

# Assessment of pain relief in the short term (0-2 months)



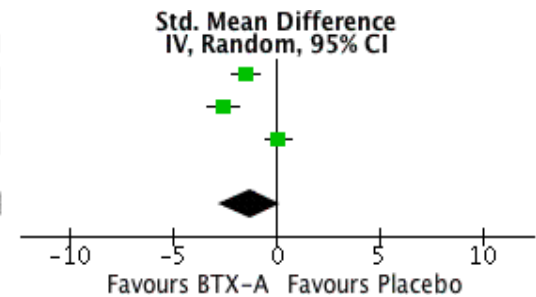
Inconsistency plot for the assessment of pain relief in the short term. IF= Inconsistency Factor; CI= Confidence Interval; BTX-A= Botulinum Toxin-A; AWB= Autologous Whole Blood.

Direct comparisons in the network											
	CS vs BTX-A	CS vs AWB	CS vs Placebo	CS vs PRP	CS vs c-hAM	BTX-A vs Placebo	AWB vs Placebo	Placebo vs mDHACM	Placebo vs SDN	Placebo vs PDRN	PRP vs DP
Network meta-analysis estimates	<b>Mixed estimates</b>										
	CS vs BTX-A	85.8	1.7	4.5	0.0	0.0	6.2	1.7	0.0	0.0	0.0
	CS vs AWB	1.1	64.0	16.4	0.0	0.0	1.1	17.4	0.0	0.0	0.0
	CS vs Placebo	3.5	20.2	52.6	0.0	0.0	3.5	20.2	0.0	0.0	0.0
	CS vs PRP	0.0	0.0	0.0	99.9	0.0	0.0	0.0	0.0	0.0	0.0
	CS vs c-hAM	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0
	BTX-A vs Placebo	41.6	11.5	30.0	0.0	0.0	5.4	11.5	0.0	0.0	0.0
	AWB vs Placebo	2.1	33.5	31.4	0.0	0.0	2.1	30.8	0.0	0.0	0.0
	Placebo vs mDHACM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
	Placebo vs SDN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
	Placebo vs PDRN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
	PRP vs DP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	<b>Indirect estimates</b>										
	CS vs SDN	2.0	11.5	29.8	0.0	0.0	2.0	11.5	0.0	43.3	0.0
	CS vs PDRN	2.0	11.5	29.8	0.0	0.0	2.0	11.5	0.0	0.0	43.3
	CS vs mDHACM	2.0	11.5	29.8	0.0	0.0	2.0	11.5	43.3	0.0	0.0
	CS vs DP	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0
	BTX-A vs AB	42.7	35.6	7.1	0.0	0.0	3.8	10.8	0.0	0.0	0.0
	BTX-A vs PRP	44.7	0.9	2.3	47.9	0.0	3.3	0.9	0.0	0.0	0.0
	BTX-A vs c-hAM	44.7	0.9	2.3	0.0	47.9	3.2	0.9	0.0	0.0	0.0
	BTX-A vs SDN	28.3	7.9	20.4	0.0	0.0	3.6	7.9	0.0	31.9	0.0
	BTX-A vs PDRN	28.3	7.9	20.4	0.0	0.0	3.6	7.9	0.0	0.0	31.9
	BTX-A vs mDHACM	28.3	7.9	20.4	0.0	0.0	3.6	7.9	31.9	0.0	0.0
	BTX-A vs DP	30.2	0.6	1.6	32.4	0.0	2.2	0.6	0.0	0.0	32.4
	AWB vs PRP	0.6	35.3	9.0	44.9	0.0	0.6	9.6	0.0	0.0	0.0
	AWB vs c-hAM	0.6	35.3	9.0	0.0	44.9	0.6	9.6	0.0	0.0	0.0
	AWB vs SDN	1.3	20.4	19.1	0.0	0.0	1.3	18.8	0.0	39.2	0.0
	AWB vs PDRN	1.3	20.4	19.1	0.0	0.0	1.3	18.8	0.0	0.0	39.2
	AWB vs mDHACM	1.3	20.4	19.1	0.0	0.0	1.3	18.8	39.2	0.0	0.0
	AWB vs DP	0.4	24.3	6.2	31.0	0.0	0.4	6.6	0.0	0.0	31.0
	Placebo vs PRP	2.0	11.5	29.8	43.3	0.0	2.0	11.5	0.0	0.0	0.0
	Placebo vs c-hAM	2.0	11.5	29.8	0.0	43.3	2.0	11.5	0.0	0.0	0.0
	Placebo vs DP	1.4	8.0	20.8	30.2	0.0	1.4	8.0	0.0	0.0	30.2
	PRP vs c-hAM	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0
	PRP vs SDN	1.4	8.0	20.8	30.2	0.0	1.4	8.0	0.0	30.2	0.0
	PRP vs PDRN	1.4	8.0	20.8	30.2	0.0	1.4	8.0	0.0	0.0	30.2
	PRP vs mDHACM	1.4	8.0	20.8	30.2	0.0	1.4	8.0	30.2	0.0	0.0
	c-hAM vs SDN	1.4	8.0	20.8	0.0	30.2	1.4	8.0	0.0	30.2	0.0
	c-hAM vs PDRN	1.4	8.0	20.8	0.0	30.2	1.4	8.0	0.0	0.0	30.2
	c-hAM vs mDHACM	1.4	8.0	20.8	0.0	30.2	1.4	8.0	30.2	0.0	0.0
	c-hAM vs DP	0.0	0.0	0.0	33.3	33.3	0.0	0.0	0.0	0.0	33.3
	SDN vs PDRN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0
SDN vs mDHACM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	
SDN vs DP	1.1	6.1	16.0	23.2	0.0	1.1	6.1	0.0	23.2	0.0	
PDRN vs mDHACM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	50.0	
PDRN vs DP	1.1	6.1	16.0	23.2	0.0	1.1	6.1	0.0	0.0	23.2	
mDHACM vs DP	1.1	6.1	16.0	23.2	0.0	1.1	6.1	23.2	0.0	0.0	
<b>Entire network</b>	8.4	10.4	15.4	14.8	8.3	1.6	7.7	8.3	8.3	8.3	
<b>Included studies</b>	2	2	5	2	2	3	1	1	1	1	

Contribution plot for the assessment of pain relief in the short term. CS= Corticosteroids; BTX-A= Botulinum Toxin-A; AWB= Autologous Whole Blood; PRP= Platelet-Rich Plasma; mDHACM= micronised Dehydrated Human Amniotic/Chorionic Membrane; DP= Dextrose Prolotherapy; PDRN= Polydeoxyribonucleotide; c-hAM= cryopreserved human Amniotic Membrane; SDN= Sham Dry Needling.

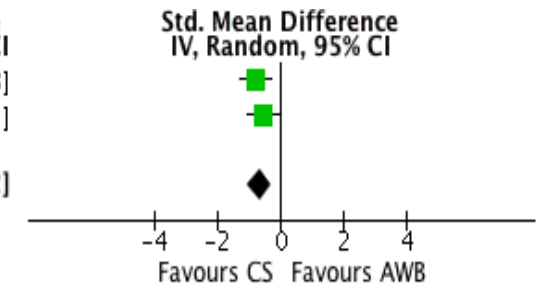
Study or Subgroup	BTX-A			Placebo			Weight	Std. Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total		
Babcock 2005	-4.95	3.33	22	-1.2	0.9	21	33.4%	-1.49 [-2.18, -0.81]
Huang 2010	-2.5	0.95	25	-0.3	0.72	25	32.8%	-2.57 [-3.33, -1.81]
Peterlein 2012	-1	2.78	20	-1.2	1.68	20	33.8%	0.09 [-0.53, 0.71]
<b>Total (95% CI)</b>			<b>67</b>			<b>66</b>	<b>100.0%</b>	<b>-1.31 [-2.84, 0.21]</b>

Heterogeneity:  $\tau^2 = 1.69$ ;  $\chi^2 = 29.49$ ,  $df = 2$  ( $P < 0.00001$ );  $I^2 = 93\%$   
 Test for overall effect:  $Z = 1.69$  ( $P = 0.09$ )



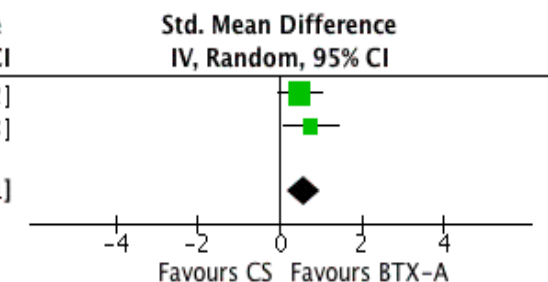
Study or Subgroup	CS			AWB			Weight	Std. Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total		
Kalaci 2009	-4.48	2.43	50	-2.52	2.66	25	51.6%	-0.77 [-1.27, -0.28]
Lee 2007	-4	2.44	31	-2.7	2.095	30	48.4%	-0.56 [-1.08, -0.05]
<b>Total (95% CI)</b>			<b>81</b>			<b>55</b>	<b>100.0%</b>	<b>-0.67 [-1.03, -0.32]</b>

Heterogeneity:  $\tau^2 = 0.00$ ;  $\chi^2 = 0.33$ ,  $df = 1$  ( $P = 0.56$ );  $I^2 = 0\%$   
 Test for overall effect:  $Z = 3.69$  ( $P = 0.0002$ )



Study or Subgroup	CS			BTX-A			Weight	Std. Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total		
Díaz-Llopis 2011	-22.12	27.42	28	-34.24	21.1	28	62.0%	0.49 [-0.04, 1.02]
Rodriguez 2013	-4.1	1.716	19	-5.5	1.93	17	38.0%	0.75 [0.07, 1.43]
<b>Total (95% CI)</b>			<b>47</b>			<b>45</b>	<b>100.0%</b>	<b>0.59 [0.17, 1.01]</b>

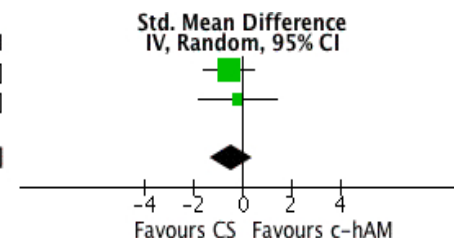
Heterogeneity:  $\tau^2 = 0.00$ ;  $\chi^2 = 0.36$ ,  $df = 1$  ( $P = 0.55$ );  $I^2 = 0\%$   
 Test for overall effect:  $Z = 2.75$  ( $P = 0.006$ )



Pair-wise comparisons for pain relief in the short term. CS= Corticosteroids; BTX-A= Botulinum Toxin-A; AWB= Autologous Whole Blood; IV= Inverse Variance; SD= Standard Deviation; CI= Confidence Interval.

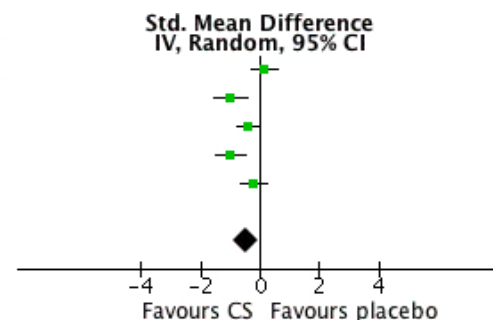
Study or Subgroup	CS			c-hAM			Weight	Std. Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total		
Hanselman 2014 1-injection cohort	-29	19.26	11	-17.3	20.51	6	71.5%	-0.56 [-1.58, 0.45]
Hanselman 2014 2-injection cohort	-24.6	19.26	3	-19.55	20.51	3	28.5%	-0.20 [-1.82, 1.41]
<b>Total (95% CI)</b>			<b>14</b>			<b>9</b>	<b>100.0%</b>	<b>-0.46 [-1.32, 0.40]</b>

Heterogeneity: Tau<sup>2</sup> = 0.00; Chi<sup>2</sup> = 0.14, df = 1 (P = 0.71); I<sup>2</sup> = 0%  
 Test for overall effect: Z = 1.05 (P = 0.29)



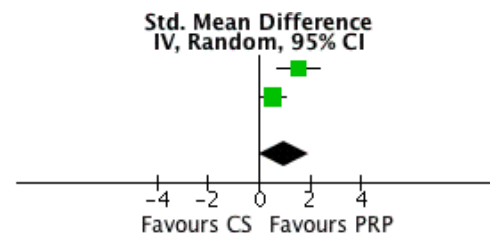
Study or Subgroup	CS			Placebo			Weight	Std. Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total		
Abdihakin 2012	-1.86	1.64	44	-2.09	1.45	38	20.7%	0.15 [-0.29, 0.58]
Ball 2012	-32.05	24.57	44	-5.1	29.8	19	17.8%	-1.02 [-1.58, -0.45]
Crawford 1999	-1.87	2.45	51	-0.81	2.67	51	21.6%	-0.41 [-0.80, -0.02]
Kalaci 2009	-4.48	2.43	50	-2.16	2.18	25	19.2%	-0.98 [-1.48, -0.47]
McMillan 2012	-25.5	22.55	41	-20.5	22.54	40	20.7%	-0.22 [-0.66, 0.22]
<b>Total (95% CI)</b>			<b>230</b>			<b>173</b>	<b>100.0%</b>	<b>-0.47 [-0.89, -0.06]</b>

Heterogeneity: Tau<sup>2</sup> = 0.17; Chi<sup>2</sup> = 16.19, df = 4 (P = 0.003); I<sup>2</sup> = 75%  
 Test for overall effect: Z = 2.23 (P = 0.03)



Study or Subgroup	Favours CS			PRP			Weight	Std. Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total		
Omar 2012	-2.3	2.29	15	-5.6	1.836	15	44.6%	1.55 [0.72, 2.38]
Tiwari 2013	-3.33	0.804	30	-3.8	0.904	30	55.4%	0.54 [0.03, 1.06]
<b>Total (95% CI)</b>			<b>45</b>			<b>45</b>	<b>100.0%</b>	<b>0.99 [0.01, 1.97]</b>

Heterogeneity: Tau<sup>2</sup> = 0.38; Chi<sup>2</sup> = 4.06, df = 1 (P = 0.04); I<sup>2</sup> = 75%  
 Test for overall effect: Z = 1.98 (P = 0.05)



Pair-wise comparisons for pain relief in the short term. CS= Corticosteroids; c-hAM= cryopreserved human Amniotic Membrane; PRP= Platelet-Rich Plasma; IV= Inverse Variance; SD= Standard Deviation; CI= Confidence Interval.