Forest plots for review question: Is intravenous administration of oxytocin more effective than intramuscular administration in the active management of the third stage of labour?

This section includes forest plots only for outcomes that are meta-analysed. Outcomes from single studies are not presented here; the quality assessment for such outcomes is provided in the GRADE profiles in appendix F.

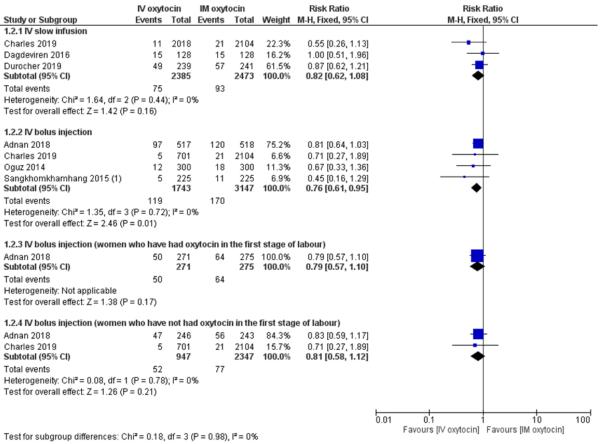
Comparison 1: IV oxytocin vs IM oxytocin

	IV oxytocin		IM oxytocin			Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% Cl	M-H, Fixed, 95% Cl
Adnan 2018	97	517	120	518	49.0%	0.81 [0.64, 1.03]	
Charles 2019	16	2809	21	2104	9.8%	0.57 [0.30, 1.09]	
Dagdeviren 2016	15	128	15	128	6.1%	1.00 [0.51, 1.96]	
Durocher 2019	49	239	57	241	23.2%	0.87 [0.62, 1.21]	
Oguz 2014	12	300	18	300	7.4%	0.67 [0.33, 1.36]	
Sangkhomkhamhang 2015 (1)	5	225	11	225	4.5%	0.45 [0.16, 1.29]	
Total (95% CI)		4218		3516	100.0%	0.78 [0.66, 0.93]	•
Total events	194		242				
Heterogeneity: Chi ² = 3.09, df = 5	(P = 0.69)); I ² = 09	%				
Test for overall effect: Z = 2.76 (P							0.01 0.1 1 10 100 Favours [IV oxytocin] Favours [IM oxytocin]

Figure 2: Primary PPH (blood loss ≥ 500 mL) – overall estimate

Footnotes (1) PPH not clearly defined by authors (measured up to 24 hours postpartum)

Figure 3: Primary PPH (blood loss ≥ 500 mL) - by type of IV administration and women who have had oxytocin in the first stage or not



Footnotes

(1) PPH not clearly defined by authors (measured up to 24 hours postpartum)

Figure 4: Severe PPH (blood loss ≥ 1000 mL) - overall estimate

	IV oxyte	ocin IM oxytocin			Peto Odds Ratio	Peto Odds Ratio				
Study or Subgroup	Events	Total	Events	Total	Weight	Peto, Fixed, 95% Cl		Peto, Fixe	d, 95% Cl	
Adnan 2018	24	517	42	518	56.5%	0.56 [0.34, 0.92]				
Charles 2019	5	2809	9	2104	12.5%	0.42 [0.14, 1.20]			-	
Dagdeviren 2016	4	128	0	128	3.6%	7.57 [1.05, 54.35]				_
Durocher 2019	14	239	18	241	27.4%	0.77 [0.38, 1.58]				
Total (95% CI)		3693		2991	100.0%	0.65 [0.44, 0.94]		•		
Total events	47		69							
Heterogeneity: Chi ² =	7.21, df=	3 (P =	0.07); I ^z =	58%					10	400
Test for overall effect: $Z = 2.28$ (P = 0.02)							0.01	Favours (IV oxytocin)	10 Favours (IM oxytocini)	100

Figure 5: Severe PPH (blood loss ≥ 1000 mL) - by type of IV administration and women who have had oxytocin in the first stage or not

	IV oxyt		IM oxyt			Peto Odds Ratio	Peto Odds Ratio
Study or Subgroup		Total	Events	Total	Weight	Peto, Fixed, 95% Cl	Peto, Fixed, 95% Cl
1.3.1 IV slow infusio							
Charles 2019	4	2018	9	2104	27.7%	0.48 [0.16, 1.43]	
Dagdeviren 2016	4	128	0	128	8.4%	7.57 [1.05, 54.35]	
Durocher 2019 Subtotal (95% CI)	14	239 2385	18	241 2473	63.9% 100.0%	0.77 [0.38, 1.58] 0.82 [0.46, 1.46]	
Total events	22	2303	27	2413	100.070	0.02 [0.40, 1.40]	
Heterogeneity: Chi² =		2 (P =		66%			
Test for overall effect	•		<i>.</i>				
1.3.2 IV bolus injecti	on						
Adnan 2018	24	517	42	518	89.2%	0.56 [0.34, 0.92]	
Charles 2019	1	701	9	2104	10.8%	0.45 [0.11, 1.88]	-
Subtotal (95% CI)		1218		2622	100.0%	0.55 [0.34, 0.88]	•
Total events	25		51				
Heterogeneity: Chi ² =	0.08, df=	1 (P =	0.77); I ^z =	0%			
Test for overall effect	: Z = 2.51 ((P = 0.0	1)				
1.3.3 IV bolus injecti	on (Wome	en who	have had	oxytoc	in in the f	irst stage of labour)	
Adnan 2018	10	253	28		100.0%	0.35 [0.18, 0.69]	
Subtotal (95% CI)		253		250	100.0%	0.35 [0.18, 0.69]	◆
Total events	10		28				
Heterogeneity: Not a							
Test for overall effect	: Z = 3.07 ((P = 0.0	02)				
1.3.4 IV bolus injecti	on (wome	n who l	nave not	had oxy	tocin in t	he first stage of labour)	
Adnan 2018	14	253	14	250	78.0%	0.99 [0.46, 2.11]	— — —
Charles 2019	1	701	9	2104	22.0%	0.45 [0.11, 1.88]	
Subtotal (95% CI)		954		2354	100.0%	0.83 [0.42, 1.63]	
Total events	15		23				
Heterogeneity: Chi² =		`		0%			
Test for overall effect	: Z = 0.54	(P = 0.5	9)				
							'0.01 0.1 i 1'0 10
							Favours (IV oxytocin) Favours (IM oxytocini)

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Figure 6: Need for manual removal of placenta - overall estimate

	IV oxytocin		IM oxyt	ocin		Peto Odds Ratio	Peto Odds Ratio		
Study or Subgroup	Events	Total	Events	Total	Weight	Peto, Fixed, 95% Cl	Peto, Fixed, 95% Cl		
Charles 2019	59	2809	60	2104	91.2%	0.73 [0.50, 1.05]			
Dagdeviren 2016	2	128	2	128	3.2%	1.00 [0.14, 7.18]			
Durocher 2019	0	239	3	241	2.4%	0.14 [0.01, 1.31]			
Oguz 2014	2	300	2	300	3.2%	1.00 [0.14, 7.13]			
Total (95% CI)		3476		2773	100.0%	0.71 [0.50, 1.01]	•		
Total events	63		67						
Heterogeneity: Chi ² =	: 2.30, df=	3 (P =	0.51); I ^z =	0%					
Test for overall effect	: Z = 1.89 ((P = 0.0	6)				0.01 0.1 1 10 1 Favours (IV oxytocin) Favours (IM oxytocin)		

Figure 7: Need for manual removal of placenta - by type of IV administration and women who have had oxytocin in the first stage or not

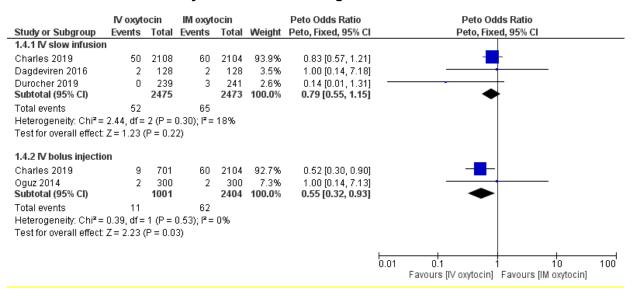


Figure 8: Need for additional uterotonics during the third stage or within the first 48 hours – overall estimate

	IV oxyte	ocin	IM oxyt	ocin		Peto Odds Ratio	Peto Odds Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	Peto, Fixed, 95% Cl	Peto, Fixed, 95% Cl
Adnan 2018	128	517	140	518	63.4%	0.89 [0.67, 1.17]	📲
Biradar 2021	0	160	3	160	1.0%	0.13 [0.01, 1.29]	
Charles 2019	20	2809	23	2104	13.3%	0.64 [0.35, 1.18]	────┼
Dagdeviren 2016	12	128	3	128	4.5%	3.56 [1.26, 10.08]	
Durocher 2019	13	239	30	241	12.5%	0.42 [0.23, 0.79]	─• ─
Neri-Mejia 2016	0	21	2	22	0.6%	0.14 [0.01, 2.23]	· · · · · · · · · · · · · · · · · · ·
Oguz 2014	6	300	9	300	4.7%	0.66 [0.24, 1.85]	I −−• <u>+</u> −
Total (95% CI)		4174		3473	100.0%	0.79 [0.63, 0.99]	▲
Total events	179		210				
Heterogeneity: Chi ² =	16.93, df	= 6 (P =	= 0.010); P	^z = 65%			0.01 0.1 1 10 100
Test for overall effect	Z = 2.07 ((P = 0.0	4)				Favours (IV oxytocin) Favours (IM oxytocin)

50

Figure 9: Need for additional uterotonics during the third stage or within the first 48 hours - by type of IV administration and women who have had oxytocin in the first stage or not

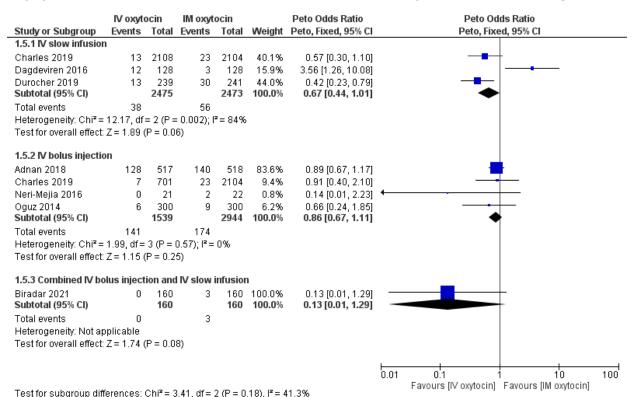


Figure 10: Side effects - by type of IV administration and women who have had oxytocin in the first stage or not

	IV oxyte	ocin	IM oxyt	ocin		Peto Odds Ratio		Peto Od	ds Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	Peto, Fixed, 95% Cl		Peto, Fixe	ed, 95% Cl	
1.6.2 IV bolus injection	on									
Adnan 2018 (1)	21	517	27	518	97.9%	0.77 [0.43, 1.38]		-	-	
Neri-Mejia 2016 (2)	1	21	0	22	2.1%	7.75 [0.15, 390.96]			· · · · · ·	
Subtotal (95% CI)		538		540	100.0%	0.81 [0.46, 1.44]			>	
Total events	22		27							
Heterogeneity: Chi ² =	1.30, df=	1 (P =	0.25); l² =	23%						
Test for overall effect:	Z=0.72 ((P = 0.4	7)							
							0.01	01	10	100
Ta at fan ar de marrie alif							0.01	Favours [IV oxytocin]	Favours (IM oxytocin)	

Test for subgroup differences: Not applicable Footnotes

(1) Nausea, vomiting, hypotension, tachycardia, headaches, shivering

(2) Hypotension