Minimum Criteria to Assess Risk of Bias in Case Series^a

Risk of Bias	Criterion	YES	NO	NA	NR	COMMENTS
Selection bias and confounding	Were the important confounding and modifying variables taken into account in the design and analysis?					
Performance bias	Was any impact from a concurrent intervention or an unintended exposure that might bias results ruled out by the researchers?					
	Did variation from the study protocol compromise the conclusions of the study?					
Attrition bias	Was there a high rate of differential or overall attrition?					
	Did attrition result in a difference in group characteristics between baseline and follow-up?					
Detection bias	6. Were the outcome assessors blinded to the intervention or exposure status of participants?					
	7a. Are the inclusion/exclusion criteria measured using valid and reliable measures?					
	7b. Were the measures implemented consistently across all study participants?					
	8a. Are interventions/exposures assessed using valid and reliable measures?					
	8b. Were the interventions implemented consistently across all study participants?					
	9a. Are primary outcomes assessed using valid and reliable measures? List outcome.					
	Outcome 1:					
	Outcome 2:					
	Outcome 3:					
	Outcome 4:					
	Outcome 5:					
	Outcome 6:					

Risk of Bias	Criterion	YES	NO	NA	NR	COMMENTS
	9b. Was outcome assessment implemented consistently across all study participants?					
	10a. Are confounding variables assessed using valid and reliable measures?					
	10b. Was assessment of confounding variables implemented consistently across all study participants?					
	11. Did the study account for secular trends and regression to the mean?					
Reporting bias	12a. Are the potential outcomes pre-specified by the researchers?					
	12b. Are harms pre-specified by the researchers?					
	13. Are all pre-specified outcomes reported?					

^a Adapted from Viswanathan M, Ansari MT, Berkman ND, Chang S, Hartling L, McPheeters ML, Santaguida PL, Shamliyan T, Singh K, Tsertsvadze A, Treadwell JR. Assessing the Risk of Bias of Individual Studies in Systematic Reviews of Health Care Interventions. Effective Health Care Program Methods Guide for Effectiveness and Comparative Effectiveness Reviews. Agency for Healthcare Research and Quality Methods Guide for Comparative Effectiveness Reviews. March 2012. AHRQ Publication No. 12-EHC047-EF. www.effectivehealthcare.ahrq.gov/