## Table O.37: N-acetylcysteine versus placebo in children and young people

Quality assessment						Summary of findings					
Participa nts (studies) Follow up	Risk of bias	Inconsistenc y	Indirectn ess	Imprecis ion	Publicati on bias	Overall quality of evidence	Study event rates (%)		Relativ e	Anticipated absolute effects	
							With place bo	With N- acetylcyste ine (NAC)	effect (95% CI)	Risk with place bo	Risk difference with N- acetylcysteine (NAC) (95% CI)
Targeted behaviour that challenges (severity) – post-treatment (Better indicated by lower values)											
29 (1 study)	serio us <sup>1</sup>	no serious inconsistenc y	serious <sup>2</sup>	very serious <sup>3</sup>	undetect ed	<ul> <li>⊕⊖⊖</li> <li>VERY LOW<sup>1,2,3</sup></li> <li>due to risk of</li> <li>bias,</li> <li>indirectness,</li> <li>imprecision</li> </ul>	15	14	-		The mean targeted behaviour that challenges (severity) – post-treatment in the intervention groups was 0.70 standard deviations lower (1.46 lower to 0.05 higher)
Adverse events (discontinuation due to adverse events, non-occurrence) – post-treatment											
33 (1 study)	serio us <sup>1</sup>	no serious inconsistenc y	serious <sup>2</sup>	very serious <sup>3</sup>	undetect ed	<ul> <li>⊕⊖⊖⊖</li> <li>VERY LOW<sup>1,2,3</sup></li> <li>due to risk of</li> <li>bias,</li> <li>indirectness,</li> <li>imprecision</li> </ul>	18/18 (100 %)	14/15 (93.3%)	RR 0.93 (0.78 to 1.11)	1000 per 1000	70 fewer per 1000 (from 220 fewer to 110 more)
Adverse events (discontinuation due to other reasons, non-occurrence) – post-treatment											
33	serio	no serious	serious <sup>2</sup>	very	undetect	$\oplus \ominus \ominus \ominus$	12/18	14/15	RR 1.4	667	267 more per 1000

Challenging behaviour and learning disabilities

Quality assessment						Summary of findings				
(1 study)	US <sup>1</sup>	inconsistenc y	serious <sup>3</sup>	ed	VERY LOW <sup>1,2,3</sup> due to risk of bias, indirectness, imprecision	(66.7 %)	(93.3%)	(0.98 to 1.99)	per 1000	(from 13 fewer to 660 more)
<sup>1</sup> Crucial limitation for one criterion or some limitations for multiple criteria sufficient to lower ones confidence in the estimate of effect <sup>2</sup> Applicability – different populations										

<sup>2</sup> Applicability – different populations
 <sup>3</sup> Optimal information size not met; small, single study