

Vaginal and Sexual Health in Patients with ER+/HER2- Metastatic Breast Cancer (mBC)

Kelly Shanahan¹; Sarah L. Sammons²; Jane L. Meisel³; Timothy J. Pluard⁴; Monica Kozlowski⁵; Dominic Carroll⁵; and Elizabeth Attias⁵

¹Metavivor Research and Support, Inc, Annapolis, MD; ²Dana Farber Cancer Institute, Harvard Medical School, Boston, MA; ³Emory Winship Cancer Institute, Atlanta, GA; ⁴Saint Luke's Cancer Institute, Kansas City, MO; ⁵Sermonix Pharmaceuticals, Columbus, OH

Introduction

- Vaginal and sexual health concerns are common,¹⁻⁴ but often understudied, in women with breast cancer being treated with endocrine therapy (ET)

Objective

To better understand the vaginal/sexual health concerns in patients with ER+/HER2-, metastatic breast cancer (mBC)

Design

- The 50-question, online *ESR1* Quality of Life Survey 2 (EQUALS 2) was emailed to US patients from the Cure Media Group and authors' contacts, and posted on private Facebook groups of patients with mBC in March and April 2023
- Patients were eligible if they had ER+/HER2- mBC
- A \$10 gift card was given to participants at survey completion
- Survey answers were summarized descriptively

Results

Participant disposition and demographics

- 200 responders were almost equally distributed to 4 age subgroups; the majority were White, had a higher education, and had a female oncologist
- Most patients were very (84%) or somewhat (6%) concerned that their mBC was impacting their family

Characteristics, n (%)		N = 200
Age	<47 yrs	43 (22)
	47–55 yrs	52 (26)
	55–60 yrs	47 (24)
	>60 yrs	58 (29)
Race/ethnicity*	White	170 (85)
	Black/African American	15 (8)
	Hispanic/Latino	13 (7)
	Asian	1 (1)
	Native Hawaiian or other Pacific Islander	1 (1)
	Declined to answer	1 (1)
Living setting	Rural	101 (51)
	Suburban	73 (37)
	Urban	26 (13)
Average household income	<\$25,000	3 (2)
	\$25,000 to <\$50,000	18 (9)
	\$50,000 to <\$75,000	76 (38)
	\$75,000 to <\$100,000	36 (18)
	\$100,000 to <\$150,000	28 (14)
	≥\$150,000	23 (12)
	Decline to answer	16 (8)
Highest level of education	Some high school	18 (9)
	High school	36 (18)
	Bachelor's degree	110 (55)
	Master's degree	26 (13)
	Any doctoral degree	10 (5)
Primary oncologist	Female	155 (78)
	Male	45 (23)

*Could select more than one option.

Figure 1. Prevalence of vaginal symptoms

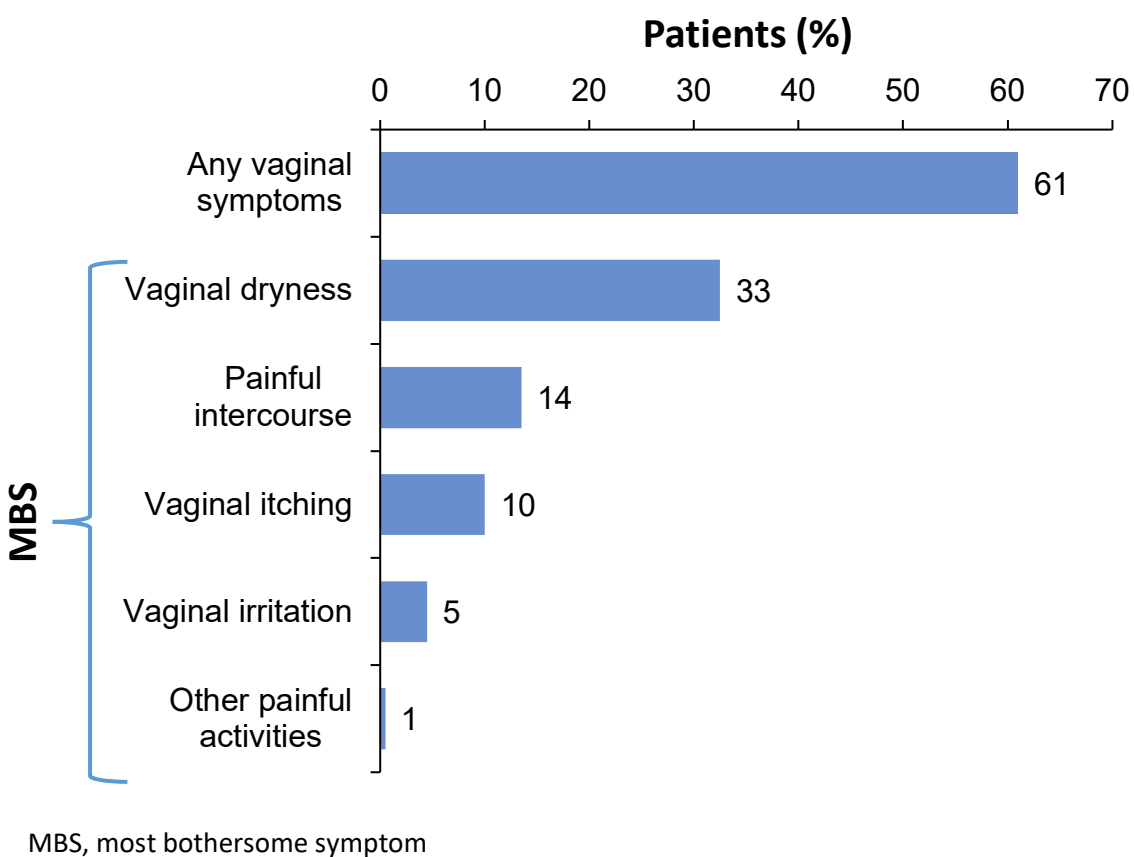


Figure 2. Impact of vaginal dryness since starting breast cancer treatment

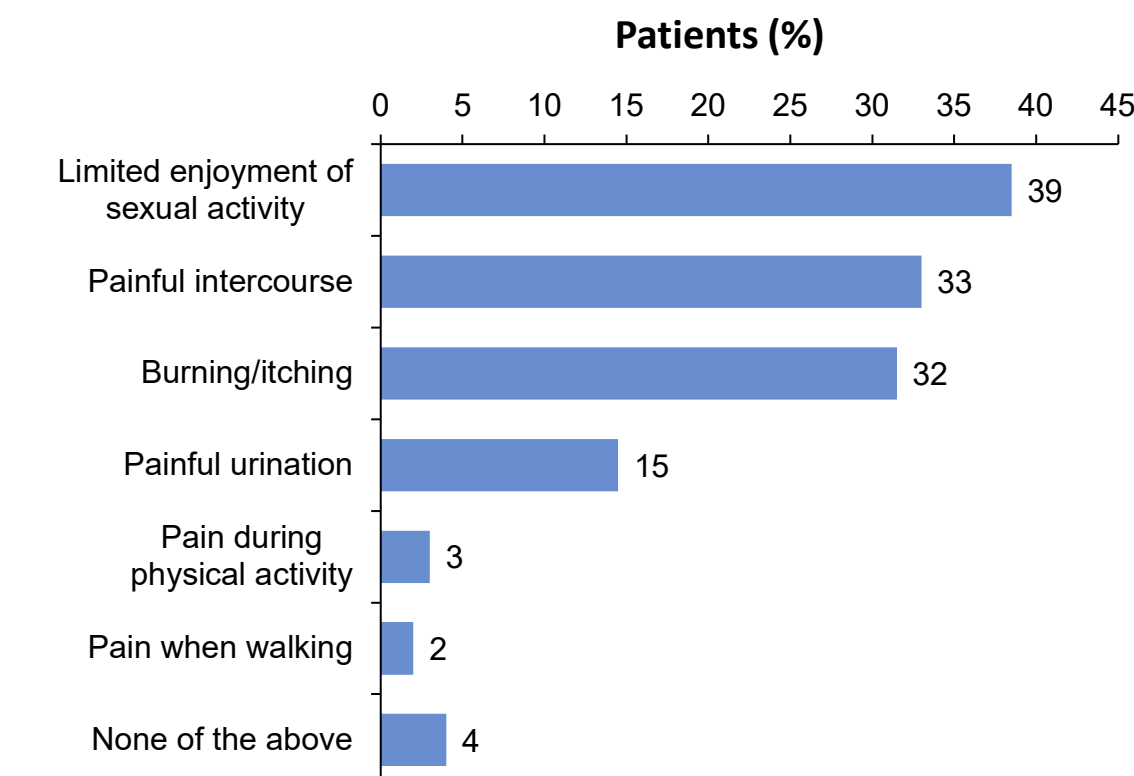
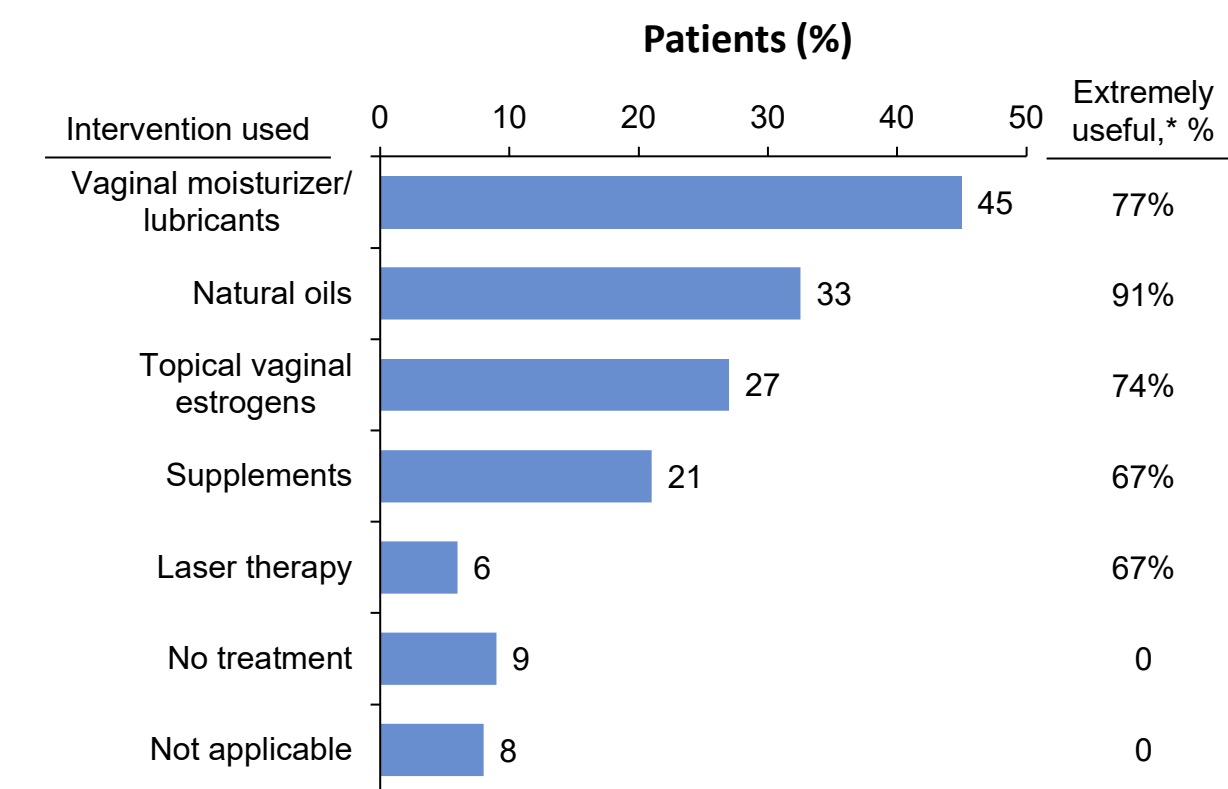


Figure 3. Interventions used to alleviate vaginal symptoms



*Proportion of patients who considered the intervention extremely useful in diminishing vaginal symptoms

Breast cancer treatment

- Prior ET for early breast cancer was used by 79% of patients and negatively impacted their sexual health in 62%
- Current treatments for mBC included aromatase inhibitor±CDK4/6 inhibitor (38%), antibody-drug conjugate/chemotherapy (33%), fulvestrant±CDK4/6 inhibitor (16%), antiestrogen+everolimus or alpelisib (3%), and elacestrant (3%); patients were on 1st (29%), 2nd (17%), 3rd (23%), or 4th+ (28%) therapy line for mBC

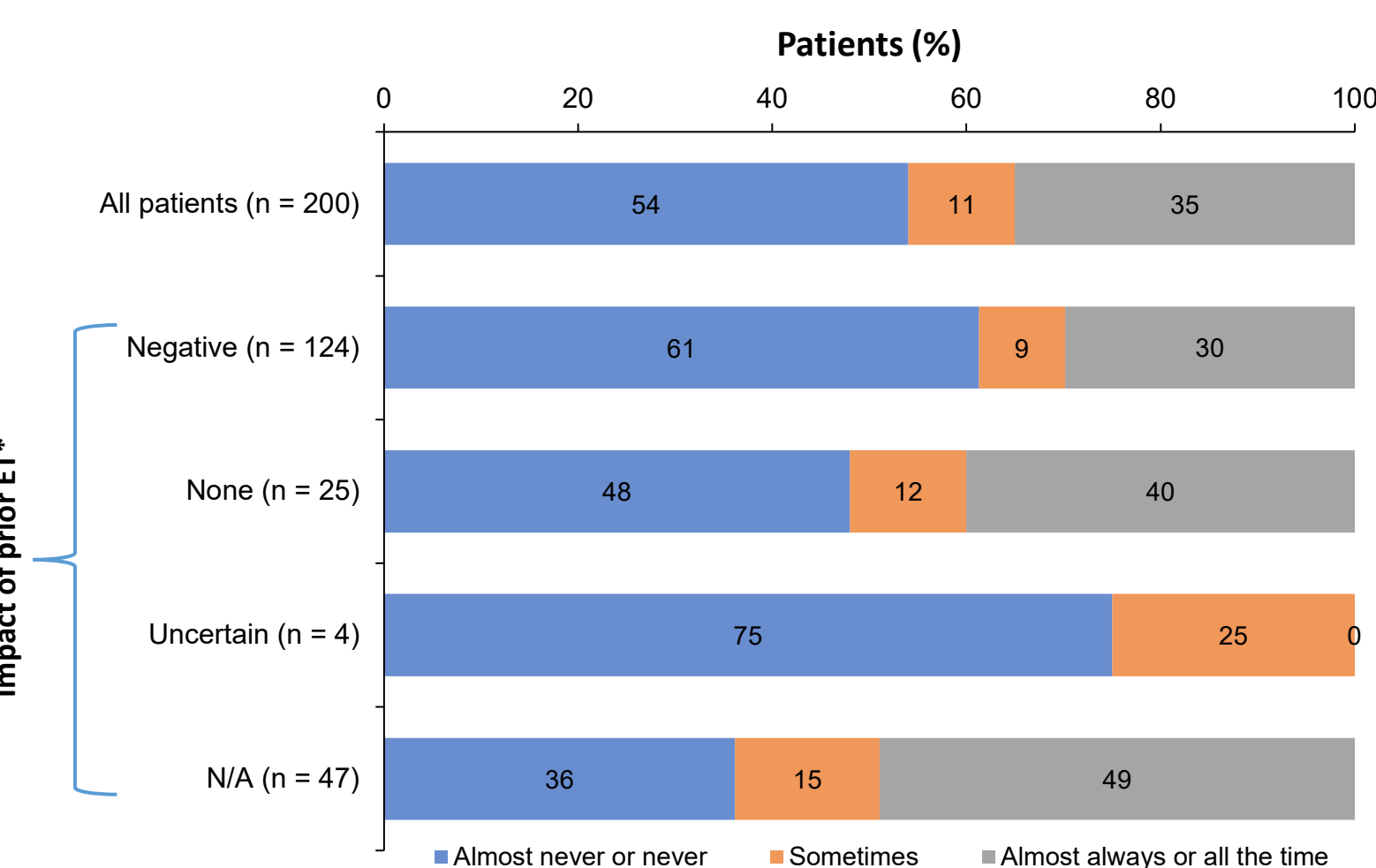
Vaginal symptoms and sexual activity

- 61% of patients experienced vaginal symptoms (Figure 1)
 - Vaginal dryness was most frequently rated as the most bothersome symptom
 - Patient had vaginal/sexual side effects from breast cancer treatment for a mean of 4.8 yrs
- Limited enjoyment of sexual activity and painful intercourse were the most reported impacts of vaginal dryness since starting treatment (Figure 2)
- Top interventions used to alleviate vaginal symptoms were vaginal moisturizers/lubricants, natural oils, and topical vaginal estrogens; therapies were considered helpful by 67%-91% of users (Figure 3)
- 54% of patients never or almost never felt sexual desire/interest in the past month, particularly those whose sexual health was negatively impacted by prior ET (61%) (Figure 4); more than half of patients (56%) felt bothered by low sexual desire
- The vaginal/sexual side effects of breast cancer treatment were a concern for most patients (80%), negatively impacting the frequency of sexual intercourse (61%) and their self-esteem (64%), and making 51% of patients feel isolated (Figure 5)
- Most (78%) felt that breast cancer negatively impacted their body image

Information source regarding vaginal side effects

- About a third of patients felt poorly informed by their medical team (MT; 38%) and not comfortable talking with their MT (31%) regarding vaginal/sexual side effects; 33% felt poorly equipped to alleviate these side effects
 - Patients with a female vs male oncologist were more likely to feel well informed by their MT (54% vs 27%) or very comfortable talking with their MT (59% vs 44%) about these side effects
- Patients were more likely to discuss vaginal/sexual side effects with their gynecologist (33%) than oncologist (15%), and more frequently obtained information on these side effects from their gynecologist (33%) rather than oncologist (8%)
- Most (93%) patients showed interest in trying a treatment if it was effective in treating breast cancer, FDA approved, and well tolerated, and could also improve vaginal/sexual health

Figure 4. Frequency of feeling sexual desire/interest over the past month



*Frequency of feeling sexual desire/interest in patients by impact of prior ET for early BC on sexual health
BC, breast cancer; ET, endocrine therapy

Figure 5. Concerns about and impact of vaginal/sexual side effects

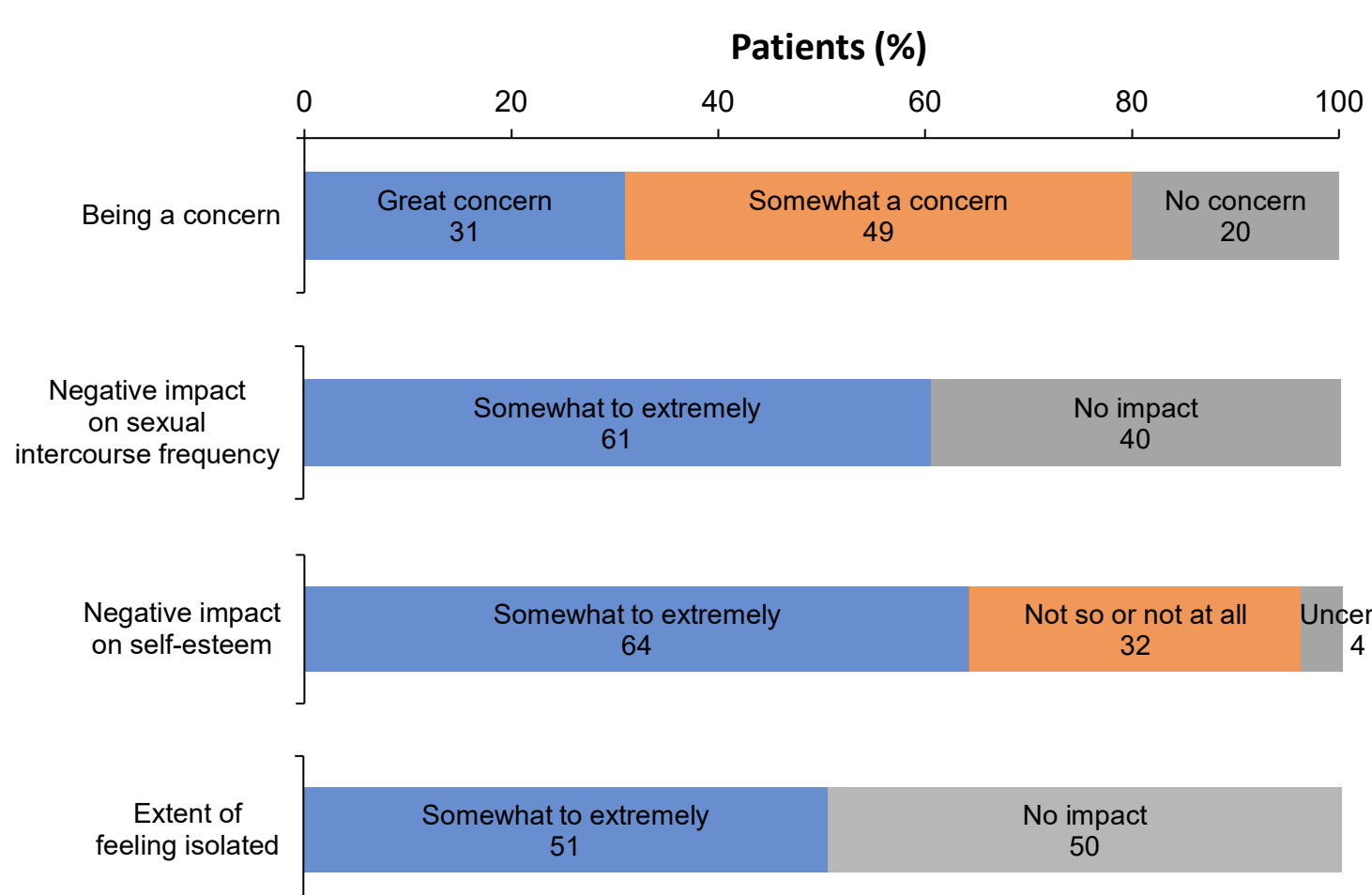
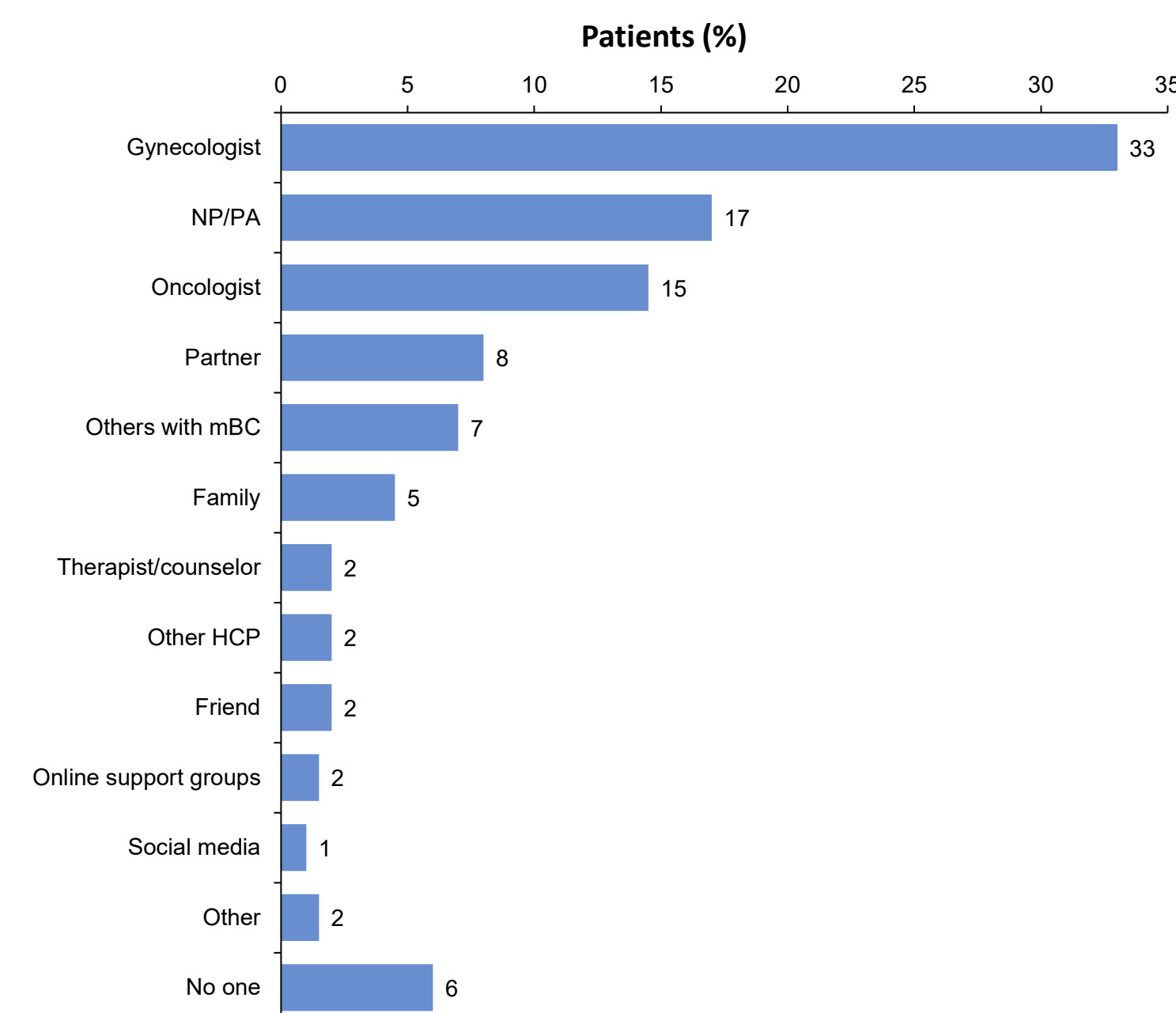


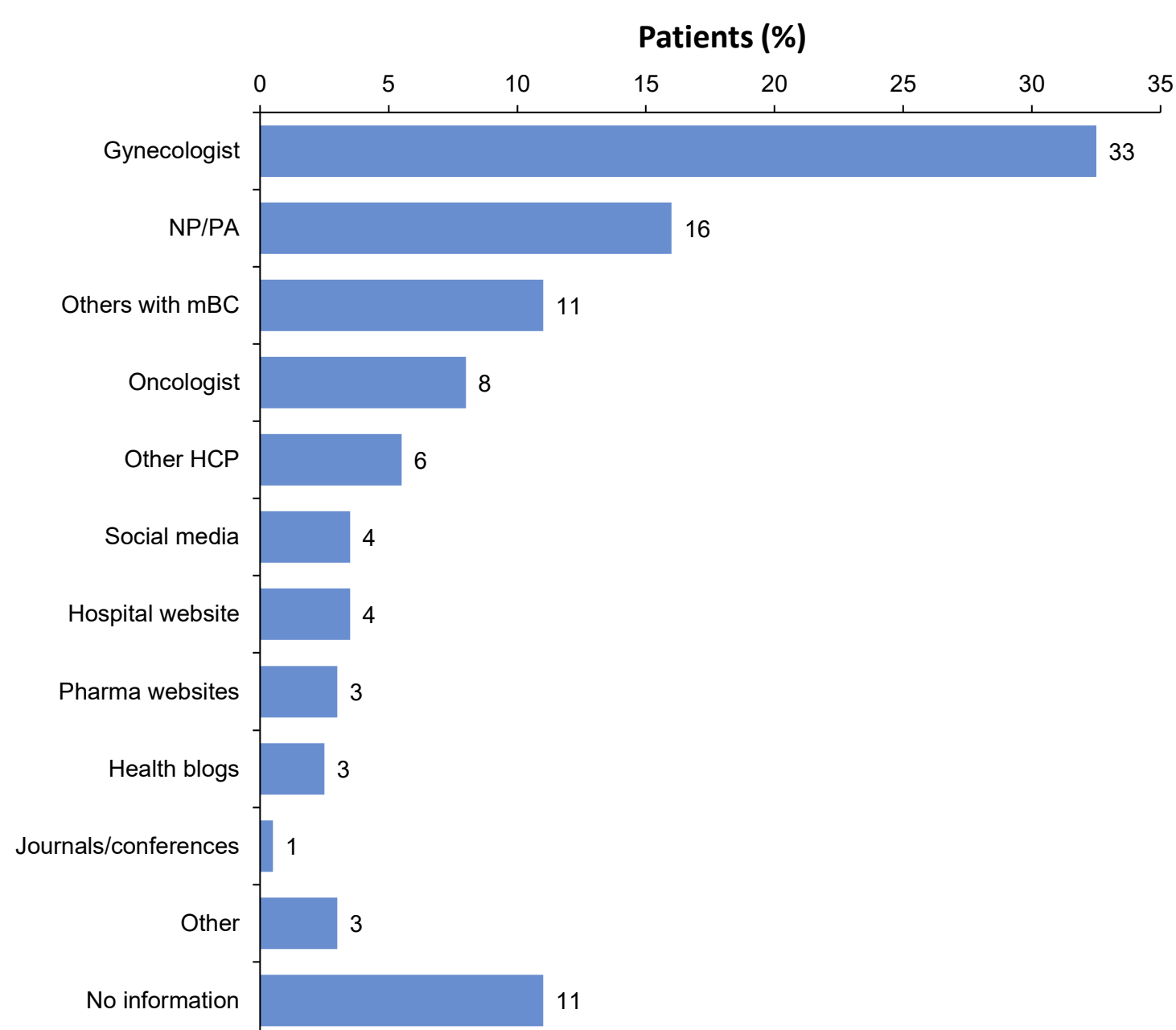
Figure 6. Sources for patients reported as most likely to (A) talk to or (B) obtain information on vaginal/sexual side effects

A. Source for discussion



HCP, healthcare professional; mBC, metastatic breast cancer; NP, nurse practitioner; PA, physician assistant

B. Source for information



Key Takeaways

- Vaginal/sexual side effects from breast cancer treatment were common in a survey of patients with ER+/HER2- mBC and were a concern for most patients
- Unmet needs exist for improving vaginal/sexual health in breast cancer patients and related patient-oncologist communication

Conclusions

- In this survey of patients with ER+/HER2- mBC, 61% of patients experienced vaginal symptoms and most (62%) felt their sexual health was negatively impacted by prior ET
- Vaginal side effects from breast cancer treatment were a concern for most patients (80%), negatively impacting patients' self-esteem and making them feel isolated
- About a third of patients felt poorly informed or uncomfortable discussing these vaginal/sexual side effects with their MT, and even more so if their oncologist was male
- The top source patients obtained information on vaginal/sexual side effects was from their gynecologist rather than oncologist
- These data highlight unmet needs for improving vaginal/sexual health while treating breast cancer, and better patient-oncologist communication about vaginal/sexual concerns

References

- Baumgart J, et al. *Am J Obstet Gynecol*. 2011;204:26 e21-27.
- Kyvernitakis I, et al. *Climacteric*. 2014;17:252-259.
- Huynh V, et al. *Ann Surg Oncol*. 2022;29:6238-6251.
- Oberguggenberger A, et al. *BMC Cancer*. 2017;17:599.

Disclosures

- KS** is on the patient advisory board for SeaGen/Pfizer and Sermonix; and is on scientific advisory board for Nape Pharmaceuticals. **SLS** received research funding (paid to institution) from AstraZeneca, Abbvie, Bristol Myers Squibb, Eli Lilly, Seagen, and Sermonix; and has consulted for Foundation Medicine, AstraZeneca, DaichiSankyo, Eli Lilly, Pfizer, Sermonix, and Novartis. **JLM** received research funding from Seagen, Pfizer, AstraZeneca; and has consulted for AstraZeneca, Clovis, Genentech, Glaxo SmithKline, Novartis, Pfizer, Puma, Sanofi Genzyme, and Seagen. **TJP** is a consultant for AstraZeneca, Gilead, HiberCell, Novartis, Pfizer, Sanofi and Seagen; has received research support from AstraZeneca, Gilead, HiberCell, Novartis, Pfizer, Sanofi, Nuvation, and Olema; and has been a speaker for AstraZeneca, Gilead, and Seagen. **MK** and **EA** are employees and stockholders of Sermonix. **DC** consults for Sermonix.
- Sermonix Pharmaceuticals sponsored the survey and provided support for the medical writing assistance of Hui Zhang, PhD and Kathleen Ohlth, PhD (Precise Publications, LLC).