Appendix 2. Modified Institute of Health Economics Tool

Question Text	Answer Text
Was the hypothesis/ aim/ objective of the study stated? Yes = The hypothesis/aim/objective was reported (includes patients, intervention and outcome). Partial/ unclear = Only one or two components (patients, intervention, or outcome) were included. No = The hypothesis/aim/ objective was not reported.	Yes
	Partial/ unclear
	No
Was the study conducted prospectively? Yes = It was clearly stated that the study was conducted prospectively. Partial/ unclear = Unclear or no information was provided. No = The study clearly stated it was a retrospective study.	Yes
	Partial/ unclear
	No
Were patients from more than one centre? For example, you can deduce single centre if they state "Data was taken from the Sloan Memorial Research Centre". Yes = Patients were from more than one centre (multicentre study). Partial/ unclear = Unclear where the patients came from. No = Patients were from one centre.	Yes
	Partial/ unclear
	No
Were patients recruited consecutively? Note: Not based on previously published protocols. Must be stated in this paper. Yes = There was a clear statement or it was clear from the context that the patients were recruited consecutively; or the study stated that all eligible patients were recruited. Partial/ unclear = No information was provided about the method used to recruit patients in the study. No = The study clearly stated that patients were not recruited consecutively; or the patients were recruited based on other criteria such as access to intervention. N/A = N of 1 study.	Yes
	Partial/ unclear
	No
	N/A
Were the eligibility criteria (i.e. inclusion and exclusion criteria) for entry into the study clearly stated? Note: Not based on previously published protocols. Must be stated in this paper. Yes = Both inclusion and exclusion criteria were reported.	Yes

Partial/ unclear = Either inclusion OR exclusion were reported. No = Neither inclusion nor exclusion criteria were reported.	
	Partial/unclear
	No
Were the characteristics of the patients included in the study described? Relevant characteristics: age, sex, malignancy type, lymphodepletion, previous treatment, concomitant treatments, co-morbidities. Yes = All of the relevant patient characteristics were reported. Partial/ unclear = >= 1 of the relevant characteristics were reported. No = None of the relevant characteristic were reported.	Yes
	Partial/ unclear
	No
Did patients enter the study at a similar point in the disease? Yes = The paper states that entering patients are in relapsed/ refractory setting. Partial/ unclear = There was no baseline information on patients' characteristics to make a judgment. No = There was a wide range in the severity of the disease and co-morbidities of patients at baseline. N/A = N of 1 study.	Yes
	Partial/ unclear
	No
	N/A
Was the intervention of interest described? Relevant characteristics: T-cell origin, CD configuration (type (i.e. CD19), co-stimulatory domain(s), dosage regimen (dose, frequency, duration). Yes = All of the relevant characteristics of the intervention were reported. Partial/unclear = Some of the relevant characteristics of the intervention were reported. No = None of the relevant characteristics of the intervention were reported.	Yes
	Partial/unclear
	No
Were additional interventions clearly described? i.e. chemotherapy, HSCT, radiation. Yes = All of the most relevant characteristics (type, dose, frequency administration, duration) of the co-intervention were reported Partial/ unclear = Some but not all of the most relevant characteristics of the co-intervention were reported. No = No information about the co-intervention was provided; or only the name of the co-intervention was mentioned.	Yes
	Partial/ unclear

	No
Were relevant outcome measures established a priori in the introduction or methods section? Yes = All relevant outcome measures were stated. Partial/ unclear = Some, but not all of the relevant outcome measures were stated. No = None of the relevant outcome measures were stated.	Yes
	Partial/ unclear
	No
Were outcome assessors blinded to the intervention that patients received? i.e. Did the study have 'independent outcome assessors'? Yes = The outcomes were assessed by individuals who were not aware of patient intervention. - SELECT where blinding is not necessary. i.e. Mortality is the outcome. - SELECT where the blinding to the outcome does not influence the assessment. i.e. Response to CAR-T. Partial/ unclear = The study did not report whether the outcome assessors were aware of the intervention. No = It was clearly stated or obvious from the context that individuals assessing outcomes were unblinded.	Yes
	Partial/ unclear
	No
Were the relevant outcomes measured using appropriate objective or subjective methods? Yes = Complete response/remission and >=1 secondary outcomes (i.e, overall response rate, non-relapse mortality, relapse, overall survival, adverse events (infection, neurotoxicity, cytokine release syndrome, B-cell aplasia, graft versus host disease, other types will be grouped by organ system affected and severity) Partial/ unclear = >=1 secondary outcomes (listed in OUR protocol) were reported No = None of the outcomes listed in OUR protocol were reported.	Yes
	Partial/ unclear
	No
Were the relevant outcome measures made before and after the intervention? Yes = The relevant outcome measures were made pre- and post-intervention; or the baseline measurements were not possible (ex. death). Partial/ unclear = The study did not report when the outcome measures were made. No = The outcome measures were only made post-intervention.	Yes
	Partial/ unclear

	No
The study does not perform selective outcome reporting. Yes = The study protocol is registered and all of the study's pre-specified outcomes of interest were stated in the methods section. Partial/ unclear = Either study protocol registered or the study's pre-specified outcomes of interest were stated in the methods section. No = No study protocol registered and none of the study's pre-specified outcomes of interest were stated in the methods section.	Yes
	Partial/unclear
	No
Were details of the statistical tests reported? Yes = The statistical tests were reported in the study. Partial/unclear = Statistical tests only partially described or reported elsewhere (e.g previous paper, or protocol). No = The statistical tests were not described in the study. N/A = N of 1 study.	Yes
	Partial/unclear
	No
	N/A
Was follow-up period reported? Yes = follow-up information was reported. No = Length of follow-up was not reported.	Yes
	No
Did the study provide estimates of random variability in the data analysisof relevant outcomes? Yes = Estimates of the random variability (ex. SE, SD, CI) were reported for all relevant outcomes and/or could be calculated from the raw data. Partial/ unclear = Estimates if the random variability were reported for some, but not all relevant outcomes. No = Estimates of the random variability were not reported for any of the relevant outcomes. N/A = N of 1 study.	Yes
	Partial/unclear
	No
	N/A
Were the adverse events reported? Includes: Infection, neurotoxicity, cytokine release syndrome, B-cell aplasia, and graft versus host disease. Yes = All adverse events were reported. Partial/ unclear = Unclear if all the adverse events were reported. No = No information about adverse events reported.	Yes
	Partial/ unclear
	No

Were both competing interests and sources of support for the study reported? Yes = Both competing interests and sources of support (financial or other) received for the study were reported; or the absence of support was acknowledged. Partial/ unclear = Either the competing interest or source of support was reported. No = Neither competing interests nor sources of support were reported.	Yes
	Partial/ unclear
	No