

# Patterns of Care in Medical Oncology

Adjuvant and Neoadjuvant Therapy for  
HER2-Positive Breast Cancer

**A 60-year-old woman has a core biopsy as follows: 4.8-cm, ER-positive, HER2-positive, node-positive IDC (3 sentinel nodes). The patient wishes to undergo breast-conserving surgery, which will be difficult or impossible without shrinkage of the breast mass.**

**Which of the following would be your most likely recommendation for this patient?**

<b>Neoadjuvant TCH</b>	<b>65%</b>
<b>Neoadjuvant AC → TH</b>	<b>25%</b>
<b>Neoadjuvant paclitaxel/trastuzumab → FEC/trastuzumab</b>	<b>5%</b>
<b>Mastectomy</b>	<b>4%</b>
<b>Other</b>	<b>1%</b>

**A 60-year-old woman has a core biopsy as follows: 4.8-cm, ER-positive, HER2-positive, node-positive IDC (3 sentinel nodes). The patient wishes to undergo breast-conserving surgery, which will be difficult or impossible without shrinkage of the breast mass. She receives TCH (docetaxel/carboplatin/trastuzumab) for 6 cycles.**

**In addition to endocrine therapy, which of the following would you most likely recommend as systemic postop treatment if this patient had...**

**A pathologic complete response**

Trastuzumab to 1 year completion	88%
More chemotherapy (with trastuzumab)	11%
No further chemotherapy or trastuzumab	1%

**Significant residual disease (3 positive nodes, 2-cm primary tumor mass)**

Trastuzumab to 1 year completion	59%
More chemotherapy (with trastuzumab)	40%
Other	1%

**Clinical Scenario 15: A woman has a 2.2-cm, ER-positive, HER2-positive, node-positive IDC (1 sentinel node).**

**Which treatment would you most likely recommend for this patient, in addition to endocrine therapy, if the patient's age was:**

Treatment	60 years	75 years	85 years
TCH	55%	58%	21%
AC-TH	38%	9%	1%
TC + trastuzumab	5%	18%	10%
Paclitaxel + trastuzumab	2%	9%	31%
Trastuzumab alone	0%	6%	30%
Trastuzumab + other chemotherapy	0%	0%	3%
None	0%	0%	4%

**Clinical Scenario 16: A 60-year-old woman has a HER2-positive, node-negative IDC (3 sentinel nodes) and undergoes breast-conserving therapy.**

**Which adjuvant systemic treatment would you most likely recommend for this patient, in addition to endocrine therapy as appropriate, given the following ER status and tumor sizes?**

Treatment	ER status and tumor size			
	ER-positive		ER-negative	
	0.3-cm tumor	0.8-cm tumor	0.3-cm tumor	0.8-cm tumor
TCH	20%	56%	27%	58%
TC + trastuzumab	7%	14%	12%	15%
Paclitaxel + trastuzumab	7%	4%	5%	3%
Trastuzumab alone	6%	7%	6%	4%
AC-TH	4%	8%	8%	15%
Other	0%	1%	1%	1%
None	56%	10%	41%	4%

## Prognostic role of HER2 positivity in small, node-negative breast cancer

Group	N	Patients	Main outcome
European Institute of Technology <sup>1</sup>	150	pT1a-b, N0	Recurrence at 5 y ER+, HER2+: 8% ER-, HER2+: 9%
MD Anderson <sup>2</sup>	965	pT1a-b, N0	Recurrence at 5 y HER2+: 22.9% Distant recurrence at 5 y HER2+: 13.6%
Memorial Sloan-Kettering Cancer Center <sup>3</sup>	257	pT1a-c, N0	Distant recurrence at 3 y No adjuvant trastuzumab: 5% Adjuvant trastuzumab: 0%

<sup>1</sup> Curigliano G et al. *J Clin Oncol* 2009;27(34):5693-9.

<sup>2</sup> Gonzalez-Angulo AM et al. *J Clin Oncol* 2009;27(34):5700-6.

<sup>3</sup> McArthur HL et al. Breast Cancer Symposium 2009; **Abstract 228**.