PS1-03-03

Patient Experience With Intramuscular vs. Oral Endocrine Therapy in Metastatic Breast Cancer

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Study was sponsored by Eli Lilly and Company

OBJECTIVE

To explore the experiences of patients who have taken both oral and intramuscular (IM) endocrine therapy (ET) for metastatic breast cancer (MBC), by evaluating treatment burdens (including challenges to administration and adherence), benefits, and preference for mode of administration (oral vs. IM)[a]

[a]In this patient survey of ET use, the oral ETs were aromatase inhibitors (AIs) and the IM ET was fulvestrant.

CONCLUSIONS

- In this sample of patients treated with both oral and IM ET, two-thirds preferred the oral route of administration
  - Benefits of oral therapy included convenience, minimal interference with daily life, and ease of access
- Both oral and IM modes of ET administration had benefits and burdens rated on treatment characteristics and features
  - IM ET was associated with more burdens than oral ET
  - "Stress of daily medication" was the most frequently reported burden for oral ET
  - "Remember to take" was a benefit for IM ET and a burden for oral ET
- The study's findings may not be generalizable to all patients with MBC, particularly those who have not been exposed to both oral and IM ET or those with different biomarker profiles. In addition, patients are self-reporting their experiences through a survey about past events, which may introduce recall bias

San Antonio Breast Cancer Symposium (SABCS) 48th Annual Meeting; San Antonio, TX; December 9-12, 2025

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BACKGROUND

- ET is commonly used in the treatment of breast cancer,[1,2] including both oral and IM modes of administration[3]
- Although both oral and IM modes of ET administration are effective, their impact on patients' daily lives may differ[3,4] in terms of convenience, pain, and overall treatment burden[5]
- There is limited research documenting patients' comparative experiences and preferences[4]

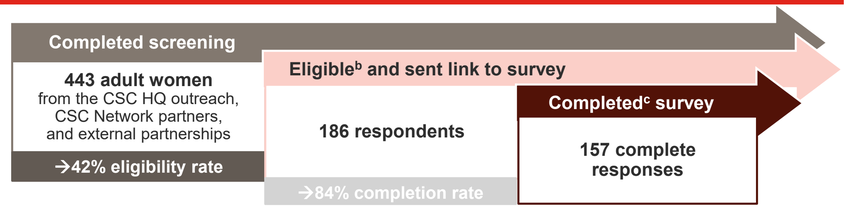
METHODS AND RECRUITMENT

Data source: Online survey conducted in the US

Survey outcomes:

- Preference for oral vs. IM ET
- Treatment characteristics and features rated on a 5-point scale of burden vs. benefit[a]
- Self-reported treatment adherence
- Priorities when considering oral vs. IM treatment options
  - 11 factors rated on a 5-point scale of "not at all important" to "very important"

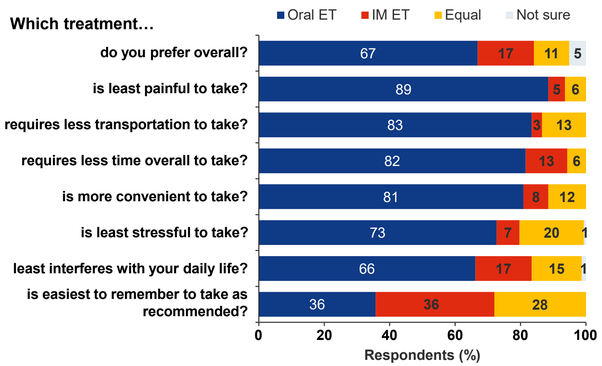
[a]Major or minor burden, neutral, major or minor benefit.



[b]People who completed screening, met eligibility criteria for biomarker status (ER+/HER2-), and had a history of taking both oral and IM ET consecutively for their MBC for ≥3 months.
[c]People who completed full survey, excluding duplicate responses.

RESULTS

Direct Comparison Showed 67% of Respondents Preferred Oral Over IM ET



Oral ET was preferred over IM ET across all factors except for "easiest to remember to take as recommended"

Note: Numbers may not add up to 100 due to rounding.

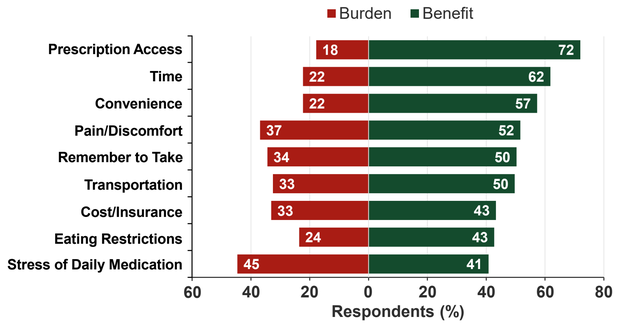
All 157 Respondents Had Taken Both Oral and IM ET

Characteristic	Respondents (N=157)
Age, mean (SD), years	52.67 (11.77)
Range	28-78
Race, n (%)	
White	104 (66.2)
Black or African American	20 (12.7)
Multiple races	13 (8.3)
Hispanic, Latino, or Spanish	12 (7.6)
Asian or Asian American	4 (2.5)
Other[a]	3 (1.9)
Prefer not to share	1 (0.6)
Educational degree, n (%)	
Associate's or bachelor's	74 (47.2)
Master's, professional, or doctorate	47 (29.9)
Other[b]	36 (22.9)
Geographic region, n (%)	
Suburban	73 (46.5)
Urban	45 (28.7)
Rural	38 (24.2)
Not sure	1 (0.6)
Travel time to treatment center, n (%)	
0-30 minutes	66 (42.0)
31-60 minutes	62 (39.5)
>60 minutes	29 (18.5)

Characteristic	Respondents (N=157)
Income, n (%)	
<$40,000	37 (23.6)
$40,000-$79,999	47 (30.0)
$80,000-$119,999	30 (19.1)
$120,000-$159,999	22 (14.0)
$160,000-$199,999	4 (2.5)
≥$200,000	10 (6.4)
Prefer not to share or Not sure	7 (4.4)
Years since MBC diagnosis, mean (SD)	5.9 (4.2)
Median (min, max)	5 (1, 24)
Duration on oral ET (AIs), mean (SD), months	31.6 (29.9)
Median (min, max)	24 (2, 180)
Duration on IM ET (fulvestrant), mean (SD), months	23.4 (23.2)
Median (min, max)	15 (3, 144)

[a]Includes other, Middle Eastern or North African, and American Indian or Alaska Native. [b]Includes other, high school diploma or equivalent (GED), trade school/vocational training, and some college, did not graduate.

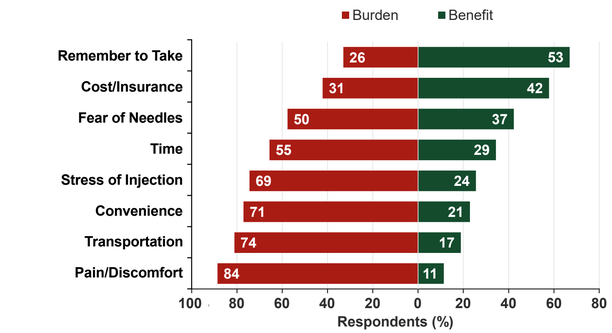
Oral ET Was Considered More a Benefit Than a Burden Across All Factors Except for "Stress of Daily Medication"[a]



1 in 4 respondents did not consider oral ET a burden, as 26% indicated none of the 9 factors were burdens of taking oral ET. 14% selected 6 or more factors as burdens of taking oral ET

[a]Between 9% and 23% of respondents had a neutral response and 0-4% of respondents said 'not applicable' for all factors, except for eating restrictions where 20% responded 'not applicable'.
Notes: Respondents assessed the amount of burden or benefit they experienced when taking oral AIs, using a 5-point scale across 9 factors: Prescription access: *How difficult is it to get this prescription filled at a pharmacy?* Time: *How much time does it require from you to take?* Convenience: *How difficult is it to take as part of your routine?* Eating restrictions/Fasting requirements: *How disruptive is it to fast prior to taking the medication?* Transportation: *Do you need to travel to fill this prescription or receive treatment?* Cost/Insurance coverage: *How much of a factor is the cost/insurance of this medication?* Remembering: *How difficult is it to remember to take?* Pain/Discomfort: *How painful or uncomfortable is the medication to take?* Stress: *Does having to take a medication every day cause you stress or anxiety?*

Participants Reported More Burdens Than Benefits With IM ET Except for "Remembering to Take" and "Cost/Insurance"[a]

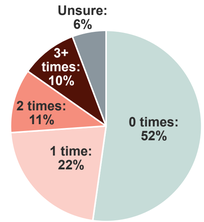


For IM ET, 38% of respondents selected 6 or more burdens and 5% indicated all 8 factors were burdens. Another 5% of respondents indicated that none of the 8 factors were burdens

[a]Between 5% and 24% of patients had a neutral response and 0-3% of respondents said 'not applicable'.
Notes: Respondents assessed the amount of burden or benefit they experienced when taking IM ET (fulvestrant), using a 5-point scale across 8 factors: Remembering: *How difficult is it to remember to schedule or go to appointments?* Cost/Insurance coverage: *How much of a factor is the cost/insurance of this medication?* Fear or dislike of needles: *How afraid are you to receive a shot?* Time: *How much time does it take to schedule an appointment and get an injection?* Stress: *Does having to get an injection every month stress you out?* Convenience: *How difficult is it to take as part of your routine?* Transportation: *Do you need to travel to fill this prescription or receive treatment?* Pain/Discomfort: *How painful or uncomfortable is the injection?*

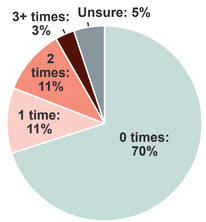
Adherence to Oral and IM ET as Reported by Respondents

Oral ET: Number of Times Daily Dose Missed Per Month



52% never missed a daily dose

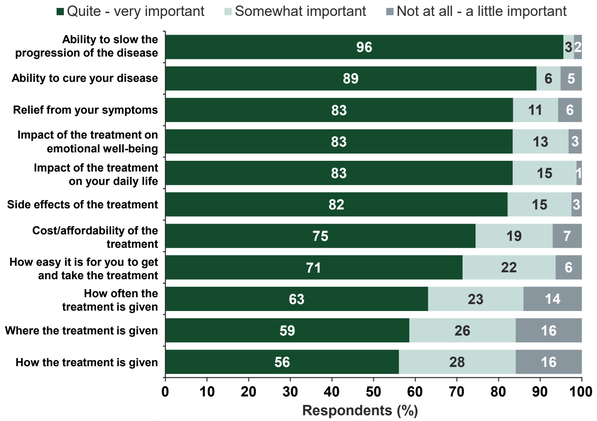
IM ET: Number of Times Monthly Dose Missed



70% never missed a monthly dose

Self-reported adherence was higher with IM ET. However, missing a single monthly IM dose omits the entire monthly treatment cycle, which has greater clinical implications than a missed daily dose of oral ET

Over 50% of Respondents Considered All Listed Treatment Priorities as "Quite - Very Important"



Note: Numbers may not add up to 100 due to rounding.

How and where the treatment is given were considered to be "quite - very important" by 56-63% of respondents

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Disclosures: **E. E. Fortune** reports receiving institutional research funding from: Eli Lilly and Company, Gilead Sciences, and Merck; and consulting funds from: BioNTech and Novartis; **A. Newell** reports receiving institutional research funding from: Genentech, Johnson & Johnson, Kite Pharma, Merck, Novartis, and Regeneron; **M. Gonzalo** reported no conflicts of interest; **R. M. Speck, A. M. Gilligan**, and **A. S. Vitko** are current employees and shareholders of: Eli Lilly and Company

ACKNOWLEDGMENTS

Medical writing assistance was provided by Mary Awoniyi, MBBS, MSc, and Hannah Carney, PhD, of Envision Catalyst, an Envision Medical Communications agency, a part of Envision Pharma Group, and was funded by Eli Lilly and Company

Abbreviations: *AI, aromatase inhibitor; CSC, Cancer Support Community; ER+, estrogen receptor-positive; ET, endocrine therapy; GED, general educational development; HER2-, human epidermal growth factor receptor 2-negative; HQ, headquarter; IM, intramuscular; max, maximum; MBC, metastatic breast cancer; min, minimum; n, number of participants; SD, standard deviation*