## Patient-reported outcomes in breast oncology: a review of validated outcome instruments

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## ABSTRACT

Aims and background. Patient-reported outcomes (PROs) include areas of health-related quality of life but also broader concepts such as patient satisfaction with care. The aim of this review is to give an account of all instruments with potential use in patients with a history of treatment for breast cancer (including surgery, chemotherapy and/or radiotherapy) with evidence of validation in the breast cancer population.

**Methods.** All instruments included in this review were identified as PRO measures measuring breast-related quality of life and/or satisfaction that had undergone development and validation with breast oncology patients. We specifically looked for PRO measures examining patient satisfaction and/or quality of life after breast cancer treatment. Following an evaluation of 323 papers, we identified 15 instruments that were able to satisfy our inclusion criteria.

**Results.** These instruments are the EORTC QOL-C30 and QLQ-BR23 (European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-Breast Cancer Module), the FACT-B (Functional Assessment of Cancer Therapy-Breast Cancer), the SLDS-BC (Satisfaction with Life Domains Scale for Breast Cancer), the BIBCQ (Body Image after Breast Cancer Questionnaire), the HIBS (Hopwood Body Image Scale), the PBIS (Polivy Body Image Scale), the MBROS (Michigan Breast Reconstruction Outcomes Study) Satisfaction and Body Image Questionnaires, the BREAST-Q, the BCTOS (Breast Cancer Treatment Outcome Scale), the BCQ, the FACT-ES (Functional Assessment of Cancer Therapy-Endocrine System), the MAS (Mastectomy Attitude Scale), and the Breast Cancer Prevention Trial Symptom Checklist (BCPT).

**Conclusions.** Suggestions for future directions include (1) to use and utilize validated instruments tailored to clinical practice; (2) to develop a comprehensive measurement of surgical outcome requiring the combination of objective and subjective measures; (3) to aim for a compromise between these two competing considerations in the form of a scale incorporating both generalizability in cancer-related QOL and specificity in breast cancer issues.

Key words: breast oncology, patientreported outcomes.

*Conflict of interest:* The authors have no conflict of interest to declare.

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