Dose reductions in metastatic breast cancer patients: Frequency, strategies, and patient experience

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Introduction

- Metastatic breast cancer (MBC) in the United States[1]
  - 169,000 living with this incurable disease
  - >42,000 will die in 2025
  - On treatment indefinitely
- Balancing length of life and quality of life are extremely important in this community[2,3]
- Dose reductions are a tool in mitigating side effects; however, little is known about how often dose is reduced in the real world

This study examined dose reductions through real-world experience of people living with MBC

Methods



- Developed for this study
- Multidisciplinary team
- Closed & open ended questions

Eligibility

- ✓ Diagnosis of MBC
- ✓ Living in the US
- ✓ 18 years old or age of majority
- ✓ English or Spanish speaking

Distributed via email, newsletters, and closed Facebook groups
$10 gift card offered



Survey Open
April - September 2025

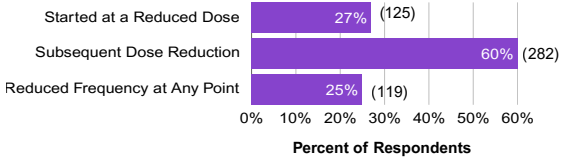
Statistical Analysis
SAS

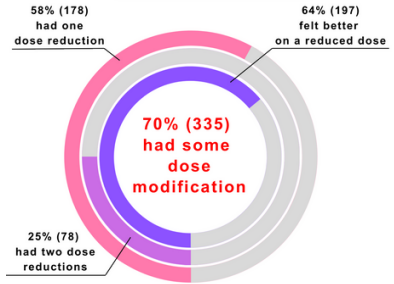
n=506

Average Age	54.9 years
Race	10% Black, 82% White, 6% Other
Ethnicity	8.1% Hispanic, 91% non-Hispanic
Gender	99% Women, 0.4% Non-binary/Third Gender
Sexual Orientation	91% Heterosexual, 2% Homosexual, 3% Asexual, 2% Bisexual
Health Insurance	52% Private Only, 38% Gvmt Only
Oncologist	55% Breast Specialist, 34% Non-specialist

79% (372) Experienced a "Bad" Side Effect → **49% (185) Sought urgent medical attention** → **61% (113) went to the ER**; **41% (76) were admitted to the hospital**

No statistically significant differences in dosing, beliefs or knowledge whether the respondent saw a breast specialist or non-specialist





Who initiated the discussion about starting at a reduced dose? (N=124)	
Patient	20% (25)
Oncologist	72% (90)

Respondents...	This Survey	PCDI 2020 Survey
Know that patients who have a bad side effect can often be given an approved lower dose of MBC drugs	90% (408)	80% (982)
Do not believe that the highest approved dose of an MBC drug is always more effective than a lower approved dose	60% (273)	53% (651)

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Results & Discussion

- Almost 4 in 5 respondents reported a bad side effect
- Dose reductions in this real world study are more than double those reported in most clinical trials
- Most patients (64%) felt better on a reduced dose
- Oncologists brought up dose reductions most often, but patients are also advocating for themselves
- Although not directly comparable, patient awareness of dose modifications and efficacy have increased since the 2020 survey[4]
- No significant difference in dose reductions, discussion, or knowledge whether the respondent saw a breast specialist or not
- Limitations to this study include a non-random sample, self-reported clinical information, and people had to be physically able to complete the survey

Needs & Opportunities

- For drugs already approved- more research into **effective and tolerable dosing strategies**
- **Revised clinical trial design** that meets the goals of the US FDA's Project Optimus and includes the input of patients[5,6]
- Expanded **patient and clinician education and dialogue** around SEs, including dose modifications

Acknowledgments

In memory of Anne Loeser, founder of the PCDI
This study was funded by generous support from
- Arnold Ventures
- The North Carolina University Cancer Research Fund.

We thank all those who took the survey.