Table 3 Examination of heterogeneity

	Ciarallo L, 1996	Devi PR, 1997	Gurkan F, 1999	Cariallo L, 2000	Scarfone RJ, 2000
Patient selection inclusion criteria	6–18 yrs, PEFR <60% predicted after 3 doses of neb. β_2 agonist, medical team consider iv therapy necessary	1–12 yrs, inadequate or poor response after 3 doses of neb. β_2 agonist (others N/A)	6–16 yrs, PEFR <60% predicted after 3 doses of neb. β_2 agonist	6–17.9 yrs, PEFR <70% predicted after 3 doses of β_2 agonist or ipratropium bromide or both	1–18 yrs, Pulmonary index of 8–13 (moderate to severe asthma)
Patient exclusion criteria	Temp >38.5°C, SBP <25th percentile for age, recent use of theophylline, history of cardiac, renal or pulmonary disease, pregnancy	Temp >38°C, blood pressure <50th percentile	Fever, SBP <25th percentile for age, recent use of theophylline, history of cardiac, renal or pulmonary disease	Temp >38.5°C, theophylline use within the preceding week, history of cardiac, renal or pulmonary disease	PI <8 or >13, use of steroid within 72♣hours, concurrent bronchiolitis, lobar pneumonia, croup, suspected foreign body aspiration, history of cystic fibrosis, BPD, CHD, liver or renal disease, sickle cell anaemia, pregnancy
Patient number (T:P*)	15:16	24:23	10:10	16:14	24:30
Mean age (T:P)	11.4+/–3.5: 10.8+/–3.6	6.7+/–3.26: 6.75+/–3.5	Overall mean 10.8+/–2.8	10.9+/–0.9: 12+/–1	6.75+/–3.6: 4.83+/–3.25
%male(T:P)	46.7%: 43.8%	79.2%:73.9%	60%: 50%	68.8%: 50%	58.3%: 46.7%
Baseline SpO_2(T:P)	92+/–3.7%: 93.9+/–2.5%	92.08+/–2.34%: 91.35+/–1.9%	91.8+/–3.2%: 91.4+/–3.6%	92+/–0.7%: 91+/–0.6%	93.9+/–2.2%: 94.1+/–2.4%
Baseline %PEFR predicted (T:P)	43.8+/–13.6%: 43+/–12.8%	30.08+/–13.96%: 27.14+/–18.42%	46.8+/–10.4%: 46.2+/–11.2%	N/A	N/A
Randomisation	Yes	Yes	Yes	Yes	Yes
Randomisation concealment	N/A	N/A	N/A	N/A	Yes
Blinding	Double	Double	Double	Double	Double
Dose of IV magnesium sulphate	25♣mg/kg	25♣mg/kg	40♣mg/kg	40♣mg/kg	75♣mg/kg
Mode of administration	Infusion in 100♣ml normal saline over	Infusion as 50% Mg sulphate	Infusion in 100♣ml normal saline over	Infusion in 100♣ml normal saline over	Infusion over 20♣min

	Ciarallo L, 1996	Devi PR, 1997	Gurkan F, 1999	Cariallo L, 2000	Scarfone RJ, 2000
IV magnesium sulphate	20♣min	solution over 35♣min	20♣min	20♣min	
Co-therapies	IV methylprednisolone 2♣mg/kg to patients who had not received steroid, nebulised salbutamol at the discretion of doctor (mean 1.5×/patient)	IV /oral steroid, iv aminophylline infusion, nebulised salbutamol according to protocol based on response	IV methylprednisolone 2♣mg/kg to all patients, nebulised salbutamol at the discretion of doctor (mean 1.3×/patient)	IV methylprednisolone 2♣mg/kg to patients who had not received steroid, nebulised salbutamol and/or ipratropium bromide at the discretion of doctor	IV methylprednisolone 1♣mg/kg to all patients, nebulised salbutamol at 0♣min, 40♣min, 80♣min, 120♣min
Adverse effects	Nil	Epigastric warmth (12.5%), local pain (16.6%), local numbness (12.5%)	Nil	Nil	Nil
Independent conclusion	Effective	Effective	Effective	Effective	Ineffective
Weight in meta-analysis of primary outcome (Fixed effect model)	2.25	5.51	Not applicable	3.85	3.85

*T:P, treatment group versus placebo group.