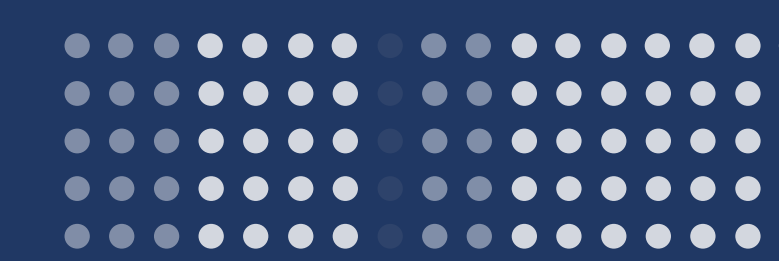


# Oral Oncology Inventory Management Interventions by a Specialty Pharmacy



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## BACKGROUND

- Oral oncology medications may diminish disease progression and improve overall survival.
- They are expensive, entail complex regimens, and their adverse effects are prevalent and often serious.
- Fairview Specialty Pharmacy has strict processes overseen by oncology pharmacists and liaisons who regularly engage with patients and providers to:
  - Ensure patients take medications correctly,
  - Provide strategies to minimize side effects, and
  - Assess patient medication inventory
- One goal of these processes is to **decrease total costs to the pharmacy, patients, and payers.**

## OBJECTIVE

To **describe interventions** that reduce oral oncology medication waste, and **calculate total cost avoidance** due to specialty pharmacy processes.

## METHODS

- Retrospective study of inventory management interventions by oncology pharmacists and liaisons occurring between April 2023 and March 2024.

- Documented situations where the full amount of oncology medication was not dispensed at the expected time of refill.
- Tracked rationale for the deviation from expected fill, medication and strength, and amount not dispensed
- Cost avoidance calculated based on average wholesale medication price (AWP).

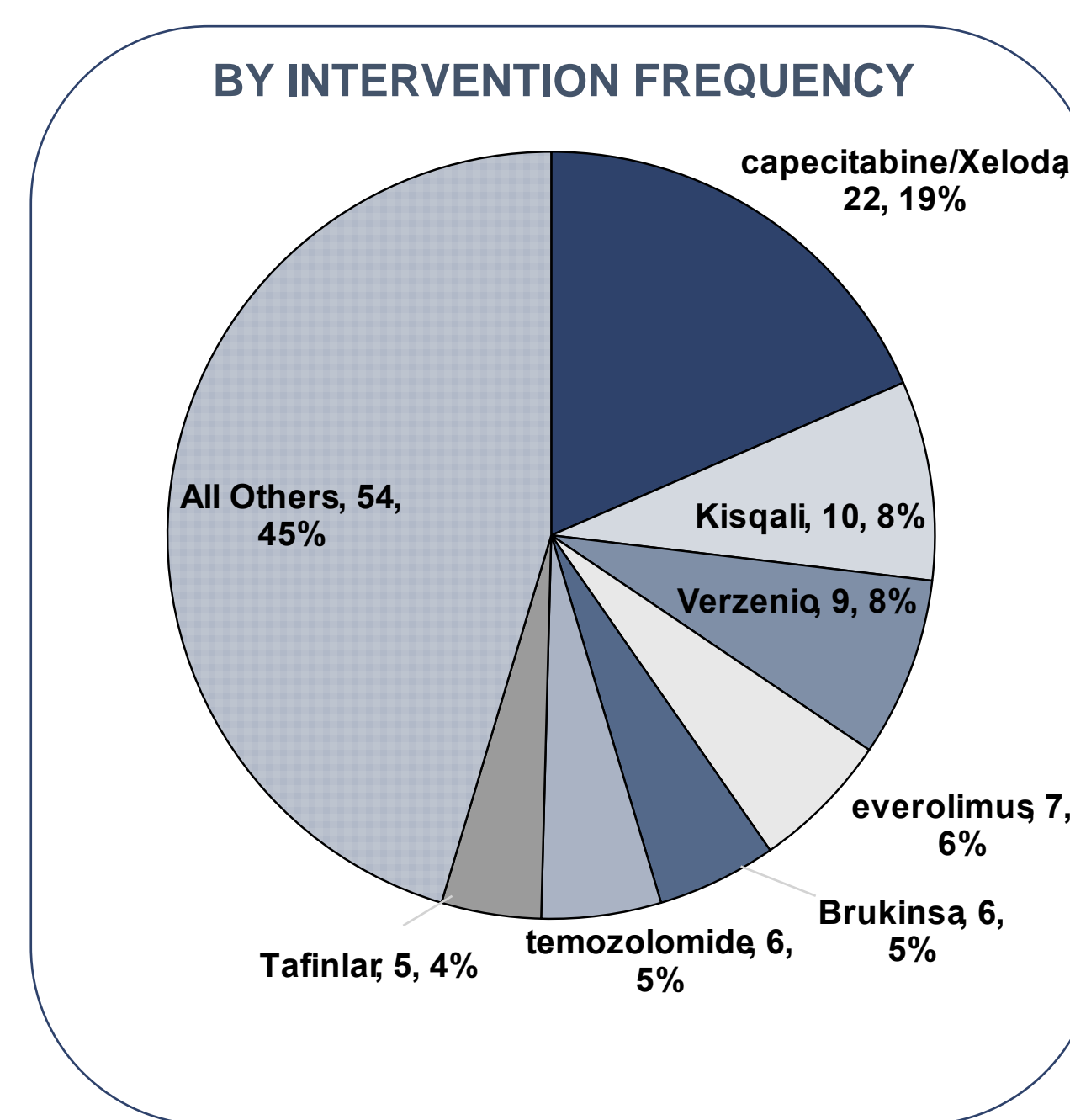
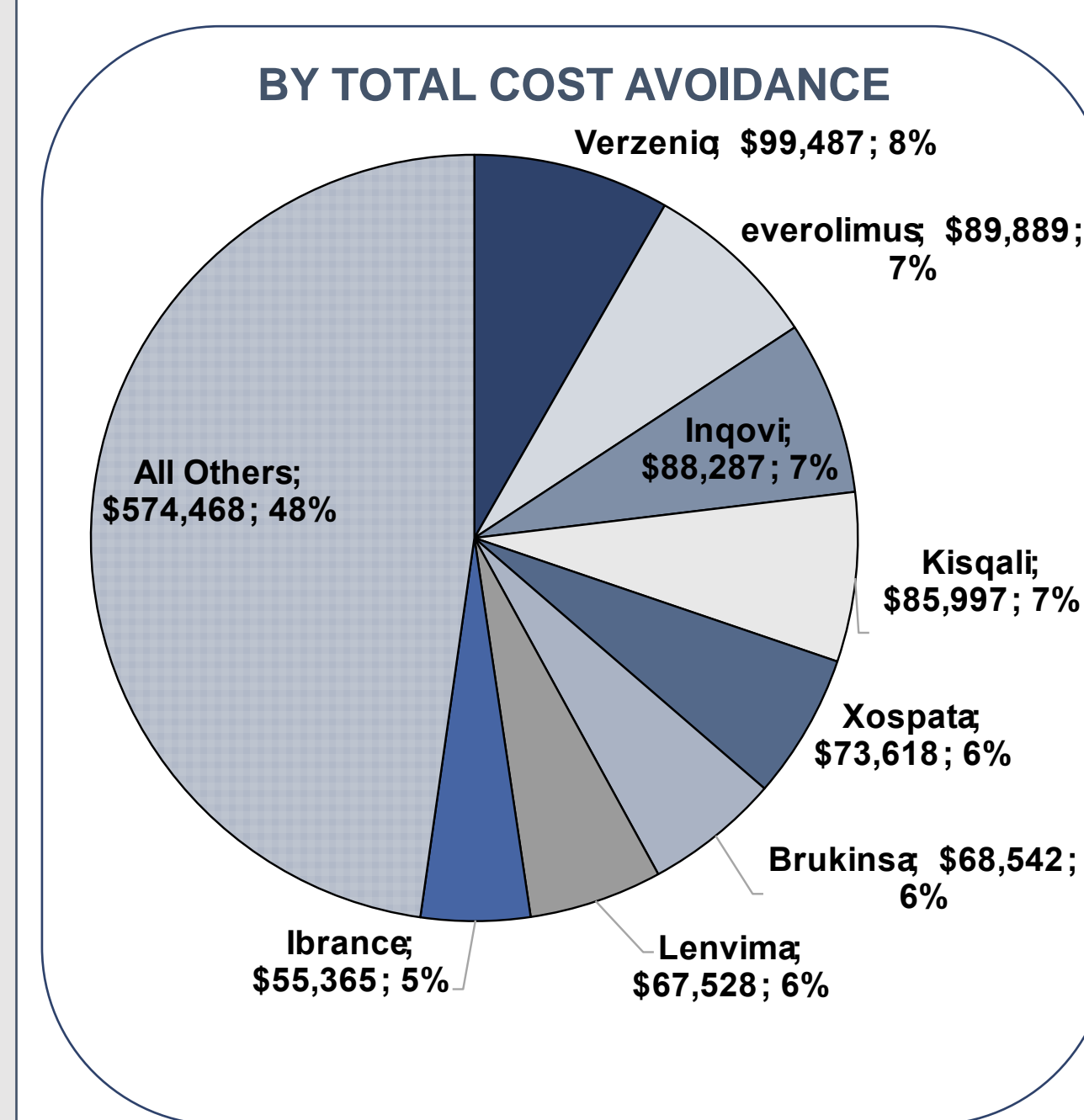
## RESULTS

### INVENTORY MANAGEMENT INTERVENTIONS AND RATIONALE RESULTING IN COST AVOIDANCE

Pharmacist Intervention Category	Rationale	Frequency	Total Cost by Rationale	Avg Cost by Rationale	Total Cost by Category	Avg Cost by Category
Hold or delay dispense	High likelihood of medication or dose change	25	\$346,387	\$13,855	<b>\$617,314</b>	<b>\$12,104</b>
	Medication on hold	12	\$140,352	\$11,696		
	Excess supply from previous cycle or fill	14	\$130,575	\$9,327		
Quantity adjustment based on cycle and/or quantity on hand	Excess supply from previous cycle or fill	26	\$78,971	\$3,037	<b>\$145,801</b>	<b>\$4,288</b>
	High likelihood of medication or dose change	8	\$66,830	\$8,354		
	Medication on hold	0	\$ -	\$ -		
Proactive split fill	High likelihood of medication or dose change	17	\$111,058	\$6,533	<b>\$111,058</b>	<b>\$6,533</b>
Dose Optimization	Consolidating a patient's regimen into fewer units while providing the appropriate, prescribed dose	2	\$35,712	\$17,856	<b>\$35,712</b>	<b>\$17,856</b>
<b>Total Pharmacist Interventions:</b>		<b>104</b>			<b>\$909,885</b>	<b>\$8,749</b>

Liaison Intervention Category	Rationale	Frequency	Total Cost by Rationale	Avg Cost by Rationale	Total Cost by Category	Avg Cost by Category
Hold or delay dispense	Excess supply from previous cycle or fill	1	\$38,918	\$38,918	<b>\$46,984</b>	<b>\$23,492</b>
	High likelihood of medication or dose change	1	\$8,066	\$8,066		
Quantity adjustment based on cycle and/or quantity on hand	Excess supply from previous cycle or fill	14	\$188,245	\$13,446	<b>\$188,245</b>	<b>\$13,446</b>
<b>Total Liaison Interventions:</b>		<b>16</b>			<b>\$235,229</b>	<b>\$14,702</b>
<b>Total Inventory Management Interventions:</b>		<b>120</b>			<b>\$1,145,114</b>	<b>\$9,543</b>

### TOP MEDICATIONS INVOLVED IN INVENTORY MANAGEMENT INTERVENTIONS



Name	Cost Avoidance per Intervention	Interventions per Dispense	Cost Avoidance per Dispense
Inqovi	\$ 29,429	6.5%	\$ 1,919
Xospata	\$ 36,809	4.1%	\$ 1,502
Onureg	\$ 22,466	5.1%	\$ 1,152
Piqray	\$ 26,477	2.4%	\$ 630
everolimus	\$ 12,841	3.4%	\$ 443
Brukinsa	\$ 11,424	3.1%	\$ 359
Mekinist	\$ 14,402	2.0%	\$ 288
Kisqali	\$ 8,600	2.3%	\$ 196
Zejula	\$ 6,832	2.7%	\$ 187
Tafinlar	\$ 6,768	2.6%	\$ 176

## DISCUSSION

- There were 120 interventions resulting in **>\$1.1 million of cost avoidance** in one year.
- Pharmacists made most of the interventions compared to liaisons (87% vs. 13%).
- Top reasons for not dispensing full medication amounts included:
  - high likelihood of medication or dose change (N=51 interventions; \$532,341)
  - excess supply from previous cycle (N=55; \$436,709).

### By Medication:

<b>Highest total cost avoidance:</b>	<b>Verzenio</b> \$99,487
<b>Greatest frequency of interventions:</b>	<b>capecitabine/Xeloda</b> 22, 19% of total interventions
<b>Highest avg cost avoidance per intervention:</b>	<b>Xospata</b> \$36,809
<b>Highest intervention rate:</b>	<b>Inqovi</b> 6.5% of all dispenses

- Consolidating a patient's regimen into fewer higher-strength units while providing the equivalent prescribed dose led to the highest average cost savings at \$17,856 per intervention, though was rare (N=2).

## CONCLUSION

- Strict inventory management processes led to significant cost avoidance and reduced waste for oncology medications.
- Strong engagement with patients and providers is necessary to avoid excess costs or waste and ensure patients have appropriate supply of oral oncology medications.
- In some cases, access to the medical record may equip the pharmacist with information to allow for additional interventions..