

# Clinical Characteristics, Biomarker Use, and Patient-Reported Burden in Platinum-Resistant Ovarian Cancer in Clinical Practice

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## Objectives

To characterize real-world PROC in the US, including patient demographics, clinical features, biomarker testing, treatment patterns, caregiving needs, and patient-reported outcomes

## Conclusions

- Treatment patterns were heterogeneous, with substantial use of off-pathway approaches and limited uptake of biomarker-driven therapies
- Physicians documented frequent fatigue, nausea, appetite loss, and weight loss; ~52% of patients required caregiver support, mostly for instrumental ADLs
- Predictive biomarkers were infrequently used in this PROC population; testing rates may vary by patient selection and timing as biomarker-driven care evolves: FRa was tested in only ~12% of patients, highlighting a gap with emerging ADC therapies
- PROs confirmed functional impairment and productivity loss, with all QLQ-C30 functional domain scores below the established thresholds; fatigue and insomnia were the most prominent symptoms, alongside limited employment and widespread activity impairment
- Significant unmet need persists in real-world PROC management, emphasizing the need for more effective therapies, broader adoption of biomarker-driven care, and improved supportive interventions

## Limitations

Results reflect PROC testing during 2023-2024; estimates may differ across data sources due to study design, patient population, and evolving biomarker adoption



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Additional treatment regimen details are provided in the e-poster appendix. Please scan the QR code to access.

## Abbreviations

ADC, antibody drug conjugate; ADL, activities of daily living; CA-125, cancer antigen 125; CBC, complete blood count; CEA, carcinoembryonic antigen; CK7, cytokeratin 7; ECOG-PS, Eastern Cooperative Oncology Group performance status; EORTC, European Organisation for Research and Treatment of Cancer; FRa, folate receptor alpha; HER2, human epidermal growth factor receptor 2; KRAS, Kirsten rat sarcoma viral oncogene homolog; LFT, liver function tests; MSI, microsatellite instability; PAX8, paired box gene 8; PD-L1, programmed death-ligand 1; PROC, platinum-resistant ovarian cancer; QLQ-C30, Quality of Life Questionnaire-Core 30; QLQ-OV28, Quality of Life Questionnaire-Ovarian Cancer Module 28; TMB, tumor mutational burden.

## Introduction

- Ovarian cancer (OC) is the third and second most prevalent gynecologic cancer globally and in the United States, respectively<sup>1,2</sup>
- While patients with OC initially respond to platinum-based chemotherapy, the majority develop platinum resistance, leading to poor survival outcomes<sup>3,4</sup>
  - Platinum-resistant ovarian cancer (PROC) is defined as disease recurrence within 6 months of completing platinum-based chemotherapy<sup>5</sup>
- Despite multiple approved treatment options for OC, effective therapies to treat patients who develop platinum resistance are limited.<sup>6</sup> Outcomes remain poor for patients with PROC,<sup>5,6</sup> highlighting the unmet need for more treatment options
- Real-world data that integrate physician-reported clinical characteristics with patient-reported outcomes (PROs) are needed to provide a complete picture of PROC disease burden, management patterns, and unmet needs

## Results

### Patient characteristics

- 104 patients with PROC were included, with a mean age of 62.1 years, moderate prior treatment exposure, and a diverse racial composition (Table)
- Disease burden was substantial, with varied histologies, reduced functional status (ECOG PS ≥1 in most patients), and a high prevalence of abnormal laboratory parameters (Table)

Table. Patient characteristics<sup>a</sup>

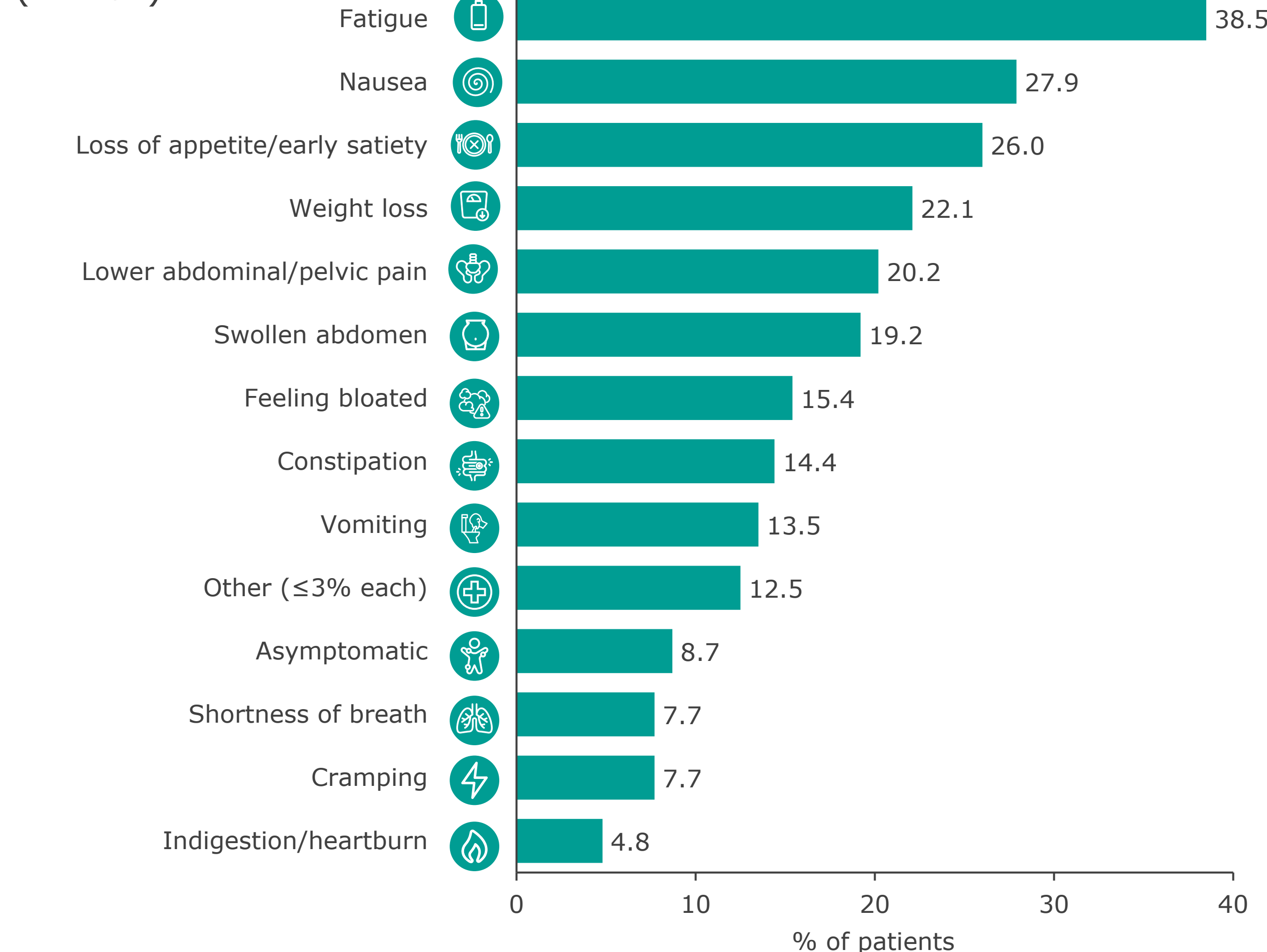
Characteristic	
Age, N [mean (SD)], years	104 [62.1 (10.6)]
BMI, N [mean (SD)], kg/m <sup>2</sup>	104 [25.8 (3.6)]
Total lines of systemic therapy, incl. current, N [mean (SD)]	104 [2.1 (0.4)]
Race <sup>b</sup> , n (%)	
White	59 (56.7)
Black/African American (incl. Caribbean)	36 (34.6)
South or Central American Native	2 (1.9)
East or Southeast Asian	6 (5.8)
South Asian (Indian subcontinent)	3 (2.9)
Ethnicity (Hispanic or Latino), <sup>c</sup> n (%)	
Yes	16 (16.2)
No	83 (83.8)
Histologic subtype, n (%)	
Serous epithelial	49 (47.1)
Endometrioid epithelial	21 (20.2)
Clear cell epithelial	14 (13.5)
Mixed epithelial	10 (9.6)
Carcinosarcoma	5 (4.8)
Transitional cell (Brenner)	4 (3.8)
Undifferentiated carcinoma	1 (1.0)
ECOG performance status, n (%)	
0 – Fully active	14 (13.5)
1 – Restricted in strenuous activity; ambulatory	48 (46.2)
2 – Ambulatory; unable to work; >50% awake time up	27 (26.0)
3 – Limited self-care; >50% in bed/chair	14 (13.5)
4 – Completely disabled	1 (1.0)
Most recent testing, n (%)	
Physical exam – Palpable disease	42 (40.4)
Blood chemistry – Abnormal	48 (46.2)
CA-125 – Abnormal	68 (65.4)
CBC – Abnormal	52 (50.0)
LFTs – Abnormal	24 (23.1)
Total serum protein – Abnormal	20 (19.2)

Percentages may not sum to 100% due to rounding. <sup>a</sup>Structured patient record form data. <sup>b</sup>Totals exceed N=104 as some patients selected multiple categories. <sup>c</sup>Ethnicity calculated among patients with known ethnicity (N=99). BMI, body mass index; CA-125, cancer antigen-125; CBC, complete blood count; LFTs, liver function tests.

### Physician-reported symptoms

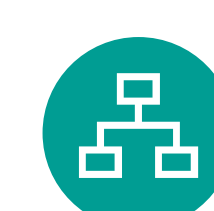
- Symptom burden was substantial, with most patients symptomatic at assessment (~9% asymptomatic) (Figure 1)
- Fatigue and gastrointestinal symptoms predominated, whereas shortness of breath and cramping (each 7.7%) were reported less frequently (Figure 1)

Figure 1. Physician-reported current symptoms in patients with PROC (N=104)



Other symptoms (≤3% each): bowel obstruction, urinary symptoms, vaginal bleeding, dyspareunia, lymphedema.

## Methods



**Study design & data source:** This was a retrospective, cross-sectional analysis using data collected from April 2023 to February 2024 through the Adelphi Real World US Ovarian Cancer Disease-Specific Program. Physicians completed structured patient record forms; patients independently completed validated PRO instruments



**Patient population:** Adult women (N=104) diagnosed with PROC were identified consecutively during routine clinical practice



**Data collection:** Participating US medical and gynecologic oncologists (managing ≥4 advanced OC patients/month) abstracted data for consecutively consulting PROC patients during routine care, regardless of prior biomarker testing status. Physician-reported data included demographics, disease characteristics, laboratory results, symptom burden, caregiving/activities of daily living (ADL) support needs, biomarker testing, and treatment history; patient-reported (n=23) data included EORTC QLQ-C30, QLQ-OV28, and Work productivity and activity impairment (WPAI) questionnaires

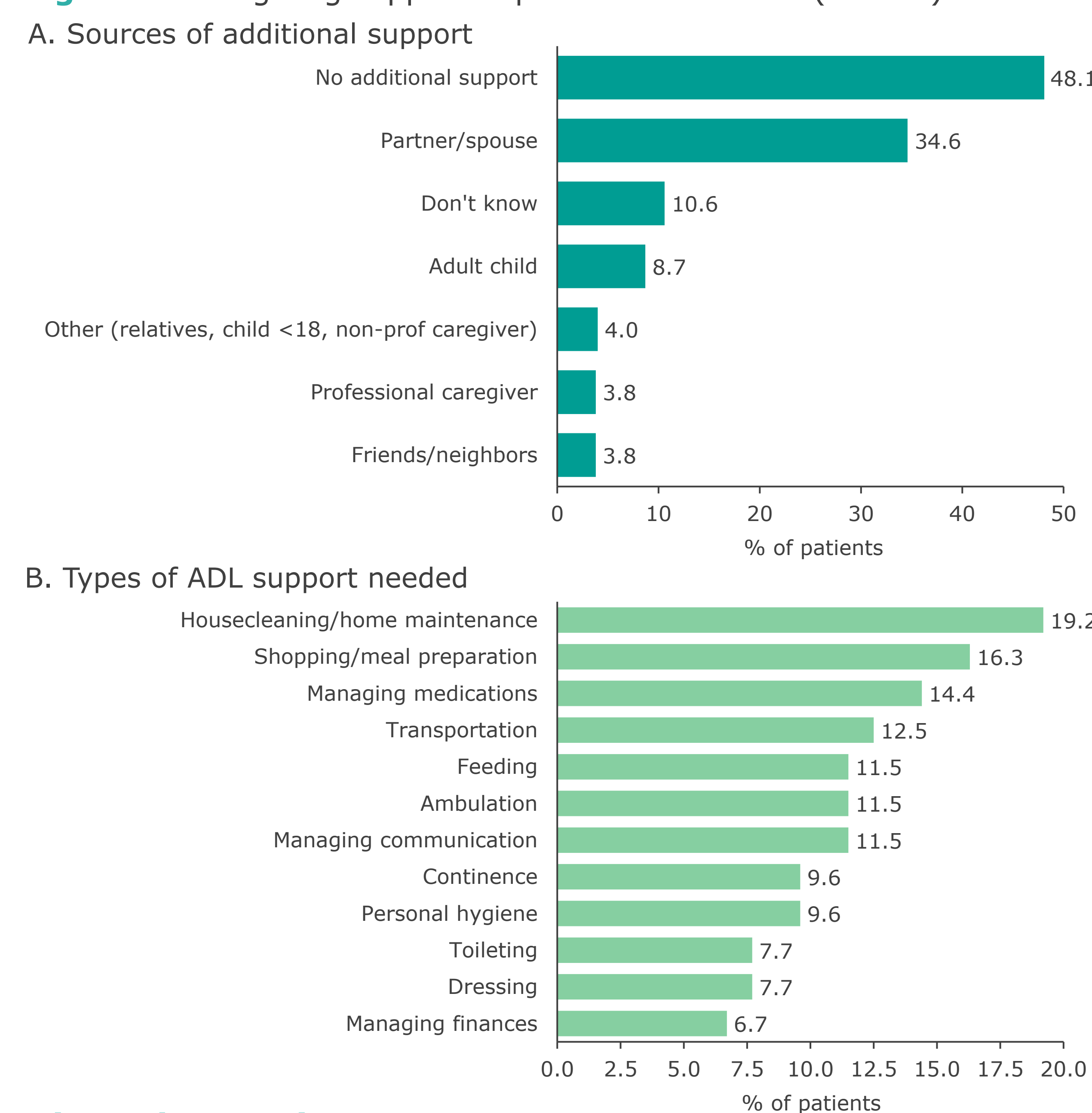


**Statistical analysis:** All analyses were descriptive; continuous variables were reported as means (SD) and categorical variables as n (%). PRO domain scores were calculated per EORTC scoring manuals (0–100 scale). No formal hypothesis testing or data imputation was performed

### Caregiving and supportive care needs

- Over half of patients with PROC required caregiver support, highlighting the substantial indirect burden on families and support networks (Figure 2)
  - ~52% of patients required additional support, mostly provided by partners/spouses, with limited reliance on formal caregivers (Figure 2A)
  - Assistance needs were primarily related to instrumental ADLs (Figure 2B)

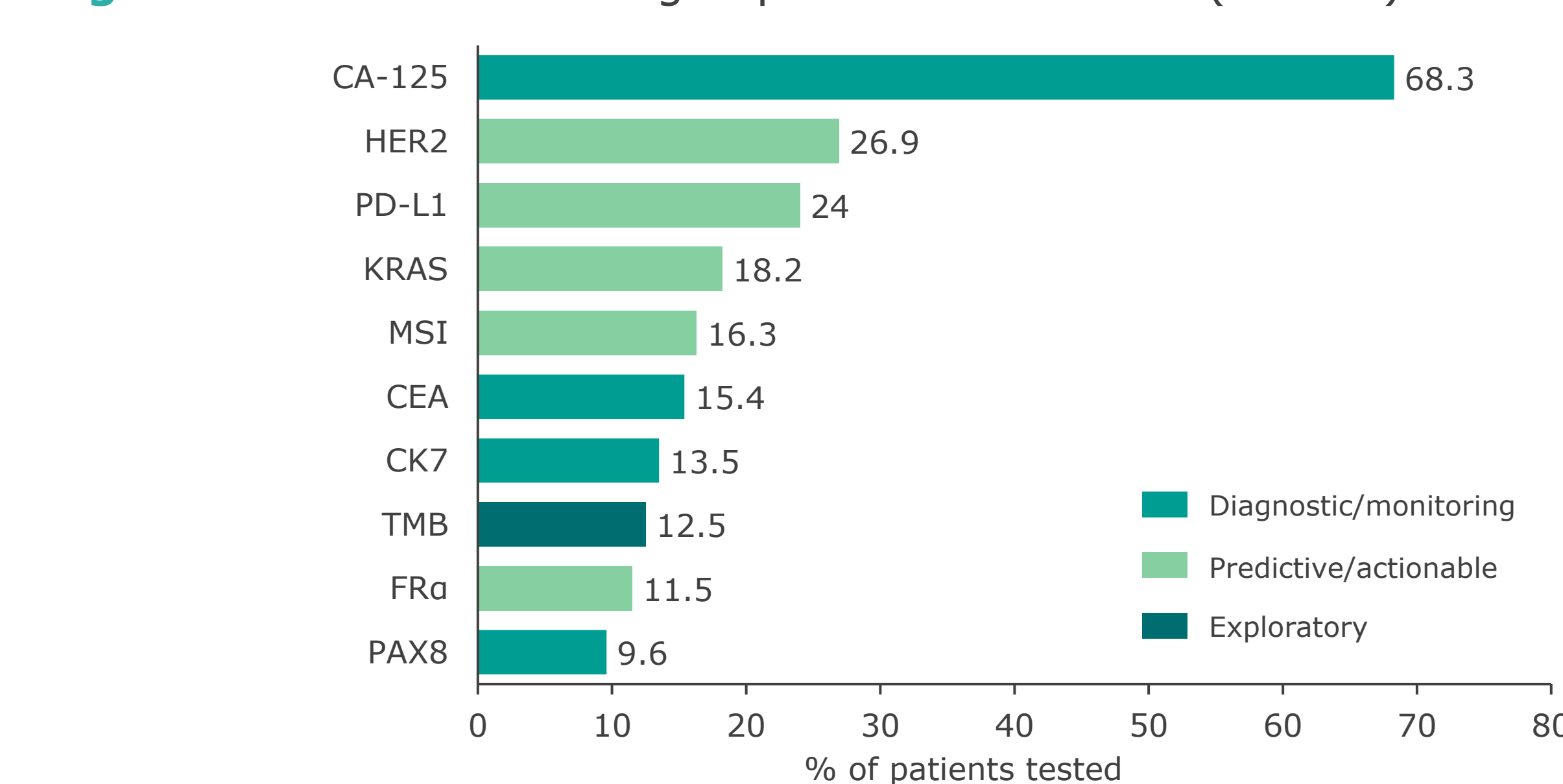
Figure 2. Caregiving support in patients with PROC (N=104)



### Biomarker testing patterns

- Diagnostic/monitoring biomarkers dominated clinical practice, followed by predictive/actionable testing; exploratory testing remained limited
  - Among the top 10 individual biomarkers, CA-125 was most frequent (68.3%); predictive testing was low with HER2 (26.9%), PD-L1 (24.0%), and MSI (16.3%) (Figure 3)
  - FRa was tested in only ~12% of patients during the study period, despite its emerging role as a predictive biomarker for FRa-targeted antibody-drug conjugate (ADC) therapies (Figure 3)

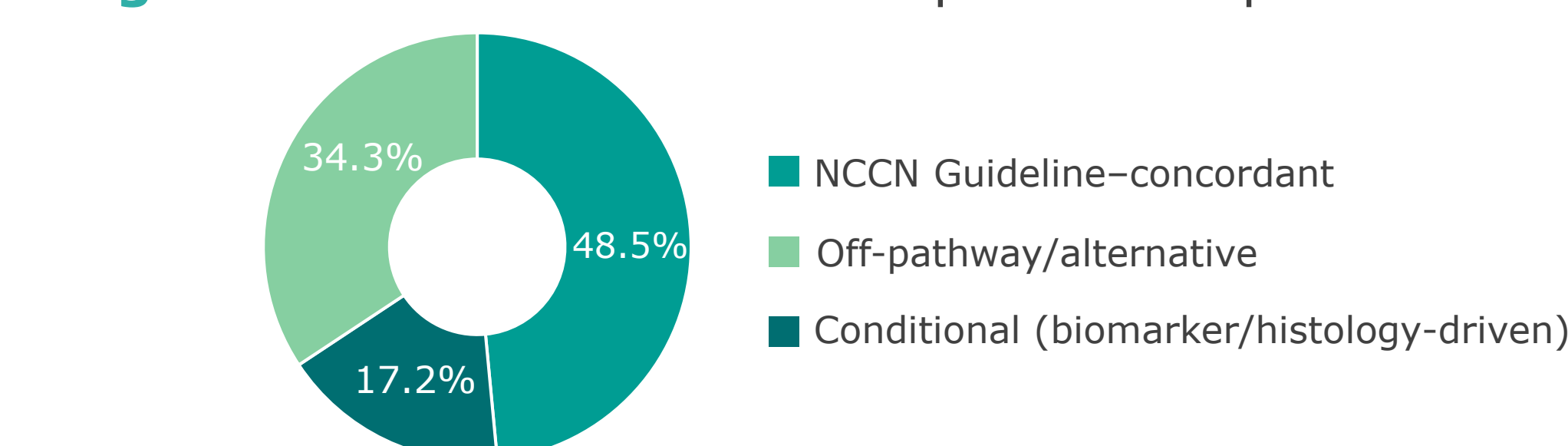
Figure 3. Biomarker testing in patients with PROC (N=104)



### Real-world treatment patterns

- Of 99 patients, approximately half received National Comprehensive Cancer Network (NCCN) guideline-concordant chemotherapy (± bevacizumab); over one-third of patients received off-pathway regimens or alternative approaches, including platinum rechallenge, immunotherapy, and investigational combinations (Figure 4)
- A small proportion (17.2%) had NCCN guideline-aligned, biomarker-driven therapy (eg, PARP inhibitors, hormonal therapy) (Figure 4)

Figure 4. Real-world treatment patterns in patients with PROC (n=99)



Top agents: liposomal doxorubicin (± bevacizumab), topotecan, paclitaxel, olaparib (BRCA+), pembrolizumab.

### Patient-reported outcomes

- Mean QLQ-C30 scores indicated moderate impairment in physical and emotional functioning (ie, below the established thresholds for clinical importance<sup>7</sup>), with similar trends observed across other functional domains. Key symptom burdens included fatigue, insomnia, pain, nausea/vomiting, and appetite loss (Figure 5A)
- QLQ-OV28 scores showed notable impact on psychosocial domains, including attitude to disease and treatment, body image, and sexual worry. Abdominal/gastrointestinal and hormonal symptoms, as well as chemotherapy-related side effects, were also meaningfully affected, reflecting physical burden (Figure 5B)
- Per WPAI responses, employment was limited, with only one-third of patients working. Among those employed, most reported moderate-to-severe impairment of work productivity (Figure 6A)
- Daily functioning was substantially affected; most patients reported moderate or severe activity impairment, while very few indicated no impact (Figure 6B)

Figure 5. EORTC QLQ scores in patients with PROC

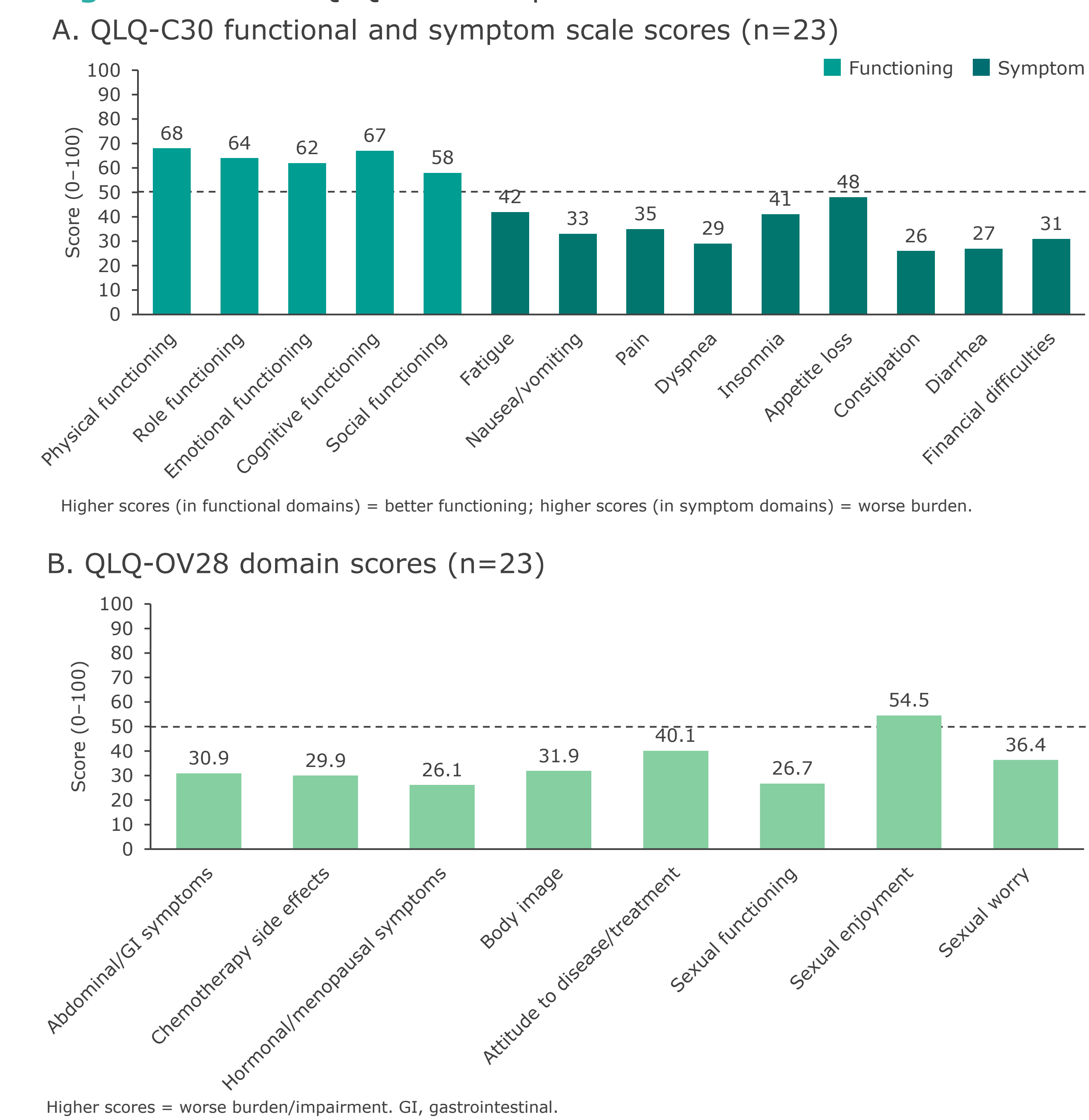
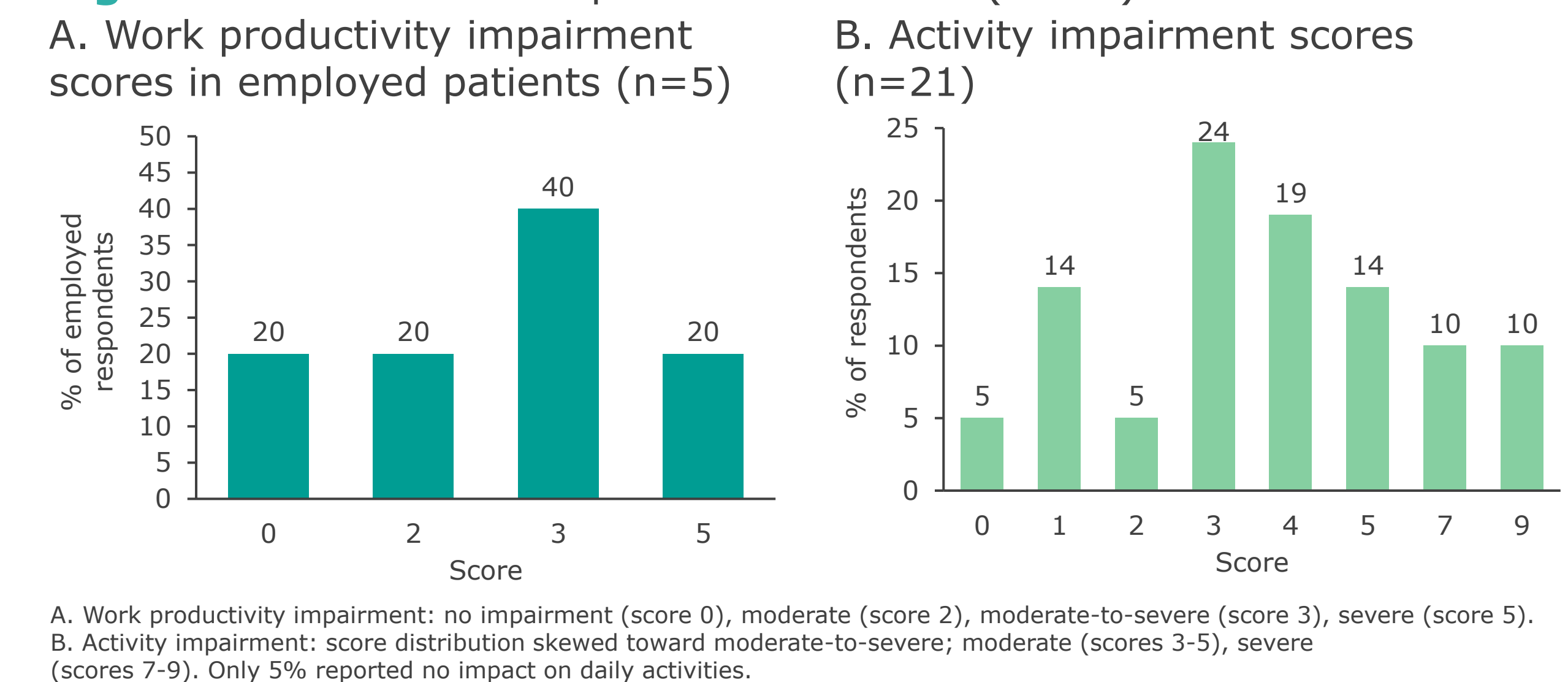


Figure 6. WPAI results in patients with PROC (n=21)



A. Work productivity impairment: no impairment (score 0), moderate (score 2), moderate-to-severe (score 3), severe (score 5). B. Activity impairment: score distribution skewed toward moderate-to-severe; moderate (scores 3-5), severe (scores 7-9). Only 5% reported no impact on daily activities.

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## Appendix. Treatment regimens (N=99)

Category	Therapy	n
<b>NCCN guideline-aligned chemotherapy (48.5%)</b>	Liposomal doxorubicin	16
	Liposomal doxorubicin + bevacizumab	13
	Topotecan	7
	Gemcitabine	3
	Paclitaxel	3
	Paclitaxel + bevacizumab	2
	Other combinations	4
<b>PARP inhibitors/conditional (17.2%)</b>	Olaparib	8
	Rucaparib	2
	Niraparib ± combinations	1
	Hormonal therapies (tamoxifen, anastrozole, megestrol, leuprolide)	6
<b>Off-pathway/alternative (34.3%)</b>	Pembrolizumab	6
	Carboplatin	4
	Doxorubicin	4
	Cisplatin	3
	Docetaxel ± bevacizumab	3
	Oxaliplatin	2
	Ifosfamide	2
	Multidrug/investigational combinations	10

NCCN, National Comprehensive Cancer Network.