Supplemental Table 3: Efficacy of gabapentinoids versus comparators in a systematic review regarding the efficacy of analgesia of gabapentin and pregabalin in children and adolescents. Bold indicated the primary outcome considered.

Reference	*Outcome measure*	*Intervention*	*Comparator 1*	*Comparator 2*	*Significance*
Brown et al. [1#]	**Decrease in usual pain intensity score (Coloured Analogue Scale [2]. or NRS if ratings were incomplete) from baseline to 6 weeks post-trial** (mean)	**1.56**	**1.16**		**Not significant**
	Dichotomized decrease in usual pain intensity score (minimally important difference of 1 or more, Coloured Analogue Scale or NRS if ratings were incomplete)) from baseline to 6 weeks post-trial (%).	52.9	41.2		Not significant
	Post-trial usual pain intensity score (Coloured Analogue Scale or NRS if ratings were incomplete) (mean)	3.57	5.29		Not significant
	Decrease in sleep score (internal Likert scale) from baseline to 6 weeks post-trial (mean)	0.38	0.88		Not significant
	Post-trial sleep score (internal Likert scale) at 6 weeks post-trial (mean)	1.27	1.88		Not significant
Mayell et al. [3]	**Total morphine consumption between 0 and 24 hrs post-operatively (mg,** mean)	**71.8**	**83.3**		**Not significant**

Cumulative morphine consumption at 1 hr post-operatively (mg/kg, mean)	0.087	0.121	Not significant
Cumulative morphine consumption at 4 hrs post-operatively (mg/kg, mean)	0.24	0.16	Not significant
Cumulative morphine consumption at 8 hrs post-operatively (mg/kg, mean)	0.44	0.56	Not significant
Cumulative morphine consumption at 12 hrs post-operatively (mg/kg, mean)	Not stated	Not stated	Not significant
Cumulative morphine consumption at 24 hrs post-operatively (mg/kg, mean)	1.29	1.46	Not significant
Cumulative morphine consumption at 48 hrs post-operatively (mg/kg, mean)	Not stated	Not stated	Not significant
Cumulative morphine consumption at 72 hrs post-operatively (mg/kg, mean)	Not stated	Not stated	Not significant
Time to first rescue analgesia (morphine or alternative opioid) (minutes, mean)	25.5	24.0	Not analysed
Pain intensity scores at rest (for each of the 7 time frames 1 to 72 hrs inclusive listed above) (NRS, mean)	Not stated	Not stated	Not significant
Pain intensity scores at cough or movement (for each of the 7 time frames 1 to 72 hrs inclusive listed above) (NRS, mean)	Not stated	Not stated	Not significant

	Persisting pain symptoms (lower back or shoulder) (%)	18.75	23.50	Not significant
	Patient satisfaction (neutral or more) (%)	88.9	88.2	Not analysed
Mohamed, Al-Sersy [4]	**Number of patients requiring non-steroidal anti-inflammatory intravenous analgesics during the early postoperative period due to complaints of highly significant postoperative pain (n)**	**14**	**35**	**Significantly less in the gabapentin treated group**
Rusy et al. [5]	**Cumulative morphine consumption through day 2 (mg/kg/hr, mean)**	**0.126**	**0.165**	**Significantly less in the gabapentin treated group**
	Total morphine consumption day of surgery (mg/kg/hr, **mean**)	0.044	0.064	Significantly less in the gabapentin treated group
	Total morphine consumption day 1 post-operatively (mg/kg/hr, **mean**)	0.046	0.055	Not significant
	Total morphine consumption day 2 post-operatively (mg/kg/hr, **mean**)	0.036	0.047	Significantly less in the gabapentin treated group
	Total morphine consumption days 3 to 5 inclusive post-operatively (mg/kg/hr, **mean**)	Not stated	Not stated	Not significant
	Pain score at rest and movement in post-anaesthesia recovery unit (NRS, mean)	2.5	6.0	Significantly less in the gabapentin treated group

	Pain score at rest and movement morning following surgery (NRS, mean)	3.2	5.0	Significantly less in the gabapentin treated group
	Pain score at rest and movement remainder of study (seven further time frames - Day 1 pm, Days 2 to 4 am and pm) (NRS, mean)	Not stated	Not stated	Not significant
Arnold et al. [6]	**Change in pain score from baseline to 15 weeks post-trial (NRS 24 hr recall, mean)**	**-1.60**	**-0.94**	**Not significant**
	Change in weekly pain score for weeks 1 to 14 inclusive (NRS 24 hr recall, mean	Not stated	Not stated	Significantly greater in pregabalin treated group for 10 of the 14 weeks (weeks 3,4,6,7,8,9,10,11,12,14) Not significant for weeks 1,2,5 or 13.
	Week 15 change in pain score (NRS 1 week recall, mean)	Not stated	Not stated	Significantly greater in pregabalin treated group
	Patient Global Impression of Change (much improved or very much improved at endpoint) (%)	53.1	29.5	Significantly improved in pregabalin treated group
	Parent Global Impression of Change (much improved or very much improved at endpoint) (%)	51.0	25.0	Significantly improved in pregabalin treated group
	Subjects with a 30% improvement in mean pain score from baseline to endpoint) (%)	33.3	31.4	Not significant
	Subjects with a 50% improvement in mean pain	16.7	7.8	Not significant

score from baseline to endpoint) (%)			
Change in weekly mean sleep quality score (n=14)	Not stated	Not stated	Significantly greater in pregabalin treated group for 2 of the 14 weeks (weeks 8 and 10) Not significant for weeks 1-7, 9, 11-14
Sleep quality score at endpoint (NRS, mean)	Not stated	Not stated	Not significant
Fibromyalgia Impact Questionnaire score at endpoint (mean) [7]	Not stated	Not stated	Not significant

NRS: Numeric Rating Scale; FLACC: Face, Leg, Activity, Crying, Consolability scale [8] ; VAS: Visual Analogue Scale using animal toys

* There are inconsistencies in the results, with different values presented in the table and text

** Impossible value reported for this measure

@ Outcome variable reported interchangeably as ‘the time to first dose of analgesia’ and ‘the time to first analgesia request’ which may differ

#Paper presented both complete case and all case (with assumptions and imputed missing values) data, the data in this table pertain to the all cases

References

1. Brown S, Johnston B, Amaria K, et al. A randomized controlled trial of amitriptyline versus gabapentin for complex regional pain syndrome type I and neuropathic pain in children. *Scandinavian Journal of Pain.* 2016;13:156-163.

2. Bulloch B, Garcia-Filion P, Notricia D, Bryson M, McConahay T. Reliability of the color analog scale: repeatability of scores in traumatic and nontraumatic injuries. *Acad Emerg Med.* 2009;16(5):465-469.

3. Mayell A, Srinivasan I, Campbell F, Peliowski A. Analgesic effects of gabapentin after scoliosis surgery in children: a randomized controlled trial. *Paediatr Anaesth.* 2014;24(12):1239-1244.

4. Mohamed MH, Al-Sersy H. Preoperative gabapentin decreases the incidence of postoperative vomiting and analgesic requirements after pediatric adenotonsillectomy. *The Egyptian Journal of Otolarynology.* 2014;30:225-228.

5. Rusy LM, Hainsworth KR, Nelson TJ, et al. Gabapentin use in pediatric spinal fusion patients: a randomized, double-blind, controlled trial. *Anesth Analg.* 2010;110(5):1393-1398.

6. Arnold LM, Schikler KN, Bateman L, et al. Safety and efficacy of pregabalin in adolescents with fibromyalgia: A randomized, double-blind, placebo-controlled trial and

a 6-month open-label extension study. *Pediatric Rheumatology.* 2016;14 (1) (no pagination)(46).

7. Bennett RM, Friend R, Jones KD, Ward R, Han BK, Ross RL. The revised fibromyalgia impact questionnaire (FIQR): validation and psychometric properties. *Arthritis Res Ther.* 2009;11(4):R120.

8. Jaskowski SK. The FLACC: A behavioral scale for scoring postoperative pain in young children. *AACN Nursing Scan In Critical Care.* 1998;8(1):16.