

Comparison: Universal screening for identification of neonatal hyperbilirubinaemia by TcB at discharge compared with clinical screening (visual inspection and/or assessment of risk factors), followed by TcB or total serum bilirubin (TSB) if required

Source: Khurshid F, Rao SPN, Sauve C, Gupta S. Universal screening for hyperbilirubinemia in term healthy newborns at discharge: a systematic review and meta-analysis (submitted).

Certainty assessment							№ of patients		Effect		Certainty (GRADE)	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Universal TcB	Clinical screening	Relative (95% CI)	Absolute (95% CI)		
Severe hyperbilirubinaemia – RCTs												
1	randomized trials	serious ^a	not serious	not serious	serious ^b	none	3/929 (0.3%)	11/929 (1.2%)	RR 0.27 (0.08 to 0.97)	9 fewer per 1000 (from 11 fewer to 0 fewer)	⊕⊕○○ LOW	CRITICAL
Severe hyperbilirubinaemia – non-RCTs												
1	observational studies	very serious ^c	not serious	not serious	not serious	none	-	-	RR 0.25 (0.12 to 0.52)	0 fewer per 1000 (from 1 fewer to 0 fewer)	⊕⊕○○ LOW	CRITICAL
Jaundice requiring exchange transfusion – RCTs												
1	randomized trials	serious ^a	not serious	not serious	very serious ^{b,d}	none	0/929 (0.0%)	2/929 (0.2%)	RR 0.20 (0.01 to 4.16)	2 fewer per 1000 (from 2 fewer to 7 more)	⊕○○○ VERY LOW	CRITICAL
Jaundice requiring exchange transfusion – non-RCTs												
1	observational studies	very serious ^c	not serious	not serious	not serious	none	-	-	OR 0.28 (0.19 to 0.42)	0 fewer per 1000 (from 0 fewer to 0 fewer)	⊕⊕○○ LOW	CRITICAL
Bilirubin induced neurological dysfunction/kernicterus – RCTs												
1	randomized trials	serious ^a	not serious	not serious	very serious ^{b,d}	none	0/929 (0.0%)	1/929 (0.1%)	RR 0.33 (0.01 to 8.17)	1 fewer per 1000 (from 1 fewer to 8 more)	⊕○○○ VERY LOW	CRITICAL
Readmission for jaundice – RCTs												
1	randomized trials	serious ^a	not serious	not serious	not serious	none	12/929 (1.3%)	48/929 (5.2%)	OR 0.24 (0.13 to 0.46)	39 fewer per 1000 (from 45 fewer to 27 fewer)	⊕⊕⊕○ MODERATE	CRITICAL

Certainty assessment							No of patients		Effect		Certainty (GRADE)	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Universal TcB	Clinical screening	Relative (95% CI)	Absolute (95% CI)		

Readmission for jaundice – non-RCTs

4	observational studies	very serious ^c	serious ^e	not serious	serious ^d	none	55/8223 (0.7%)	89/8266 (1.1%)	OR 1.01 (0.38 to 2.70)	0 fewer per 1000 (from 7 fewer to 18 more)	⊕○○○ VERY LOW	CRITICAL
---	-----------------------	---------------------------	----------------------	-------------	----------------------	------	----------------	----------------	----------------------------------	--	------------------	----------

CI: confidence interval; OR: odds ratio; RCT: randomized controlled trial; RR: risk ratio.

a. The pooled effect provided by study "B".

b. Less than 30 events.

c. Most of the pooled effect provided by studies "C".

d. Wide confidence interval crossing the line of no effect.

e. Statistical heterogeneity ($I^2 \geq 60\%$ or $\text{Chi}^2 \leq 0.05$).