

Correspondence

Quality of life trajectories in breast cancer patients: an updated analysis 5 years after diagnosis

Dear Editors,

We recently published a paper in the Journal of Public Health regarding quality-of-life (QoL) trajectories in a breast cancer cohort (NEON-BC) in the first 3 years after cancer diagnosis.¹ Here we update this analysis for 5 years of follow-up, including a total of 424 participants with complete QoL data in all evaluations.

Within 5 years after diagnosis, we identified four QoL trajectories (A5–D5), corresponding to different patterns of variation. There were no significant differences among trajectories regarding sociodemographic and clinical characteristics at baseline and treatments performed during the 5-year period. A5 was characterized by an overall better and stable QoL, with no meaningful variation in the mean score across the 5-year period. B5 and C5 presented similar QoL scores at baseline but different variation patterns. In B5, the QoL decreased between the 3- and 5-year evaluations, but there was still an improvement from the baseline to the end of follow-up ($P = 0.008$), while in C5 there was a worsening within that period ($P < 0.001$). D5 presented the worst QoL at baseline, which further deteriorated in the first year, improved between the first and third years and worsened again at the 5-year evaluation; this corresponded to a significant decrease in QoL from baseline to the end of follow-up (Fig 1, right panel).

When comparing trajectories based on the data up to the 3-year follow-up (Fig 1, left panel) with those including the 5-year period after diagnosis, the worsening of QoL from the third to the fifth year is noteworthy, especially among women in trajectories B5 and D5. This may reflect persistent fear of recurrence, physical and emotional symptoms or concerns about losing sense of security and reassurance given by specialists what may be felt by those patients who were discharged from Cancer Institute to primary care.^{2–4}

Most participants previously classified in A3 ($n = 44$, 81.5%) were also in A5. However, from those assigned to B3, only 51 (31.1%) were in B5 and 18 (11.0%) in A5, whereas most were classified in trajectories with worse trends in QoL, namely, C5 ($n = 82$, 50.0%) and D5 ($n = 13$, 7.9%). A similar pattern was observed for participants in C3, with most being classified in C5 ($n = 88$, 55.4%) or in a trajectory characterized

by worse QoL over the 5 years ($n = 67$, 42.1%). This resulted in 72.0% of the women being classified in trajectories C5 and D5, whereas C3 and D3 included less than half the participants (Fig 1, center panel). These results may reflect longer-term effects of disease and its primary treatment or side effects of endocrine therapy, to which the patients diagnosed with endocrine-responsive tumors are submitted for 5–10 years.

Almost three in four women experienced QoL deterioration in the first 5 years after diagnosis, with trajectories and classification of patients in each trajectory changing with the length of the follow-up. This reinforces the importance of survivorship care planning, including regular assessment and management of QoL, in the short- and long-term.

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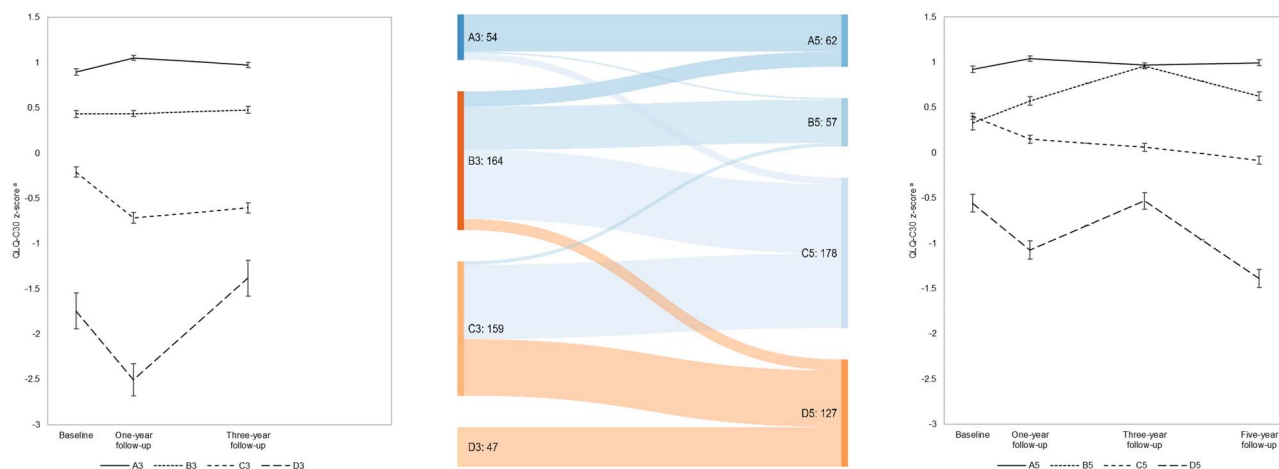


Fig. 1 Variation of quality of life in breast cancer patients according to trajectories until 3 (left) and 5 (right) years after diagnosis and Sankey diagram (center) depicting the variation in the classification of the participants when considering the 3- and 5-year follow-up periods ($n = 424$). QLQ-C30, the Quality of Life Questionnaire Core 30 of the European Organization for Research and Treatment of Cancer. ³QLQ-C30 scores are expressed as z-scores, with higher scores indicating better quality of life; trajectories are represented as means and the corresponding 95% confidence intervals of QLQ-C30 at baseline, 1-, 3- and 5-year follow-up evaluations, as applicable.

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Conflict of interest

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