Outcomes of Pharmacist Driven Clinical Interventions in a Medically Integrated Oncology Specialty Pharmacy Practice

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BACKGROUND

- Oral oncolytic medications are typically dispensed at specialty pharmacies. Patients who are prescribed specialty medications require close monitoring, including assessment of laboratory parameters, toxicities, and adherence.
- Rx To Go Pharmacy is affiliated with Florida Cancer Specialists, a system of state-wide outpatient oncology clinics. As a medically integrated oncology pharmacy, pharmacists have the ability to access patient's charts, assess therapy, and efficiently communicate with prescribers. Having this benefit allows optimization of patient care through the implementation of pertinent clinical recommendations.
- Published literature has demonstrated a unique role of oncology pharmacists, as part of a multidisciplinary team, in contributing to overall positive outcomes for patients[1,2,3].

PURPOSE

- The purpose of this study was to highlight the impact of pharmacist-led clinical interventions on patient therapy management, assessing drug interactions, labs, drug cycle, strength/dosing, and treatment holds.

METHODS

Study Design	• Single center, retrospective, descriptive analysis
Inclusion Criteria	• Captured pharmacist-led clinical interventions for patients receiving oral oncolytics between April 1st, 2022, to August 31st, 2023
Exclusion Criteria	• REMS, supportive care, non-formulary, clerical pharmacist-led interventions

OUTCOMES

Primary Outcome

- Number of pharmacist-led interventions

Secondary Outcomes

- Frequencies of each intervention type
- Intervention acceptance rates
- Most common medications intervened on

RESULTS

Figure 1. Overall Clinical Interventions (n = 3,528) (%)

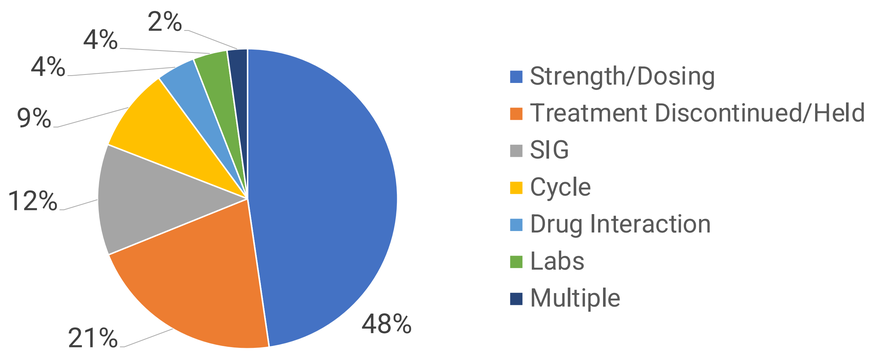

Figure 2. Clinical Intervention Acceptance Rates (n = 3,528) (%)

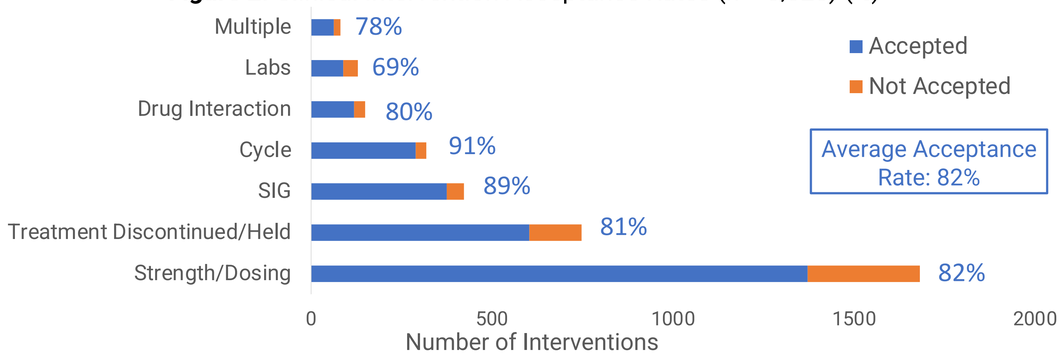

Table 1. Most common medications intervened on (n = 3,528) (%)

Strength/Dosing	Treatment Discontinued / Held	SIG	Cycle	Drug Interaction	Labs
Capecitabine (16%)	**Capecitabine** (17%)	**Capecitabine** (18%)	**Capecitabine** (37%)	**Venetoclax** (45%)	**Capecitabine** (26%)
Venetoclax (14%)	**Temozolomide** (6%)	**Venetoclax** (17%)	**Venetoclax** (22%)	Acalabrutinib (11%)	Alpelisib (14%)
Temozolomide (4%)	**Venetoclax** (6%)	**Temozolomide** (8%)	**Temozolomide** (16%)	Apalutamide (7%)	Olaparib (6%)
Ruxolitinb (4%)	Palbociclib (5%)	Avatrombopag (4%)	Palbociclib (5%)	Enzalutamide (7%)	Palbociclib (5%)
Abemaciclib (4%)	Abiraterone (4%)	Relugolix (3%)	Trifluridine and Tipiracil (3%)	Ibrutinib (5%)	Venetoclax (4%)

DISCUSSION

- This retrospective study showed an overall positive impact of pharmacist interventions within a medically integrated oncology specialty pharmacy. Through medical integration, pharmacists were able to collaborate with providers to optimize drug therapy by intervening on drug cycles, drug interactions, strength and dosing, labs and treatment holds.
- Within the 16-month review period, there were a total of 3,528 pharmacist-led clinical interventions.
- The most common pharmacist-led interventions pertained to strength and dosing, treatment discontinuation or hold, SIG, and cycle (Figure 1).
- The average clinical intervention acceptance rate was 82% (Figure 2).
- The most common medications intervened on were medications that often have cycles and have significant impacts on blood counts such as capecitabine, temozolomide, and venetoclax (Table 1).
- Medical integration allows pharmacists to accurately perform medication reconciliation and identify drug interactions before dispensing oral oncolytics to the patient.
  - Venetoclax was the leading medication needing intervention for drug interactions and subsequent dose reduction which was mostly due to the CYP3A4 interaction, especially with azole antifungals.
  - The capsule formulation of acalabrutinib had a significant interaction with proton pump inhibitors (PPI's) that no longer applies with the tablet formulation.

CONCLUSION

- Pharmacists play an essential role in the continuity of coordinated and quality oncology care.
- With access to a patient's medical record, medically integrated pharmacists can maximize therapy outcomes and disease management through collaboration with providers to ensure each patient is receiving appropriate, evidence-based, treatment.

REFERENCES

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DISCLOSURE

Authors of this presentation have nothing to disclose concerning financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.