Table S1 Review authors' judgments about all risk of bias domains using the risk-of-bias tool for randomized trials per main outcome (survival) according to Sterne (2019)

Domain	Signalling question	Response	Comments
Xuan *et al.* 2018			
Bias arising from the randomization process	1.1 Was the allocation sequence random?	Y	www.randomization.com, concealed, external person, blinding
	1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions?	Y	
	1.3 Did baseline differences between intervention groups suggest a problem with the randomization process?	N	no imbalances observed
	Risk of bias judgement	**Low**	
Bias due to deviations from intended interventions	2.1.Were participants aware of their assigned intervention during the trial?	PY	provided written informed consent before stem cell trans
	2.2.Were carers and people delivering the interventions aware of participants' assigned intervention during the trial?	Y	
	2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context?	NI	no deviations reported
	2.4 If Y/PY to 2.3: Were these deviations likely to have affected the outcome?	NA	
	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	no information

	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?	N	no other than allocated intervention
	Risk of bias judgement	**Some concerns**	
Bias due to missing outcome data	3.1 Were data for this outcome available for all, or nearly all, participants randomized?	N	4 patients excluded only in the experimental group
	3.2 If N/PN/NI to 3.1: Is there evidence that result was not biased by missing outcome data?	N	no addressing analyses
	3.3 If N/PN to 3.2: Could missingness in the outcome depend on its true value?	PY	only recall failure and one consecutive trauma, missing failures can have an impact on success rate
	3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value?	PN	
	Risk of bias judgement	**Some concerns**	
Bias in measurement of the outcome	4.1 Was the method of measuring the outcome inappropriate?	N	clinical and radiological
	4.2 Could measurement or ascertainment of the outcome have differed between intervention groups?	PN	no information
	4.3 Were outcome assessors aware of the intervention received by study participants?	PY	blinding until analysis
	4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?	PN	

	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?	PY	ClinicalTrials.gov (NCT 01814436)
	5.2 ... multiple eligible outcome measurements (e.g. scales, definitions, time points) within the outcome domain?	N	according to trial registration
	5.3 ... multiple eligible analyses of the data?	N	according to trial registration
	Risk of bias judgement	**Low**	
Overall bias	**Risk of bias judgement**	**Some concerns**	
Brizuzela *et al.* 2020			
Bias arising from the randomization process	1.1 Was the allocation sequence random?	Y	1:1 restricted, EXCEL spreadsheets, centrally generated, hidden until intervention
	1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions?	Y	
	1.3 Did baseline differences between intervention groups suggest a problem with the randomization process?	N	no imbalances observed
	Risk of bias judgement	**Low**	
Bias due to deviations	2.1.Were participants aware of their assigned intervention during the trial?	PY	hidden until the time of intervention

from intended interventions	2.2.Were carers and people delivering the interventions aware of participants' assigned intervention during the trial?	Y	
	2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the experimental context?	NI	no deviations reported
	2.4 If Y/PY to 2.3: Were these deviations likely to have affected the outcome?	NA	
	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	no information
	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?	N	no other than allocated intervention
	Risk of bias judgement	**Some concerns**	
Bias due to missing outcome data	3.1 Were data for this outcome available for all, or nearly all, participants randomized?	Y	all patients were included inn recall
	3.2 If N/PN/NI to 3.1: Is there evidence that result was not biased by missing outcome data?	NA	
	3.3 If N/PN to 3.2: Could missingness in the outcome depend on its true value?	NA	
	3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value?	NA	
	Risk of bias judgement	**Low**	
Bias in measurement	4.1 Was the method of measuring the outcome inappropriate?	N	safety and efficacy (sensibility and CBCT)

of the outcome	4.2 Could measurement or ascertainment of the outcome have differed between intervention groups?	PN	no information
	4.3 Were outcome assessors aware of the intervention received by study participants?	PY	hidden until time of intervention, blinded for recall
	4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?	PN	
	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?	PY	ClinicalTrials.gov (NCT03102879)
	5.2 ... multiple eligible outcome measurements (e.g. scales, definitions, time points) within the outcome domain?	N	according to trial registration
	5.3 ... multiple eligible analyses of the data?	N	according to trial registration
	Risk of bias judgement	**Low**	
Overall bias	**Risk of bias judgement**	**Some concerns**	