PHARMACIST-LED MONITORING FOR PATIENTS INITIATING PARP INHIBITOR THERAPY

Brooke D. Looney, PharmD[1] | Stephanie G. White, PharmD[1] | Ryan Moore, MS[2] | Autumn D. Zuckerman, PharmD, BCPS, AAHIVP, CSP[1] | Leena Choi, PhD[2] | Paul Hueseman, PharmD, MS[3] | Kristen W. Whelchel, PharmD[1] |
[1]Vanderbilt Specialty Pharmacy, Vanderbilt University Medical Center [2]Department of Biostatistics, Vanderbilt University Medical Center [3]AstraZeneca, Inc.

VANDERBILT UNIVERSITY MEDICAL CENTER

CONCLUSIONS

- Patients receiving pharmacist-led monitoring had fewer and shorter dose interruptions during the first 90 days of poly (ADP-ribose) polymerase inhibitors (PARPi) therapy
- Fewer hospitalizations occurred during the first 90 days of PARPi therapy in patients receiving pharmacist-led monitoring

PURPOSE

To evaluate the impact of pharmacist-led tailored monitoring on medication interruptions, dose reductions, discontinuations, and ER visits/hospitalizations over the first 90 days of treatment in patients initiating PARP inhibitor therapy.

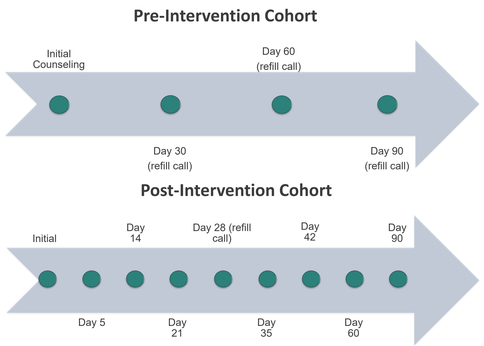
METHODS

Single center pre/post intervention study

Adult patients initiating PARPi therapy
Pre-intervention
November 2017 – October 2019
Post-intervention
July 2021 – October 2022

Filled by the Vanderbilt Specialty Pharmacy or manufacturer assistance program

FIGURE 1. MONITORING SCHEDULE*



*Refill calls were completed by the pharmacy technician. All other monitoring was completed by the pharmacist.

FIGURE 2. MONITORING TOPICS

RESULTS

TABLE 1. COHORT CHARACTERISTICS

	Pre-Intervention n (%) n=28	Post-Intervention n (%) n=29
Age, years-median (IQR)	62 (53-72)	63 (56-69)
Gender, female	27 (96)	26 (90)
Race		
White	23 (82)	26 (90)
Black	4 (14)	2 (7)
Other	1 (4)	1 (3)
Disease duration, years-median (IQR)	1.8 (1.4-3.6)	1.1 (0.6-3.3)
Cancer type		
Ovarian*	23 (82)	20 (69)
Breast	3 (11)	6 (21)
Prostate	1 (4)	1 (3)
Pancreatic	1 (4)	2 (7)
PARP inhibitor		
olaparib	25 (89)	26 (90)
niraparib	0 (0)	3 (10)
rucaparib	2 (7)	0 (0)
talazoparib	1 (4)	0 (0)

* Ovarian included ovarian, fallopian tube, or primary peritoneal

FIGURE 3. ADVERSE EVENTS

	Week 1		Week 2		Week 3		Week 4		Week 5		Week 6		Day 60		Day 90		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Fatigue	3	7	1	16	2	11	6	3	1	11	4	9	4	10	4	9	25	76
Nausea	4	15	3	13	3	9	4	2	2	9	3	5	4	3	1	2	24	58
Arthralgia/myalgia	1	3		2		1			2	3	1	2	2	1	3	3	9	15
Diarrhea		4		3	2	2		1		1		2			1		3	13
Dyspepsia		1		2		2				2		1		1	2		2	9
Headache		5		3	1				1		3	1	1				6	9
Vomiting	1	1	1	3	2	1	1		1		1	1	3	1			10	7
Constipation	1	2		1		1		1		1			1	1	2		4	7
Edema	1			1	1	2	1	1		1		2	1		1		5	7
Dizziness		1		3		2	1				1		1	1	1		4	7
Dysgeusia	1					1	1			1	1	1	1	1		2	4	6
Stomatitis						1			1	1		1		1		2	1	6
Anemia	1		2			1	4		3		1	1	4	1	3		18	3
Bloating										1		1				1		3
Cough				1	1		1				1	1					2	3
Dyspnea					1		1				1	1	2		2		5	3
Thrombocytopenia				1			1	2		2	1	2		1			7	3
Decreased appetite	1		1				1	1		1		1	1				6	2
Elevated creatinine			1	1	1	1	4						2		2		10	2
Weakness			1						1		1				1		4	
Other*	1		2	4	3	2	3	1	3	6	1		1	2	1	4	15	19
Total	**15**	**39**	**13**	**55**	**15**	**41**	**28**	**9**	**18**	**38**	**22**	**29**	**29**	**24**	**24**	**23**	**164**	**258**

*Other AE were reported <3 times in both cohorts

TABLE 2. PHARMACIST INTERVENTIONS (PIs)

	Total PIs Performed n (%) (n=181)	Patients Receiving PI n (%) (n=28)
Patient education*	123 (68)	27 (93)
Supportive therapy	29 (16)	18 (62)
Care coordination	8 (4)	7 (24)
Dose reduction	7 (4)	7 (24)
Lab monitoring	6 (3)	5 (17)
Treatment interruption	6 (3)	5 (16)
Contact manufacturer	1 (1)	1 (3)
ER/hospitalization	1 (1)	1 (3)

*Patient education included active listening, review/optimization of therapies, review of side effect management, counseling on new dosing, financial counseling, and drug interaction screening

FIGURE 4. PATIENT JOURNEY

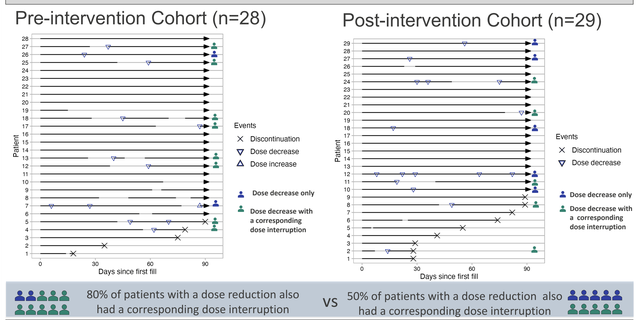


FIGURE 5. SUMMARY OF THERAPY CHANGES, HOSPITALIZATIONS, and ER VISITS

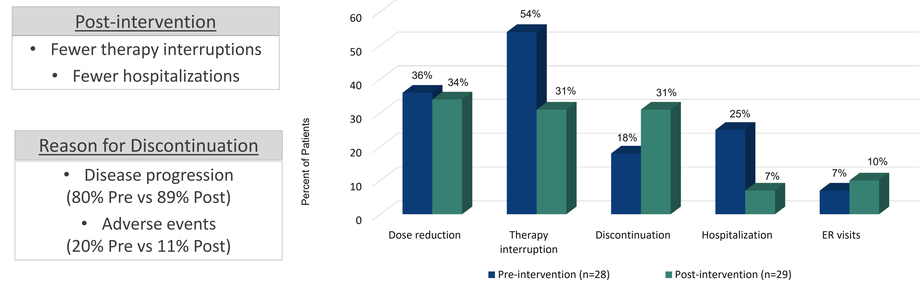


FIGURE 6. MEDIAN LENGTH (DAYS) of TREATMENT INTERRUPTIONS

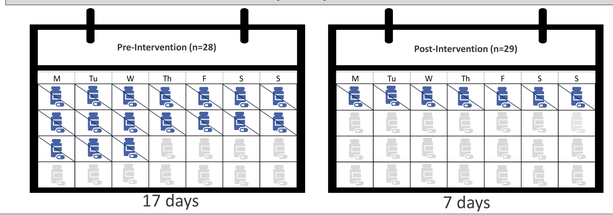
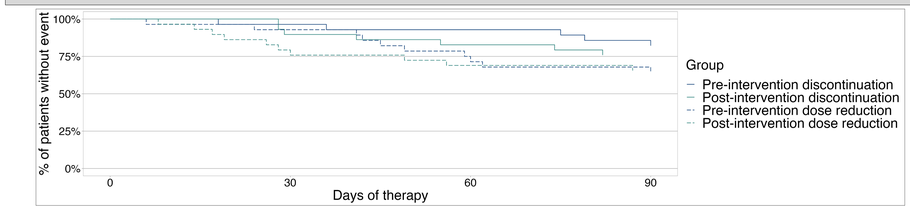


FIGURE 7. PERCENT OF PATIENTS MAINTAINING THERAPY IN THE FIRST 90 DAYS OF TREATMENT



This study was supported by AstraZeneca and Merck Sharp & Dohme Corop., a subsidiary of Merk &Co., Inc., Kenilworth, NJ, USA, who are codeveloping olaparib