The for Label	<b>_</b>			T	T	
Elies after 1  Fig. 12 Annual control of the contro	Unique ID	Amanat 2021	Study ID		Assessor	QJY and ZL
Size of the Col records    Companies   Com	Ref or Label	https://doi.org/10.1186/s13287-021-02513-4	Aim			
Comments	Experimental	Stem cell threapy	Comparator	Rehabilitation therapy	Source	
Bills a mining from the candidation wag mint a minder?  12 Note the adviction wag mint a minder?  13 Note the adviction wag mint a minder?  14 Note the adviction wag mint a minder?  15 Note the adviction sequence considered with participants were enrolled and aparticipants of the internetional of internetional process of the internetion process of the internetional process of the internetio	Outcome	GMFM-66	Results	mean change 10.65, 95%CI 5.39 to 15.91	Weight	1
Biles arising from 12 Wes the abbordon segment conceived and participants were woulded and anotyped to more writtene? 13 Wes the abbordon segment conceived and participants were woulded and anotyped to more writtene? 15 Wes the abbordon segment conceived and participants were writtened to the more writtened. 15 Wes the abbordon segment conceived and participants were writtened to the more writtened to the more writtened. 15 Wes the segment and discovered between intervention grappes aggins a problem with the mortation-bridge processor.  15 Wes the segment are writtened to the segment of the segment	Domain	Signalling question			Response	Comments
Rise of the participation from the randomization of the participation and the randomization of the randomization o		1.1 Was the allocation sequence random?			Y	assigned in 1:1 ratio using permuted block
Risk of bias judgement  2.1 Were participants areas or free assigned intervention during the table in clinical data of a clinic	Bias arising from the randomization	1.2 Was the allocation sequence concealed until	participants were enrolle	d and assigned to interventions?	Y	system to receive either UCT-MSC or sham
2.1. Were participants owner of that assigned intervention during the trial?  2.2. Were carest and people delivering the intervention during the trial?  2.2. Were carest and people delivering the interventions are of participants' assigned intervention during the trial?  2.2. Were carest and people delivering the interventions are of participants' assigned intervention during the trial?  2.2. Were carest and people delivering the interventions are of participants' assigned intervention during the trial?  Note that the property of the intervention and the delivering during the trial?  Note that the property of the intervention and the delivering during the trial?  Note that the property of the intervention and the delivering during the trial?  Note that the property of the intervention and the delivering during the trial?  Note that the property of the intervention and the delivering during the trial?  Note that the property of the intervention and the delivering during the trial?  Note that the property of the intervention and the delivering during the trial?  Note that the property of the intervention and the delivering during the trial?  Note that the property of the intervention and the delivering during the trial?  Note that the property of the intervention and the delivering during the trial?  Note that the property of the intervention and the delivering during the trial?  Note that the property of the intervention and the delivering during the trial.  Note that the property of the intervention and the delivering during the trial and the delivering during the delivering during the trial and the delivering during d	process	1.3 Did baseline differences between intervention	n groups suggest a proble	em with the randomization process?	N	between groups regarding the baseline
Bias due to		Risk of bias judgement			Low	
Bias due to dividations from international transfer of the control of the state position of the state of the control of the state position of the state of the control of the state position of the state of the control of the state position of the state of the control of the state position of the state of the control of the state position of the state of the control of the state position of the state of the control of the contr		2.1.Were participants aware of their assigned int	ervention during the trial?		N	the clinical data of cases. Personnel staff responsible for cell preparations was not masked, but they had no contacts with participants, parents, or investigators. They also had no information about the clinical
interventions  2.4 if Y/P/Y to 2.2. Were these deviations from intervention between groups?  2.8 Was an appropriate analysis used to estimate the effect of assignment to intervention?  2.8 Was an appropriate analysis used to estimate the effect of assignment to intervention?  2.7 f MANNATE to 2.4. Were these potential for a substantial impact (on the result) of the failure to analyse perticipants in the property to which they were nucleonated were nucleonated were nucleonated with the definition of the delitical analysis.  Risk of bias judgement  2.1 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.1 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.2 if NPNNI to 3.1: is there evidence that result was not biased by missing outcome data?  3.2 if NPNNI to 3.2: Could missingness in the outcome depended on its true value?  3.3 if NPN to 3.2. Could missingness in the outcome depended on its true value?  A 1 Vivas the method of measuring the outcome depended on its true value?  A 1 Vivas the method of measuring the outcome depended on its true value?  A 1 Vivas the method of measuring the outcome depended on its true value?  A 1 Vivas the method of measuring the outcome depended on its true value?  A 1 Vivas the method of measuring the outcome inappropriate?  A 1 Vivas the method of measuring the outcome inappropriate?  A 1 Vivas the method of measuring the outcome inappropriate?  A 2 Could measurement of the autcome have differed between intervention groups?  N and intervention received by study perticipants?  N and intervention received?  A 3 Were outcome assessors aware of the intervention received by study perticipants?  N and intervention received?  N and interv	Bias due to				N	participants, their parents, and investigators were blinded during the study unless serious adverse events occurred that emergent evaluations and treatments by medical staff
2.4 if VPYN to 2.3 Were those devalors idealy to have affected the outcome?  2.5 if VPYN 15 2.4 Were those devalors for intended intervention behavior groups?  2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention?  2.7 if NPNNI to 2.5 Was there potential for a substantial impact (on the result) of the failure to analyse participants in the protection of the substantial impact (on the result) of the failure to analyse participants in the protection of the substantial impact (on the result) of the failure to analyse participants in the protection of the substantial impact (on the result) of the failure to analyse participants in the protection of the substantial impact (on the result) of the failure to analyse participants in the substantial analyse.  Risk of bias judgement  3.1 Were data for the outcome available for all, or nearly all, participants randomized?  PN  3.1 Were data for the outcome available for all, or nearly all, participants randomized?  PN  3.2 if NPNN to 3.1 is there evidence that result was not biased by missing outcome data?  2.2 if NPNN to 3.1 is there evidence that result was not biased by missing outcome data?  2.2 if NPNN to 3.2 is all itself that missing outcome depend on its frue value?  A.6 if VPYN to 3.3 is all itself that missing outcome depend on its frue value?  A.7 if VPNN to 3.3 is all itself that missing outcome depended on its true value?  A.8 if VPNN to 3.2 is all itself that missing outcome depended on its true value?  A.9 if VPNN to 3.2 is all itself that missing outcome depended on its true value?  A.1 Was the method of measuring the outcome inappropriate?  A.1 Was the method of measuring the outcome inappropriate?  A.1 Were outcome assessors aware of the introvention received by study participants?  A.2 Could measurement of accordantment of the outcome have differed between intervention groups?  A.3 Were outcome assessors aware of the introvention received by study participants?  A.4 if VPNN to 4.3 Could assessment of the outcome have	intended		s from the intended inter	vention that arose because of the experimental	NA	
2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention?  2.7 If NPNNI to 2.6. Was there potential for a substantial impact (on the result) of the failure to analyse participants in the groups to within they were anisotraced.  Risk of bias judgement  2.8 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.1 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.1 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.2 If NPNNI to 3.1: is there evidence that result was not biased by missing outcome data  3.2 If NPNNI to 3.1: is there evidence that result was not biased by missing outcome data?  3.3 If NPN to 3.2 Could missingness in the outcome depended on its true value?  3.4 If VPYNN to 3.3: is tilledy that missingness in the outcome depended on its true value?  A.1 Was the method of measuring the outcome Rappropriate?  A.1 Was the method of measuring the outcome have differed between intervention groups?  A.2 Could measurement of the outcome have differed between intervention groups?  A.3 Were outcome assessors aware of the intervention received by kindly participants?  A.3 Were outcome assessors aware of the intervention received by study participants?  A.3 Were outcome assessors aware of the intervention received by study participants?  A.4 Were outcome assessors aware of the intervention received by study participants?  A.4 If YPYNI to 4.3 Could assessment of the outcome have differed between intervention received?  A.4 If YPYNI to 4.3 Could assessment of the outcome have been influenced by knowledge of intervention neceived?  A.5 If YPYNI to 4.3 Could assessment of the outcome have been influenced by knowledge of intervention neceived?	interventions	2.4 If Y/PY to 2.3: Were these deviations likely to	have affected the outcome	me?	NA	
2.6 Was an appropriate analysis used to estimate the effect of esignment to intervention?  2.7 if NPNNN1 to 2.6. Was there potential for a substantial impact (on the result) of the failure to analyse participants in the produced in the statistical analysis.  Risk of Dias judgment  2.1 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.1 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.1 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.1 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.1 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.2 if NPNN Ib 3.1: is there evidence that result was not biased by missing outcome data?  2.2 if NPNN Ib 3.1: is there evidence that result was not biased by missing outcome data?  3.3 if NPN Ib 0.3.2: Could missingness in the outcome depended on its true value?  NA  3.4 if Y/PYNN Ib 3.3: is Il likely that missingness in the outcome depended on its true value?  NA  4.1 Was the method of measuring the outcome lappropriate?  NA  4.1 Was the method of measuring the outcome lappropriate?  NA  4.1 Was the method of measuring the outcome have differed between intervention groups?  N  2.2 Could measurement of the outcome have differed between intervention groups?  N  3.3 Were outcome assession aware of the intervention received by study participants?  N  4.1 Was the method of measuring the outcome have differed between intervention groups?  N  3.3 Were outcome assession aware of the intervention received by study participants?  N  A.3 Were outcome assession aware of the intervention received by study participants?  NA  A.4 if Y/PYNN Ib 4.3: Could assessment of the outcome have defined between intervention received?  NA		2.5. If Y/PY/NI to 2.4: Were these deviations from	n intended intervention ba	alanced between groups?	NA	
Bias due to missing outcome data  Bias full to a surface of the evidence that result was not biased by missing outcome data?  3.1 When data for this outcome available for all, or nearly all, participants randomized?  Bias due to missing outcome data  3.2 If NPNNI to 3.1: is there evidence that result was not biased by missing outcome data?  3.2 If NPNNI to 3.1: is there evidence that result was not biased by missing outcome data?  3.3 If NPN to 3.2: Could missingness in the outcome depended on its true value?  Risk of bias judgement  4.1 Was the method of measuring the outcome inappropriate?  Bias in measurement of the outcome of the outcome have differed between intervention groups?  A 3.4 If VIPVNI to 4.3: Could measurement of the outcome have differed between intervention groups?  A 3.4 If VIPVNI to 4.3: Could measurement of the outcome have differed between intervention groups?  A 3.4 If VIPVNI to 4.3: Could measurement of the outcome have differed between intervention groups?  N 4.5 Were outcome assessors aware of the intervention received by study participants?  N 5.5 Were outcome assessors aware of the intervention received by study participants?  N 6.5 Were outcome assessors aware of the intervention received by study participants?  N 7.5 Were outcome assessors aware of the intervention received by study participants?  N 8.6 Were outcome assessors aware of the intervention received by study participants?  N 8.7 Were outcome assessors aware of the intervention received by study participants?  N 9.7 Were outcome assessors aware of the intervention received by study participants?  N 1.5 Were outcome assessors aware of the intervention received by study participants?  N 1.5 Were outcome assessors aware of the intervention received by study participants?  N 1.6 Were outcome assessors aware of the intervention received by study participants?  N 2.6 Were outcome assessors aware of the outcome have been influenced by knowledge of intervention received?  N 2.7 Were outcome assessors aware of the outcome have bee		2.6 Was an appropriate analysis used to estimate	e the effect of assignmen	Y	participants who were randomized were	
Risk of bias judgement  Low  Primary screening to identify eligible participants was performed on 321 individuals, and 72 cases were randomly appropriate?  3.1 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.2 If NPNNI to 3.1: Is there evidence that result was not biased by missing outcome data?  3.2 If NPNNI to 3.1: Is there evidence that result was not biased by missing outcome data?  3.3 If NPN to 3.2: Could missingness in the outcome depend on its true value?  NA  3.4 If VPYNNI to 3.3: Is It likely that missingness in the outcome depended on its true value?  A.1 Was the method of measuring the outcome inappropriate?  A.1 Was the method of measuring the outcome inappropriate?  A.2 Could measurement of the outcome inappropriate?  A.3 Were outcome assessors aware of the intervention received by study participants?  A.3 Were outcome assessors aware of the intervention received by study participants?  N.3 Were outcome assessors aware of the intervention received by study participants?  N.4 If YPYNNI to 4.3: Could assessment of the outcome have differed between intervention received?  N.4 If YPYNNI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?  N.4 If YPYNNI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?  N.4 If YPYNNI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?  N.4 If YPYNNI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?  N.5 Primary screening to define the cuttome have been influenced by knowledge of intervention received?  N.6 Primary screening to define the cuttome have been influenced by knowledge of intervention received?  N.6 Primary screening to define the cuttome have been influenced by knowledge of intervention received?  N.7 Primary screening to define the cuttome have been influenced by knowledge of intervention received?  N.7 Primary screening			ubstantial impact (on the i	NA		
Bias due to missing outcome data  3.1 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.1 Were data for this outcome available for all, or nearly all, participants randomized?  PN  3.2 If NPNNI to 3.1: is there evidence that result was not blased by missing outcome data?  3.2 If NPNNI to 3.1: is there evidence that result was not blased by missing outcome data?  3.3 If NPN to 3.2: Could missingness in the outcome depend on its true value?  All if Y/PYNI to 3.3: is it likely that missingness in the outcome depended on its true value?  Risk of bias judgement  A.1 Was the method of measuring the outcome inappropriate?  NA  4.1 Was the method of measuring the outcome inappropriate?  NA  A.2 Could measurement of the outcome assessors aware of the intervention received by study participants?  NA  A.3 Were outcome assessors aware of the intervention received by study participants?  NA  A.4 If Y/PYNI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?  NA  A.4 If Y/PYNI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?  NA  A.4 If Y/PYNI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?  NA  A.4 If Y/PYNI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?  NA  A.4 If Y/PYNI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?  NA				Low		
as 2 if NIPNINI to 3.1: is there evidence that result was not biased by missing outcome data?  3.2 if NIPNINI to 3.2: Sould missingness in the outcome depend on its true value?  NA  3.4 if YIPYINI to 3.3: is it likely that missingness in the outcome depended on its true value?  NA  Risk of bias judgement  Low  The GMFM-66 was found through Rasch analysis to best describe the gross motor function of children with CP of varying abilities and is a 66 item subset of the original 88 items [29]. It has a unidimensional scale providing interval scaling rather than the ordinal scaling of the GMFM-88. It was shown that inter-rater reliability of Farsi version of this scale for all dimensions was between 0.78 and 0.94 [30]. Cronbach's alpha coefficient for all dimensions was between 0.78 and 0.94 [30]. Cronbach's alpha coefficient for all dimensions was between 0.78 and 0.94 [30]. All Was the method of measurement of the outcome have differed between intervention groups?  Na  4.1 Was the method of measurement of the outcome have differed between intervention groups?  Na  4.2 Could measurement or ascertainment of the outcome have differed between intervention groups?  Na  and investigators were blinded during the study unless serious adverse events occurred that emergent evaluations and treatments by medical staff were essential.  4.4 if Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?  Na		3.1 Were data for this outcome available for all, or nearly all, participants randomized?			PN	participants was performed on 321 individuals, and 72 cases were randomly assigned to study arms (36 cases in each group). There were 5 cases (6.9%) who discontinued the study due to the lost to follow-up (n= 3 or 4.1%) or withdrawal of
Bias in measurement of the outcome  4.1 Was the method of measuring the outcome inappropriate?  Bias in measurement of the outcome  4.2 Could measurement or sees sees aware of the intervention received by study participants?  A Were outcome assessors aware of the intervention received by study participants?  No and investigators were blinded during the study unless serious adverse events occurred that emergent evaluations and treatments by medical staff were essential.	Bias due to missing outcome data	3.2 If N/PN/NI to 3.1: Is there evidence that result was not biased by missing outcome data?			PY	experimental group and two in control group.The study was terminated in 1 case in each group.So the number of lost visits was
Risk of bias judgement    Company		3.3 If N/PN to 3.2: Could missingness in the outc	ome depend on its true v	NA		
The GMFM-66 was found through Rasch analysis to best describe the gross motor function of children with CP of varying abilities and is a 66 item subset of the original 88 items [29]. It has a unidimensional scale providing interval scaling rather than the ordinal scaling of the GMFM-88. It was shown that inter-rater reliability of Farsi version of this scale for all dimensions was between 0.97 and 0.99 and the intra-rater reliability was 0.99 [30]. Cronbach's alpha coefficient for all dimensions was between 0.78 and 0.94 [30].  4.2 Could measurement of the outcome assessors aware of the intervention received by study participants?  N and investigators were blinded during the study unless serious adverse events occurred that emergent evaluations and treatments by medical staff were essential.		3.4 If Y/PY/NI to 3.3: Is it likely that missingness i	n the outcome depended	on its true value?	NA	
Bias in measurement of the outcome  Bias in measurement of the outcome  4.1 Was the method of measuring the outcome inappropriate?  Bias in measurement of the outcome  4.2 Could measurement of the outcome assessors aware of the intervention received by study participants?  N and investigators were blinded during the study unless serious adverse events occurred that the emptant and treatments by medical staff were essential.		Risk of bias judgement			Low	
the outcome 4.2 Could measurement or ascertainment of the outcome have differed between intervention groups?  N  and investigators were blinded during the study unless serious adverse events occurred that emergent evaluations and treatments by medical staff were essential.  4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?  NA	Bias in measurement of the outcome	4.1 Was the method of measuring the outcome in	nappropriate?	N	analysis to best describe the gross motor function of children with CP of varying abilities and is a 66 item subset of the original 88 items [29]. It has a unidimensional scale providing interval scaling rather than the ordinal scaling of the GMFM-88. It was shown that inter-rater reliability of Farsi version of this scale for all dimensions was between 0.97 and 0.99 and the intra-rater reliability was 0.99 [30]. Cronbach's alpha coefficient for all	
4.3 Were outcome assessors aware of the intervention received by study participants?  N study unless serious adverse events occurred that emergent evaluations and treatments by medical staff were essential.  4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?  NA		4.2 Could measurement or ascertainment of the	outcome have differed be	N		
					N	study unless serious adverse events occurred that emergent evaluations and
4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received?  NA		4.4 If Y/PY/NI to 4.3: Could assessment of the ou	itcome have been influen	ced by knowledge of intervention received?	NA	
i de la companya de l		4.5 If Y/PY/NI to 4.4: Is it likely that assessment of	of the outcome was influe	nced by knowledge of intervention received?	NA	

	Risk of bias judgement	Low	
	5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized before unblinded outcome data were available for analysis?	Υ	ClinicalTrials.gov (NCT03795974)
Bias in selection of the reported	5.2 multiple eligible outcome measurements (e.g. scales, definitions, time points) within the outcome domain?	N	
result	5.3 multiple eligible analyses of the data?	N	
	Risk of bias judgement	Low	
Overall bias	Risk of bias judgement	Low	

	T	1		T	1
Unique ID	Gu 2020	Study ID	Gu 2020	Assessor	QJY and ZL
Ref or Label	https://doi.org/10.1186/s13287-019-1545-x	Aim	assignment to intervention (the 'intention-to- treat' effect)		
Experimental	Stem cell therapy	Comparator	Rehabilitation therapy	Source	Journal article(s) with results of the trial; Trial protocol
Outcome	gross motor function measure (GMFM)	Results	64.526 ± 9.600, mean ± SEM	Weight	1
Domain	Signalling question			Response	Comments
	1.1 Was the allocation sequence random?			Y	A randomized block design was utilized with 10 participants in a block. The eligible patients were assigned to one of two groups at a 1:1 ratio according to a random number table, which was generated by a
Bias arising from the randomization process	1.2 Was the allocation sequence concealed until	participants were enroll	led and assigned to interventions?	Y	biostatistician with SAS 9.0. To facilitate the blinding procedure, randomization information was sealed in opaque envelopes and delivered to the authorized investigator according to the sequence of screening.
	1.3 Did baseline differences between interventio	n groups suggest a prob	olem with the randomization process?	N	With respect to the demographics of patients at baseline, no significant differences were found between groups.
	Risk of bias judgement			Low	
	2.1.Were participants aware of their assigned int	ervention during the tria	ıl?	N	The patients and their families, as well as
	2.2.Were carers and people delivering the interv	entions aware of particip	N	the investigators, were all blinded to the grouping information.	
	2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviation context?	ns from the intended inte	NA		
	2.4 If Y/PY to 2.3: Were these deviations likely to	have affected the outc	NA		
	2.5. If Y/PY/NI to 2.4: Were these deviations from	n intended intervention b	NA		
Bias due to deviations from intended interventions	2.6 Was an appropriate analysis used to estimat	e the effect of assignme	Y	Based on our pilot studies, the sample size was calculated based on the assumption that clinical benefit was achieved for 60% of patients in the hUC-MSC group and 10% of patients in the control group ( $\alpha=0.05,\beta=0.10$ , allocation ratio 1:1, by two-tailed tests). Thus, at least 14 subjects were required for each group. Therefore, 20 participants were planned for each group considering the withdrawal rate.	
	2.7 If N/PN/NI to 2.6: Was there potential for a sigroup to which they were randomized?	ubstantial impact (on the	NA		
	Risk of bias judgement		Low		
Bias due to	3.1 Were data for this outcome available for all,	or nearly all, participants	Y	In total, 40 patients were recruited from 8 August 2014 to 31 December 2016, while 1 patient withdrew informed consent without any treatment and was lost to follow-up (Fig. 2). Therefore, 39 patients completed all the study assessments.	
missing outcome	3.2 If N/PN/NI to 3.1: Is there evidence that resul	t was not biased by mis	sing outcome data?	NA	
data	3.3 If N/PN to 3.2: Could missingness in the outo	ome depend on its true	value?	NA	
	3.4 If Y/PY/NI to 3.3: Is it likely that missingness	in the outcome depende	ed on its true value?	NA	
	Risk of bias judgement		Low		
	4.1 Was the method of measuring the outcome i	nappropriate?	N	GMFM-88 scale was used to assess gross motor ability regarding "lying and rolling," " sitting," "crawling and kneeling, " "standing," and "walking, running, and jumping."	
	4.2 Could measurement or ascertainment of the	outcome have differed b	N		
Bias in measurement of the outcome	4.3 Were outcome assessors aware of the interv	ention received by study	y participants?	N	The patients and their families, as well as the investigators, were all blinded to the grouping information.

	4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?	NA	
	4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received?	NA	
	Risk of bias judgement	Low	
Bias in selection	5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized before unblinded outcome data were available for analysis?	N	Chictr.org.cn, ChiCTR1800016554. Registered 08 June 2018—retrospectively registered. The public title was "Randomized trial of umbilical cord-derived mesenchymal stem cells for cerebral palsy."
of the reported result	5.2 multiple eligible outcome measurements (e.g. scales, definitions, time points) within the outcome domain?	N	
	5.3 multiple eligible analyses of the data?	N	
	Risk of bias judgement	Some concerns	
Overall bias	Risk of bias judgement	Some concerns	

Unique ID	Huang 2018	Study ID	Huang 2018	Assessor	QJY and ZL
Ref or Label	Cell Transplantation 2018, Vol. 27(2) 325–	Aim	assignment to intervention (the 'intention-to-		
	334		treat' effect) Rehabilitation therapy	0	In the second section of the second s
Experimental	Stem cell therapy	Comparator	40.00 . 0.00	Source	Journal article(s) with results of the trial
Outcome	GMFM-88	Results	12.66 ± 0.66, mean ± standard error	Weight	1
Domain	Signalling question			Response	Comments
	1.1 Was the allocation sequence random?			Y	All of the patients were randomly assigned
Bias arising from	1.2 Was the allocation sequence concealed until	participants were enrolle	d and assigned to interventions?	PY	to 2 groups on a 1:1 allocation.
the randomization process	1.3 Did baseline differences between intervention	n groups suggest a proble	em with the randomization process?	N	No considerable difference was observed in baseline functional assessments between the 2 groups, including GMFM88 scale scores and the CFA scores.
	Risk of bias judgement			Low	
	2.1.Were participants aware of their assigned into	ervention during the trial?	,	N	All of the patients and their families were blinded to the group assignment, and the patients received hUCB-MSC infusion with basic rehabilitation in the infusion group, whereas patients in the placebocontrolled
	2.2.Were carers and people delivering the interven	entions aware of participa	Y	group received basic rehabilitation and normal saline (0.9% NS). The investigators and charge nurses were made aware of the treatment information to handle emergen- cies, if any.	
Bias due to deviations from intended interventions	2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviation context?	is from the intended inter	N	Except for 2 patients who dropped out and were lost to follow-up without efficacy assessments, 54 patients in total completed all the required study evaluations at scheduled time points and were included in the statistical analyses.	
	2.4 If Y/PY to 2.3: Were these deviations likely to	have affected the outcor	NA		
	2.5. If Y/PY/NI to 2.4: Were these deviations from	n intended intervention ba	NA		
	2.6 Was an appropriate analysis used to estimate	e the effect of assignmen	PN		
	2.7 If N/PN/NI to 2.6: Was there potential for a sugroup to which they were randomized?	ıbstantial impact (on the r	PN		
	Risk of bias judgement		Some concerns		
Bias due to	3.1 Were data for this outcome available for all, or nearly all, participants randomized?			Y	Except for 2 patients who dropped out and were lost to follow-up without efficacy assessments, 54 patients in total completed all the required study evaluations at scheduled time points and were included in the statistical analyses.
missing outcome	3.2 If N/PN/NI to 3.1: Is there evidence that result	t was not biased by missi	ng outcome data?	NA	
data	3.3 If N/PN to 3.2: Could missingness in the outc	ome depend on its true va	alue?	NA	
	3.4 If Y/PY/NI to 3.3: Is it likely that missingness i	n the outcome depended	NA		
	Risk of bias judgement		Low		
	4.1 Was the method of measuring the outcome in	nappropriate?		N	
	4.2 Could measurement or ascertainment of the	outcome have differed be	N		
Bias in	4.3 Were outcome assessors aware of the interv	ention received by study	PY		
measurement of the outcome	4.4 If Y/PY/NI to 4.3: Could assessment of the ou	itcome have been influen	nced by knowledge of intervention received?	PY	
	4.5 If Y/PY/NI to 4.4: Is it likely that assessment of	of the outcome was influe	PY	1	
I			1	1	

	Risk of bias judgement	High	
	5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized before unblinded outcome data were available for analysis?		No information about clinical registration was found in the article.
Bias in selection of the reported	5.2 multiple eligible outcome measurements (e.g. scales, definitions, time points) within the outcome domain?	N	
•	5.3 multiple eligible analyses of the data?	N	
	Risk of bias judgement	Some concerns	
Overall bias	Risk of bias judgement	High	

Unique ID	Kang 2015	Study ID	Kang 2015	Assessor	QJY and ZL
Ref or Label	doi: 10.1089/scd.2015.0074	Aim	assignment to intervention (the 'intention-to-	7436330I	QUI AIIU ZL
			treat' effect) placebo-controlled Active, Rehabilitation	_	Journal article(s) with results of the trial;
Experimental	Stem cell therapy	Comparator		Source	Trial protocol
Outcome	GMFM-88	Results	7.08 (2.04)	Weight	1
Domain	Signalling question		Response	Comments	
	1.1 Was the allocation sequence random?			Y	This study was designed as a placebo- controlled, double-blind study and conducted in accordance with the Declaration of Helsinki. An independent statistician produced a randomization table
Bias arising from	1.2 Was the allocation sequence concealed uni	il participants were enroll	ed and assigned to interventions?	Y	for patient grouping using SAS software. Subjects were randomly assigned (1:1) into the UCB or control group in accordance with this randomization table.
the randomization process	1.3 Did baseline differences between intervention	on groups suggest a prob	N	Thirty-six children with CP participated in the study, and 34 subjects completed all of the testing procedures (Supplementary Fig. 2). The general baseline characteristics of the UCB and control groups were not significantly different (Table 1). Also, no serious adverse events occurred during this study (Supplementary Table 1).	
	Risk of bias judgement			Low	
	2.1.Were participants aware of their assigned in	tervention during the trial	N	Investigators, assessors, participants, and their parents were all blinded to the group	
	2.2.Were carers and people delivering the inter	ventions aware of particip	N	allocation until the study was completed.	
	2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviation context?	ons from the intended inte	NA		
Bias due to	2.4 If Y/PY to 2.3: Were these deviations likely to have affected the outcome?			NA	
deviations from intended	2.5. If Y/PY/NI to 2.4: Were these deviations from intended intervention balanced between groups?			NA	
interventions	2.6 Was an appropriate analysis used to estima	te the effect of assignme	N	Power analysis to determine the sample size was not conducted due to the limited number of participating subjects.	
	2.7 If N/PN/NI to 2.6: Was there potential for a group to which they were randomized?	substantial impact (on the	PN		
	Risk of bias judgement		Some concerns		
	3.1 Were data for this outcome available for all, or nearly all, participants randomized?			Y	Thirty-six children with CP participated in the study, and 34 subjects completed all of the testing procedures (Supplementary Fig. 2).
Bias due to missing outcome	3.2 If N/PN/NI to 3.1: Is there evidence that resu	ılt was not biased by miss	NA		
data	3.3 If N/PN to 3.2: Could missingness in the out	come depend on its true	value?	NA	
	3.4 If Y/PY/NI to 3.3: Is it likely that missingness	in the outcome depende	d on its true value?	NA	
	Risk of bias judgement		Low		
	4.1 Was the method of measuring the outcome	inappropriate?		N	
	4.2 Could measurement or ascertainment of the	outcome have differed b	etween intervention groups?	N	
Bias in measurement of	4.3 Were outcome assessors aware of the inter	vention received by study	N	Investigators, assessors, participants, and their parents were all blinded to the group allocation until the study was completed.	
the outcome	4.4 If Y/PY/NI to 4.3: Could assessment of the o	outcome have been influe	NA		
	4.5 If Y/PY/NI to 4.4: Is it likely that assessment	of the outcome was influ	NA		
	Risk of bias judgement		Low		
Bias in selection	5.1 Were the data that produced this result ana before unblinded outcome data were available to		a pre-specified analysis plan that was finalized	Y	This study was approved by the Institutional Review Board and Ethics Committee of CHA Bundang Medical Center and was registered at www.clinicaltrials.gov(NCT01528436).

of the reported result	5.2 multiple eligible outcome measurements (e.g. scales, definitions, time points) within the outcome domain?	N	
	5.3 multiple eligible analyses of the data?	N	
	Risk of bias judgement	Low	
Overall bias	Risk of bias judgement	Some concerns	

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Unique ID	Liu 2017	Study ID	Liu 2017	Assessor	QJY and ZL
Ref or Label	J Transl Med (2017) 15:48	Aim	assignment to intervention (the 'intention-to-treat' effect)		
Experimental	Stem cell therapy	Comparator	Rehabilitation therapy	Source	Journal article(s) with results of the trial; Trial protocol
Outcome	GMFM	Results	127.03 ± 35.80 and 111.91 ± 31.68	Weight	1
Domain	Signalling question			Response	Comments
	1.1 Was the allocation sequence random?			Y	This study involved 105 CP patients who were enrolled from May 1, 2010, to October 31, 2012. Patients were randomly assigned into the BMMSC group, the BMMNC group or the control group in a 1:1:1 ratio. The randomisation table was generated by SAS
Bias arising from the randomization process	1.2 Was the allocation sequence concealed until	participants were enrolle	ed and assigned to interventions?	Y	software. After randomisation, the study processes were blinded to the patients in the BMMSC and BMMNC groups, participant surgeons, coordinators, and the investigators who were responsible for patient assessment.
	1.3 Did baseline differences between intervention	n groups suggest a probl	lem with the randomization process?	N	In comparison of the baseline of GMFM, FMFM, and dimensions among the BMMCS group, BMMNS group, and the control group, the differences were not statistically significant (P > 0.05)
	Risk of bias judgement			Low	
	2.1.Were participants aware of their assigned int	ervention during the trial	N	The randomisation table was generated by SAS software. After randomisation, the study processes were blinded to the patients in the BMMSC and BMMNC groups, participant	
Bias due to	2.2.Were carers and people delivering the interven	entions aware of particip	N	surgeons, coordinators, and the investigators who were responsible for patient assessment.	
deviations from	2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviation context?	ns from the intended inte	NA		
intended interventions	2.4 If Y/PY to 2.3: Were these deviations likely to	have affected the outco	NA		
	2.5. If Y/PY/NI to 2.4: Were these deviations from	n intended intervention b	NA		
	2.6 Was an appropriate analysis used to estimate	e the effect of assignmen	NI		
	2.7 If N/PN/NI to 2.6: Was there potential for a sugroup to which they were randomized?	ubstantial impact (on the	PN		
	Risk of bias judgement		Some concerns		
Bias due to missing outcome					Two children in the BMMSC group and one child in the BMMNC group left the experiment due to their parent withdrawal. In all, there are 33 patients in the BMMSC group (18 boys and 15 girls), and 34 patients (18 boys and 16 girls) in the BMMNC group completed the experiment. The general details, as well as GMFM and FMFM scores are provided in Additional file 1, Tables 1 and 2.
data	3.2 If N/PN/NI to 3.1: Is there evidence that resul	t was not biased by miss	sing outcome data?	NA	
	3.3 If N/PN to 3.2: Could missingness in the outc	ome depend on its true	value?	NA	
	3.4 If Y/PY/NI to 3.3: Is it likely that missingness it	in the outcome depende	d on its true value?	NA	
	Risk of bias judgement			Low	
	4.1 Was the method of measuring the outcome in	he method of measuring the outcome inappropriate?			The gross motor function measure (GMFM) and fine motor function measure (FMFM) were used to evaluate the efficacy of cell therapy.
	4.2 Could measurement or ascertainment of the	outcome have differed b	N		
Bias in measurement of the outcome	4.3 Were outcome assessors aware of the interv	ention received by study	participants?	N	After randomisation, the study processes were blinded to the patients in the BMMSC and BMMNC groups, participant surgeons, coordinators, and the investigators who were responsible for patient assessment.

	4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?	NA	
	4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received?	NA	
	Risk of bias judgement	Low	
Bias in selection	5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized before unblinded outcome data were available for analysis?	Y	The study was approved by the General Hospital of Chinese People's Armed Police Forces Medical Ethics Committee and has been registered in WHO (registration number CHiCTR-TRC-12002568).
of the reported result	5.2 multiple eligible outcome measurements (e.g. scales, definitions, time points) within the outcome domain?	N	
	5.3 multiple eligible analyses of the data?	N	
	Risk of bias judgement	Low	
Overall bias	Risk of bias judgement	Some concerns	

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Overall bias	Risk of bias judgement			High	
	5.3 multiple eligible analyses of the data?  Risk of bias judgement		PN Some concerns		
Bias in selection of the reported result	5.2 multiple eligible outcome measurements (e	e.g. scales, definitions, t	PN		
	before unblinded outcome data were available for analysis?				and in accordance with guidelines issued by the Chinese Ministry of Health (91-006)
	5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized			PN	The protocol of clinical studies was approved by the Scientific Council and Ethics Committee of Navy Gen-eral Hospital
	Risk of bias judgement		High		
	4.5 If Y/PY/NI to 4.4: Is it likely that assessment of	of the outcome was influ	uenced by knowledge of intervention received?	PY	
the outcome	4.4 If Y/PY/NI to 4.3: Could assessment of the or	utcome have been influe	enced by knowledge of intervention received?	PY	
Bias in measurement of	4.3 Were outcome assessors aware of the interv	rention received by stud	y participants?	PY	
	4.2 Could measurement or ascertainment of the	outcome have differed b	N		
	4.1 Was the method of measuring the outcome i	nappropriate?	N		
	Risk of bias judgement		Low		
	3.4 If Y/PY/NI to 3.3: Is it likely that missingness	in the outcome depende	NA		
missing outcome data	3.3 If N/PN to 3.2: Could missingness in the outcomes	ome depend on its true	NA		
Bias due to	3.2 If N/PN/NI to 3.1: Is there evidence that resul	t was not biased by mis	NA		
	3.1 Were data for this outcome available for all,	or nearly all, participants	Y	A total of 94 consecutive patients visiting our hospital who met the following criteria were recruited.	
	Risk of bias judgement		Some concerns		
	2.7 If N/PN/NI to 2.6: Was there potential for a signoup to which they were randomized?	ubstantial impact (on the	PN		
	2.6 Was an appropriate analysis used to estimat	e the effect of assignme	NI		
intended interventions	2.5. If Y/PY/NI to 2.4: Were these deviations from	n intended intervention l	NA		
Bias due to deviations from	2.4 If Y/PY to 2.3: Were these deviations likely to	have affected the outc	NA		
	2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviation context?	ns from the intended inte	ervention that arose because of the experimental	N	
	2.2.Were carers and people delivering the interven	entions aware of particip	pants' assigned intervention during the trial?	PY	about the practice of blinding.
	2.1.Were participants aware of their assigned int	ervention during the tria	nl?	PY	We don't see any explanation in the article
	Risk of bias judgement			Low	
the randomization process	1.3 Did baseline differences between intervention		<del>-</del>	N	
Bias arising from	1.2 Was the allocation sequence concealed until	participants were enroll	led and assigned to interventions?	PY	assigned to two groups (treatment group, n = 45; control group, n = 49).
	1.1 Was the allocation sequence random?			Υ	The included patients were randomly
Domain	Signalling question			Response	Comments
Outcome	GMFM	Results	12.94 ± 10.93	Weight	Trial protocol
Experimental	pp. S91–S98, 2012 Stem cell therapy	Comparator	treat' effect) Rehabilitation therapy	Source	Journal article(s) with results of the trial;
Ref or Label	Cell Transplantation, Vol. 21, Supplement 1,	Aim	assignment to intervention (the 'intention-to-		
Unique ID	Luan 2012 Cell Transplantation, Vol. 21, Supplement 1	Study ID	Luan 2012	Assessor	QJY and ZL

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Unique ID	Min 2013	Study ID	Min 2013 assignment to intervention (the 'intention-to-	Assessor	QJY and ZL
Ref or Label	STEM CELLS 2013;31:581-591	Aim	treat' effect) Rehabilitation therapy		Journal article(s) with results of the trial;
Experimental	Stem cell therapy	Comparator	псенавінаціон інегару	Source	Trial protocol
Outcome	GMFM	Results	14.5 (1.8), mean (SE)	Weight	1
Domain	Signalling question			Response	Comments
	1.1 Was the allocation sequence random?			Y	The children were randomly distributed (i.e., 1:1:1 allocation) by an independent provider
	1.2 Was the allocation sequence concealed until	participants were enrolled	d and assigned to interventions?	Y	for each unit who was not informed about each subject.
Bias arising from the randomization process	Did baseline differences between intervention	n groups suggest a proble	em with the randomization process?	N	There were no significant differences between the three groups, pUCB (n = 31), EPO (n = 33), and Control (n = 32), in the demographic data, MRI findings [41], severity of disease [42], typology [1], residence area, and duration of previous and postdischarge rehabilitation (Table 1; Supporting Information Table S1).
	Risk of bias judgement			Low	
	2.1.Were participants aware of their assigned into	ervention during the trial?		N	In accordance with a placebo-controlled double-blind trial protocol, all participants including family members, observers,
	2.2.Were carers and people delivering the interve	entions aware of participa	ints' assigned intervention during the trial?	N	investigators, and employees were blinded to the group assignment.
Bias due to	2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviation context?	s from the intended inter	vention that arose because of the experimental	NA	
deviations from intended	2.4 If Y/PY to 2.3: Were these deviations likely to	have affected the outcor	NA		
interventions	2.5. If Y/PY/NI to 2.4: Were these deviations from	n intended intervention ba	NA		
	2.6 Was an appropriate analysis used to estimate		NI		
	2.7 If N/PN/NI to 2.6: Was there potential for a su group to which they were randomized?	ıbstantial impact (on the r	PN		
	Risk of bias judgement		Some concerns		
	3.1 Were data for this outcome available for all, c	or nearly all, participants r	PN	Among the 105 children enrolled in this study, nine dropped out (Supporting Information Contents 1). Thus, 96 participants were included in the analyses (Fig. 1).	
Bias due to missing outcome	3.2 If N/PN/NI to 3.1: Is there evidence that result	t was not biased by missi	PN		
data	3.3 If N/PN to 3.2: Could missingness in the outcomes	ome depend on its true va	alue?	PN	Among the 105 children enrolled in this study, nine dropped out (Supporting
	3.4 If Y/PY/NI to 3.3: Is it likely that missingness i	n the outcome depended	NA	Information Contents 1).	
	Risk of bias judgement			Low	
	4.1 Was the method of measuring the outcome inappropriate?			N	The inter-rater reliability ICCs of the GMFM subscores and total score were 0.97–1.00 (n = 101, 10 raters) and the intrarater reliability ICCs were 0.99–1.00 (n = 101, two raters).
	4.2 Could measurement or ascertainment of the	outcome have differed be	etween intervention groups?	N	
Bias in measurement of the outcome	4.3 Were outcome assessors aware of the intervention received by study participants?			N	In accordance with a placebo-controlled double-blind trial protocol, all participants including family members, observers, investigators, and employees were blinded to the group assignment.
	4.4 If Y/PY/NI to 4.3: Could assessment of the ou	itcome have been influen	ced by knowledge of intervention received?	NA	
	4.5 If Y/PY/NI to 4.4: Is it likely that assessment of	of the outcome was influe	nced by knowledge of intervention received?	NA	
	Risk of bias judgement			Low	
	5.1 Were the data that produced this result analy before unblinded outcome data were available fo		Y	This trial was registered at www.clinicaltrials.gov (NCT01193660).	
Bias in selection of the reported	5.2 multiple eligible outcome measurements (e	e.g. scales, definitions, time	N		
result	5.3 multiple eligible analyses of the data?			N	
	Risk of bias judgement			Low	
Overall bias	Risk of bias judgement			Some concerns	

Unique ID	Rah 2017	Study ID	Rah 2017	Assessor	QJY and ZL
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Domain	Signalling question		Response	Comments	
Bias arising from the randomization process	1.1 Was the allocation sequence random?			Y	One month after cryopreservation of the mPBMCs (M1), patients were randomized to receive either mPBMCs or placebo. We performed a randomized, double-blind, cross-over study to assess the neuroregenerative potential of intravenous
	1.2 Was the allocation sequence concealed until	participants were enrolle	Y	granulocyte colony-stimulating factor (G-CSF) followed by infusion of mobilized peripheral blood mono-nuclear cells (mPBMCs) in children with cerebral palsy (CP).	
	1.3 Did baseline differences between interventio	n groups suggest a probl	em with the randomization process?	NI	
	Risk of bias judgement			Low	
	2.1.Were participants aware of their assigned intervention during the trial?			N	One month after cryopreservation of the mPBMCs (M1), patients were randomized to receive either mPBMCs or placebo.
	2.2.Were carers and people delivering the interventions aware of participants' assigned intervention during the trial?			N	Masking:Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor)
Bias due to	2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviation context?	ns from the intended inter	vention that arose because of the experimental	NA	
deviations from intended	2.4 If Y/PY to 2.3: Were these deviations likely to	have affected the outco	me?	NA	
interventions	2.5. If Y/PY/NI to 2.4: Were these deviations from intended intervention balanced between groups?			NA	
	2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention?			NI	
	2.7 If N/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomized?			PN	
	Risk of bias judgement			Some concerns	
	3.1 Were data for this outcome available for all, or nearly all, participants randomized?			N	Fifty-seven patients were enrolled in the current study. Forty-seven patients for whom complete study data were available were included in this analysis.
Bias due to missing outcome	3.2 If N/PN/NI to 3.1: Is there evidence that resul	t was not biased by miss	ng outcome data?	PN	
data	3.3 If N/PN to 3.2: Could missingness in the outc	ome depend on its true v	NI		
	3.4 If Y/PY/NI to 3.3: Is it likely that missingness	in the outcome depended	NI		
	Risk of bias judgement		High		
	4.1 Was the method of measuring the outcome i	nappropriate?	N		
Bias in	4.2 Could measurement or ascertainment of the outcome have differed between intervention groups?			N	The results for each examination tool were evaluated by well-trained physical and occupational therapists, and therapeutic responses were comprehensively assessed by rehabilitation specialists.
Bias in					by remainment operium to.
Bias in measurement of the outcome	4.3 Were outcome assessors aware of the interv	rention received by study	participants?	N	Masking:Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor)
measurement of				N NA	Masking:Quadruple (Participant, Care
measurement of	4.3 Were outcome assessors aware of the interv	utcome have been influer	cced by knowledge of intervention received?		Masking:Quadruple (Participant, Care
measurement of	4.3 Were outcome assessors aware of the interval. 4.4 If Y/PY/NI to 4.3: Could assessment of the or	utcome have been influer	cced by knowledge of intervention received?	NA	Masking:Quadruple (Participant, Care
measurement of	4.3 Were outcome assessors aware of the intervent.  4.4 If Y/PY/NI to 4.3: Could assessment of the or  4.5 If Y/PY/NI to 4.4: Is it likely that assessment	utcome have been influer of the outcome was influe	ced by knowledge of intervention received?  nced by knowledge of intervention received?	NA NA	Masking:Quadruple (Participant, Care
measurement of the outcome  Bias in selection of the reported	4.3 Were outcome assessors aware of the interval. 4.4 If Y/PY/NI to 4.3: Could assessment of the or 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of Risk of bias judgement  5.1 Were the data that produced this result analy	of the outcome was influence of the outcome was influence of the outcome was influence of the outcome with a contract of the outcome was influenced by the outcome with a contract of the outcome was influenced by the outcome with a contract of the outcome with	ced by knowledge of intervention received?  nced by knowledge of intervention received?  pre-specified analysis plan that was finalized	NA NA Low	Masking:Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor)  Trial registration: ClinicalTrials.gov, NCT02983708. Registered 5 December,
measurement of the outcome	4.3 Were outcome assessors aware of the interval.  4.4 If Y/PY/NI to 4.3: Could assessment of the or  4.5 If Y/PY/NI to 4.4: Is it likely that assessment of  Risk of bias judgement  5.1 Were the data that produced this result analybefore unblinded outcome data were available for	of the outcome was influence of the outcome was influence of the outcome was influence of the outcome with a contract of the outcome was influenced by the outcome with a contract of the outcome was influenced by the outcome with a contract of the outcome with	ced by knowledge of intervention received?  nced by knowledge of intervention received?  pre-specified analysis plan that was finalized	NA NA Low	Masking:Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor)  Trial registration: ClinicalTrials.gov, NCT02983708. Registered 5 December,
measurement of the outcome  Bias in selection of the reported	4.3 Were outcome assessors aware of the interval.  4.4 If Y/PY/NI to 4.3: Could assessment of the order of t	of the outcome was influence of the outcome was influence of the outcome was influence of the outcome with a contract of the outcome was influenced by the outcome with a contract of the outcome was influenced by the outcome with a contract of the outcome with	ced by knowledge of intervention received?  nced by knowledge of intervention received?  pre-specified analysis plan that was finalized	NA NA Low N	Masking:Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor)  Trial registration: ClinicalTrials.gov, NCT02983708. Registered 5 December,

Unique ID	Sun 2017	Study ID	Sun 2017	Assessor	QJY and ZL
Ref or Label	STEM CELLS TRANSLATIONAL MEDICINE 2017;6:2071–2078	Aim	assignment to intervention (the 'intention-to-treat' effect)		
Experimental	Stem cell therapy	Comparator	Rehabilitation threapy	Source	Journal article(s) with results of the trial; Trial protocol

Outcome	GMFM-66	Results	7.5 points (SD 6.8)	Weight	1
Domain	gnalling question			Response	Comments
Bias arising from the randomization process	1.1 Was the allocation sequence random?			Y	Computergenerated randomization was performed by The Emmes Corporation in a
	1.2 Was the allocation sequence concealed until	participants were enrolle	Y	1:1 ratio, stratified by age and CP typography.	
	1.3 Did baseline differences between intervention groups suggest a problem with the randomization process?			N	Subjects' etiology of CP was classified as: periventricular leukomalacia (n 5 17), in utero stroke/bleed (n 5 27), ischemic injury (n 5 7), other multifactorial causes doses were not associated with baseline age or type/severity of CP (Table 2).
	Risk of bias judgement			Low	
	2.1.Were participants aware of their assigned intervention during the trial?			N	Only staff preparing the products were aware of the treatment assignment, and these individuals had no contact with the patients, families, providers, and examiners
	2.2.Were carers and people delivering the interve	entions aware of participa	N	who were masked to the assigned treatment. Masking was achieved by covering all infusion bags with a dark bag in the laboratory and infusing a similar volume as the placebo product.	
Bias due to deviations from	2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviation context?	s from the intended inter	vention that arose because of the experimental	NA	
1	2.4 If Y/PY to 2.3: Were these deviations likely to	have affected the outcor	ne?	NA	
	2.5. If Y/PY/NI to 2.4: Were these deviations from	intended intervention ba	lanced between groups?	NA	
	2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention?			Y	Sample size planning used estimates of this change score in untreated patients derived from a literature review (mean 5 6, SD 5 3) [14, 15].
	2.7 If N/PN/NI to 2.6: Was there potential for a sugroup to which they were randomized?	bstantial impact (on the r	NA		
	Risk of bias judgement		Low		
	3.1 Were data for this outcome available for all, o	r nearly all, participants r	andomized?	Υ	
Bias due to	3.2 If N/PN/NI to 3.1: Is there evidence that result	was not biased by missi	ng outcome data?	NA	
	3.3 If N/PN to 3.2: Could missingness in the outco	ome depend on its true v	NA		
	3.4 If Y/PY/NI to 3.3: Is it likely that missingness i	n the outcome depended	NA		
	Risk of bias judgement		Low		
	4.1 Was the method of measuring the outcome inappropriate?			N	GMFM-66 [7], a 66-item measure designed to assess gross motor function in children with CP
	4.2 Could measurement or ascertainment of the	outcome have differed be	N		
Bias in measurement of the outcome	4.3 Were outcome assessors aware of the intervention received by study participants?			N	Only staff preparing the products were aware of the treatment assignment, and these individuals had no contact with the patients, families, providers, and examiners who were masked to the assigned treatment.
	4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?			NA	
	4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received?			NA	
	Risk of bias judgement		Low		
Bias in selection of the reported result	5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized before unblinded outcome data were available for analysis?			Y	This trial is registered with ClinicalTrials.gov, number NCT01147653.
	5.2 multiple eligible outcome measurements (e	.g. scales, definitions, tim	N		
	5.3 multiple eligible analyses of the data?			N	
	Risk of bias judgement		Low		
Overall bias	Risk of bias judgement		Low		