

*Abstract*

## Effects of an Integrative Day Care Clinic Program with a Focus on Nature Therapy in a Hospital Park Setting on Quality of Life in Oncological Patients-A Non-Randomized Controlled Study

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Cancer often causes long-term physical and psychological impairments. Lifestyle modification and nature-based interventions (NBIs) can have a positive impact on patients' quality of life (QOL). This participants-blinded, non-randomized controlled study assessed parameters at weeks 0, 12, and 24, including, as a primary endpoint, QOL in cancer patients on the Functional Assessment of Cancer Therapy-General (FACT-G) at week 12. QOL in breast cancer patients, fatigue, well-being, stress, anxiety/depression, socio-psychological well-being, benefits of nature interaction, insomnia, self-efficacy, mindfulness, and self-compassion were assessed as secondary endpoints. N = 107 cancer patients (96.3% women; 52.5 ± 9.3

years, 80.4% breast cancer) were assigned to either a 12-week nature-based (NDC; n = 56) or conventional (DC; n = 51) oncology day care clinic program, whereby the assignment group was not known to the participants. There was no significant group difference for the primary endpoint. At week 24, QOL, fatigue, mindfulness and self-compassion scores were significantly higher, and at weeks 12 and 24, the insomnia score was significantly lower in NDC compared to DC. In conclusion, this study indicates positive and clinically relevant effects of the program on QOL, fatigue, and psychological parameters. NBIs seem to have a more pronounced effect.

*Keywords:* MICOM; Mind-body Medicine; cancer; day care; integrative medicine; lifestyle; meditation; mindfulness; nature; oncology