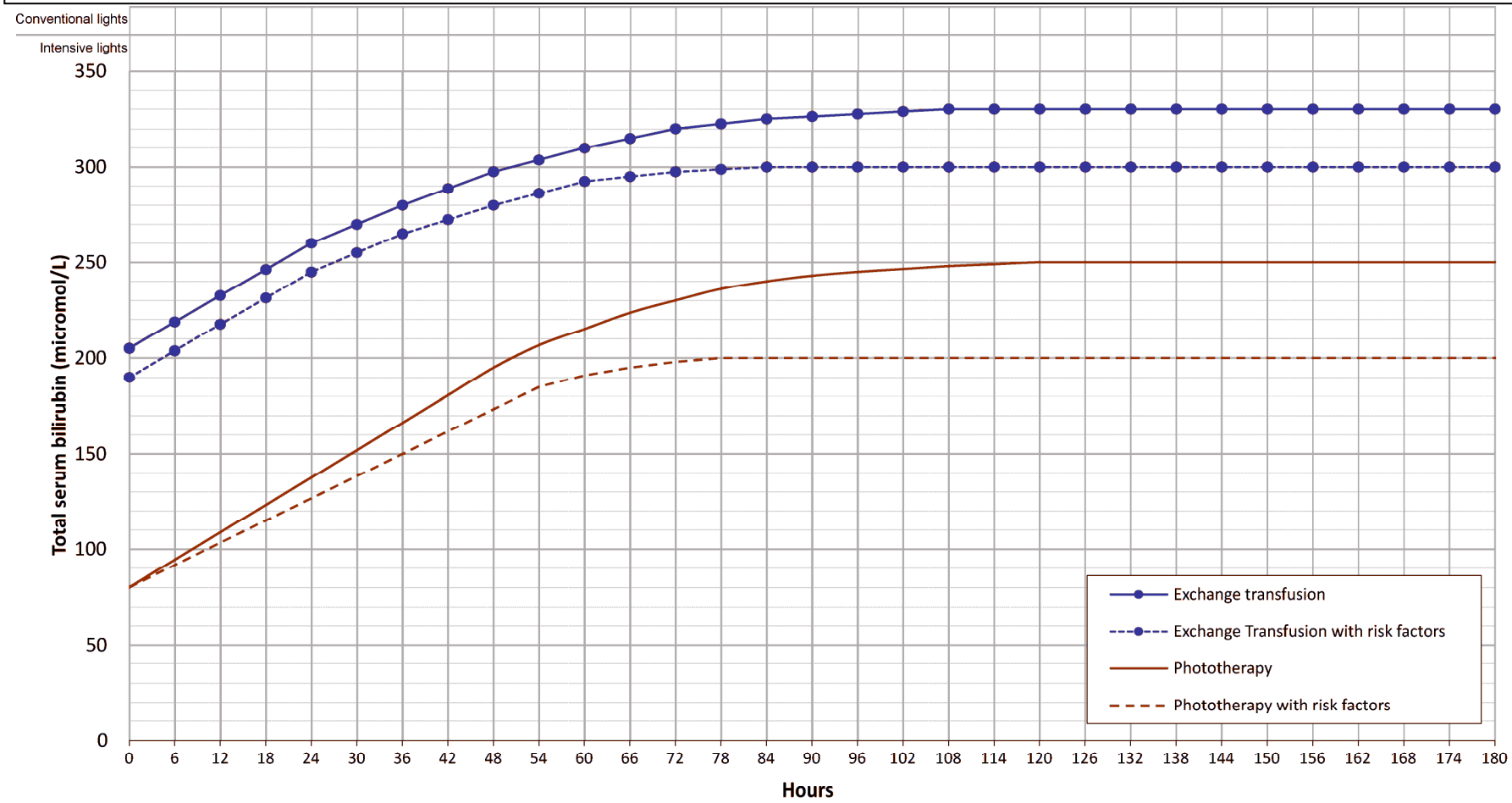
Queensland Clinical Guideline: Neonatal jaundice Flowchart version: F17.7-2-V5-R22

Adapted from: American Academy Pediatrics American Academy of Pediatrics Subcommittee on Hyperbilirubinemia. Clinical Practice Guideline: Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation. Pediatrics. 2004; 114:297–316; Maisels M, Bhutani V, Bogen D, Newman T, Stark A, Watchko J. Hyperbilirubinemia in the newborn infant ≥35 weeks' gestation: An update with clarifications. Pediatrics. 2009; 124(4):1193–1198; Horn A, Kirsten G, Kroon S, Henning P, Moller G, Pieper C, et al. Phototherapy and exchange transfusion for neonatal hyperbilirubinaemia: neonatal academic hospitals' consensus guidelines for South African hospitals and primary care facilities. South African Medical Journal. 2006; 96(9):819–24; Morris BH, Oh W, Tyson JE, Stevenson DK, Phelps DL, O'Shea T et al. Aggressive vs conservative phototherapy for infants with extremely low birth weight. New England Journal of Medicine. 2008;359(18):1885–96.

© State of Queensland (Queensland Health) 2017

Nomogram: Jaundice management for baby less than 35 weeks gestation greater than 1999 g birth weight

1. In the presence of risk factors (sepsis, haemolysis, acidosis or asphyxia) use the lower line.
2. If baby is greater than 12 hours old with total serum bilirubin (TSB) 1–50 micromol/L below the line, repeat the TSB within 6–24 hours.
3. Babies under phototherapy:
    a. Consider measuring the TSB 4–6 hourly until the rise of serum bilirubin is known to be controlled, then measure TSB 12–24 hourly.
    b. Stop phototherapy if the TSB is greater than 50 micromol/L below line and recheck in 12–24 hours.
4. If baby presents with TSB above threshold and the TSB is not expected to be below the threshold after 6 hours of intensive phototherapy, an exchange transfusion is indicated.
5. If there are signs of bilirubin encephalopathy an immediate exchange transfusion is recommended.



Date and time	Total Serum Bilirubin

Baby less than 35 weeks gestation greater than 1999 g birth weight

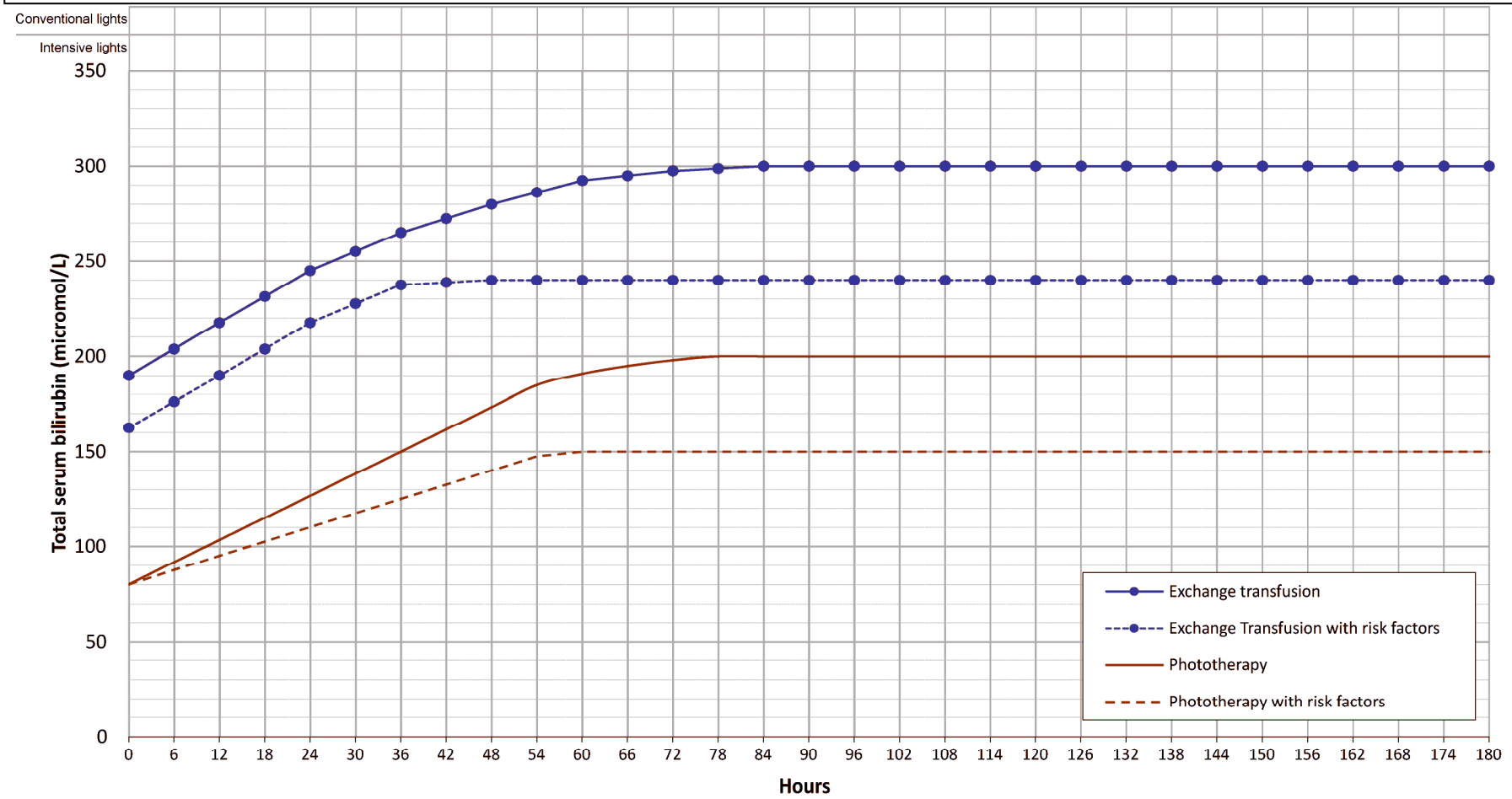
Queensland Clinical Guideline: Neonatal jaundice Flowchart version: F17.7-2-V5-R22

Adapted from: American Academy Pediatrics American Academy of Pediatrics Subcommittee on Hyperbilirubinemia. Clinical Practice Guideline: Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation. Pediatrics. 2004; 114:297–316; Maisels M, Bhutani V, Bogen D, Newman T, Stark A, Watchko J. Hyperbilirubinemia in the newborn infant ≥35 weeks' gestation: An update with clarifications. Pediatrics. 2009; 124(4):1193–1198; Horn A, Kirsten G, Kroon S, Henning P, Moller G, Pieper C, et al. Phototherapy and exchange transfusion for neonatal hyperbilirubinaemia: neonatal academic hospitals' consensus guidelines for South African hospitals and primary care facilities. South African Medical Journal. 2006; 96(9):819–24; Morris BH, Oh W, Tyson JE, Stevenson DK, Phelps DL, O'Shea T et al. Aggressive vs conservative phototherapy for infants with extremely low birth weight. New England Journal of Medicine. 2008;359(18):1885–96.

© State of Queensland (Queensland Health) 2017

Nomogram: Jaundice management for baby less than 35 weeks gestation 1500 g to 1999 g birth weight

1. In the presence of risk factors (sepsis, haemolysis, acidosis or asphyxia) use the lower line.
2. If baby is greater than 12 hours old with total serum bilirubin (TSB) 1–50 micromol/L below the line, repeat the TSB within 6–24 hours.
3. Babies under phototherapy:
    a. Consider measuring the TSB 4–6 hourly until the rise of serum bilirubin is known to be controlled, then measure TSB 12–24 hourly.
    b. Stop phototherapy if the TSB is greater than 50 micromol/L below line and recheck in 12–24 hours.
4. If baby presents with TSB above threshold and the TSB is not expected to be below the threshold after 6 hours of intensive phototherapy, an exchange transfusion is indicated.
5. If there are signs of bilirubin encephalopathy an immediate exchange transfusion is recommended.



Date and time	Total Serum Bilirubin

Baby less than 35 weeks gestation 1500 g to 1999 g birth weight

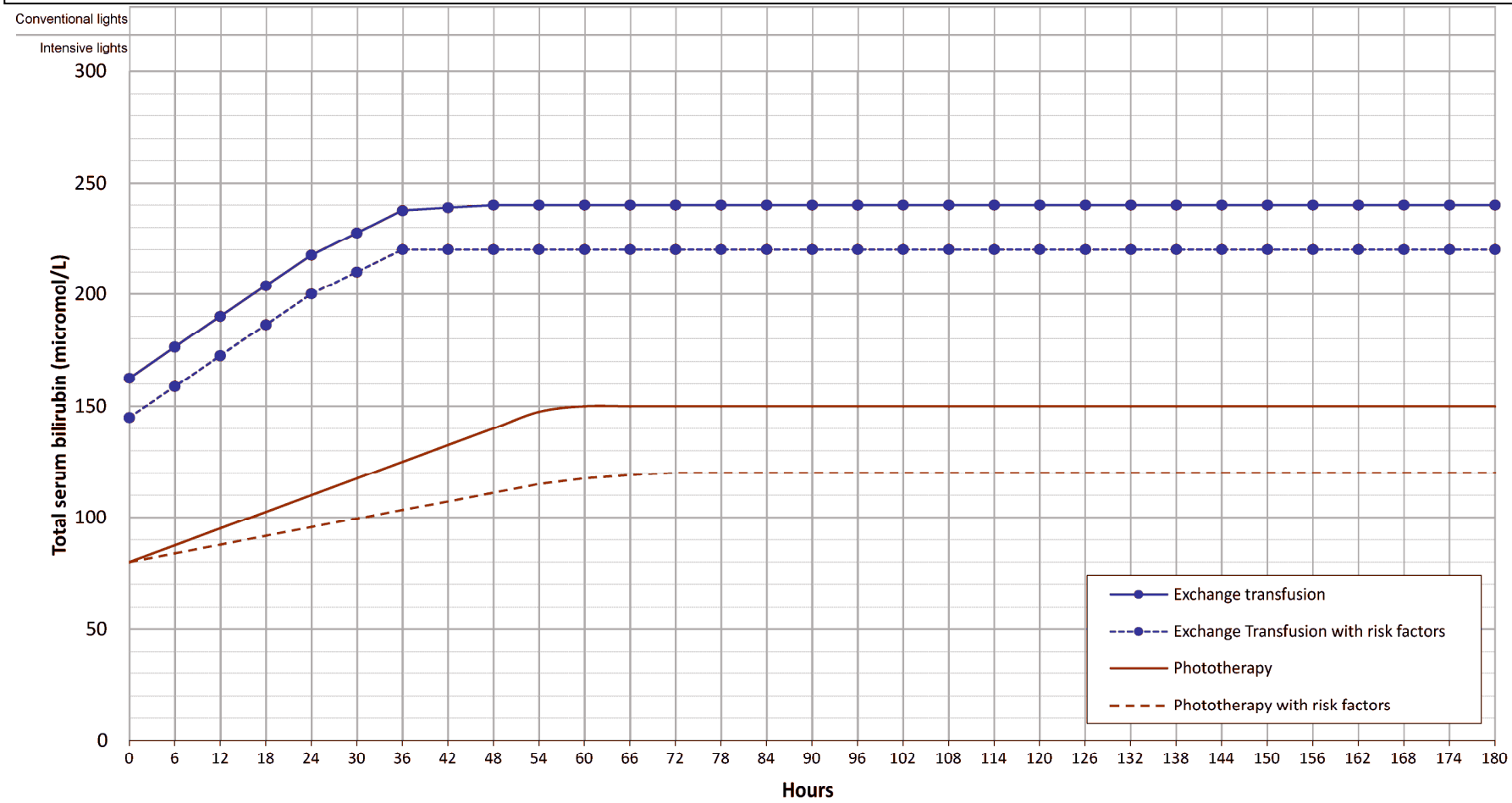
Queensland Clinical Guideline: Neonatal jaundice Flowchart version: F17.7-2-V5-R22

Adapted from: American Academy Pediatrics American Academy of Pediatrics Subcommittee on Hyperbilirubinemia. Clinical Practice Guideline: Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation. Pediatrics. 2004; 114:297–316; Maisels M, Bhutani V, Bogen D, Newman T, Stark A, Watchko J. Hyperbilirubinemia in the newborn infant ≥35 weeks' gestation: An update with clarifications. Pediatrics. 2009; 124(4):1193–1198; Horn A, Kirsten G, Kroon S, Henning P, Moller G, Pieper C, et al. Phototherapy and exchange transfusion for neonatal hyperbilirubinaemia: neonatal academic hospitals' consensus guidelines for South African hospitals and primary care facilities. South African Medical Journal. 2006; 96(9):819–24; Morris BH, Oh W, Tyson JE, Stevenson DK, Phelps DL, O'Shea T et al. Aggressive vs conservative phototherapy for infants with extremely low birth weight. New England Journal of Medicine. 2008;359(18):1885–96.

© State of Queensland (Queensland Health) 2017

Nomogram: Jaundice management for baby less than 35 weeks gestation 1000 g to 1499 g birth weight

1. In the presence of risk factors (sepsis, haemolysis, acidosis or asphyxia) use the lower line.
2. If baby is greater than 12 hours old with total serum bilirubin (TSB) 1–50 micromol/L below the line, repeat the TSB within 6–24 hours.
3. Babies under phototherapy:
    a. Consider measuring the TSB 4–6 hourly until the rise of serum bilirubin is known to be controlled, then measure TSB 12–24 hourly.
    b. Stop phototherapy if the TSB is greater than 50 micromol/L below line and recheck in 12–24 hours.
4. If baby presents with TSB above threshold and the TSB is not expected to be below the threshold after 6 hours of intensive phototherapy, an exchange transfusion is indicated.
5. If there are signs of bilirubin encephalopathy an immediate exchange transfusion is recommended.



Date and time	Total Serum Bilirubin

Baby less than 35 weeks gestation 1000 g to 1499 g birth weight

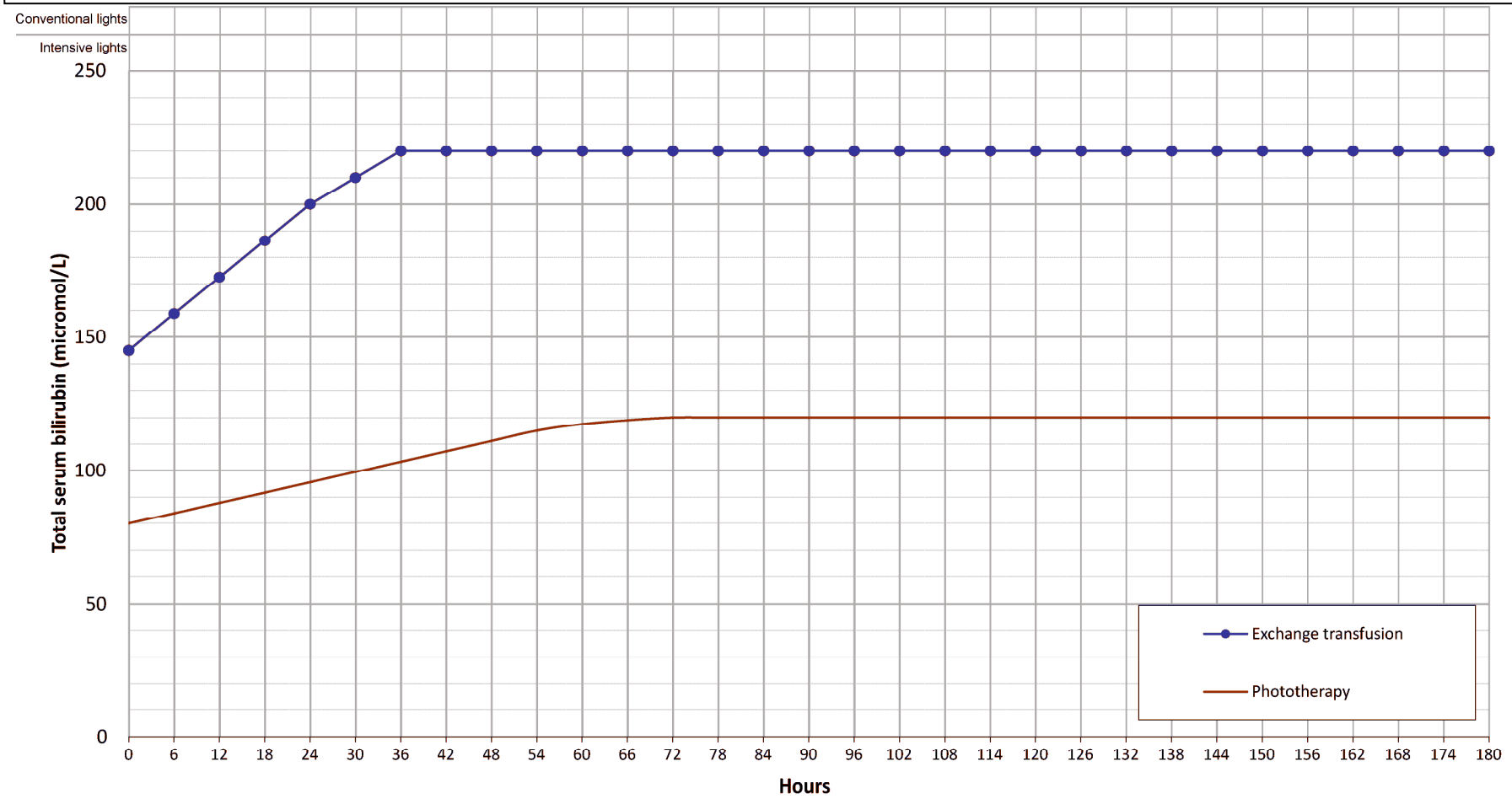
Queensland Clinical Guideline: Neonatal jaundice Flowchart version: F17.7-2-V5-R22

Adapted from: American Academy Pediatrics American Academy of Pediatrics Subcommittee on Hyperbilirubinemia. Clinical Practice Guideline: Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation. Pediatrics. 2004; 114:297–316; Maisels M, Bhutani V, Bogen D, Newman T, Stark A, Watchko J. Hyperbilirubinemia in the newborn infant ≥35 weeks' gestation: An update with clarifications. Pediatrics. 2009; 124(4):1193–1198; Horn A, Kirsten G, Kroon S, Henning P, Moller G, Pieper C, et al. Phototherapy and exchange transfusion for neonatal hyperbilirubinaemia: neonatal academic hospitals' consensus guidelines for South African hospitals and primary care facilities. South African Medical Journal. 2006; 96(9):819–24; Morris BH, Oh W, Tyson JE, Stevenson DK, Phelps DL, O'Shea T et al. Aggressive vs conservative phototherapy for infants with extremely low birth weight. New England Journal of Medicine. 2008;359(18):1885–96.

© State of Queensland (Queensland Health) 2017

Nomogram: Jaundice management for baby less htan 35 weeks gestation less than 1000 g birth weight

1. In the presence of risk factors (sepsis, haemolysis, acidosis or asphyxia) use the lower line.
2. If baby is greater than 12 hours old with total serum bilirubin (TSB) 1–50 micromol/L below the line, repeat the TSB within 6–24 hours.
3. Babies under phototherapy:
    a. Consider measuring the TSB 4–6 hourly until the rise of serum bilirubin is known to be controlled, then measure TSB 12–24 hourly.
    b. Stop phototherapy if the TSB is greater than 50 micromol/L below line and recheck in 12–24 hours.
4. If baby presents with TSB above threshold and the TSB is not expected to be below the threshold after 6 hours of intensive phototherapy, an exchange transfusion is indicated.
5. If there are signs of bilirubin encephalopathy an immediate exchange transfusion is recommended.



Date and time	Total Serum Bilirubin

Baby less than less than 1000 g birth weight

Queensland Clinical Guideline: Neonatal jaundice Flowchart version: F17.7-2-V5-R22

Adapted from: American Academy Pediatrics American Academy of Pediatrics Subcommittee on Hyperbilirubinemia. Clinical Practice Guideline: Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation. Pediatrics. 2004; 114:297–316; Maisels M, Bhutani V, Bogen D, Newman T, Stark A, Watchko J. Hyperbilirubinemia in the newborn infant ≥35 weeks' gestation: An update with clarifications. Pediatrics. 2009; 124(4):1193–1198; Horn A, Kirsten G, Kroon S, Henning P, Moller G, Pieper C, et al. Phototherapy and exchange transfusion for neonatal hyperbilirubinaemia: neonatal academic hospitals' consensus guidelines for South African hospitals and primary care facilities. South African Medical Journal. 2006; 96(9):819–24; Morris BH, Oh W, Tyson JE, Stevenson DK, Phelps DL, O'Shea T et al. Aggressive vs conservative phototherapy for infants with extremely low birth weight. New England Journal of Medicine. 2008;359(18):1885–96.

© State of Queensland (Queensland Health) 2017