BREASTFIT MNI: Implementing a Structured Clinical Nutrition Pathway to Prevent Treatment-Related Malnutrition and Functional Decline in Breast Cancer Patients

Project team Oncologists – Dietitians – Physiotherapists – Psychologists – Nursing staff – Hospital Pharmacist – IT

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Background / context Breast cancer treatments frequently induce metabolic deterioration, weight changes and muscle loss, reducing treatment tolerance and quality of life. Despite strong evidence, nutrition care remains inconsistently implemented in oncology.
Rationale The MNI Grant 2026 prioritizes implementation of structured nutrition pathways and measurable improvements in clinical nutrition. BREASTFIT MNI operationalizes a standardized, scalable and sustainable nutrition pathway within the Breast Clinic.
Objectives and scope
Prevent malnutrition, sarcopenic obesity and functional decline during systemic therapy
Integrate systematic screening, BIA monitoring and individualized nutrition care into routine oncology
Target population: breast cancer patients receiving chemotherapy and/or hormone therapy
Implementation period: 24 months

Planned activities & deliverables
Key steps of the project management plan
Implement mandatory nutritional screening at baseline and each treatment cycle ; Perform standardized BIA body composition assessments ; Deliver individualized medical nutrition therapy ; Provide group education (“Lifestyle Café”) and digital follow-up
Monthly MDT meetings including pharmacist input ; Integrate nutrition alerts and referral triggers into the EPR
Concrete deliverables
Fully operational nutrition pathway ; SOPs for screening, BIA and referrals ; Digital dashboards for monitoring ;
Patient education materials
Progress expected at 12 and 24 months 12 months: ≥80% screening/BIA completion; pathway fully implemented; improved patient engagement **24 months:** Reduced malnutrition and sarcopenic obesity; improved functional capacity and QoL; fewer treatment interruptions; demonstrated economic benefits

Resources & enablers
Personnel & financial needs
Dietitian time for pathway implementation and follow-up
Oncologist involvement for clinical coordination and integration of nutrition into treatment decisions
Hospital pharmacist for treatment–nutrition interactions and supportive care optimization
IT support for digital integration
Physiotherapy and psychology for functional and psychosocial support
Use of the €40,000 grant
Dietitian staffing ; BIA equipment upgrades/maintenance ; Digital platform integration and dashboards ;
Patient education materials ; Staff training
Success factors
Strong institutional support ; Multidisciplinary collaboration ; Digital infrastructure ; PEN society endorsement
Continuous quality improvement (PDSA cycles)

Results, expected outcomes & impact
Implementation of findings
Integration of nutrition alerts and referral triggers in the EPR
Standardized pathway adopted as routine practice
Dissemination to hospital leadership and PEN society
Advancement of clinical nutrition
Demonstrates effective nutritional care and pathway implementation
Improves early detection and management of malnutrition
Enhances patient-reported outcomes and functional status
Reduces complications and treatment interruptions
Provides evidence of health-economic benefits
Strengthens patient engagement through education and digital tools
Transferability The model is scalable and easily adaptable to other tumor types and cancer centres nationally and internationally.

☐ **Please tick to confirm the PEN letter of endorsement is attached. Incomplete submissions will not be considered.**