Depression and associated characteristics in older oncology patients at initiation of chemotherapy

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Introduction

- Depression is one of the most prevalent causes of distress in older adults with and without cancer
- The prevalence of depression increases in older adults receiving chemotherapy
- Study purposes were to evaluate for the prevalence of and risk factors for depression prior to the initiation of chemotherapy

Methods

- N = 139, age ≥ 60 years, diagnosed with gynecological or colorectal cancer
- Depressive symptoms measured using the Center for Epidemiological Studies-Depression scale (CES-D). Cut-off score of ≥ 16 indicates depression
- Multivariate regression analyses determined demographic and clinical characteristics associated with higher depression scores

Results

- Mean CES-D score was 11.6
- 27% reported scores above the cut-off of ≥16
- Associations with higher CES-D scores:
  - higher number of comorbidities
  - female gender
  - lower hemoglobin levels
  - lower Karnofsky Performance Status score

Conclusion

- Clinicians should consider the burden of comorbidities in older adults at initiation of chemotherapy

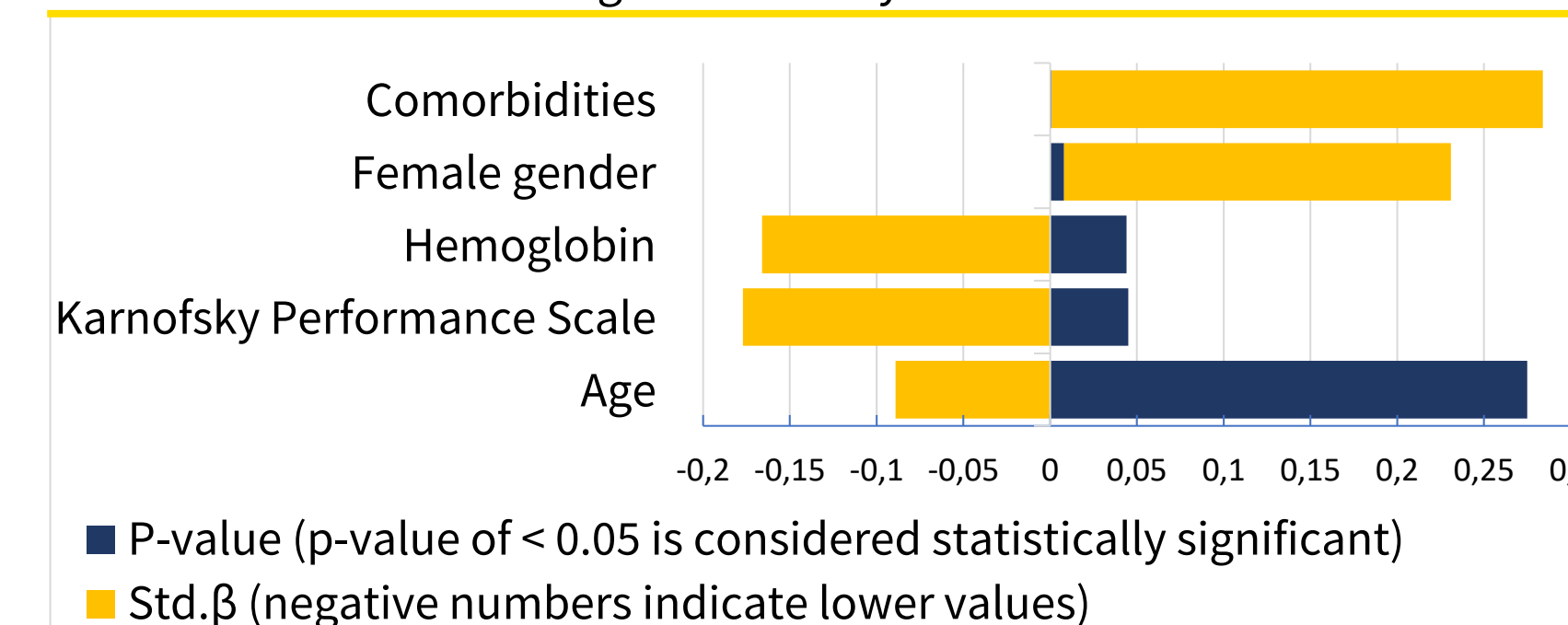# Age is not associated with depression in older oncology patients

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Demographic and Clinical Characteristics

Characteristic	Mean (SD)
Age (years)	70.5 (6.4)
Karnofsky Performance Status score	86.7 (10.9)
Body mass index (kg/m²)	25.8 (6.0)
Number of comorbidities	1.9 (1.8)
Hemoglobin (g/dl)	12.6 (1.7)
	n (%)
Female gender	130 (93.5)
Married or partnered (% yes)	83 (62.9)
Education	
Primary school	19 (16.0)
High school	56 (47.1)
College	44 (37.0)

Abbreviations: dl = deciliters, g = grams, kg = kilograms, m2 = meters squared, SD = standard deviation

Demographic and Clinical Characteristics Associated with Higher CES-D Scores in Multivariable Regression Analysis

- ■ P-value (p-value of < 0.05 is considered statistically significant)
- ■ Std.β (negative numbers indicate lower values)

Univariable and Multivariable Regression Analyses of Demographic and Clinical Characteristics and Severity of Depression

Variable	Univariable analysis				Multivariable analysis		
	Adj. R²	Std. β	95 % CI	p-value	Std. β	95 % CI	p-value
Age	-.002	-.080	-.335, .129	.380	-.089	-.320, .092	.275
Gender (ref. male)	.070	.278	3.448, 14.901	.002	.223	1.939, 12.759	.008
Karnofsky Performance Status	.109	-.342	-.388, -.129	.000	-.177	-.264, -.003	.045
Body mass index (kg/m²)	.010	.137	-.060, .428	.137			
Number of comorbidities	.106	.337	.764, 2.326	.000	.283	.550, 2.075	.001
Hemoglobin (g/dl)	.042	-.224	-2.165, -.261	.013	-.166	-1.783, -.024	.044
Marital status (ref. married)	.021	.172	-.118, 5.948	.059			
Education (ref. higher education)	.005	.116	-1.194, 5.190	.217			

Abbreviations: Adj. R² = Adjusted R-squared, CI = Confidence Interval, dl = deciliters, g = grams, kg = kilograms, m² = meters squared, ref. = reference, Std. β = Standardized beta