



## The 65th ASH Annual Meeting Abstracts

## ONLINE PUBLICATION ONLY

## 906. OUTCOMES RESEARCH-MYELOID MALIGNANCIES

**Financial Toxicity and Quality of Life in Patients Taking Oral Therapy for Hematologic Malignancies**

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*Background*

There has been an increase in the use of oral agents for the treatment of hematologic malignancies. Though clinically efficacious and convenient, oral therapies often have higher out-of-pocket cost than intravenous medications due to differences in insurance coverage. High financial burden and sequelae thereof, known as financial toxicity (FT), can negatively impact patient mood, adherence, quality of life (QoL), and outcomes. We present cross-sectional data from a longitudinal survey to evaluate the economic, psychosocial, and QoL impact of oral anti-cancer medications (OAMs) in the treatment of hematologic malignancies.

*Methods*

We used database query to identify patients at a midwestern, tertiary care, academic medical center who were 18 years or older and were prescribed Enasidenib, Ivosidenib, Venetoclax, Gilteritinib, Midostaurin, Ibrutinib, Acalabrutinib, Imatinib, Nilotinib, Ponatinib, Bosutinib, Duvelisib, or Idelalisib within the past 3 months. Chart review confirmed medication initiation within the past 3 months for a diagnosis of MDS, AML, CML, ALL, CLL, HL, or NHL. Patients were recruited by phone and consented by email. Consenting patients were sent an 85-item online survey assessing sociodemographic information, treatment-related information, and validated surveys, including the Functional Assessment of Cancer Therapy (FACT-G7) and Comprehensive Score for Financial Toxicity (COST) questionnaires. Participants received a follow-up survey 3 months after completing the initial survey. Statistical analysis was performed with GraphPad Prism 9 by Spearman's rank correlation, Mann-Whitney U test, or Kruskal-Wallis H test as appropriate.

*Results*

Between November 2021 and April 2023, 528 patients were identified, of whom 152 were eligible for participation and 28 consented and completed the initial survey (18.4%). Demographics are reported in Table 1. The group was predominantly male (64.3%), white (92.9%), married (78.6%), college-educated (64.3%), and financially stable (50% with annual income over \$100,000). In the six months prior to diagnosis, 57.1% of participants were working full time and 35.7% were retired. At the time of survey completion, 25% were working full time, 50% were retired, and 14.3% were disabled or unable to work due to health. All participants were insured (60.7% Medicare, 35.7% private insurance). All participants on Medicare had Part A and B coverage, and 82.4% had Part D coverage. All but 1 participant had prescription drug coverage. AML (32.1%), CLL (25%), and CML (17.9%) were the most common diagnoses. Venetoclax (46.6%) was the most common OAM.

Results are summarized in Table 2. Those with a history of depression or anxiety had no difference in financial stress, experiencing cancer as a financial hardship, QoL satisfaction, or bother from side effects (SE) as those without such history. Income was inversely associated with identifying cancer as a financial hardship (rs -0.485; 95% CI, -0.732 to -0.125) and with pain (rs -0.389; 95% CI, -0.678 to -0.007). Income had no correlation with QoL satisfaction or bother from SE. Insurance coverage had no association with financial stress, seeing cancer as a financial hardship, QoL satisfaction, or bother from SE. Those disabled or unable to work felt more financial stress than those who were retired (P=0.018). They also saw cancer as more of a financial hardship than those who either worked full time or were retired (P=0.005). Those who had a family member stop working or reduce work hours had lower income (P=0.009), greater financial stress (P=0.015), worse QoL satisfaction (P=0.013), and in-

creased bother from SE (P=0.017) than those who did not. Financial stress was negatively associated with QoL satisfaction (rs -0.552; 95% CI, -0.775 to -0.206) and positively associated with bother from SE (rs 0.469; 95% CI, 0.105 to 0.772). Experiencing cancer as a financial hardship was negatively associated with QoL satisfaction (rs -0.517; 95% CI, -0.755 to -0.159).

**Conclusions**

In this well-resourced cohort taking OAMs to treat hematologic malignancies, there were multiple indicators of FT. Patient or family loss of employment was notably associated with financial stress and hardship. Financial stress and hardship were associated with worse satisfaction with QoL and worse experience of SE. Further study should define change in these features over time and interventions to mitigate distress.

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**Table 1. Patient Characteristics**  
n (%) unless otherwise indicated; 28 total respondents

	Malignancy	Income
Age (median, range)	67 (22-82)	
Gender		
Male	18 (64.3%)	
Female	10 (35.7%)	
Ethnicity		
Hispanic	0 (0.0%)	
Not Hispanic	28 (100%)	
Self-identified Race		
White	25 (92.9%)	
Black	1 (3.6%)	
Asian	1 (3.6%)	
Other	1 (3.6%)	
Marital Status		
Married	22 (78.6%)	
Single	2 (7.1%)	
Living with Partner	1 (3.6%)	
Divorced	2 (7.1%)	
Widowed	1 (3.6%)	
Education		
HS Diploma or GED	3 (10.7%)	
Associate or Some College	7 (25%)	
Bachelor's Degree	8 (28.6%)	
Graduate Degree	10 (35.7%)	
	Medicare	Caregiver Cut Back or Quit Work
	17 (60.7%)	5 (17.9%)
	Medicaid	1 (3.6%)
	Private	10 (35.7%)
		No
		16 (57.1%)
		Does not apply
		7 (25%)

**Table 2. Patient Circumstance Impact on Financial Strain and Quality of Life**

	Financial Stress		Cancer as Financial Hardship		Satisfaction with Quality of Life		Bother from Side Effects	
	H (df) or U	P	H (df) or U	P	H (df) or U	P	H (df) or U	P
Cancer Type	5.91 (6)	0.434	5.79 (6)	0.448	7.23 (6)	0.300	8.02 (6)	0.237
Insurance Coverage	2.45 (2)	0.294	2.55 (2)	0.279	3.05 (2)	0.218	3.04 (2)	0.219
History of Depression	49.5	0.110	78.0	0.998	49.0	0.158	46.0	0.074
History of Anxiety	44.5	0.112	67.0	0.784	68.0	0.960	65.5	0.686
Employment Status	13.6 (5)	0.018*	16.9 (5)	0.005*	15.4 (5)	0.009*	9.21 (5)	0.101
Disabled		0.056		0.020*		0.003*		
Retired		>0.999		>0.999		0.222		
Disabled		0.015*		0.015*		0.092		
Family Cut Back or Quit	11.2 (2)	0.015*	5.63 (2)	0.060	8.73 (2)	0.013*	8.20 (2)	0.017*
Yes vs No		0.015*				0.010*		0.017*
Yes vs N/A		0.531				0.226		0.593
No vs N/A		0.453				0.882		0.432

Figure 1

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