

BACKGROUND

- AML is an aggressive and costly cancer to treat, which often results in lower quality of life, including worse and more frequent depression and anxiety, physical strains, and financial toxicity.
- AML can also have a considerable impact on social well-being, including personal and work domains. While individual social impacts of cancer are often considered, we propose that social toxicity is a unique construct—much like financial toxicity—that should be measured as such.

AIMS

- Determine the feasibility of creating a composite measure of social toxicity
- Examine the prevalence of social toxicity in AML patients and survivors and its relationship to other patient reported outcomes.

METHODS

- From Jan-Mar 2023, **109 participants with AML** from the Cancer Support Community's Cancer Experience Registry® provided sociodemographic and clinical history information, and completed at least 50% of items pertinent to social toxicity, including:
 - PROMIS Social Function scale (transformed into a T-score)
 - 3 items on CancerSupportSource (CSS)
 - Employment status
 - Medication interference
- A social toxicity composite score was calculated by summing the number of indicators present (possible range = 0-6), with higher scores indicating more social toxicity (see Figure 1).
- Lastly, we investigated the relationship between social toxicity and patient reported outcomes, including anxiety and depression (PROMIS-29 4-item T-scores) and financial toxicity (11-item FACIT-COST).

PARTICIPANTS

N = 109	Mean/n	SD/%
Age (years) (range 29-86)	M=63.6	SD=13.3
Race & Ethnicity		
Non-Hispanic White	n=91	84%
Non-Hispanic Black or African American	n=4	4%
Non-Hispanic American Indian/Alaska Native	n=3	3%
Hispanic	n=6	6%
Non-Hispanic other/Multiracial	n=3	3%
Gender Identity		
Woman	n=63	58%
Man	n=43	39%
Relationship Status		
Married or in a serious relationship	n=74	68%
Divorced, separated, or widowed	n=20	18%
Single or dating	n=13	12%
Household Income		
Less than \$40,000	n=19	17%
\$40,000 - \$79,999	n=33	30%
\$80,000 - \$119,999	n=10	9%
\$120,000 and above	n=20	18%
Years Since Diagnosis (range 0-36)	Median=2	
Currently in Treatment	n=57	52%
PROMIS Anxiety T-score	M=54.2	SD=10.8
PROMIS Depression T-score	M=50.8	SD=9.6
FACIT-COST	M=21.6	SD=3.0

Note: Data for "I don't know" and "Prefer not to share" response options omitted from table.

RESULTS

Figure 1. Calculating Social Toxicity and the percent of sample (N=109) endorsing each indicator

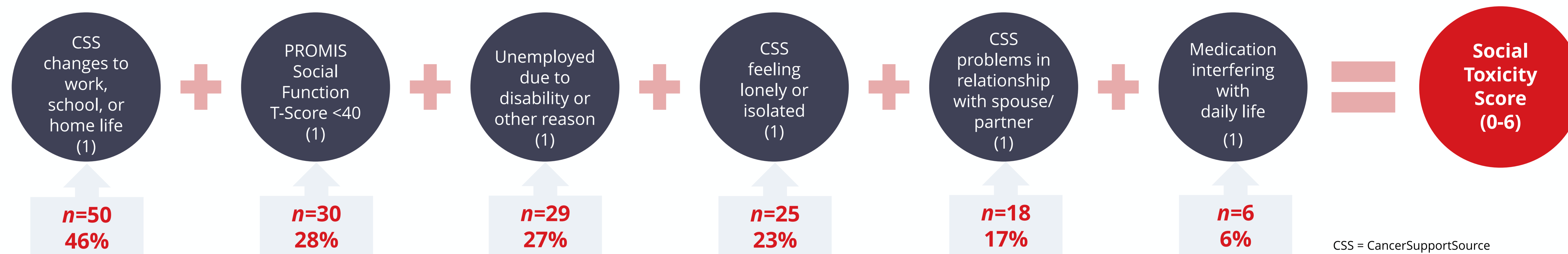


Figure 2. Social Toxicity score frequency and descriptives for all participants and those in current treatment vs. not

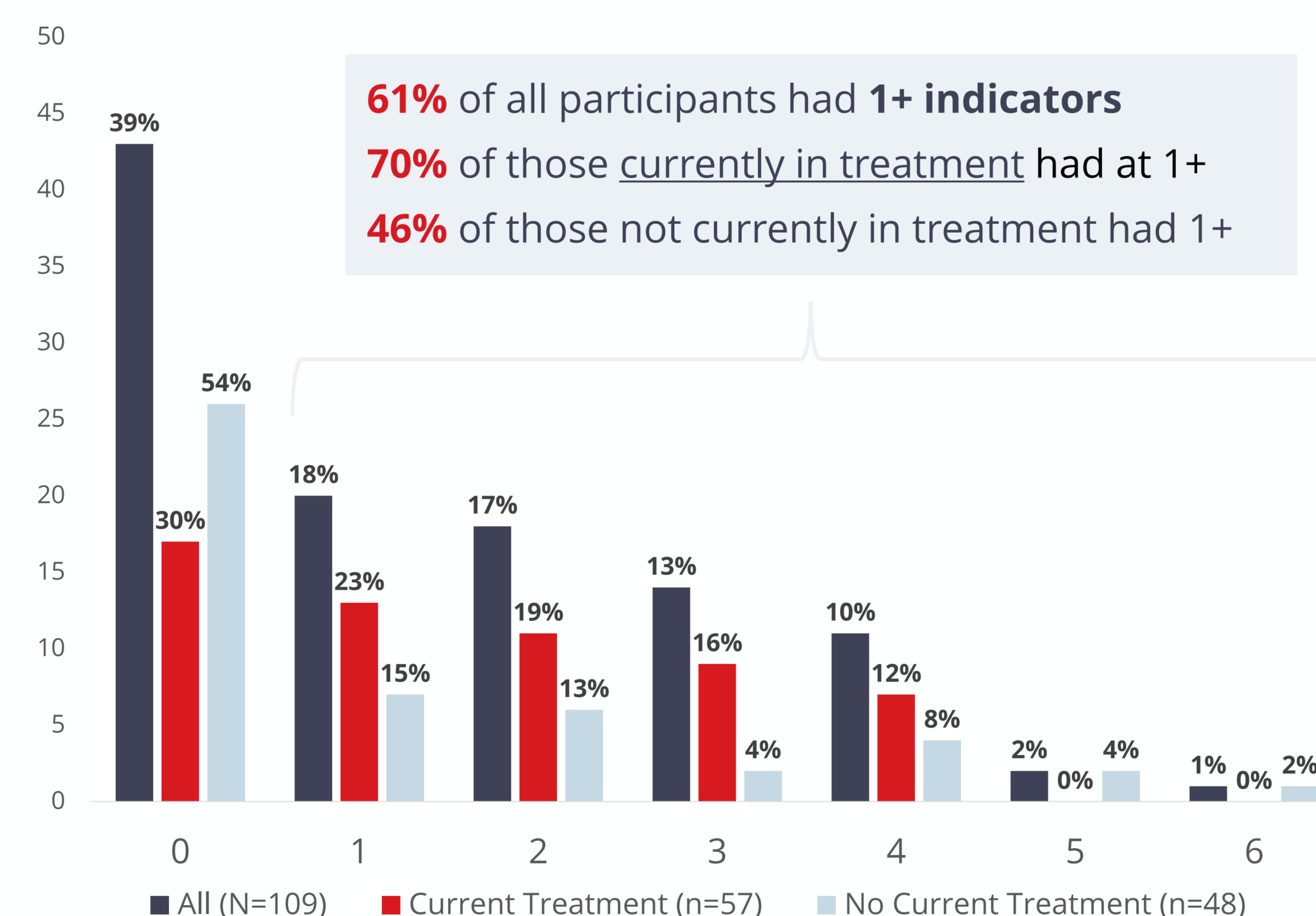
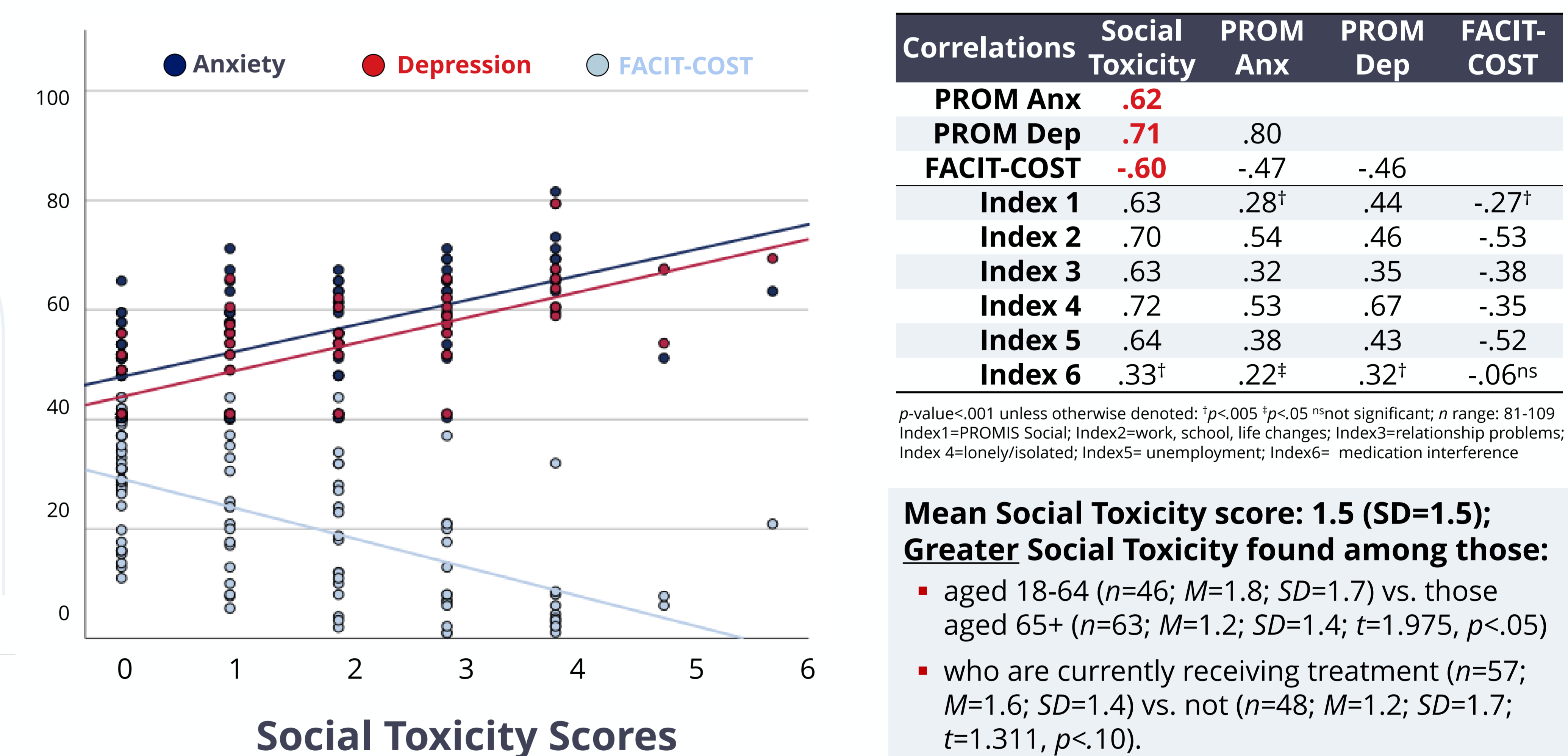


Figure 3. Social Toxicity correlations with anxiety, depression, and financial toxicity and between-group analyses based on age and treatment status



CONCLUSIONS AND IMPLICATIONS

- The current findings suggest that **social toxicity—negative social impact due to cancer diagnosis or treatment—can be assessed using a composite score** of indices that reflect individuals' social activity and well-being across multiple life domains.
- While 39% of the sample reported no social toxicity, **61% had at least one of the selected indices, with the most frequent being changes in work, school, or home life.** For those currently receiving treatment, 70% had at least one indicator of Social Toxicity compared to 46% of those not currently in treatment.
- Social toxicity was significantly related to other patient reported outcomes** with a larger magnitude correlation than that observed for individual indices, including anxiety, depression, and financial toxicity, thus indicating its potential importance in the larger cancer landscape, **especially for those younger than 65 and those currently receiving treatment.**
- Social toxicity is particularly important to investigate for patients dealing with aggressive and costly cancers, such as AML,** and methods of measurement for assessing social toxicity should continue to be explored in additional clinical populations to better align individuals with tailored support resources.

ACKNOWLEDGMENTS

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