EPOC risk of bias assessment within randomised trials (n=3)

Domain	Chambers 2017	Nelson 2019	Victorson 2019
1. Random Sequence Generation	**Reviewer Comments:** Quote: "participants were randomly allocated to MBCT or to a minimally enhanced usual care (control) group" **Judgement** Low risk	**Reviewer Comments:** Quote: "Participants were randomly allocated to the two treatment arms using a permuted block randomization procedure to ensure that the two treatment groups would be balanced with the respective type of surgery" **Judgement** Low risk	**Reviewer Comments:** Quote: "participants completed baseline measures and were randomly assigned by a research study coordinator (using a Random Numbers Statistical Table) to either the 8-week mindfulness-based stress reduction intervention (for specific details on this intervention" **Judgement** Low risk
2. Allocation Concealment	**Reviewer Comments:** Quote: "A random assignment sequence was undertaken by the project manager and was concealed from the investigators" **Judgement** Low risk	**Reviewer Comments:** Quote: "Since informed consent procedures explained the two different study arms, participants were not blinded to their treatment condition" **Judgement** High risk	**Reviewer Comments:** Quote: "Investigators and physicians were blinded to participant allocation" **Judgement** Low risk
3. Baseline characteristics similar	Low risk	Low risk	Low risk
4. Knowledge of the allocated interventions adequately prevented during the study	**Reviewer Comments:** Quote: "Random assignment occurred in blocks of 14, with each condition randomly generated 7 times within each block. This ensured an unpredictable allocation sequence with equal numbers of men in each condition at the completion of each block" **Judgement** Low risk	**Reviewer Comments:** Quote: "Additionally, the research staff who reminded subjects to complete study measures online were not blinded to study condition" **Judgement** High risk	**Reviewer Comments:** Not specified in the paper. Probably not assessed blindly. **Judgement** High risk
5. Other risks of bias	**Reviewer Comments:** There is no evidence of other risk of biases.	**Reviewer Comments:** There is no evidence of other risk of biases	**Reviewer Comments:** There is no evidence of other risk of biases

Domain	Chambers 2017	Nelson 2019	Victorson 2019
	Judgement Low risk	**Judgement** Low risk	**Judgement** Low risk
OUTCOME(S)	**Anxiety, Cancer-specific distress, Quality of life, Post-traumatic growth.**	**Depression, Sexual self-esteem, and relationship**	**Prostate cancer anxiety, Quality of life, Post-traumatic growth**
6. Protection against contamination	Low risk	Unclear risk	Unclear risk
7. Selective outcome reporting	**Reviewer Comments:** All relevant outcomes in the methods section were reported in the results section **Judgement** Low risk	**Reviewer Comments:** Quote: "All study patient reported outcomes were completed online to reduce any potential influence from research staff" **Judgement** Low risk	**Reviewer Comments:** Quote: "In this current study, posttraumatic growth was the only outcome to demonstrate significant and robust in- creases over the 12-month period for participants in the mindfulness arm, compared with those in the control arm" **Judgement** Low risk
8. Baseline outcome measurements similar	Low risk	Low risk	Low risk
9. Incomplete outcome data	**Reviewer Comments:** Follow-up was reported. Quote: "Per-protocol analyses was conducted based on the 49 men in the MBCT group who completed more sessions". However, participants that had received androgen deprivation therapy were not take into consideration when assessing psychological distress. **Judgement** Unclear risk	**Reviewer Comments:** Quote: "Participants were only followed for eight months and many were less than a year post surgery. This did not allow us to assess erectile function as a viable option". **Judgement** High risk	**Reviewer Comments:** Quote: "We did not specifically assess whether men diagnosed with prostate cancer in our sample considered their experience to be traumatic". **Judgement** High risk
Overall RoB within studies	**Low risk**	**Unclear risk**	**Unclear risk**

NIH quality assessment tool for before-after (Pre-Post) study

Reviewer: Daniel Nnate **Date**: 20 November 2020 **Author:** Chambers et al. **Year:** 2012			
Major Components	Response options		
1. Was the study question or objective clearly stated?	**Yes**	No	Cannot Determine/ Not Applicable/ Not Reported
2. Were eligibility/selection criteria for the study population prespecified and clearly described?	**Yes**	No	Cannot Determine/ Not Applicable/ Not Reported
3. Were the participants in the study representative of those who would be eligible for the test/service/intervention in the general or clinical population of interest?	**Yes**	No	Cannot Determine/ Not Applicable/ Not Reported
4. Were all eligible participants that met the prespecified entry criteria enrolled?	Yes	**No**	Cannot Determine/ Not Applicable/ Not Reported
5. Was the sample size sufficiently large to provide confidence in the findings?	Yes	**No**	Cannot Determine/ Not Applicable/ Not Reported
6. Was the test/service/intervention clearly described and delivered consistently across the study population?	**Yes**	No	Cannot Determine/ Not Applicable/ Not Reported
7. Were the outcome measures prespecified, clearly defined, valid, reliable, and assessed consistently across all study participants?	**Yes**	No	Cannot Determine/ Not Applicable/ Not Reported
8. Were the people assessing the outcomes blinded to the participants' exposures/interventions?	Yes	**No**	Cannot Determine/ Not Applicable/ Not Reported
9. Was the loss to follow-up after baseline 20% or less? Were those lost to follow-up accounted for in the analysis?	Yes	**No**	Cannot Determine/ Not Applicable/ Not Reported
10. Did the statistical methods examine changes in outcome measures from before to after the intervention? Were statistical tests done that provided p values for the pre-to-post changes?	**Yes**	No	Cannot Determine/ Not Applicable/ Not Reported

11. Were outcome measures of interest taken multiple times before the intervention and multiple times after the intervention (i.e., did they use an interrupted time-series design)?	Yes	No	Cannot Determine/ Not Applicable/ **Not Reported**
12. If the intervention was conducted at a group level (e.g., a whole hospital, a community, etc.) did the statistical analysis take into account the use of individual-level data to determine effects at the group level?	Yes	**No**	Cannot Determine/ Not Applicable/ Not Reported
Quality Rating	Good	**Fair**	Poor
Additional Comments (If Poor, please state why):			

Website: https://www.nhlbi.nih.gov/health-topics/study-quality-assessment-tools