ASPS Critical Appraisal Checklist

AMERICAN SOCIETY OF
PLASTIC SURGEONS

Key for all tables:
Y = Yes
N = No
N/A = Not applicable
? = Not addressed

Systematic Review/Meta-Analysis (Prognostic/Risk or Treatment)

Author, Pub Date	Assess for Selection Bias Could publication bias play a role in article selection? Could literature search methods influence results of the review?			Assess for Measurement Bias Could differences in how the studies were reviewed and analyzed influence the results of the review?						Assess for Conflict of Interest
	Inclusion and exclusion criteria identified and articles appropriately selected	Multiple search methods utilized	All eligible studies included in analysis and rationale provided for excluded studies	Studies assessed by blinded reviewer(s)	Studies assessed by multiple reviewers	Valid critical appraisal system described and applied	If data was combined, it was reasonable to do so (type of data collected was similar in studies)	Data synthesis method described and applied appropriately	Recommendations are consistent with overall results	Free of potential conflict of interest related to authors and/or funding

RCT (Treatment)

Author, Pub Date	Assess for Selection Bias: Could any differences between patients or the way in which patients were selected or randomized influence the treatment effect?								Assess for Intervention Bias: Could any differences in how patients/groups were treated influence the treatment effect?			Assess for Measurement Bias: Could any differences in how the outcome was measured and/or reported influence the treatment effect?				Assess for Type II error	Assess for Conflict of Interest
	Patients appropriately recruited	Allocation concealed (i.e., the randomization process was concealed)	Patients appropriately randomized into intervention/control groups	Groups similar except for treatment allocation	Confounders addressed	Data complete for at least 80% of patients in each group	Patients lost to follow up were not significantly different than remaining patients	If applicable, intention-to-treat analysis described and applied appropriately	Intervention method described and applied similarly within treatment group	Caregiver blinded (Groups treated similarly except for intervention)	Treatment administered by same surgeon	Patients Blinded	Outcome assessor blinded	Outcomes measured similarly and w/ valid defined criteria	Sufficient follow up time to detect and measure outcome	Adequate power to detect effect for each measured outcome	Free of potential conflicts of interest related to authors and/or funding

Cohort/Comparative (Treatment)

Author, Pub Date	Prospective (P) or Retrospective (R)	Assess for Selection Bias: Could any differences between groups influence the treatment effect?					Assess for Intervention Bias: Could any differences in how groups were treated influence the treatment effect?		Assess for Measurement Bias: Could any differences in how the outcome is measured and/or reported influence the treatment effect?			Assess for Type II error	Assess for Conflict of Interest
		Cohort and controls selected appropriately	Groups similar at entry except for intervention	Confounders addressed	Data complete for at least 80% of patients in each group	Pts lost to follow up not significantly different than remaining pts	Intervention applied similarly within the Treatment Group	Treatment administered by same surgeon	Outcome Assessor Blinded (if feasible)	Outcomes measured similarly and w/ valid, defined criteria	Follow-up long enough to detect outcome	Adequate power to detect effect for each measured outcome	Free of potential conflicts of interest related to authors and/or funding

Cohort/Comparative (Risk)

Author, Pub Date	Prospective (P) or Retrospective (R)	Assess for Selection Bias: Could any differences between groups influence the outcome?					Assess for Intervention Bias: Could any differences in how groups were treated influence the outcome?		Assess for Measurement Bias: Could any differences in how the exposure and outcome are measured and/or reported influence the outcome?			Assess for Type II error	Assess for Conflict of Interest
		Cohort and controls selected appropriately	Groups similar at entry except for exposure/risk factor of interest	Confounders addressed	Data complete for at least 80% of patients in each group	Pts lost to follow up not significantly different than	Procedure applied similarly within all patients/groups	All procedures performed by same surgeon	Outcome Assessor Blinded (if feasible)	Exposure/risk factor and outcomes measured similarly and w/ valid, defined criteria	Follow-up time sufficient to detect outcome	Adequate power to detect effect for each measured outcome	Free of potential conflicts of interest related to authors and/or funding

Case-Control (Risk or Treatment)

Author, Pub Date	Assess for Selection Bias: Could any differences between groups influence the outcome?				Assess for Intervention Bias (if applicable): Could any differences in how procedure was performed influence the outcome?		Assess for Measurement Bias: Could any differences in how the exposures/risk factors and/or outcomes are measured influence the outcome?					Assess for Type II error	Assess for Conflict of Interest
	Cases selected appropriately	Controls selected appropriately	Groups similar except for outcome of interest	Confounders addressed	Procedure performed similarly n all patients/groups	All procedures performed by same surgeon	Outcome of interest measured with valid, defined criteria	Exposure or risk factor measured with valid, defined criteria	Exposure or risk factor precedes outcome	Cases and controls evaluated with similar methods	Blinding incorporated (if feasible)	Power sufficient to detect differences between groups	Free of potential conflicts of interest related to authors and/or funding

Case-Series (Risk or Treatment)

Author, Pub Date	Assess for Selection Bias: Patients should be consecutive in a Case Series study to ensure that patients were not "handpicked." Could any confounding issues impact the outcome?			Assess for Intervention Bias: Could any differences in how patients were treated influence the outcome?		Assess for Measurement Bias: Could any differences in the outcomes measurement influence the results?		Assess for Conflict of Interest
	Cases selected appropriately	Cases were consecutive	Confounders addressed	Intervention performed similarly n all patients	All procedures performed by same surgeon	Outcomes measured with valid, defined criteria	Follow-up time sufficient to detect outcome	Free of potential conflicts of interest related to authors and/or funding

Diagnostic Studies

Author, Pub Date	Assess for Selection Bias: Could any differences between patients influence the reported efficacy of the diagnostic test?			Assess for Intervention Bias: Could any differences in how the tests were applied influence the reported efficacy of the diagnostic test?			Assess for Measurement Bias: Could any differences in measurement influence the reported efficacy of the diagnostic test?		Assess for Conflict of Interest
	Cases selected appropriately	Cases were consecutive	Cases represent a wide range of condition/disease severity	Methods for diagnostic test well defined	Diagnostic test applied similarly to all patients	Diagnostic test compared to a reference test in all patients	Condition/disease well defined	Assessors of diagnostic test results blinded to diagnosis and results of reference standard test	Free of potential conflicts of interest related to authors and/or funding