

Supplementary Appendix 1

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Bjornson CL, Klassen TP, Williamson J, et al. A randomized trial of a single dose of oral dexamethasone for mild croup. *N Engl J Med* 2004;351:1306-13.

Supplementary Table 1: Adverse events reported among children in study (n=720)

ADVERSE EVENT	Number of children experiencing event	
	Dexamethasone	Placebo
Abnormal bowel movements, no evidence of clinically significant gastrointestinal bleeding	6	5
Fever	5	4
Pneumonia	3	4
Vomiting or gastroenteritis	3	4
Otitis media	1	5
Bronchitis	3	1
Sore throat	1	2
Streptococcal throat infection	1	1
Abdominal pain	1	1
Rash	2	0
Dehydration	1	0
Febrile seizure	1	0
Respiratory syncytial virus (RSV) infection	1	0
Uncomplicated varicella	0	1
Urinary tract infection	0	1
Irritability	1	1
Eye discharge	1	0
Sinusitis	0	1
Bleeding from ear	0	1
Nasal discharge	1	0

Supplementary Table 2: Economic Analysis

Variable	Dexamethasone			Placebo			Rank Sum Mann-Whitney	
	Mean	S.D.	Median	Mean	S.D.	Median	Z	p-value
TFC-LW	12.76	45.32	1.69	12.95	32.98	2.06	-2.909	0.0036
TFC	54.31	127.16	2.85	67.7	149.43	3.8	-3.535	0.0004
MD	3.86	11.99	0	5.17	13.75	0	-3.083	0.002
RHA	13.96	91.65	3.2	19.78	127.07	0	20.69	<0.0001
TPC	17.83	97.51	3.2	24.96	133.57	0	18.516	<0.0001
TSC	72.13	170.14	5.97	92.66	215.41	8.53	2.46	0.0139
TSC_LW	30.59	112.16	4.1	37.92	144.27	3.14	5.329	<0.0001
<i>TFC-LW = Total Family Cost not including Lost Wages</i>								
<i>TFC = Total Family Cost including lost wages</i>								
<i>MD = Medical Doctor visit billings</i>								
<i>RHA = Regional Health Authority costs including treatment cost and follow-up hospital visits</i>								
<i>TPC = Total Payer Costs: MD plus RHA variables combined</i>								
<i>TSC = Total Societal Costs: Total Family Costs including Lost Wages plus RHA plus MD variables combined</i>								
<i>TSC-LW = Total Societal Costs not including Lost Wages: Total Family Costs not including Lost Wages plus RHA plus MD variables</i>								

For all seven cost variables, the dexamethasone and placebo groups differed significantly. Due to the skewed nature of the data, non-parametric statistical tests were used. From an economic perspective, the three key variables are: TFC, TPC and TSC. Coupled with the primary outcome data, it is clear that in all three of these cases (i.e., burden on the family, burden on the payer, and burden on society overall), we have the rare finding of seeing improved clinical outcome at lower cost. That is, dexamethasone, in comparison to placebo, is the technically efficient option. In economics, this is referred to as a 'dominant scenario'. This suggests that, all things being equal, in comparison to placebo, dexamethasone would be the unequivocally preferred treatment for these patients.