

# Classifying determinants of non-adherence in oncology breast cancer patients in Portugal according to the ABC taxonomy for medication adherence

Catarina Bernardo, António Moreira, Helena Florindo, Filipa Alves da Costa

**Background** The ABC taxonomy describes medication adherence as a process comprising three quantifiable phases, initiation, implementation and discontinuation, being possible to estimate adherence according to treatment phase. For oral antineoplastic therapies non-adherence and their determinants have been little researched.

**Purpose** Our main goals are (a) to estimate the prevalence of non-adherence to breast cancer oral treatments (b) to identify determinants of non-adherence in these patients and (c) to classify those determinants according to the ABC taxonomy medication adherence phase (implementation and discontinuation). Our main goals are (a) to estimate the prevalence of non-adherence to breast cancer oral treatments (b) to identify determinants of non-adherence in breast cancer patients and (c) to classify those determinants according to the ABC taxonomy medication adherence phase (implementation and discontinuation).

**Method** A cross-sectional study will be conducted across 5 hospitals in mainland Portugal. A questionnaire will be constructed by gathering key surveys which can identify non-adherence determinants and can measure medication adherence through self-report. To track patient's medication adherence phase, we will combine the questionnaire with prescriptions renewals, pharmacy refill data and pill count. Women must be aged 18 years or over, have a diagnosis of metastatic breast cancer (stage IV) and be prescribed with capecitabine, palbociclib, riblociclib or abemaciclib for at least 3 months. All participants must sign an informed consent. Data analysis will resort to Excel and SPSS, version 24.

**Findings** A questionnaire was developed to explore medication adherence issues based on the identification of key surveys. The final questionnaire comprises 5 domains to evaluate health literacy (Medical Term Recognition Test - METER), digital literacy (Get Digital basic skills assessment questions ? Get digital from Tech Partnership), disease-related factors (e.g. Illness Perceptions Questionnaire), medication-related factors (e.g. Medication Adherence Report Scale - MARS-9) and healthcare-related factors (e.g. Health Care Climate ? HCC). Whenever a key survey was not available in Portuguese, we resorted to Guillemin's guidelines for cross-cultural adaptation. This procedure was applied to adapt the Get Digital questionnaire and the HCC. MARS-9 was already available in Portuguese requiring validation for breast cancer patients, which will include psychometric testing. Patients' sociodemographic variables and treatment regimens will be collected from medical records and supplemented with interviews. The questionnaire will be made available electronically and in paper as self- or interviewer-administered, according to patient's preferences and educational level.

**Conclusion** Identifying patterns of medication adherence and their determinants in this population will lead to the development of tailored service provision, involving multidisciplinary teams and technology, whenever appropriate.