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Background

➤ Clinical practice guidelines are increasingly used to improve the quality of care for patients by providing evidence-based recommendations that can be used in health care decision-making.

➤ Over 14 different breast cancer treatment guidelines have been created by various groups to provide guidance at the local, national, and/or global levels. These guidelines may also consider factors such as resource availability and robustness of supporting evidence, which can result in differing recommendations from each guiding body.

➤ While there is data reporting practitioner adherence to specific guideline recommendations, the literature reports little regarding which guidelines the practitioner is utilizing, and factors that influence their preferences.

Objective

The primary objective of this study is to evaluate the utilization of local, regional/national, and global breast cancer treatment guidelines and determine factors impacting their use by oncology practices in the United States.

Methods

➤ In 2015, an anonymous, web-based survey, approved by Rutgers IRB, was distributed internationally to physicians treating breast cancer; US results are summarized here.

- Survey was distributed by third party vendor
- 33 US responses were targeted
- Respondents met the following criteria:
 - Has a medical specialty in oncology
 - Provides cancer-related drug treatment to breast cancer patients
 - Has practiced in the cancer setting for 3 or more years
- A 21-question survey assessed the following:
 - Respondent qualifications and demographics
 - Impact of various factors on breast cancer drug treatment plan decisions
 - Current practices regarding guidelines/evidence used for breast cancer drug treatment decisions
- Descriptive statistics were used to analyze and report the findings and identify trends
 - "Majority" is defined by highest reported frequency

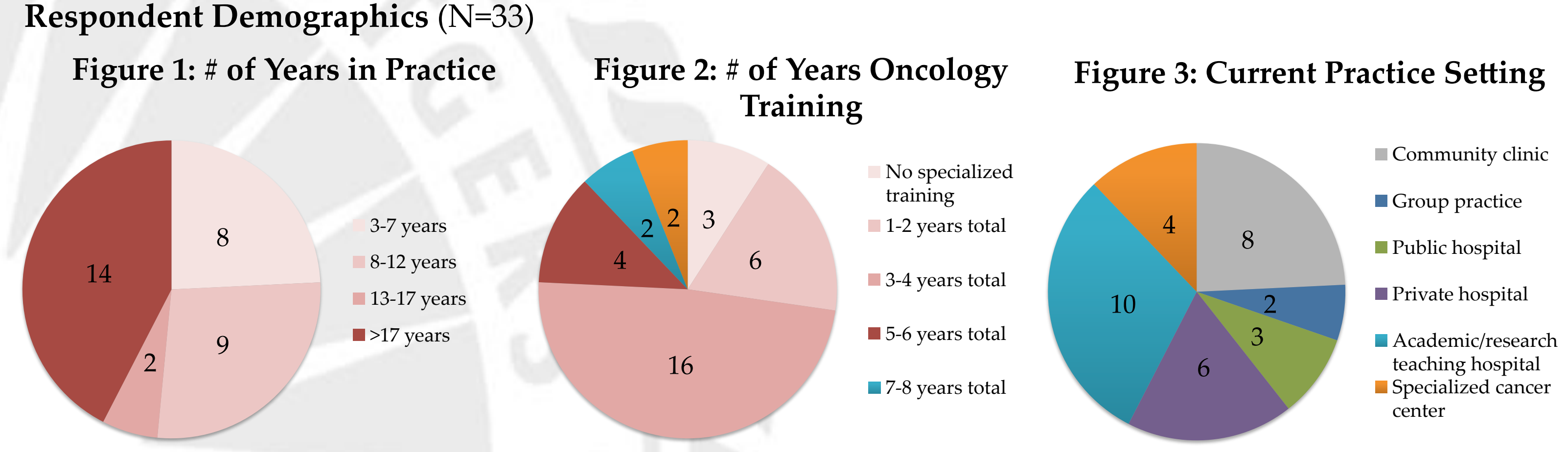
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Disclosure
The authors have nothing to disclose.

ABBREVIATIONS: Local=Local/Institution/Payer Guidelines; Peer Reviewed Lit=Peer Reviewed Literature/ Consensus Statements; Clinical Trials/Investigational Therapy; ASCO=American Society of Clinical Oncology; CCO=Cancer Care Ontario; NCI=National Cancer Institute; NCCN=National Comprehensive Cancer Network; DGHO=German Society for Haematology and Medical Oncology; DKG=German Cancer Society; ESMO=European Society for Medical Oncology; NCCC=National Collaborating Centre for Cancer; NICE=National Institute for Health and Care Excellence; Pharma=Pharmaceutical Company; SIGN=Scottish Intercollegiate Guidelines Network; JBSC=Japan Breast Cancer Society Clinical Practice Guidelines; NBOCC=National Breast and Ovarian Cancer Center; WHO=World Health Organization.

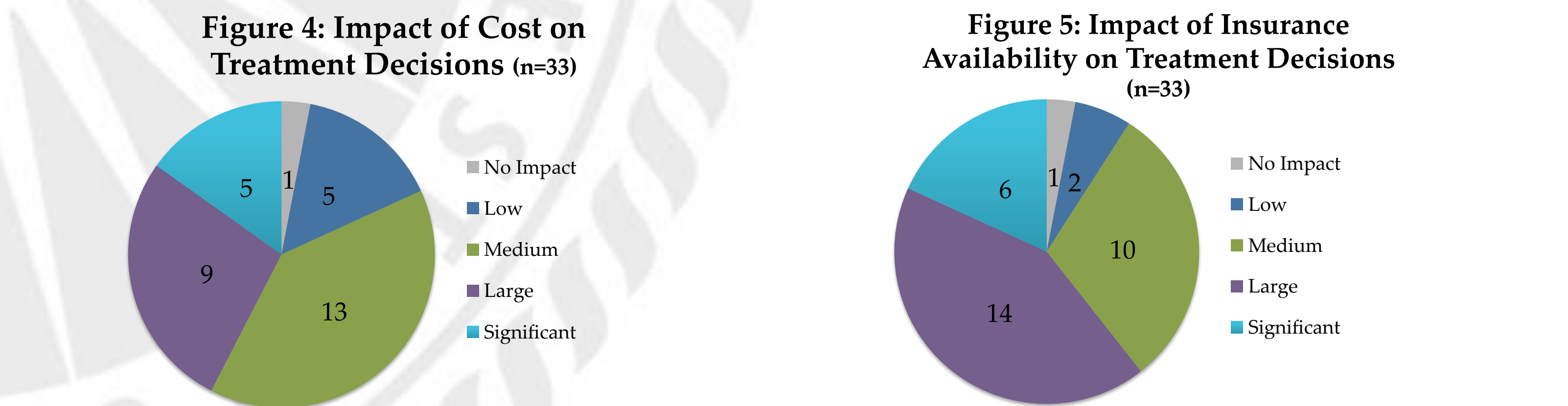
LEGEND:
¹Respondents were able to provide more than 1 response.
²Data from top 4 most commonly used guidelines/evidence presented
³N varies based on number of respondents confirming use of guideline/evidence

Results

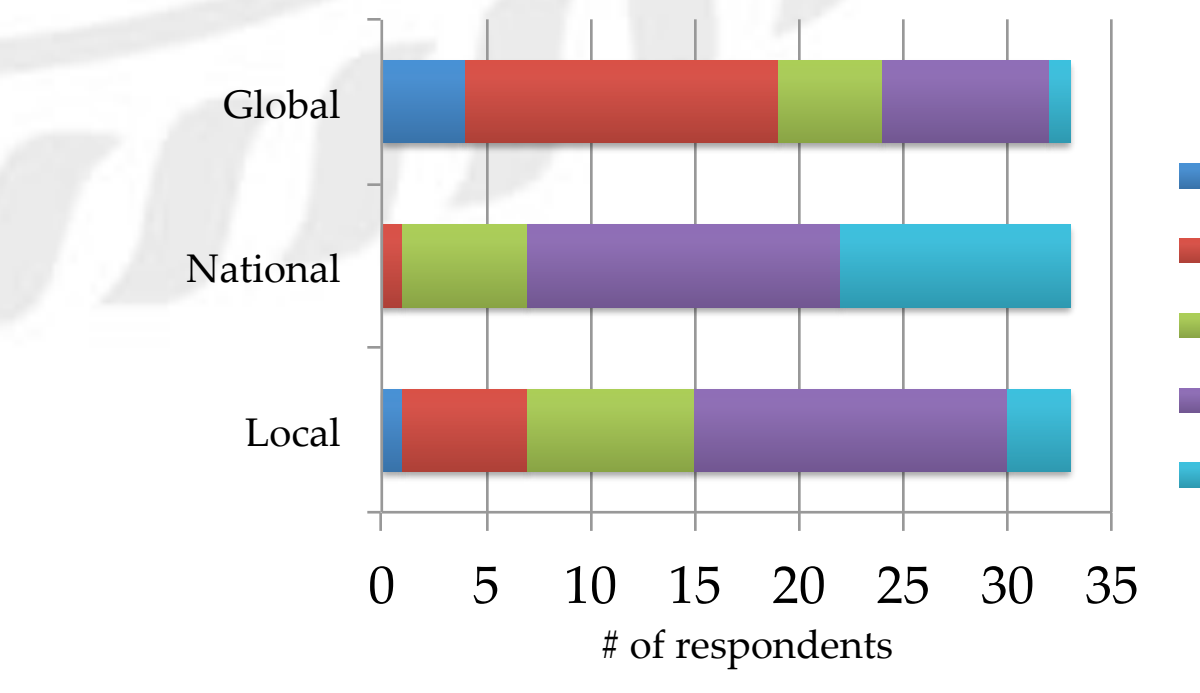


- The majority of respondents completed their training in academic/research based sites.
- The majority of respondents are responsible for treating 7 or more of the 10 most common cancer types.

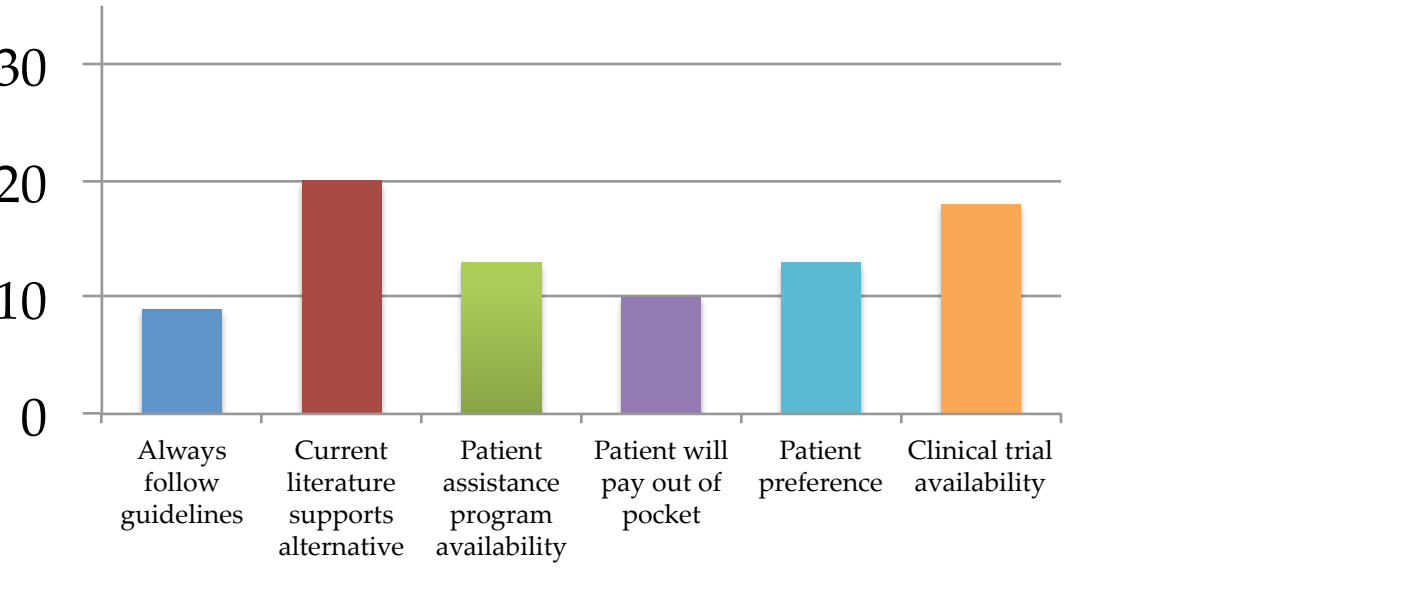
Factors Influencing Decision-Making



Impact of Guidelines on Treatment Decisions (n=33)



Reasons to Choose an Alternative Treatment from Guideline Recommendation¹ (n=33)



Guideline Preferences

Figure 8: Guidelines/Evidence Referenced in Breast Cancer Drug Treatment Decisions¹ (n=33)

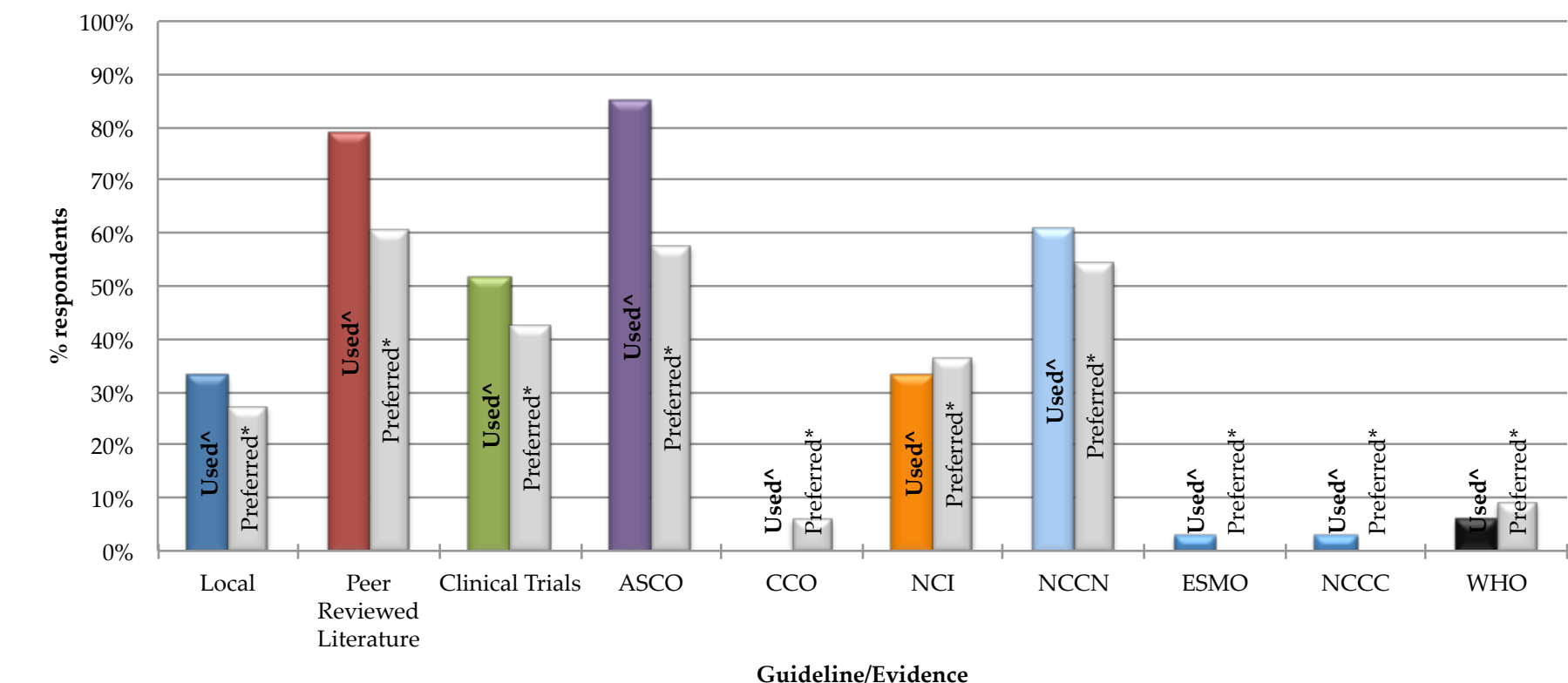


Figure 8: ¹Used currently in practice *Preference for use given no financial or regulatory restrictions
○ No statistical difference in guideline/evidence use between these scenarios using a t-test of 2 samples.

Figure 9: Adherence to Guideline/Evidence Recommendations^{2,3}

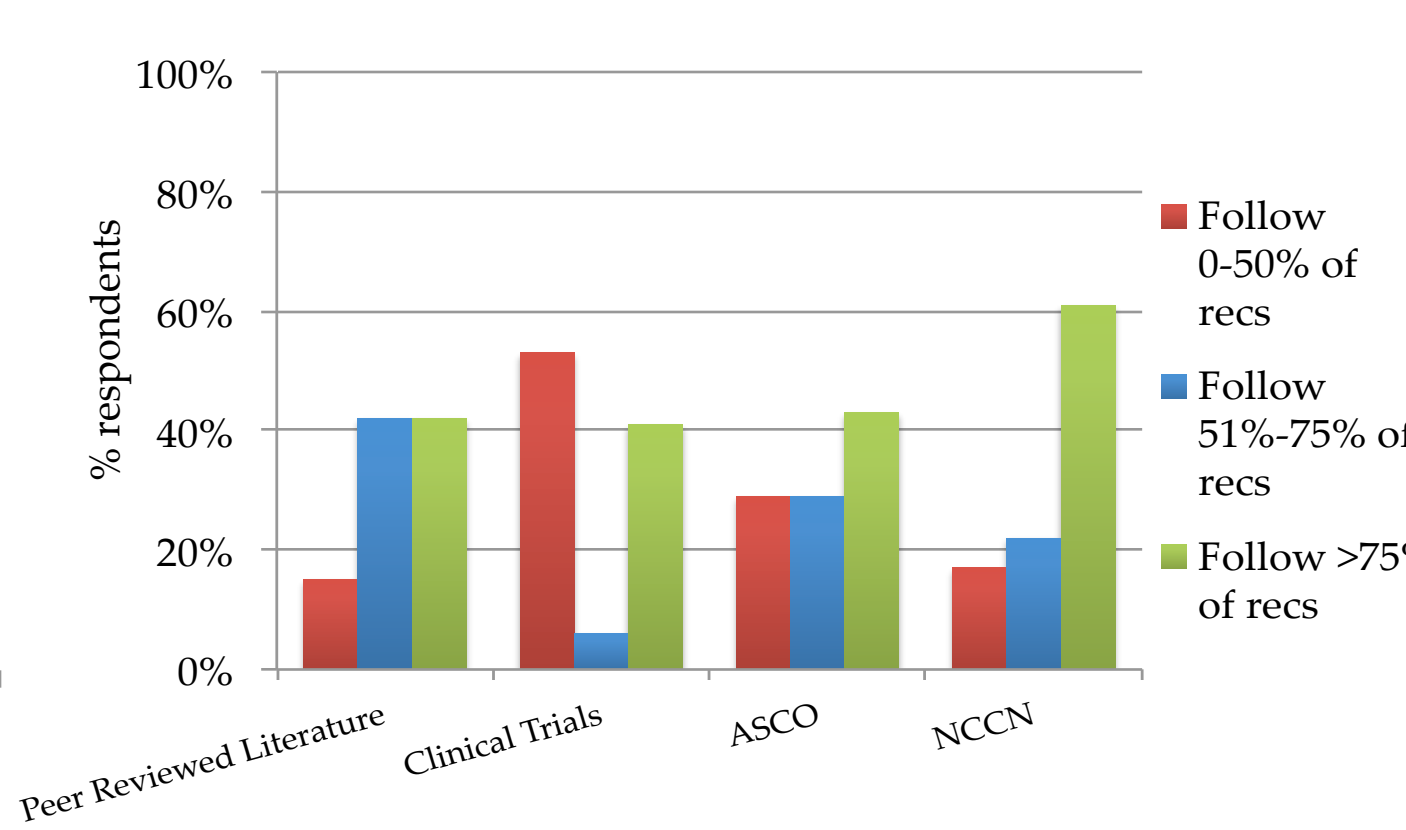


Figure 10: Mean Use of Guideline/Evidence by Insurance Type^{2,3}

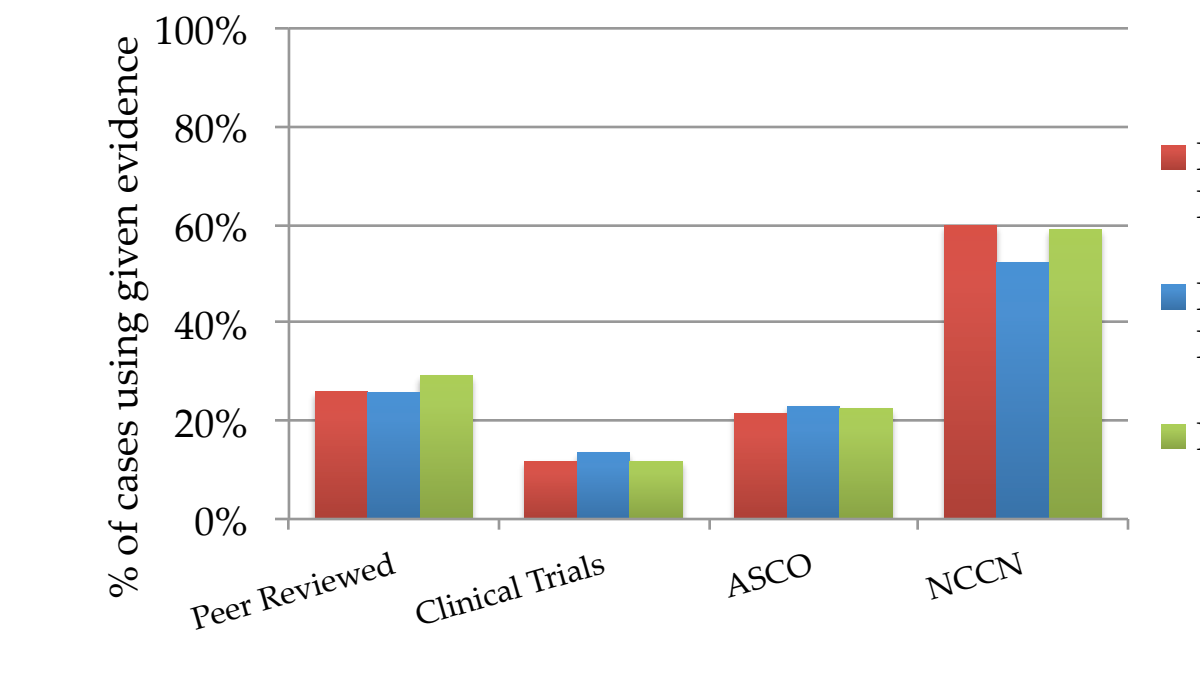


Figure 10: This figure represents the percentage of total breast cancer cases in which each guideline/evidence was utilized to make drug treatment decisions. The influence of insurance type (public versus private vs no insurance) on utilization is evaluated within each guideline/evidence.

Discussion/Limitations

➤ Local and national guidelines are most commonly reported as having a large impact on breast cancer drug treatment plans.

- Global guidelines had the least impact on treatment decisions, with 15/33 indicating low impact
- The majority of respondents are willing to use a treatment other than that recommended in the guidelines, most commonly due to the availability of literature that supports an alternative regimen.
- U.S.-based guidelines for breast cancer are the most commonly referenced guidelines by US oncologists compared to non-US-based guidelines.
- From the top 4 most referenced guidelines/evidence, the NCCN recommendations were the most closely followed (>75% adherence).
- In reviewing the top 4 guidelines/evidence, average use was not dictated based on the patient's insurance type (public vs private vs no insurance).
- Limitations of this study include:
 - Reporting of "majority" data may not be reflective of entire population.
 - "Peer reviewed literature" may be interpreted to include guidelines.
 - Variability in guidelines used versus those preferred with no restrictions unaccounted for.

Conclusions

➤ This study provides insight on which breast cancer guidelines are used by US oncologists and describes cost and insurance coverage as notable factors in breast cancer drug treatment decision-making.

- 42% of respondents described cost as having a large or significant impact on their treatment choice.
- 61% of respondents described the availability of insurance as having a large or significant impact on their treatment choice.
- U.S.-based breast cancer oncologists most commonly reference ASCO, peer reviewed literature, NCCN, and clinical trials to inform breast cancer drug treatment decision-making.
 - This preference does not appear to change even if financial and regulatory restrictions are removed.
- A larger study is needed to confirm these results in the broader prescriber population, as well as a focus on specific variables that may influence guideline preferences.

