

Understanding the Collateral Damage of Treating Acute Myeloid Leukemia: An Estimate of Patient-Reported Side Effect Rates from a National Survey



THE OHIO STATE UNIVERSITY

WEXNER MEDICAL CENTER

Norah L Crossnohere¹, Daniel Richardson², Susan Love³, Crystal Reinhart⁴, B Douglas Smith⁵, Bernadette O' Donoghue⁶, John FP Bridges¹

¹. The Ohio State University College of Medicine, ². University of North Carolina School of Medicine, ³. Dr. Susan Love Research Foundation, ⁴. University of Illinois Urbana-Champaign School of Social Work, ⁵. The Johns Hopkins University School of Medicine, ⁶. Leukemia and Lymphoma Society

Background

Acute myeloid leukemia (AML) is a cancer of myeloid progenitors resulting in bone marrow failure. AML treatment is often aggressive and results in **short- and long-term side effects**. The objective of this research was to document the **prevalence** and **severity** of treatment side effects.

Methods

A national survey was conducted in partnership with the Leukemia & Lymphoma Society to recruit AML patients and caregivers.

- Univariate analysis explored side effect severity & prevalence
- T-tests assessed differences in patient and caregiver reports

Study recruitment

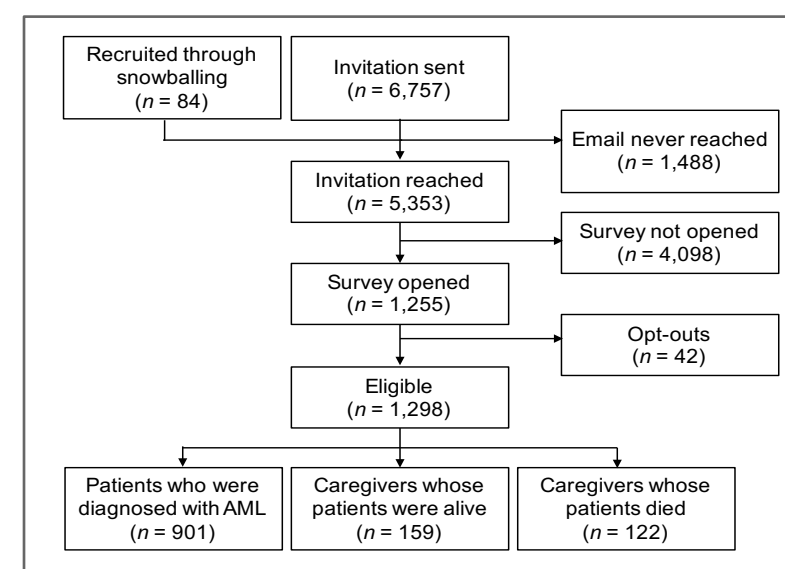
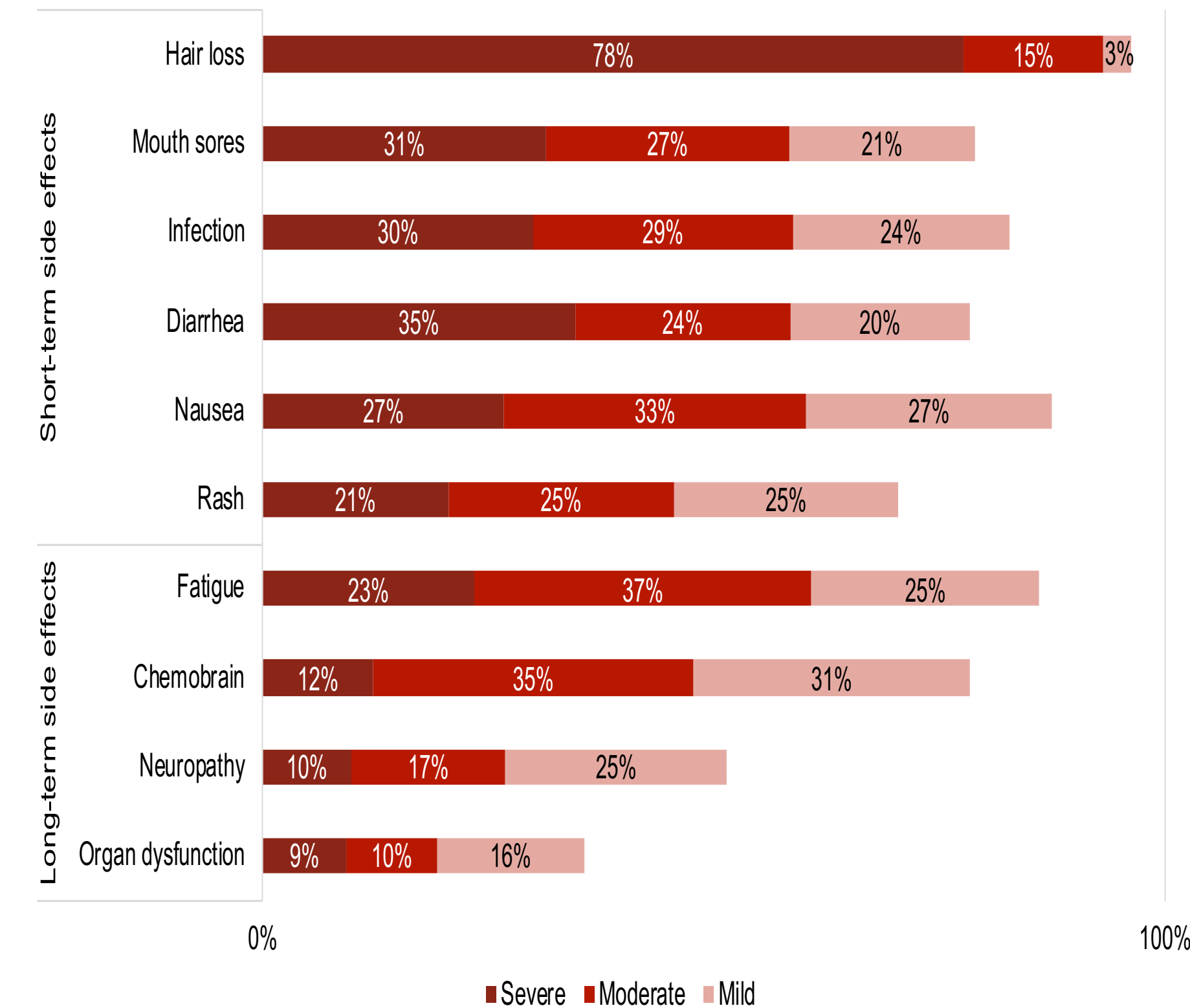


Table. Participant characteristics, n=1182

Survey participant characteristics		n (%)
Participant role	Patient	901 (76)
	Caregiver	281 (24)
Gender	Woman	689 (65)
Age (mean, range)	55 years (19 – 87 years)	
Race/ethnicity	White/Caucasian	735 (88%)
Education	College or higher	549 (66%)
Insurance	Private insurance	652 (79%)
Clinical characteristics of patient		n (%)
Time since diagnosis	8 years (1 – 40 years)	
Treatments	Chemotherapy	1165 (99%)
	Radiation	247 (20%)
Disease status	In remission	1002 (87%)

Results

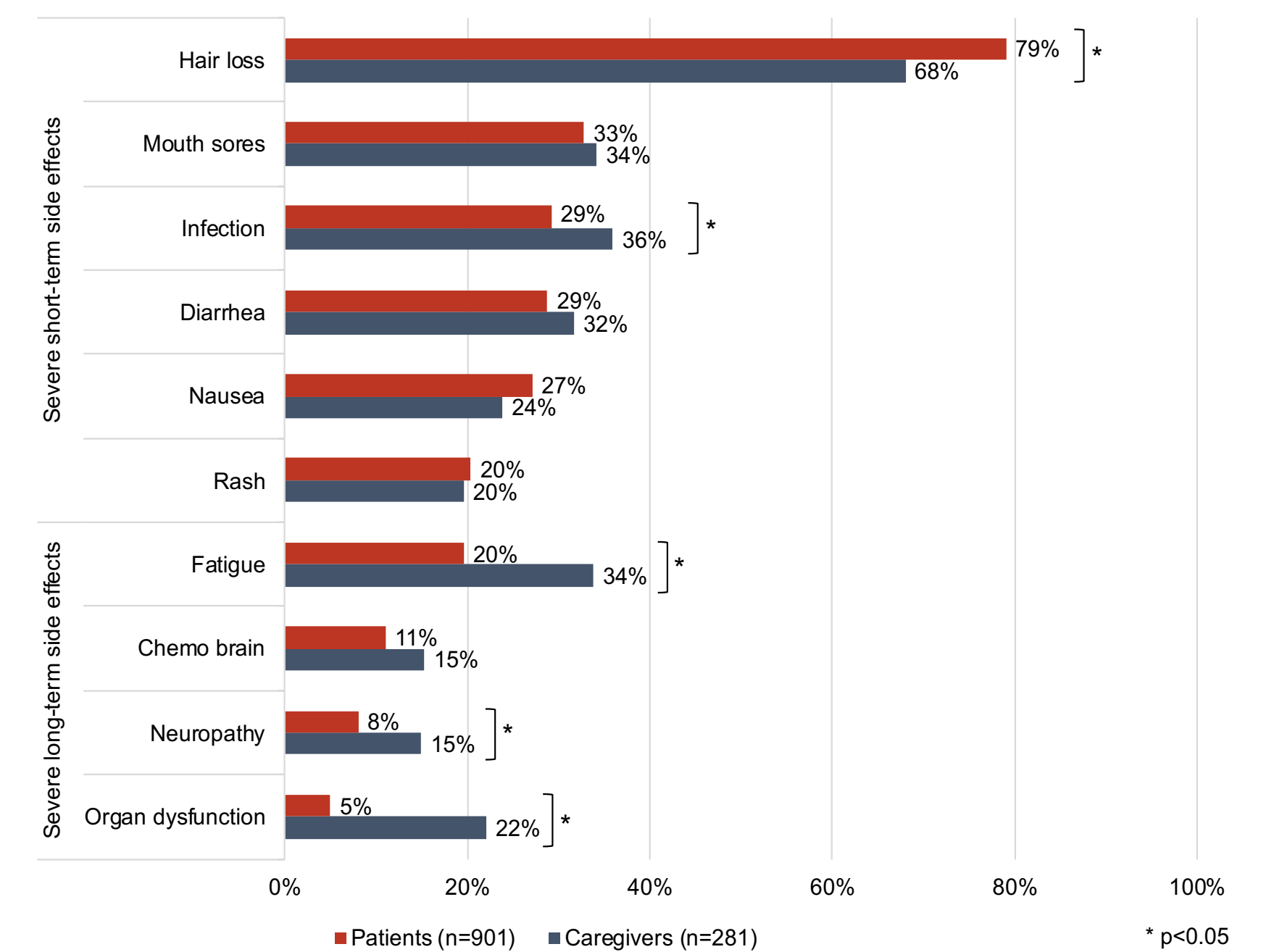
Fig 1. Side effect prevalence and severity



- 87% reported a severe short-term effect
- 33% reported a severe long-term effect
- 75% reported one or more moderate short-term side effects, and 60% reported one or more moderate long-term side effects.
- Hair loss and fatigue were the most common severe short- and long-term side effects (78%, 33%, respectively).
- 11% reported no severe side effects
- There was a moderate correlation between having short- and long-term side effects (r=0.41, P<0.001).

Results, continued

Fig 2. Reported side effects, patient and caregiver



- Caregivers were more likely to report severe infection, organ dysfunction, fatigue, and neuropathy (P-values<0.05).
- Patients were more likely to report severe hair loss (P<0.05).

Conclusions

AML survivors experience a **high burden** of side effects **from treatments**, underscoring the **need for less toxic therapies**. Differences in patient and caregiver reported side effect severity highlight the importance of sampling from diverse groups to capture full treatment burden.

