

Clinical question: Does the use of Adrenaline in inpatients improve clinical outcome compared with placebo

Study authors and year	Study Design	Participants	Exposure/ Comparison	Outcomes	Results					Quality Scores
					EER	CER	RR	RD	NNT	
Hartling, 2003	Meta analysis- 4 studies	96 119	Adrenaline vs placebo	Clinical score change at 30 mins				-0.17[-0.52, 0.18}		+
Hartling, 2003	Meta analysis- 2 studies	34 33	Adrenaline vs placebo	Clinical score change at 60 mins				-.52 [-1.00, -0.03]		+
Hartling, 2003	Meta analysis- 3 studies	58 82	Adrenaline vs placebo	Oxygen saturation change at 30 mins				-0.05 [-0.94, 0.85].		+
Hartling, 2003	Meta analysis- 2 studies	34 33	Adrenaline vs placebo	Oxygen saturation change at 60 mins				0.11 [-0.98,1.21]		+

Hartling, 2003	Meta analysis-3 studies	58 82		Heart rate at 30 min				4.64 [-1.94,11.23]		+
Hartling, 2003	Meta analysis-2 studies	34 33		Heart rate at 60 min				5.18 [-9.53, 19.88]		+
Hartling, 2003	Meta analysis-3 studies	58 82	Adrenaline vs placebo	Respiratory rate at 30 min				0.02 [-3.60,3.65]		+
Hartling, 2003	Meta analysis-2 studies	34 33		Respiratory rate at 60 min				-1.76 [-6.65, 3.13]		+
Hartling, 2003	Meta analysis-2 studies	149 143		Length of stay (hours)				-5.9 [-16.23,4.43]		+
Kristiannson refer Hartling, 2003	RCT	15 14		Pallor	4/15	1/14	4.73 [0.46,48.77]			+

Table 2 Clinical question: Does the use of Adrenaline in inpatients improve clinical outcome compared with salbutamol

Study authors and year	Study Design	Participants	Exposure/ Comparison	Outcomes	Results					Quality Scores
					EER	CER	RR	RD	NNT	
Hartling, 2003	Meta analysis-3 studies	52 53	Adrenaline vs salbutamol	Clinical score change at 30 mins				-0.43 [-1.01, 0.16]		+
Bertrand refer Hartling	RCT	16 16	Adrenaline vs salbutamol	Clinical score change baseline to 30 mins after 24 hours at 60 mins				0.11 [-0.61, 0.83]		+
Bertrand refer Hartling	RCT	16 14	Adrenaline vs salbutamol	Clinical score change baseline to 30 mins after 36 hours at 60 mins				0.55 [-0.18, 1.29]		+
Hartling, 2003	Meta analysis-2 studies	36 39	Adrenaline vs salbutamol	Oxygen saturation change at 30 mins				0.21 [-0.73, 1.14]		+
Hartling, 2003	Meta analysis-2 studies	36 39	Adrenaline vs salbutamol	Heart rate at 30 min				0.83 [-5.56, 7.22]		+
Hartling, 2003	Meta analysis-2 studies	36 39	Adrenaline vs salbutamol	Respiratory rate at 30 min				-5.12 [-6.83, -3.41]		+

Hartling, 2003	Meta analysis- 2 studies	66 65	Adrenaline vs salbutamol	Length of stay (hours)					-3.96 [- 25.55, 17.62]		+
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Table 3: Clinical question: Does the use of Adrenaline in outpatients improve clinical outcome compared with placebo

Study authors and year	Study Design	Participants	Exposure/ Comparison	Outcomes	Results					Quality Scores
					EER	CER	OR	RD	NNT	
Hartling, 2003	Meta analysis- 2 studies	OP 54 51	Adrenaline vs placebo	Clinical score change at 30 mins				-0.55 [-1.11, 0.02]		
Barlas refer Hartling, 2003	RCT	15 15	Adrenaline vs placebo	Clinical score change at 60 mins				-0.81[-1.56, -0.07]		Φ Single study Jadad 1
Hariprakash Refer Hartling, 2003	RCT	38 37	Adrenaline vs placebo	Oxygen saturation change at 30 mins				2.79 [1.50, 4.08].		+ Single study Jadad 5
Barlas refer Hartling, 2003	RCT	15 15		Oxygen saturation change at 60 mins				1.20 [-.13,2.53]		Φ Single study Jadad 1
Hariprakash Refer Hartling, 2003	RCT	38 37		Heart rate at 30 min				-2.80 [-9.22,3.62]		+ Single study Jadad 5
Barlas refer Hartling, 2003	RCT	15 15		Heart rate at 60 min				11.80 [5.20, 18.40]		Φ Single study Jadad 1

Hariprakash Refer Hartling, 2003	RCT	37 37	Adrenaline vs placebo	Respiratory rate at 30 min				-4.54 [- 8.89,-0.19]		+ Single study jaded 5
Hartling, 2003	Meta analysis- 2 studies	31 29		Improvement	23/51	5/29	25.06 [4.95,126.91]		2	Φ
Hartling, 2003	Meta analysis- 2 studies	53 52		Admissions	19/53	26/52	0.51 [0.18, 1.42]			+

Table 4: Clinical question: Does the use of Adrenaline in outpatients improve clinical outcome compared with salbutamol

Study authors and year	Study Design	Participants	Exposure/ Comparison	Outcomes	Results					Quality Scores
					EER	CER	OR	RD	NNT	
Hartling, 2003	Meta analysis-2 studies	54 53	Adrenaline vs salbutamol	Clinical score change at 30 mins				0.08 [-0.84, 0.69]		+
Hartling, 2003	Meta analysis-3 studies	114 114	Adrenaline vs salbutamol	Clinical score change at 60 mins				-0.21 [-0.74, 0.32]		+
Hartling, 2003	Meta analysis-2 studies	54 53	Adrenaline vs salbutamol	Clinical score change at 90 mins				-0.32 [-0.82, 0.19]		+
Hartling, 2003	Meta analysis-2 studies	65 67	Adrenaline vs salbutamol	Oxygen saturation change at 30 mins				1.31 [-3.15, 5.76]		+
Hartling, 2003	Meta analysis-3 studies	80 82		Oxygen saturation change at 60 mins				1.91 [0.38, 3.44]		+
Menon, 1995 Refer Hartling	RCT	20 21		Oxygen saturation change at 90 mins				-0.68 [-2.39, 1.03]		+
Menon Refer Hartling	RCT	20 21		Heart rate at 30 min				-1.00 [-11.41, 9.41]		+

Hartling, 2003	Meta analysis-3 studies	80 82		Heart rate at 60 min				6.25 [-3.64, 16.13]		+
Menon, 1995 Refer Hartling	RCT	20 21		Heart rate at 90 min				-14.00 [-22.95, -5.05]		+
Menon, 1995 Refer Hartling	RCT	20 21	Adrenaline vs salbutamol	Respiratory rate at 30 min				-6.00 [-15.50, 3.50]		+
Hartling, 2003	Meta analysis-2 studies	65 67		Respiratory rate at 60 min				-7.76 [-11.35, -4.17]		+

Menon, 1995 Refer Hartling	RCT	20 21		Respiratory rate at 90 m				-5.04 [- 12.04, 2.04]		+
Hartling, 2003	Meta analysis- 2 studies	66 65		Improvement	42/59	25/61	4.51 [1.93, 10.53]	3.3		Φ
Hartling, 2003	Meta analysis- 4 studies	66 65		Admissions	29/114	45/114	0.40, [0.12,1.33]			+
Menon, 1995 Refer Hartling	RCT	20 21		Pallor	10/20	3/21	6.00 [1.33, 27.00]	2.7		+