

# Routine Evaluation of People Living with Cancer

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## Introduction

Cachexia is a debilitating condition associated with cancer, impacting both curative and palliative populations. The Routine Evaluation of People Living with Cancer (REVOLUTION) (IRAS: 272861) study characterizes cachexia in patients with incurable malignancies, while the REVOLUTION Surgery (IRAS: 311387) study focuses on those undergoing surgical resection. Understanding the evolution of cachexia across these distinct populations is crucial for developing targeted interventions. Preliminary results are reported.

## Methods

These combined observational studies assess longitudinal changes in body composition, physical function, systemic inflammation, and quality of life using imaging, inflammatory markers, patient-reported outcomes, and functional tests. In REVOLUTION Surgery, additional tissue samples (fat and muscle) are collected during surgery. Baseline demographics, including age, sex, cancer type, and treatment history, are recorded. Patients who experience recurrence following surgical resection in REVOLUTION Surgery may transition to the REVOLUTION study for continued follow-up.

## Results

REVOLUTION (n=120): 46.6% (n=56) female; median age: 70 years (IQR: 61-74); median BMI: 25.5kg/m<sup>2</sup> (IQR: 21.4 – 28.3).

REVOLUTION Surgery (n=40): 87.5% (n=35) male; median age: 62 years (IQR: 46-78); median BMI: 27kg/m<sup>2</sup> (IQR: 18-44.3).

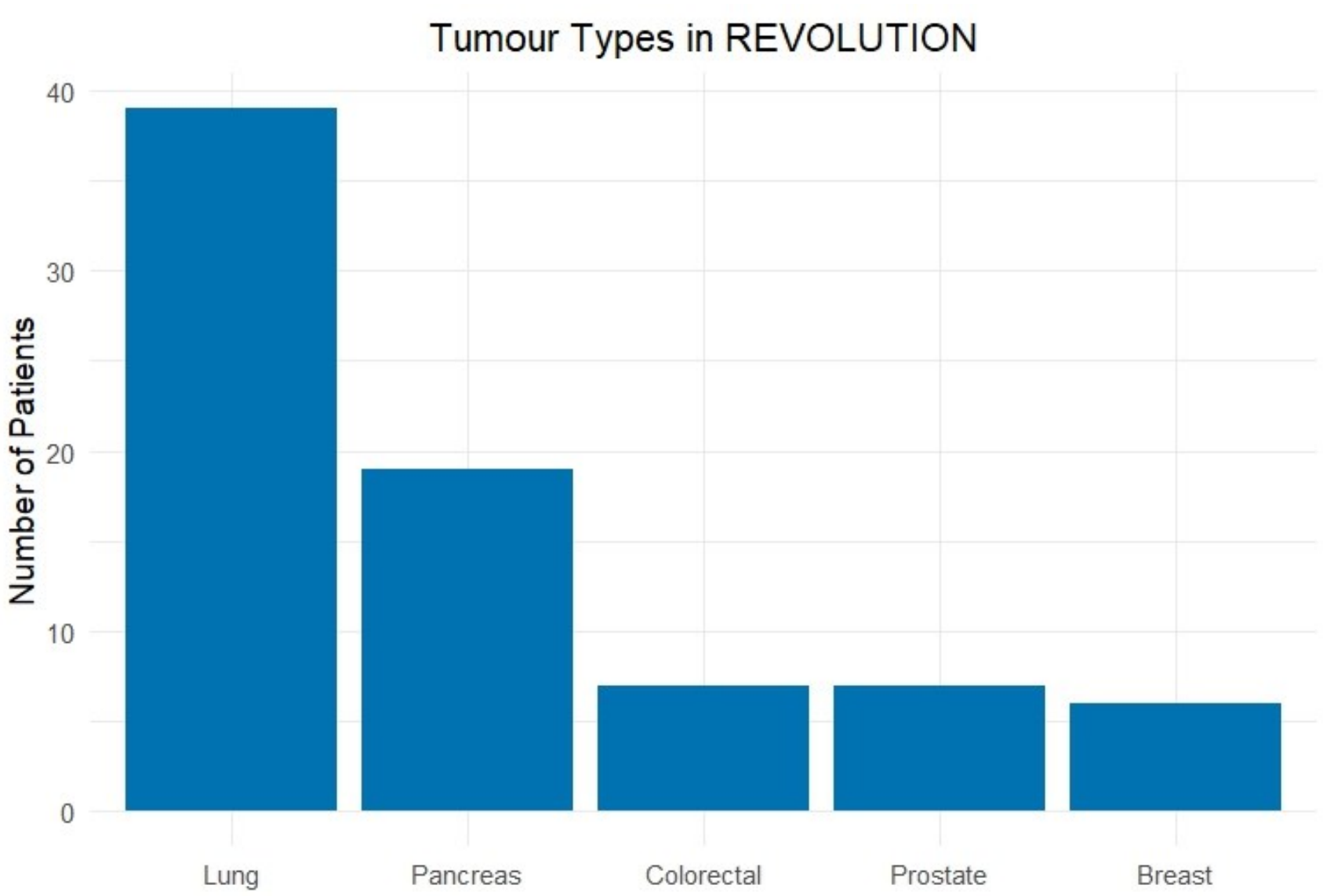


Figure 1: Breakdown of participants by 5 most frequent tumour types

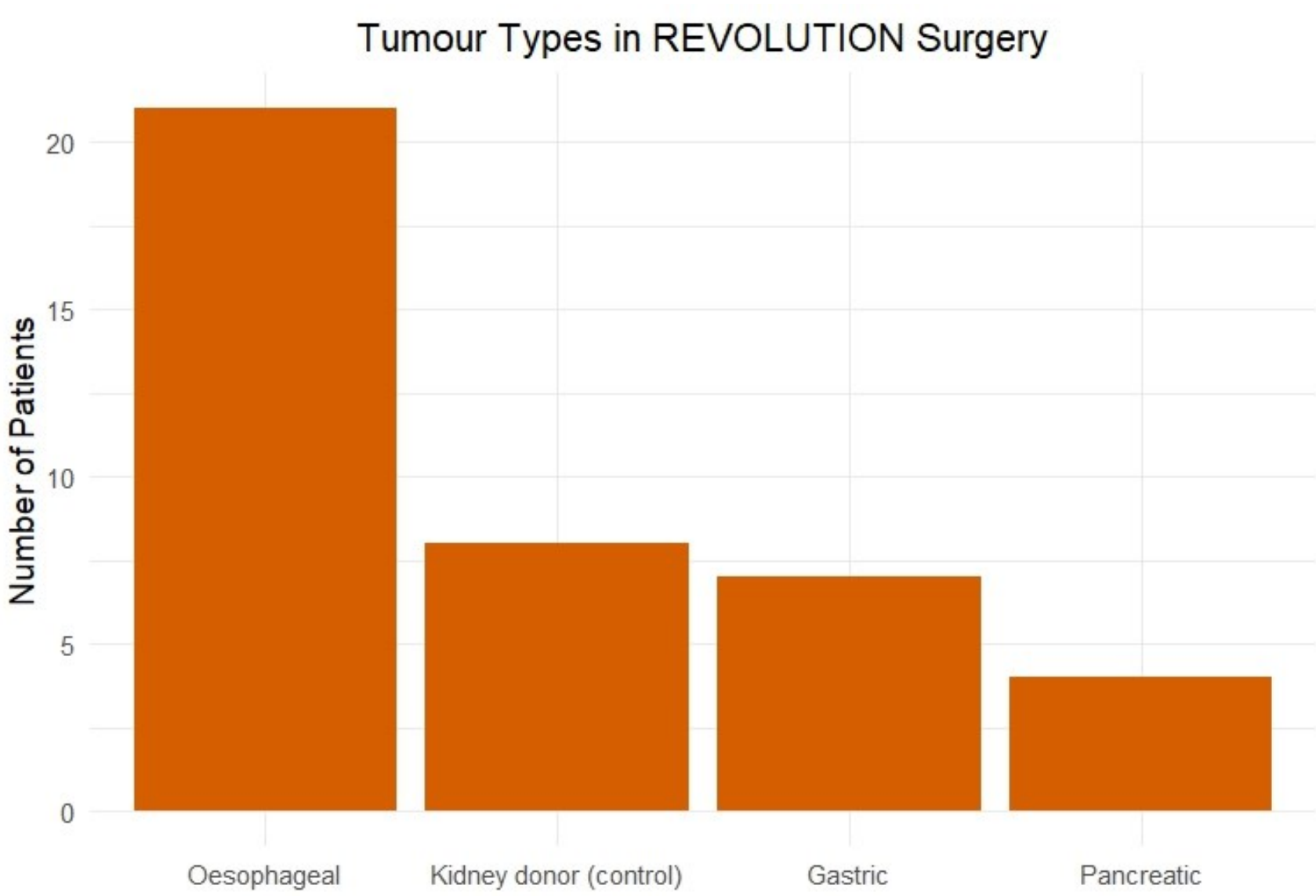


Figure 2: Breakdown of participants by tumour types

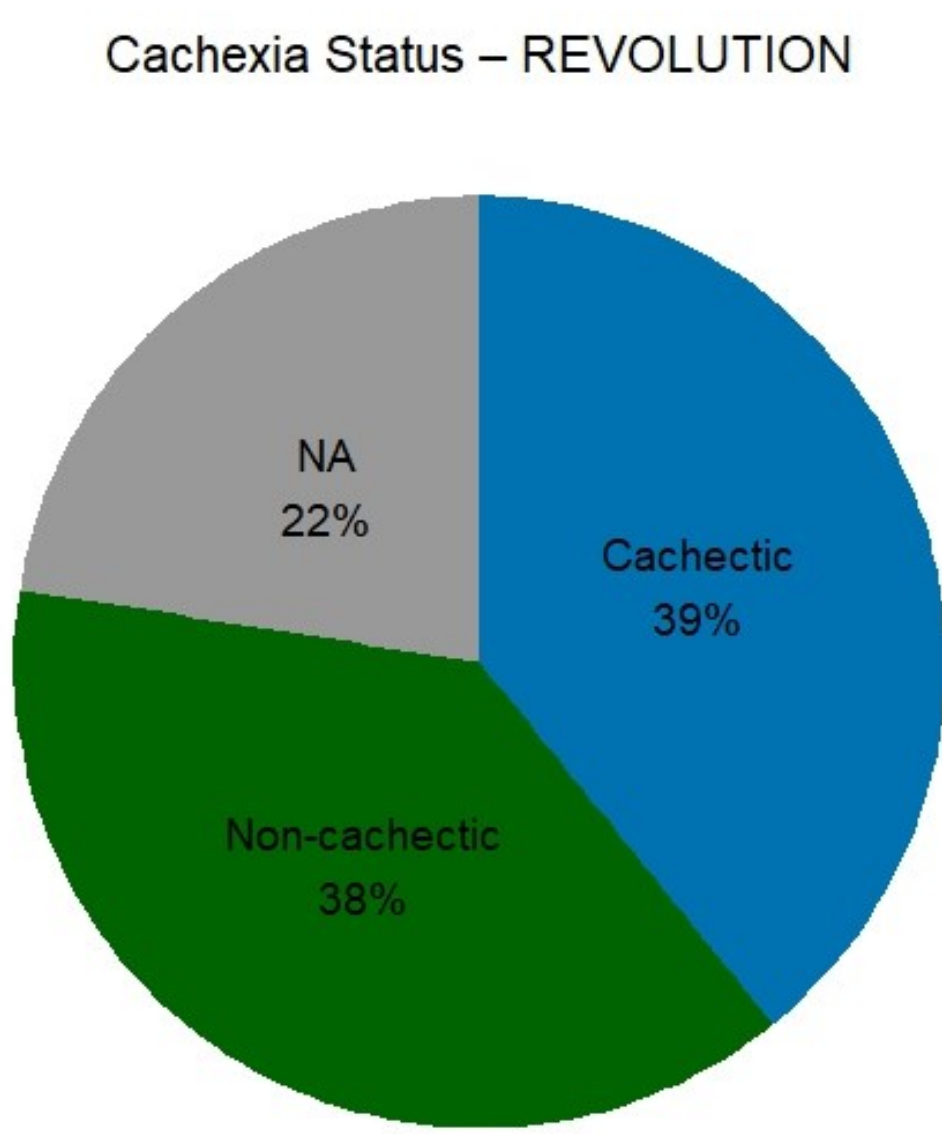


Figure 3: Proportion of participants with cachexia as per the Global Leadership Initiative on Malnutrition Criteria

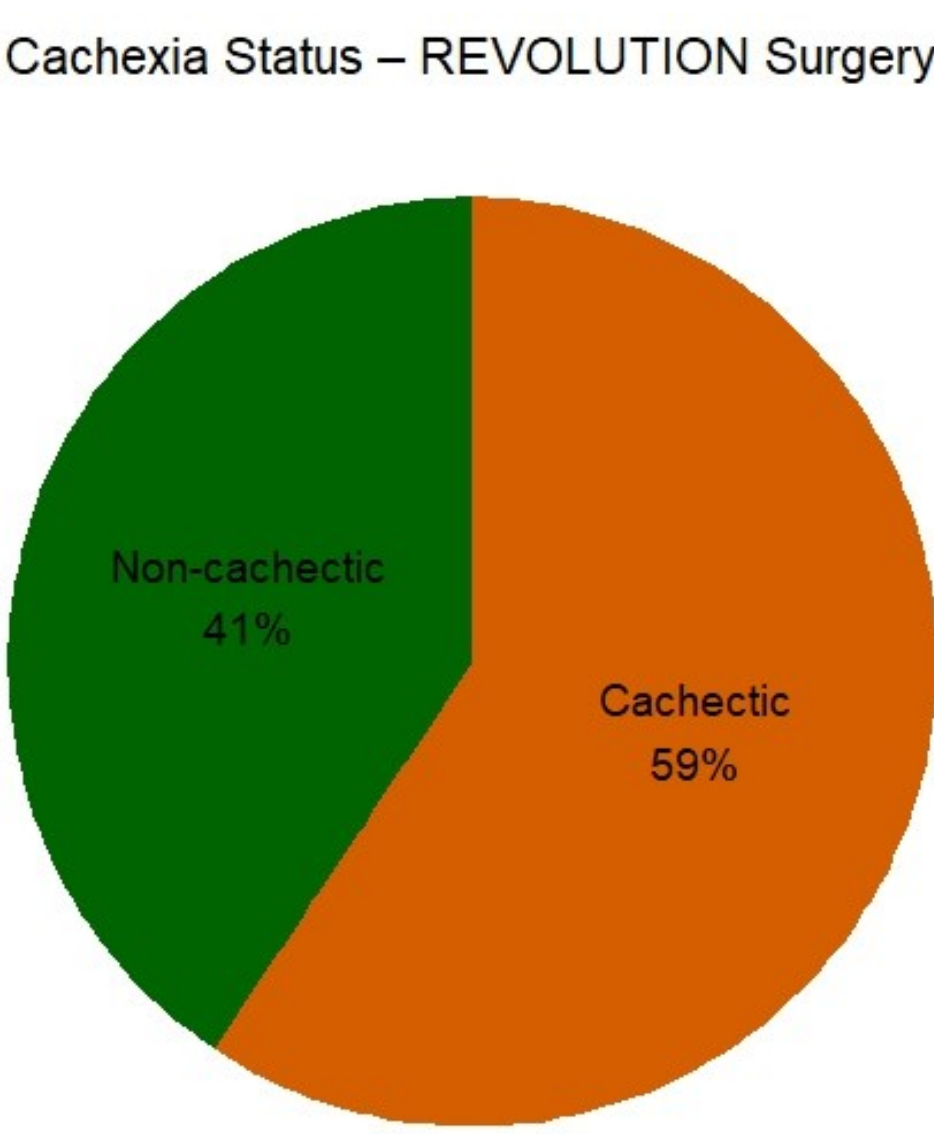
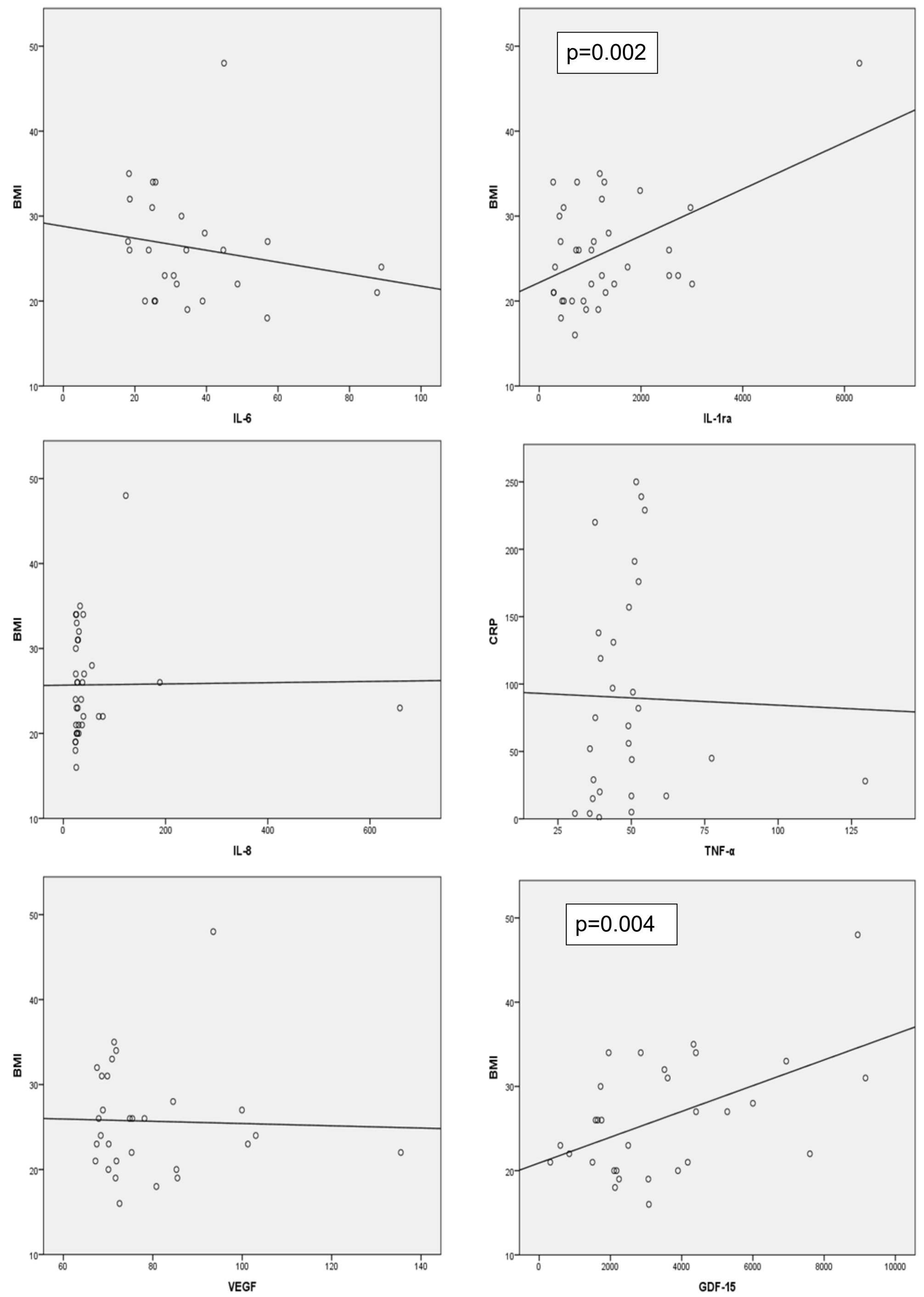


Figure 4: Proportion of participants with cachexia as per the Global Leadership Initiative on Malnutrition Criteria



## Conclusion

This study provides a comprehensive characterization of cachexia across different stages of cancer progression. By integrating findings from both cohorts, we aim to improve understanding of cancer cachexia, inform early interventions, and guide supportive care strategies for both curative and palliative patients. Further follow-up is required to assess longitudinal outcomes and validate potential prognostic biomarkers.