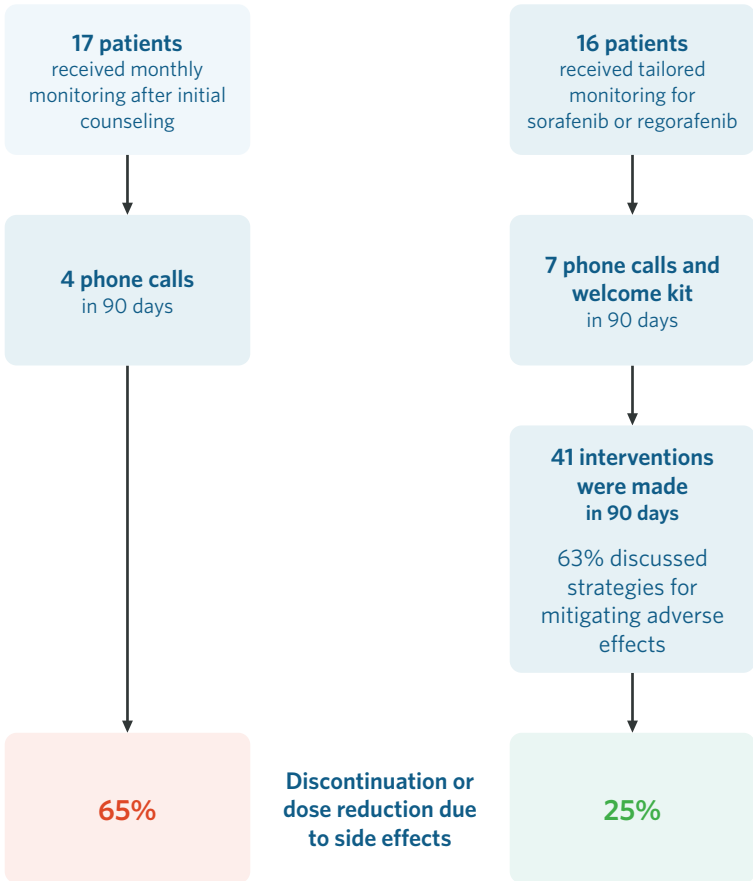


# A targeted approach to reducing rates of discontinuation and dose reduction in patients receiving sorafenib or regorafenib

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## Quick Facts



Tailored clinical monitoring was effective in detecting and mitigating adverse reactions, enabling patients to remain on therapy longer and without dose modification.

# A Targeted Approach to Reducing Rates of Discontinuation and Dose Reduction in Patients Receiving Sorafenib or Regorafenib

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## Background

- Sorafenib and regorafenib are oral multikinase inhibitors that treat certain cancers, but adverse events are common and often result in treatment discontinuation or dose reduction.<sup>1,2</sup>
- Pharmacists have the potential to monitor and address patients' adverse reactions, preventing dose reduction or treatment discontinuation.

## Objective

To assess the impact of a pharmacist intervention on rates of sorafenib and regorafenib treatment discontinuation and dose reduction due to adverse reactions.

Table 2: Sample Characteristics: Counseling Topics

Characteristic	M (SD) or n(%)	
	CG (n=17)	IG (n=16)
Age, years	64 (15.2)	59 (17)
Gender, female	9 (53)	11 (69)
Race, White	17 (100)	12 (75)
Indication		
AML	7 (41)	3 (19)
HCC	6 (35)	6 (44)
Desmoid tumor	2 (12)	5 (31)
Other*	2 (12)	1 (6)

\*DTC, GIST, and Metastatic NSCLC  
Note: AML=acute myeloid leukemia; HCC=hepatocellular carcinoma; DTC=differentiated thyroid carcinoma; GIST=gastrointestinal stromal tumor; NSCLC=non-small cell lung cancer.

## Methods

Historically controlled study of adult patients prescribed sorafenib or regorafenib by a Vanderbilt-Ingram Cancer Center provider using Vanderbilt Specialty Pharmacy.

Group	Date Therapy Initiated	Pharmacist Counseling
Control Group (CG)	Sept. 2016–Aug. 2017	4 phone calls in 90 days
Intervention Group (IG)	Sept. 2017–Aug. 2018	Welcome Kit + 7 phone calls in 90 days

Figure 1: Intervention Call Schedule

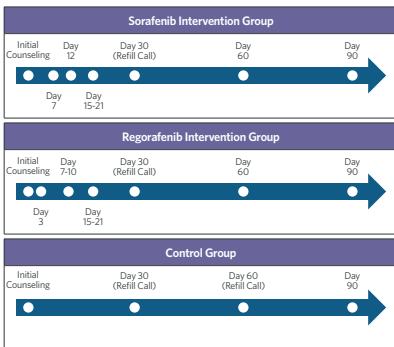


Table 1: Counseling Topics

Topic	Assessment Number
Pregnancy, lactation, and contraception status	*
Medication dosing, administration, and storage	*   *
Common side effects and mitigation strategies	*   *
Starter kit contents	*   *
Drug-drug interactions	*   *   *   *   *   *
Confirm start of therapy	*   *
Incidence of side effects	*   *   *   *   *
Communication with healthcare provider	*   *   *   *   *
Blood pressure monitoring	*   *   *   *   *
Best time for next call	*   *   *   *   *
Patient experience/feelings	*   *   *   *   *
Missed doses	*   *   *   *   *
Current supply/need for refill	*   *   *   *   *

\*= as needed

## Results

Figure 2: Percent of Patients Maintaining Therapy in 90 Days After Treatment Initiation

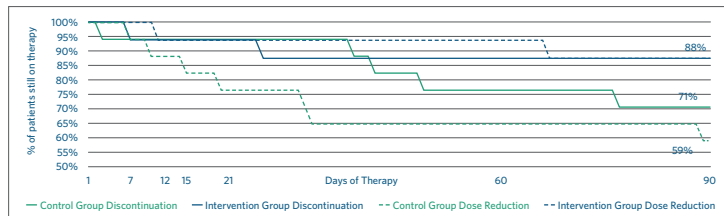
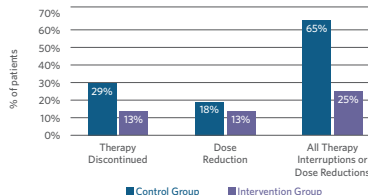
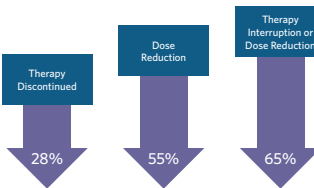


Figure 3: Rates of Therapy Interruption or Dose Reduction within 90 Days



Intervention Group vs. Control Group



## Intervention Group



Table 3: Pharmacist Interventions

	n	(%)
Discussed strategies for mitigating adverse effects <sup>1,2</sup>	26	(63)
Reviewed dose	6	(14)
Screened for drug interaction	3	(7)
Communicated information to healthcare provider	3	(7)
Provided additional supplies from starter kit	3	(7)

## Conclusion

Tailored clinical monitoring of oral multikinase inhibitors was effective in detecting and mitigating adverse reactions, enabling patients to remain on therapy longer and without dose modification.