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Utility of a Novel Staging System in the Setting of Breast Cancer Recurrence

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Disclosures

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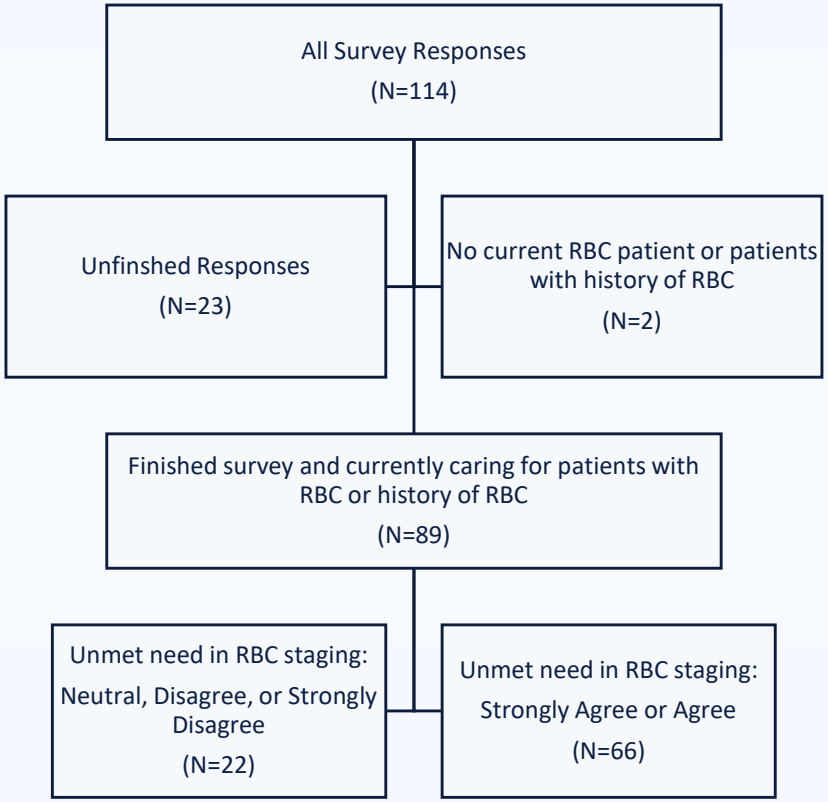
Introduction

- 30% of breast cancers recur
- Recurrent breast cancer (RBC) = heterogenous
- Staging includes extent of disease and biomarkers
- Lack of standardized staging for recurrent breast cancer

1. Saphner T, Tormey DC, Gray R: Annual hazard rates of recurrence for breast cancer after primary therapy. J Clin Oncol 14:2738-46, 1996.
2. Buchholz TA, Ali S, Hunt KK: Multidisciplinary Management of Locoregional Recurrent Breast Cancer. J Clin Oncol 38:2321-2328, 2020
3. Dieci MV, Barbieri E, Piacentini F, et al: Discordance in receptor status between primary and recurrent breast cancer has a prognostic impact: a single-institution analysis. Ann Oncol 24:101-8, 2013

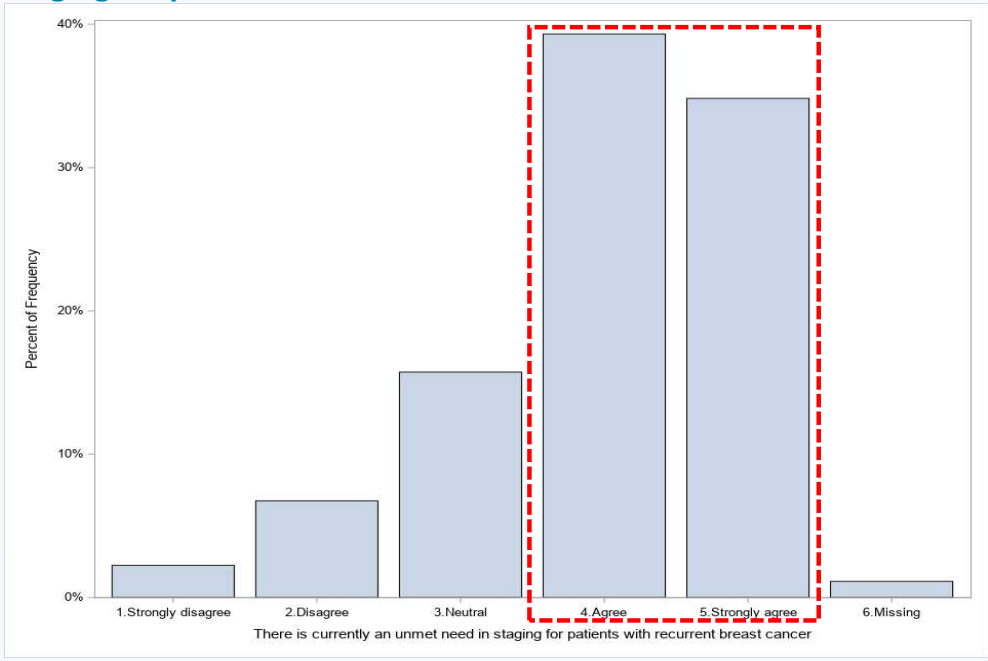
Methods



- Qualtrics survey sent to 329 breast oncology providers at four major cancer centers
- Received 114 responses (34.7% response rate)
  - After exclusion, 89 survey responses included
- Participant demographics, practice details, and survey question responses compared

Perceived Need Among Clinicians

Figure 1. Responses to: "There is currently an unmet need in staging for patients with RBC"



74.2% Agree

Table 1. Participant Characteristics and Perceived Unmet Need

	All Participants (N=89)	There is currently an unmet need in staging for RBC patients			P-Value
		Unanswered (N=1)	Neutral, Disagree, or Strongly Disagree (N=22)	Strongly Agree or Agree (N=66)	
Age – Median (IQR)	45 (37.5 - 55)		50 (40 - 55)	44 (37 - 55)	0.20
Gender					0.62
Cisgender Man	15 (16.9%)	0 (0%)	3 (13.6%)	12 (18.2%)	
Cisgender Woman	66 (74.2%)	1 (100%)	18 (81.8%)	47 (71.2%)	
Nonbinary	1 (1.1%)	0 (0%)	0 (0%)	1 (1.5%)	
Transgender Woman	3 (3.4%)	0 (0%)	0 (0%)	3 (4.5%)	
Unanswered*	4 (4.5%)	0 (0%)	1 (4.5%)	3 (4.5%)	
Years of practice					0.15
<5	14 (15.7%)	0 (0%)	2 (9.1%)	12 (18.2%)	
5-9	26 (29.2%)	0 (0%)	3 (13.6%)	23 (34.8%)	
10-14	14 (15.7%)	0 (0%)	4 (18.2%)	10 (15.2%)	
15-19	11 (12.4%)	0 (0%)	4 (18.2%)	7 (10.6%)	
20 or more	24 (27%)	1 (100%)	9 (40.9%)	14 (21.2%)	
Percentage current practice is:					
Research – Median (IQR)	15 (5 - 30)		20 (5 - 40)	10 (5 - 20)	0.25
Administrative/Leadership – Median (IQR)	10 (5 - 20)		12 (10 - 40)	11 (5 - 20)	0.11
Clinical – Median (IQR)	**70 (50 - 80)**		**49.5 (39 - 76)**	**75 (50 - 80)**	**0.02**
% of Patients Treated for Breast Cancer? – Median (IQR)	97 (69 - 100)		100 (85 - 100)	95 (65 - 100)	0.19
% of those Breast Cancer Patients With RBC – Median (IQR)	15 (7 - 25)		16.5 (5 - 30)	15 (10 - 24)	0.98

Current Practices and Barriers

Figure 2. Responses to "There is currently an unmet need in staging for patients with RBC" Stratified by Staging Use

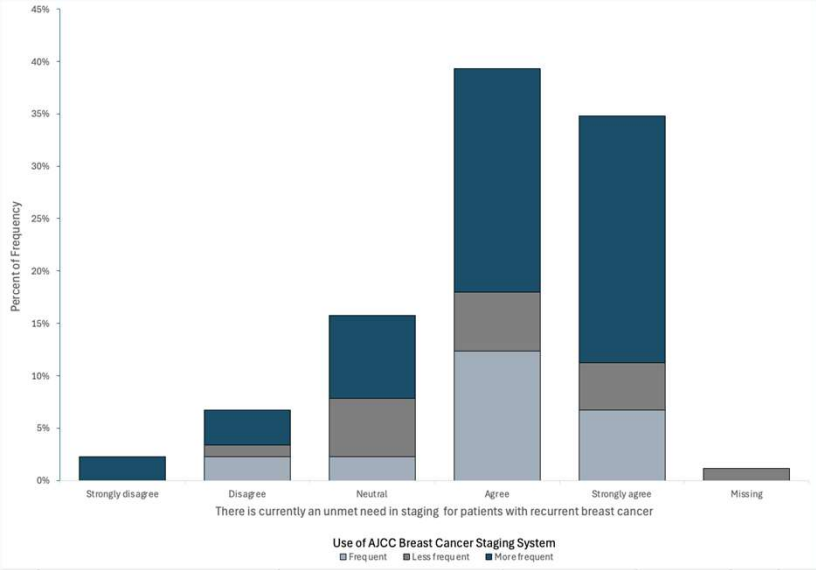


Table 2. Barriers to Discussing Prognosis with RBC Patients Stratified by Response to Unmet Need for Staging

	All Participants (N=89)	There is currently an unmet need in staging for RBC patients			P-Value
		Unanswered* (N=1)	Neutral, Disagree, or Strongly Disagree (N=22)	Strongly Agree or Agree (N=66)	
Barriers or challenges:					
Lack of clear and standardized guidelines					**0.02**
A lot	**14 (15.7%)**	**0 (0%)**	**0 (0%)**	**14 (21.2%)**	
Somewhat	**33 (37.1%)**	**0 (0%)**	**6 (27.3%)**	**27 (40.9%)**	
A little	**27 (30.3%)**	**0 (0%)**	**10 (45.5%)**	**17 (25.8%)**	
Not at all	**12 (13.5%)**	**0 (0%)**	**5 (22.7%)**	**7 (10.6%)**	
Unanswered*	**3 (3.4%)**	**1 (100%)**	**1 (4.5%)**	**1 (1.5%)**	
Limited time					0.68
A lot	6 (6.7%)	0 (0%)	2 (9.1%)	4 (6.1%)	
Somewhat	15 (16.9%)	0 (0%)	4 (18.2%)	11 (16.7%)	
A little	26 (29.2%)	0 (0%)	4 (18.2%)	22 (33.3%)	
Not at all	38 (42.7%)	0 (0%)	10 (45.5%)	28 (42.4%)	
Unanswered*	4 (4.5%)	1 (100%)	2 (9.1%)	1 (1.5%)	
Unclear benefit of discussing prognosis					0.11
A lot	2 (2.2%)	0 (0%)	0 (0%)	2 (3%)	
Somewhat	27 (30.3%)	0 (0%)	3 (13.6%)	24 (36.4%)	
A little	34 (38.2%)	0 (0%)	9 (40.9%)	25 (37.9%)	
Not at all	23 (25.8%)	0 (0%)	9 (40.9%)	14 (21.2%)	
Unanswered*	3 (3.4%)	1 (100%)	1 (4.5%)	1 (1.5%)	

Utility of Standardized Staging Tool

- 62% agree that a staging tool for RBC would improve communication
- 63% agree that a staging tool for RBC would inform treatment decisions
- 65% agree that a staging tool for RBC would have use for research
- When stratified by perceived unmet need for RBC staging, those that agreed with unmet need were more likely to say this tool would be useful for the above factors than those that disagreed with unmet need

Table 3. Areas of Utility for Novel RBC Staging Tool Stratified by Response to Unmet Need for Staging

	All Participants (N=89)	There is currently an unmet need in staging for patients with recurrent breast cancer			P-Value
		Unanswered (N=1)	Neutral, Disagree, or Strongly Disagree (N=22)	Strongly Agree or Agree (N=66)	
How useful would having a standardized staging tool be for:					
Improving communication with providers and patients					**<0.001**
A lot	**42 (47.2%)**	**0 (0%)**	**1 (4.5%)**	**41 (62.1%)**	
Somewhat	**20 (22.5%)**	**0 (0%)**	**3 (13.6%)**	**17 (25.8%)**	
A little	**18 (20.2%)**	**0 (0%)**	**12 (54.5%)**	**6 (9.1%)**	
Not at all	**7 (7.9%)**	**0 (0%)**	**5 (22.7%)**	**2 (3%)**	
Unanswered*	**2 (2.2%)**	**1 (100%)**	**1 (4.5%)**	**0 (0%)**	
Informing treatment decisions/recommendations					**<0.001**
A lot	**39 (43.8%)**	**0 (0%)**	**3 (13.6%)**	**36 (54.5%)**	
Somewhat	**24 (27%)**	**0 (0%)**	**2 (9.1%)**	**22 (33.3%)**	
A little	**17 (19.1%)**	**0 (0%)**	**12 (54.5%)**	**5 (7.6%)**	
Not at all	**7 (7.9%)**	**0 (0%)**	**4 (18.2%)**	**3 (4.5%)**	
Unanswered*	**2 (2.2%)**	**1 (100%)**	**1 (4.5%)**	**0 (0%)**	
Research					**<0.001**
A lot	**40 (44.9%)**	**0 (0%)**	**3 (13.6%)**	**37 (56.1%)**	
Somewhat	**25 (28.1%)**	**0 (0%)**	**5 (22.7%)**	**20 (30.3%)**	
A little	**14 (15.7%)**	**0 (0%)**	**9 (40.9%)**	**5 (7.6%)**	
Not at all	**7 (7.9%)**	**0 (0%)**	**4 (18.2%)**	**3 (4.5%)**	
Unanswered*	**3 (3.4%)**	**1 (100%)**	**1 (4.5%)**	**1 (1.5%)**	

Takeaways

- 74.2% of respondents perceived unmet need in RBC staging
  - More clinical time → Greater perceived unmet need
- More individuals who agree with unmet need of RBC staging tool cited lack of standardized guidelines as a significant barrier
- Participants who perceived a need for RBC staging felt that a tool could benefit all areas of utility proposed
  - Communication, informing treatment decisions, predicting prognosis, and research