

SCHEMA

SCREENING

ELIGIBILITY CRITERIA: People who: a) are age 18 years or older, b) have a diagnosis of cancer, c) completed surgery, radiation, and/or systemic intravenous anticancer therapy (e.g., chemotherapy, targeted therapy, immunotherapy) 2 or more months prior to enrollment (ongoing oral hormonal, targeted, or maintenance therapy allowed; intravenous supportive therapy is allowed), d) stable disease or no detectable disease, e) report WORST level of fatigue in the past week as moderate to severe (i.e., a score ≥ 4 on a 0-10 scale), f) are able to read and speak English, and g) are capable of providing written informed consent

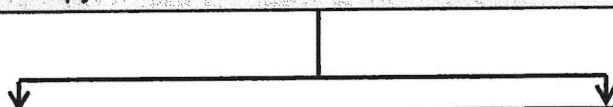


CONSENT, BASELINE, AND RANDOMIZATION

SAMPLE SIZE: 422 patients will sign informed consent

BASELINE DATA COLLECTED: Demographic and clinical information, cancer-related fatigue and quality of life (FACIT-F/FACT-G), depression (PROMIS Depression Short Form 8a), cognition (PROMIS Cognitive Function 8a, Cognitive Abilities 4a), insomnia (ISI), symptom inventory (MDASI, symptom interference), blood draw (inflammatory markers, NF-kB gene expression, CYP2B6 genotype), saliva collection (cortisol)

RANDOMIZATION: Random (50/50) block of 4 or 8 stratified by study site; previous receipt of chemotherapy; metastatic disease at time of enrollment; and current receipt of oral hormonal, targeted, or maintenance therapy



Arm 1

**Bupropion XL
(150 mg/capsule)**

Week 1: 1 capsule
Weeks 2-12: 2 capsules
Week 13: 1 capsule
Week 14: no capsules

N=211

Arm 2

**Placebo
(lactose supplementation)**

Week 1: 1 capsule
Weeks 2-12: 2 capsules
Week 13: 1 capsule
Week 14: no capsules

N=211



END OF STUDY ASSESSMENT

11-12 weeks after the start of the intervention

Cancer-related fatigue and quality of life (FACIT-F/FACT-G), depression (PROMIS Depression Short Form 8a), cognition (PROMIS Cognitive Function 8a, Cognitive Abilities 4a), insomnia (ISI), symptomatology (MDASI), adherence, dose reduction, early treatment discontinuation, blood sample (bupropion metabolites, inflammatory markers, NF-kB gene expression), saliva collection (cortisol)