**Title :**

Evolution and management of a psychoneurological symptom cluster in patients with breast cancer or digestive cancer: study protocol

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**Theme:** Complementary and integrative cancer care

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**Abstract (1600 characters max, including spaces):**

Objectives: A psychoneurological symptom cluster (PNSC) composed of fatigue, pain, emotional distress (i.e., depression and anxiety), and sleep difficulties is increasingly documented in oncology. These symptoms reinforce each other through strong but complex associations, impacting patients’ quality of life. The relationships between these symptoms seem to vary according to the cancer diagnosis or timing in the cancer trajectory. The core (i.e., central) symptom of a cluster could represent a target for interventions to improve the whole PNSC.

Methods: Our study will focus on breast and digestive cancer survivors. First, network analyses (N=2x240) will be used to assess the evolution of the PNSC in each population, based on four measurement times (baseline, then 6, 12 and 24 months later), and the core symptom of the PNSC at baseline, possibly different between the two populations. Second, a pilot randomized-controlled trial (N=2x16) will test the feasibility and preliminary benefits of a mind-body group intervention designed to address this core symptom, proposed to each population and based on various empowering strategies.

Expected results: We expect that depression will be the core symptom in both populations, and that the intervention will allow for an improvement of the whole PNSC.

Conclusion and clinical implication: This study will allow an in-depth understanding of the relationships between common symptoms in oncology and offer new therapeutic perspectives to manage symptom clusters, hence improving the quality of life of cancer patients.