CALGB-9741:

A Randomized Phase III Trial of Sequential Chemotherapy Using Doxorubicin, Paclitaxel, and Cyclophosphamide or Concurrent Doxorubicin and Cyclophosphamide Followed by Paclitaxel at 14 or 21 Day Intervals in Women With Node Positive Stage II/IIIA Breast Cancer

ClinicalTrials.gov Identifier: NCT00003088

Study Background

Trial Design:

This is a randomized study. Patients are randomized into one of four arms (sequential chemotherapy every 2 weeks vs every 3 weeks vs concurrent chemotherapy followed by paclitaxel every 2 weeks vs every 3 weeks). All tumor should be removed by either a modified radical mastectomy or a segmental mastectomy plus axillary node dissection. Adjuvant chemotherapy is started within 84 days following the last surgical procedure.

- Arm I: Patients receive sequential chemotherapy every 3 weeks. Doxorubicin IV is administered once every 3 weeks for 4 doses. Paclitaxel IV is then administered over 3 hours once every 3 weeks for 4 doses. Cyclophosphamide IV is administered once every 3 weeks for 4 doses following paclitaxel.
- Arm II: Patients receive sequential chemotherapy every 2 weeks. Doxorubicin IV is administered once every 2 weeks for 4 doses. Paclitaxel IV is then administered over 3 hours once every 2 weeks for 4 doses. Cyclophosphamide IV is administered once every 2 weeks for 4 doses following paclitaxel. Filgrastim (G-CSF) is administered by subcutaneous injection on days 3-10 after each dose of doxorubicin, paclitaxel, and cyclophosphamide.
- Arm III: Patients receive combination chemotherapy every 3 weeks. Combination doxorubicin IV and cyclophosphamide IV is administered once every 3 weeks for 4 doses. Paclitaxel IV is administered over 3 hours once every 3 weeks for 4 doses following combination chemotherapy.
- Arm IV: Patients receive combination chemotherapy every 2 weeks.
 Combination doxorubicin IV and cyclophosphamide IV is administered once every 2 weeks for 4 doses. Paclitaxel IV is administered over 3 hours once every 2 weeks for 4 doses following combination chemotherapy. G-CSF is administered by subcutaneous injection on days 3-10 after each dose of doxorubicin/cyclophophamide and after each dose of paclitaxel.

After completion of all chemotherapy, patients receive tamoxifen orally for 5 years. Patients undergo radiotherapy 4-6 weeks after the completion of chemotherapy. Patients are followed every 6 months for 5 years, then annually until death.

Objectives:

- To compare sequential chemotherapy with doxorubicin, paclitaxel, and cyclophosphamide to combined doxorubicin and cyclophosphamide followed by paclitaxel for disease-free and overall survival.
- To determine whether increasing the dose density of adjuvant chemotherapy (decreasing the interval between chemotherapy courses from 21 to 14 days) will improve disease-free overall survival.
- To compare the toxicity for patients treated with sequential doxorubicin, paclitaxel, and cyclophosphamide followed by paclitaxel at 14 and 21 day intervals.

Stratification Number of positive lymph nodes $(1-3, 4-9, \ge 10, \text{ sentinel node dissection only})$

Factors:

Study 9/15/1997 Activation Date **History:** 1/15/1999 Close Date

April 2003 Primary Completion Date
June 2003 Study Completion Date

Publication Information

Analysis Type: Primary Endpoint Analysis

PubMed ID: 12668651

Citation: Citron ML, Berry DA, Cirrincione C, Hudis C, Winer EP, Gradishar WJ,

Davidson NE, Martino S, Livingston R, Ingle JN, Perez EA, Carpenter J, Hurd D, Holland JF, Smith BL, Sartor CI, Leung EH, Abrams J, Schilsky RL, Muss

HB, Norton L. Randomized trial of dose-dense versus conventionally scheduled and sequential versus concurrent combination chemotherapy as postoperative adjuvant treatment of node-positive primary breast cancer: first report of Intergroup Trial C9741/Cancer and Leukemia Group B Trial 9741. J Clin Oncol. 2003 Apr 15;21(8):1431-9. Epub 2003 Feb 13. Erratum in: J Clin

Oncol. 2003 Jun 1;21(11):2226.

Associated NCT00003088_D1_(comp_by_cyc)

Datasets: NCT00003088_D2_(comp_by_pt)

NCT00003088_D3_(dosered) NCT00003088_D4_(toxicity) NCT00003088_D5_(treated)

The following were added 5/18/2018 to include a patient identifier (patid) that ties to NCTN Navigator submissions. Only the inclusion of this patid field has

changed from the first 5 datasets.

NCT00003088_D6_(comp_by_cyc)

NCT00003088_D7_(comp_by_pt)

NCT00003088_D8_(dosered)

NCT00003088_D9_(toxicity)

NCT00003088_D10_(treated)

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Dataset Information

Dataset Name: NCT00003088_D10_(treated)

Description: The NCT00003088_D10_(treated) dataset is one of 5 datasets associated

with PubMed ID 12668651. This dataset contains one record for treated patients only (N=1973). The dataset contains the primary and secondary

endpoint survival data.

NCT00003088_D10_(treated) Data Dictionary

Variable Description	Variable Name	Code	Notes
Patient Identifier	patid		De-identified patient identifier
			that can be tied to patient
			information submitted to NCTN
			Navigator submissions.
De-identified patient	MASK_ID		De-identified patient identifier
identifier			
Age category	agecat	1 = '<40 years'	
		2 = '40-49 years'	
		3 = '50-59 years'	
		4 = '60-69 years'	
		5 = '70+ years'	
Bilateral breast cancer	bilat	1 = 'No'	
		2 = 'Yes'	
		9 = 'Missing'	
Site of new disease	distant	0 = 'No'	
spread: Distant relapse		1 = 'Yes'	
		9 = 'Missing'	
Treatment related	dt006		
Cause of Death			
Treatment related	dt007		
Cause of Death			
Comments			
Estrogen receptor	er	1 = 'Negative'	
status		2 = 'Positive'	
		9 = 'Missing'	
Site of Failure	failsite	1='local only'	
		2='distant only'	
		3='both local and distant concur'	
Disease-free survival	failstat	0=censor	
status		1=local recurrence, distant	
		relapse, or death without relapse	

Group ID	grp	1 = 'CALGB' 2 = 'SWOG'	
		3 = 'ECOG' 4 = 'RTOG'	
Regimen	indrx	1 = 'sequential A x 4 (doses)> T x 4> C x 4 with doses every 3 weeks' 2 = 'sequential A x 4> T x 4> C x 4 every 2 weeks with filgrastim' 3 = 'concurrent AC x 4> T x 4 every 3 weeks' 4 = 'concurrent AC x 4> T x 4 every 2 weeks with filgrastim'	A: doxorubicin T: paclitaxel C: cyclophosphamide AC: concurrent doxorubicin and cyclophosphamide
Dose density	length	0 = 'q2' 1 = 'q3'	q2: Therapy every 2 weeks q3: Therapy every 3 weeks
Site of new disease spread: Local recurrence	local	0 = 'No' 1 = 'Yes' 9 = 'Missing'	, , ,
Menopausal status	menop	1 = 'Pre' 2 = 'Post' 9 = 'Missing'	
Number of positive sentinel nodes (NPN)	npn	Continuous	
Number of postive nodes category	npn13	1 = '1-3' 2 = '4-9' 3 = '10+'	
Site of new disease spread: Opposite breast	oppbr	0 = 'No' 1 = 'Yes' 9 = 'Missing'	
Progesterone receptor status	pgr	1 = 'Negative' 2 = 'Positive' 9 = 'Missing'	
Second primary status	secstat	0='No' 1='Yes'	
Sequence	seq	0 = 'Concurrent (Regimen III + IV)' 1 = 'Sequential (Regimen I + II)'	
Tumor size (cm) Strat factor: Number of positive nodes category	size stra1	Continuous 1 = '1-3' 2 = '4-9' 3 = '10+' 4 = 'Sentinel node dissection'	cm
Surgery	surg	1 = 'Lumpectomy' 2 = 'Mastectomy' 3 = 'Other' 9 = 'Unknown'	
Survival time (months)	survmos	Continuous	Time from registration to event in months
Overall survival status	survstat	0 = Censor 1 = Death from any cause	

Tamoxifen	tamo	1 = 'Received'	
Tumor size category	tsize	2 = 'Did not receive' 1 = '\le 2 cm' 2 = '\le 2 cm' 9 = 'Missing'	
Disease-free survival time (months)	ttofail	Continuous	Time from study entry until local recurrence, distant relapse, or death without relapse, which ever occurred first, in months.
Time to second primary (months)	ttosec	Continuous	Time from study entry until second primary, in months
Treatment related death	txreldth	0=' No' 1=' Yes'	
Race: white?	white	1 = 'Yes' 2 = 'No'	1 = White 2 = Non-White