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## Ästhetisches und funktionelles Ergebnis als Dimensionen der Lebensqualität nach brusterhaltender Therapie - Validierung der deutschen Version der "Breast Cancer Treatment Outcome Scale" (BCTOS)

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Aesthetic and functional results influence QoL of breast cancer patients. The BCTOS questionnaire describes the functional and aesthetic outcome after breast-conserving surgery. It was developed by Stanton et al. and was already validated in its original English version. On the basis of 22 questions, it points out the main components of functional and aesthetic status.

The purpose of this study was to develop and validate a German version of the BCTOS and to provide an examination of its correlates with respect to QoL in women after breast-conserving therapy.

189 patients with one-sided, primary breast cancer, who are treated conservatively, filled out a German version of the BCTOS questionnaire and the EORTC QLQ C30-BR23 questionnaire in average 7 days after surgery. The translation of the German version of the BCTOS questionnaire was done in accordance to the EORTC translation guidelines. To validate the BCTOS questionnaire, a factor analysis and a correlation and regression analysis was performed to evaluate relationships of the BCTOS subscales with the EORTC QLQ C30-BR23 questionnaire subscales and with patient-, tumour- and therapy-related variables.

A coherent factor structure indicated three subscales: aesthetic status (7 items), functional status (9 items) and breast sensitivity (6 items) status. Subscales were internally consistent. All BCTOS subscales were correlated with subscales of the EORTC QLQ C30-BR23 with correlation magnitudes ranging from 0.24 to 0.67, which correspond to descriptive p-values < 0.001. In regression analyses, the BCTOS subscales were associated most strongly with EORTC global health status, physical functioning, breast symptoms and arm symptoms scales, accounting for 21% to 42% of the variance in those scales. Of demographic and tumour-related variables, younger patient age was most consistently associated with poorer self-perceived status on all BCTOS subscales. The German version of the BCTOS is a useful instrument to measure aesthetic and functional outcome after breast-conserving surgery. Aesthetic and functional outcomes influence major QoL aspects.