

## 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/cyclophosphamide 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  
Factors:**

Number of positive lymph nodes (1-3, 4-9,  $\geq 10$ , sentinel node dissection only)

**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 Datasets:** NCT00003088\_D1\_(comp\_by\_cyc)  
NCT00003088\_D2\_(comp\_by\_pt)  
NCT00003088\_D3\_(dosed)  
NCT00003088\_D4\_(toxicity)  
NCT00003088\_D5\_(treated)

## Dataset Information

**Dataset Name:** NCT00003088\_D5\_(treated)

**Description:** The NCT00003088\_D5\_(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 D5 (treated) Data Dictionary

Variable Description	Variable Name	Code	Notes
De-identified patient identifier	MASK_ID		De-identified patient 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 spread: Distant relapse	distant	0 = 'No' 1 = 'Yes' 9 = 'Missing'	
Treatment related Cause of Death	dt006	Text field	Blank for patients who did not experience treatment related death
Treatment related Cause of Death Comments	dt007	Text field	Blank for patients who did not experience treatment related death
Estrogen receptor status	er	1 = 'Negative' 2 = 'Positive' 9 = 'Missing'	
Site of Failure	failsite	1='local only' 2='distant only' 3='both local and distant concur'	
Disease-free survival status	failstat	0=censor 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 positive 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)	size	Continuous	cm
Strat factor: Number of positive nodes category	stra1	1 = '1-3' 2 = '4-9' 3 = '10+' 4 = 'Sentinel node dissection'	
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' 2 = 'Did not receive'	
Tumor size category	tsize	1 = '≤2 cm' 2 = '>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