

Variance Between Experts and Community Practitioners in Treatment of Metastatic Breast Cancer



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Background

- Practice guidelines in metastatic breast cancer (MBC) are an important resource to help guide management of patients (pts) but can be difficult to apply to individual pts, particularly when there are 2 or more treatment (Tx) options with similar levels of evidence
- To provide healthcare providers (HCPs) with expert guidance and feedback on choice of Tx for specific case scenarios, we implemented an **interactive Web-based decision support tool**, in which HCPs input specific pt and tumor characteristics along with their planned Tx approach and then receive expert recommendations
- Here we analyze data from this tool capturing recent Tx trends in the evolving therapeutic landscape for MBC, variance in HCP planned Tx vs expert recommendations, and the impact of this online tool on practice

Study Components

- Online decision support tool published in December 2016
 - Each expert provided Tx recommendations in October 2016
- The tool included **492 different MBC case variations** based on specific pt/tumor characteristics, including disease phenotype, previous therapy, visceral crisis, and rate of disease progression
- HCPs are prompted to enter pt/tumor characteristics and indicate their intended clinical approach
 - Recommendations from the 5 experts are displayed
 - Users are asked whether the experts' recommendation confirmed or changed their intended clinical approach
- The tool is online at: clinicaloptions.com/MBCtool**

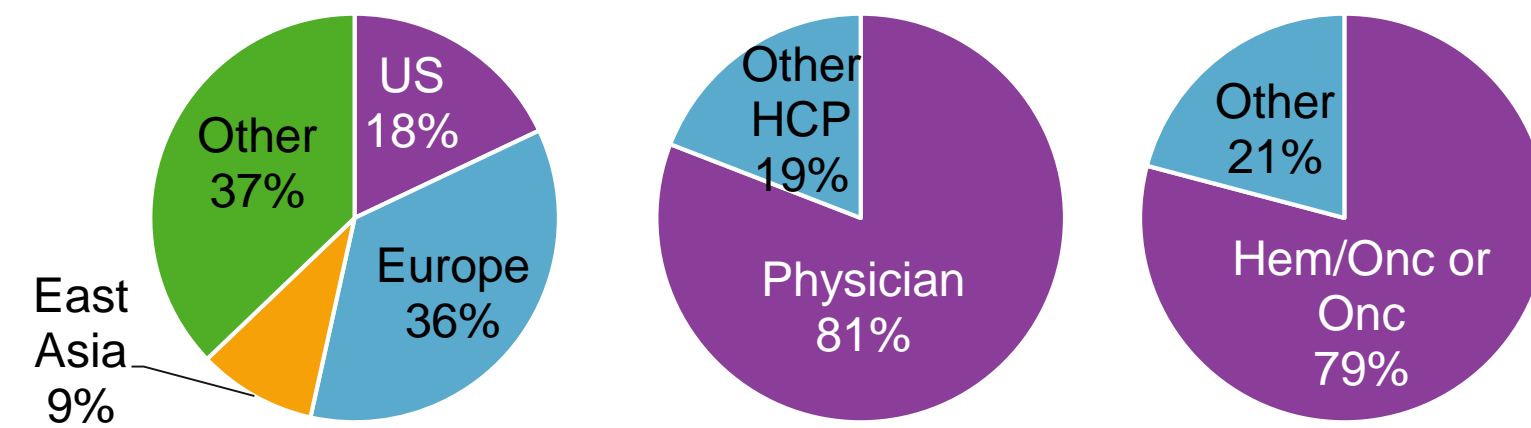
MBC Tool Screenshots (Examples)

- Clinician enters information on pt and disease characteristics using drop-down menus
- Clinician indicates his/her intended Tx approach
- Clinician receives expert Tx recommendations for their specific pt scenario
- Clinician is able to compare intended Tx vs expert recommendation

Results

Tool Participant Demographics

- 793 HCPs entered 1470 different pt cases between December 2016 and October 2017



Phenotype of Cases Entered and Practice Impact

HR+/HER2-, %	HR-/HER2+, %	HR+/HER2+, %	HR-/HER2-, %
54	10	14	21

Intended Use of Tool (n = 388 cases)

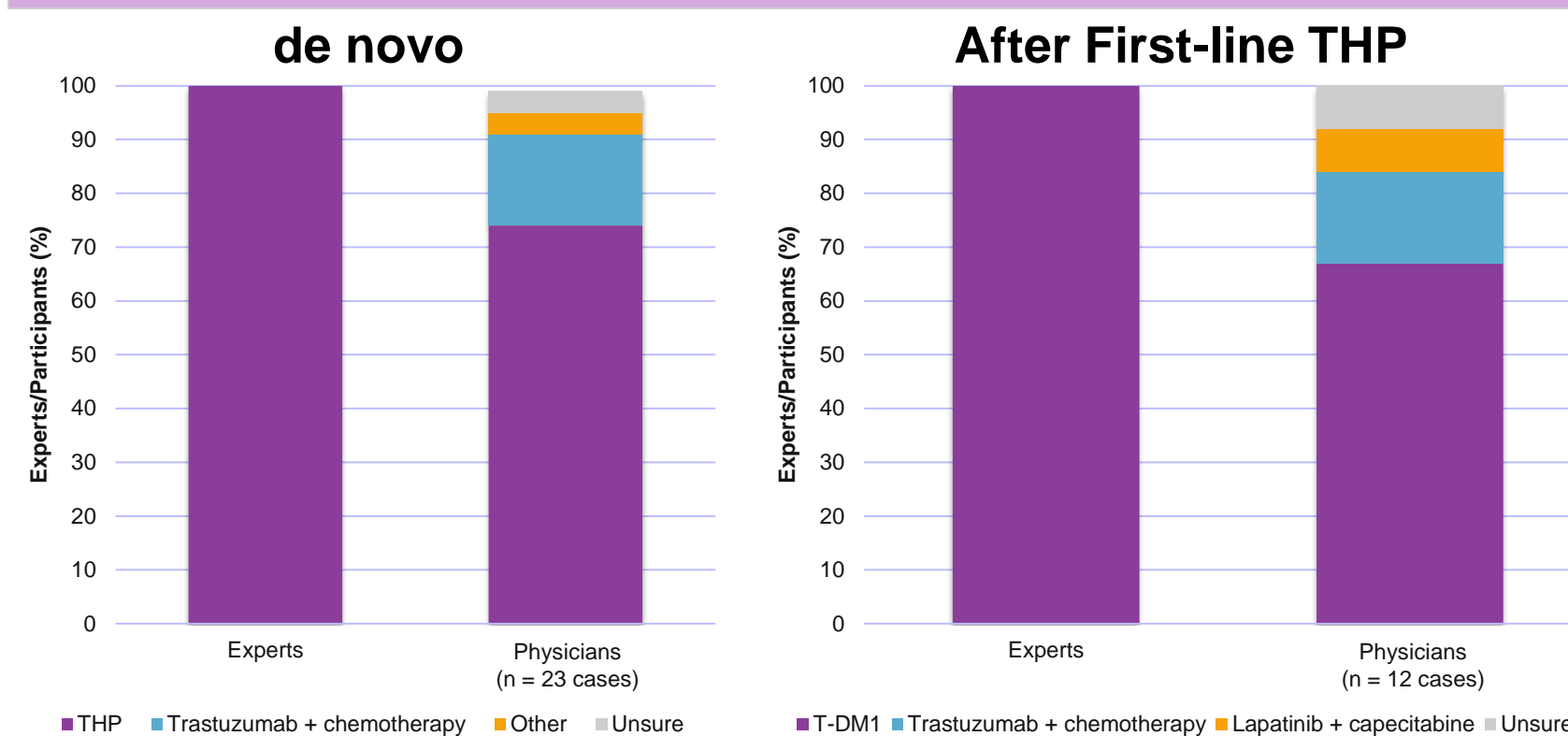
Cases, %	
Hypothetical pt case (educational resource)	51
Actual pt case (virtual consultation)	49

Self-Identified Impact (n = 388 cases)

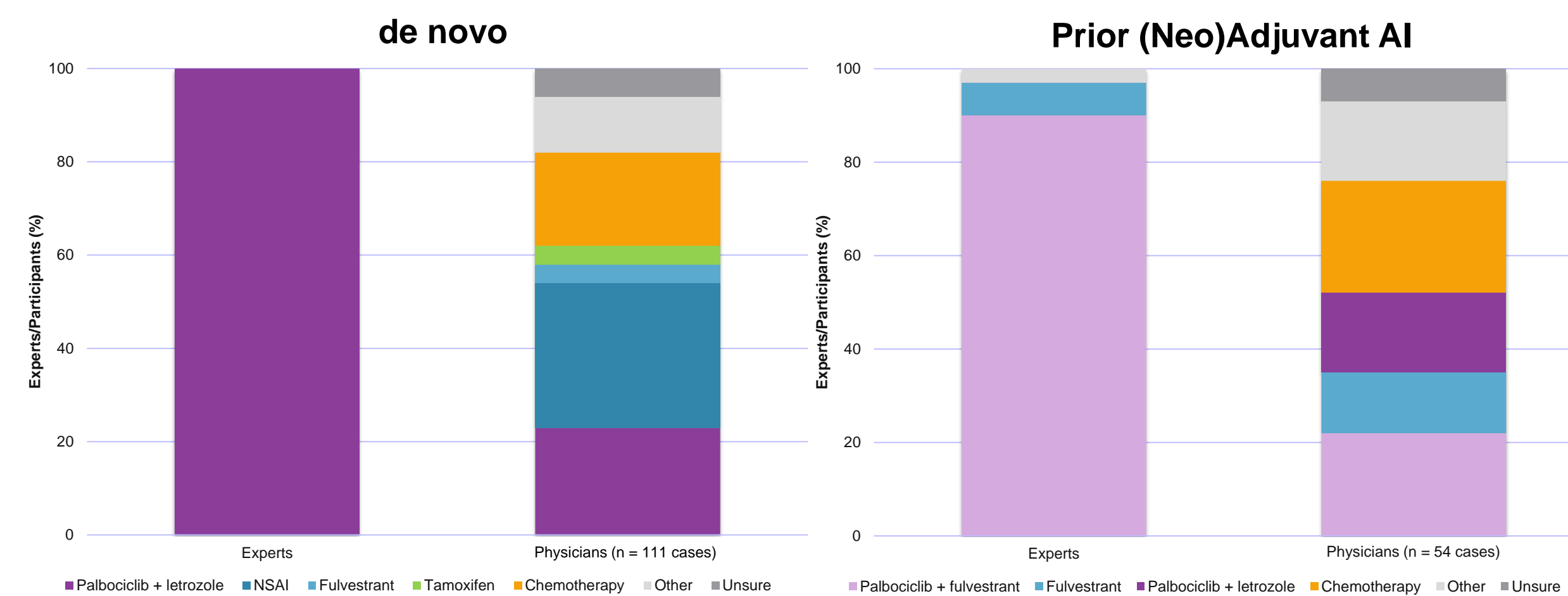
Cases, %	
Changed treatment plan to match experts (<i>among those who initially differed from experts</i>)	62
Confirmed treatment plan	35

All subsequent presented data analyses limited to 973 cases entered by 523 physicians with an indicated specialty of oncology or hem/onc

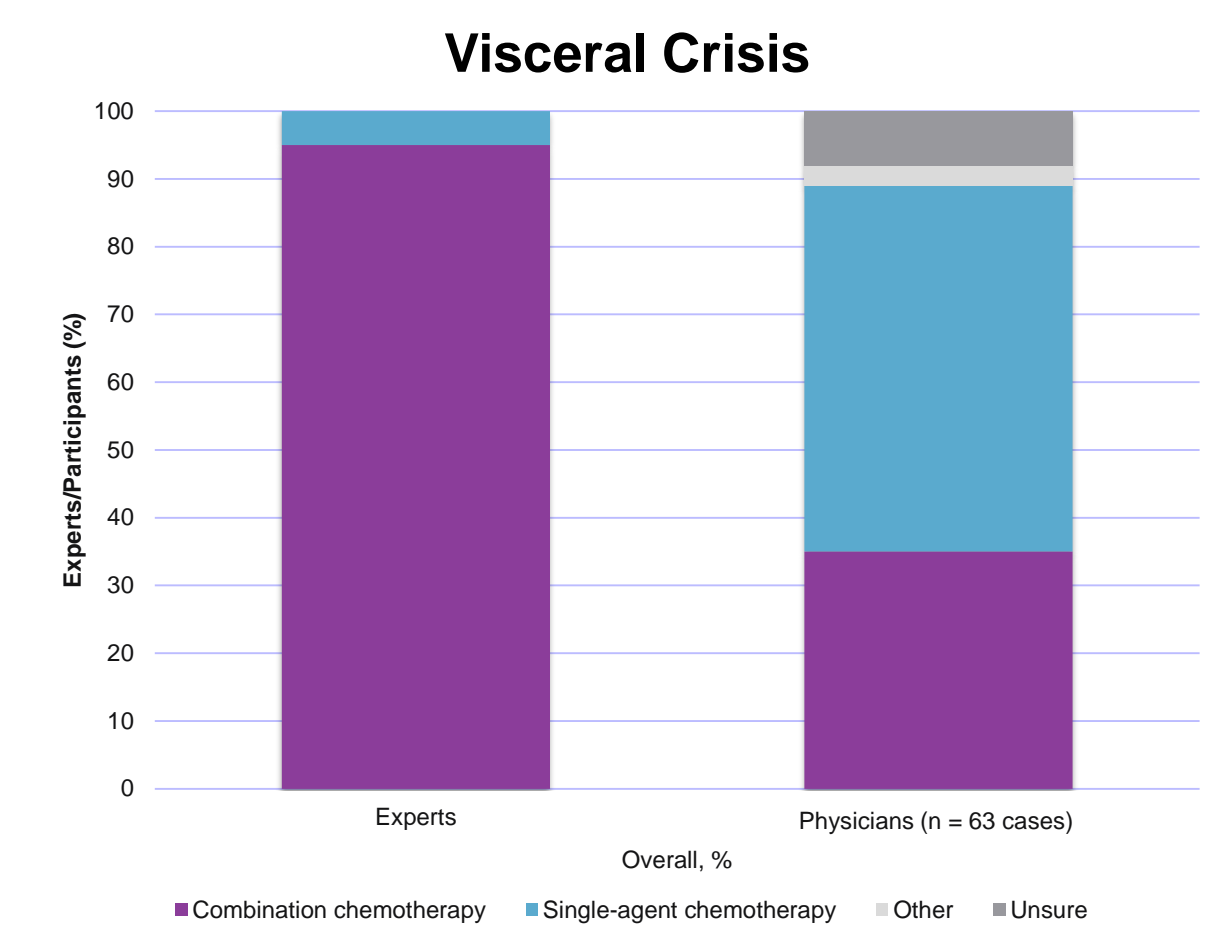
Treatment Choice for HR-/HER2+ MBC (No Visceral Crisis)



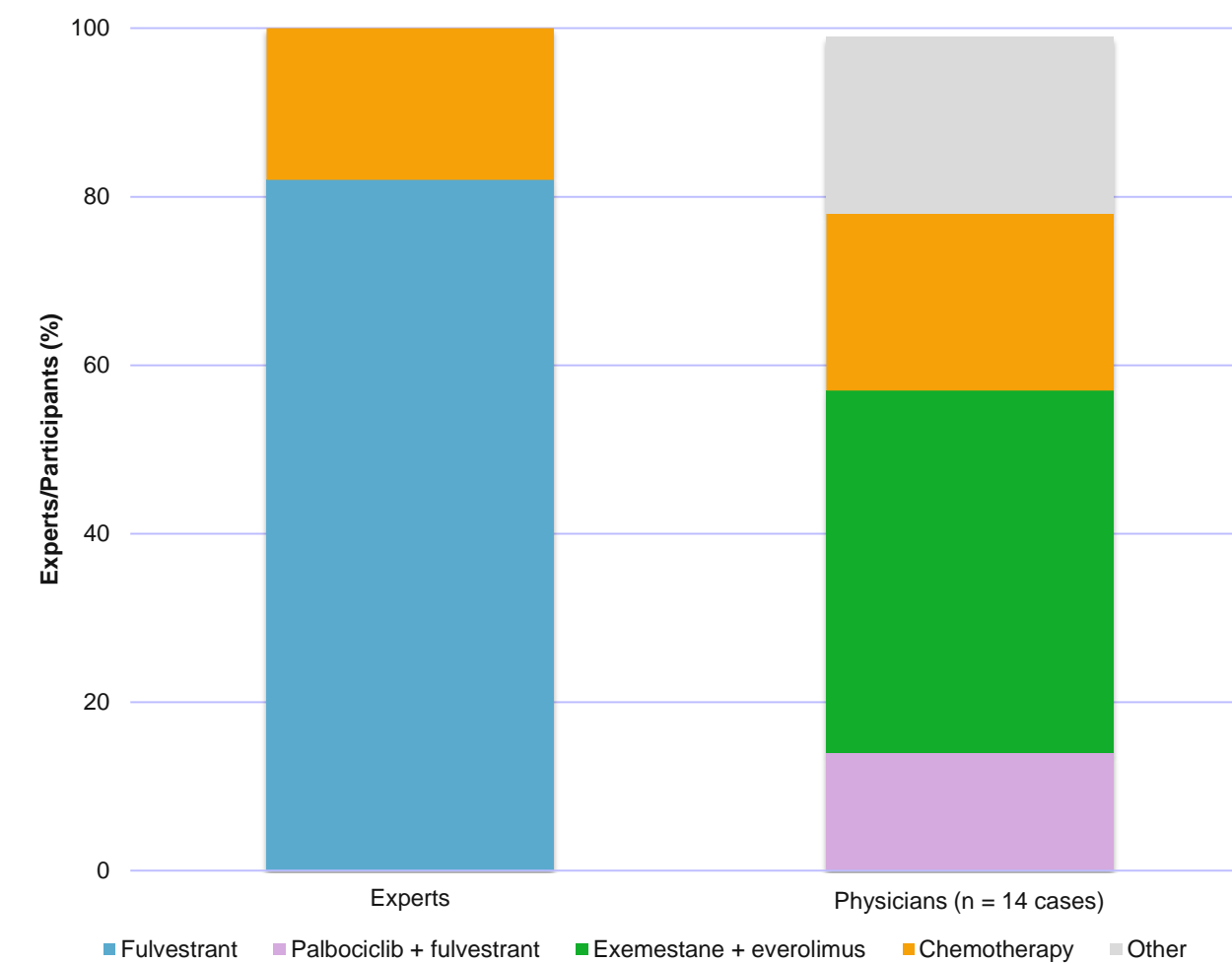
Treatment Choice for HR+/HER2- MBC (No Visceral Crisis)



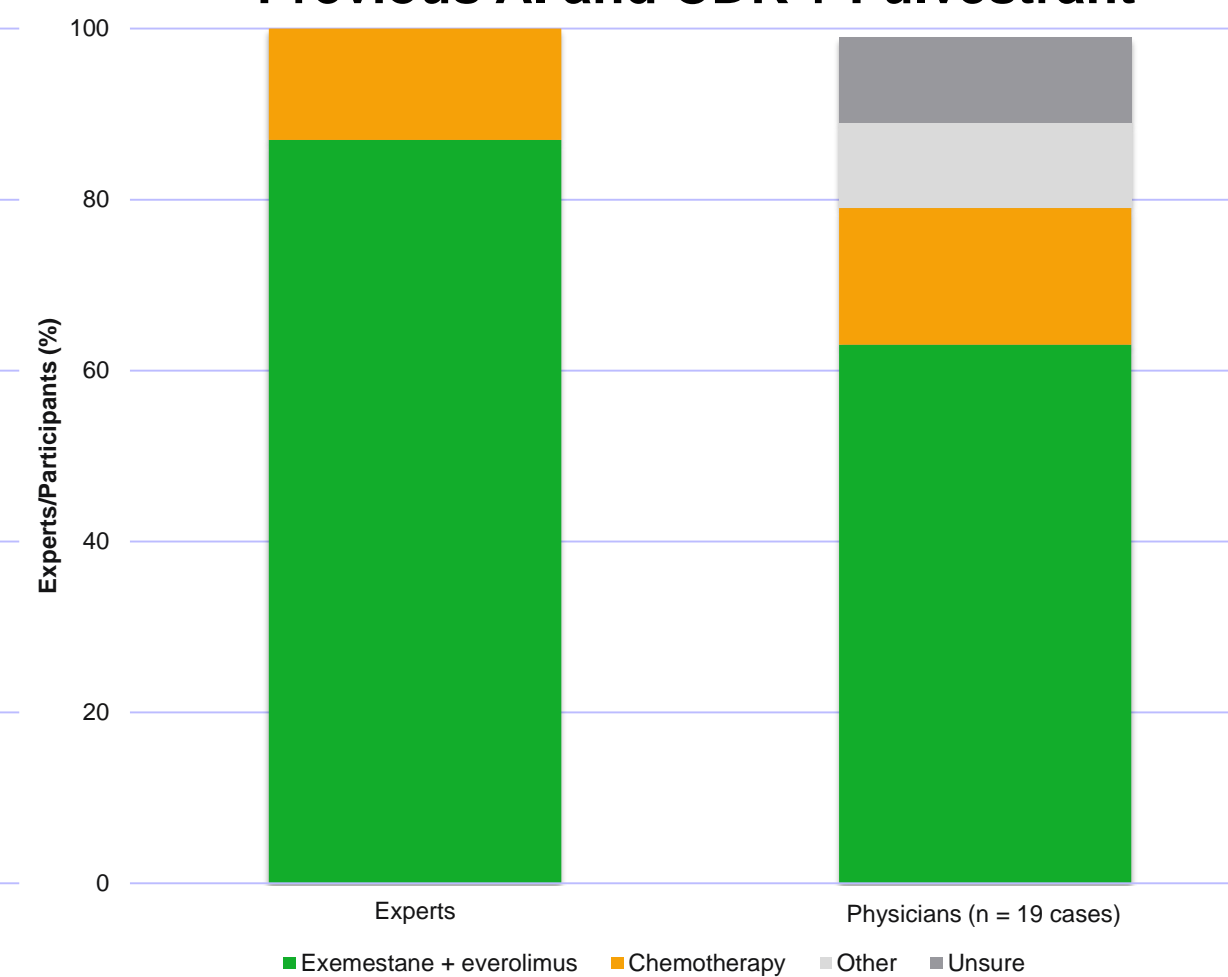
Treatment Choice for mTNBC



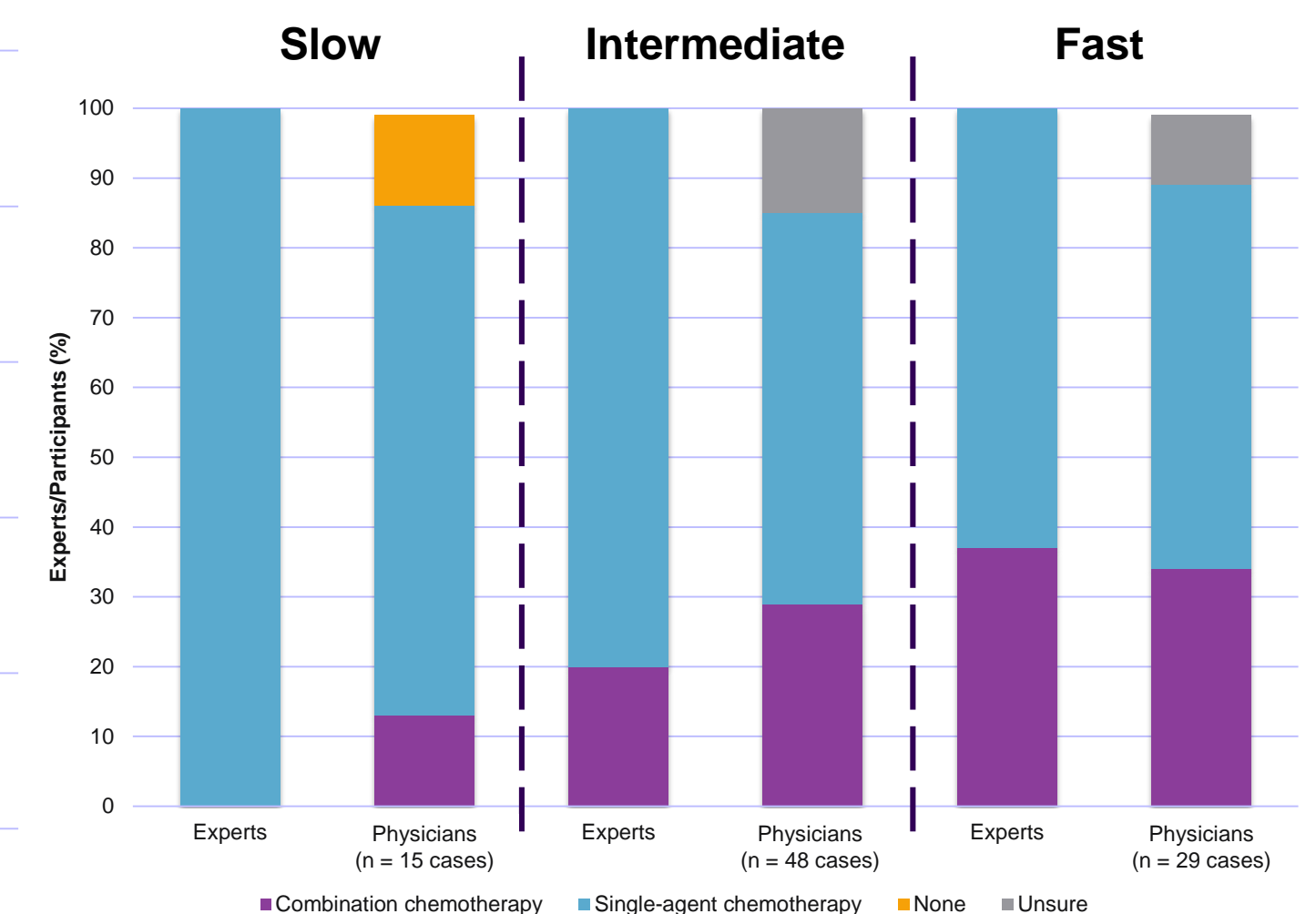
Previous First-line CDK + AI



Previous AI and CDK + Fulvestrant



No Visceral Crisis



Conclusions

- The majority of cases entered by HCPs were HR+/HER2- MBC
- Substantial variation was evident between oncologists' planned Tx and expert recommendations for each MBC subtype
 - For HR+/HER2- MBC, in the de novo or post-(neo)adjuvant AI therapy disease settings, experts frequently chose a regimen with a CDK4/6 inhibitor vs approximately 1 in 5 oncologists
 - For HR-/HER2+ MBC, approximately 1 in 4 (de novo) or 1 in 3 (post-THP therapy) oncologists' planned Tx differed from expert consensus
 - For HR-/HER2- MBC, in the setting of a visceral crisis, experts frequently chose combination chemotherapy vs approximately 1 in 3 oncologists
- Expert recommendations from this tool led to a change in intended treatment for 62% of cases where HCPs initially chose a Tx plan different from the expert panel indicating this tool can have an impact on patient care

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