CALGB-90203

A Randomized Phase III Study of Neo-Adjuvant Docetaxel and Androgen Deprivation Prior to Radical Prostatectomy Versus Immediate Radical Prostatectomy in Patients with High-Risk, Clinically Localized Prostate Cancer

ClinicalTrial.gov Identifier: NCT00430183

Study Background

Trial Description

RATIONALE: Drugs used in chemotherapy, such as docetaxel, work in different ways to stop the growth of tumor cells, either by killing the cells or by stopping them from dividing. Androgens can cause the growth of prostate cancer cells. Antihormone therapy, such as goserelin and leuprolide, may stop the adrenal glands from making androgens. Giving docetaxel and leuprolide or goserelin before surgery may make the tumor smaller and reduce the amount of normal tissue that needs to be removed. It is not yet known whether giving docetaxel and leuprolide or goserelin before surgery is more effective than surgery alone in treating patients with prostate cancer.

PURPOSE: This randomized phase III trial is studying docetaxel and leuprolide or goserelin to see how well they work when given before surgery compared with surgery alone in treating patients with high-risk localized prostate cancer.

Arms:

Arm A: docetaxel + LHRH agonist + surgical intervention: (Experimental): Patients receive six cycles of docetaxel administered every 3 weeks combined with 18-24 weeks of androgen deprivation therapy. During each cycle of chemotherapy, all patients should undergo premedication with dexamethasone 8 mg orally prior to docetaxel. Dexamethasone may also be given intravenously according to institutional guidelines. Patients will also receive androgen deprivation for 18-24 weeks of an LHRH agonist (eg, leuprolide acetate, goserelin acetate). Additional premedication and antiemetics may be given at the physician's discretion and as defined by the protocol. Patients will undergo standard surgical intervention. The surgical procedures will be performed within 60 days of the completion of neoadjuvant therapy. Patients are allowed to receive adjuvant external beam radiation at the discretion of the treating physician and as defined per the protocol. It must be initiated within 6 months of the date of surgery.

Arm B: surgical intervention: (Other): All patients undergo standard surgical intervention. The surgical procedures will be performed within 60 days of randomization. Patients are allowed to receive adjuvant external beam radiation at the discretion of the treating physician and as defined per the protocol. Adjuvant radiation must be initiated within 6 months of the date of surgery.

Objectives:

- Primary:
  - To determine whether treatment with neoadjuvant docetaxel and androgen deprivation therapy prior to radical prostatectomy will increase the rate of 3-year biochemical progression-free survival (bPFS) compared to treatment with immediate radical prostatectomy alone for high-risk prostate cancer patients.
- Secondary:
  - To compare the 5-year bPFS rate, bPFS, disease progression, disease-free survival, and overall survival of patients randomized to the two arms of this trial
  - To determine the safety and tolerability of neoadjuvant docetaxel and androgen deprivation therapy prior to surgery for high-risk patients undergoing radical prostatectomy
  - To compare the impact of neoadjuvant docetaxel and androgen deprivation therapy on time to clinically apparent local disease recurrence and metastatic disease in high-risk patients undergoing radical prostatectomy for clinically localized prostate cancer
  - To compare the impact of neoadjuvant docetaxel and androgen deprivation therapy relative to RP on pathologic tumor stage, frequency of lymph node metastases and positive margin rates for high-risk patients undergoing radical prostatectomy for clinically localized prostate cancer
  - To determine if changes in serum testosterone levels will predict bPFS
  - To determine prospectively whether PSA doubling time (PSADT) is a surrogate endpoint for time to clinical metastases and overall survival.

Patients are followed up to 15 years post-randomization.

Study Milestones:

Primary Completion Date: October 2, 2018

Publication Information:

Analysis Type: Primary

Pubmed ID: 32706639

Citation: J Clin Oncol. 2020 Sep 10;38(26):3042-3050. doi: 10.1200/JCO.20.00315. Epub 2020 Jul 24.

Associated Datasets:

NCT00430183-D1-Dataset.csv (baseline),

NCT00430183-D2-Dataset.csv (toxicity)

Dataset Information:

Dataset Name: NCT00430183-D1-Dataset.csv (baseline)

Description: Dataset NCT00430183-D1-Dataset.csv (baseline) is one of 2 datasets associated with PubMed ID 32706639. This dataset contains information that is presented in the manuscript excluding the toxicity data.

Data can be used to approximate published study findings, but exact reproduction of previous manuscripts may not be possible in some cases (e.g., when data must be modified for de-identification purposes or have undergone further data cleaning).

Blank values indicate data not applicable or missing, except where otherwise noted.

NCT00430183-D1-Dataset.csv (baseline) Data Dictionary:

LABEL	NAME	ELEMENTS	COMMENTS
Patient identifier	patid		
Surgery	surgery	Underwent radical prostatectomy, Deemed ineligible after randomization, Withdrew consent before surgery, Surgery aborted/unresected, Surgery aborted for grossly positive nodes	
Lost to follow-up	lfu	Lost to follow-up	Missing indicates patient was NOT lost to follow-up
Treatment arm assigned	TREAT_ASSIGNED	Arm B: Surgical Intervention, Arm A: LHRH Agonist+Docetaxel+Surgery	
Additional Treatment	addtx	Yes, No	
PSA progression	psaprog	0=censor, 1=event	

LABEL	NAME	ELEMENTS	COMMENTS
Still in active follow-up	afu	Still in active follow-up	Missing indicates patient NOT in active follow-up
Biopsy Gleason score	gleastc	7 (3+4), 7 (4+3), 8, 9, 6, 10	
Race	RACE_ID	White, Black or African American, Unknown, Asian, American Indian or Alaska Native, Not Reported	
Risk group	strat1	Group 2: 21-39.9%, Group 3: 40-59.9%, Group 1: 0-20.9%, Group 4: Gleason score 8-10 with nomogram-predicted biochemical progression-free survival > 60%	
Prior androgen-deprivation therapy	strat2	No, Yes	
Age (years)	age		
Prostate-specific antigen level before biopsy, ng/mL	baselinepsa		
Clinical stage by digital rectal examination	TSTAGEC	T2c, T1c, T2b, T3a, T2a, T3, T2, T1a, T1b, T1	
Seminal vesicle invasion	SVINV	Yes, No	Missing indicates data was not collected
Pathologic nodal stage	NSTAGEP	pN1, pN0, pNX	Missing indicates stage was not collected
Gleason score in surgical specimen	Gleasgroup	3, 5, 4, 2, 1	Missing indicates data was not collected

LABEL	NAME	ELEMENTS	COMMENTS
Surgical Margins	surgmargall	Positive, Negative	Missing indicates data was not collected
Pathologic T stage	tstage	T3, T4, T1/2	
BPFS Time (years)	bpfstimeyrs		This variable is used for EFS time (years) also.
BPFS	bpfs_alldeath	0=censor, 1=event	
3-year BPFS Status	bpfs_3year	0=censor, 1=event	
5-year BPFS Status	bpfs_5year	0=censor, 1=event	
OS	status	0=censor, 1=event	
OS time (years)	survivalyrs		
EFS	cum_bpfs_alldeath	0 = no event 1 = biochemical progression or death 2 = competing risk event	
Prostate Cancer Specific Death	PCdeath1	0 = No death (censor), 1 = Death Due to Prostate Cancer, 2 = Death due to other cause	
MFS	mPFS	0=censor, 1=event	
MFS time (years)	mPFSyrs		
Adjuvant Therapy	rtearlever	0 = No adjuvant therapy received 1 = Adjuvant therapy received	
Time to testosterone recovery > 150 ng/dL (days)	time_to_150		
Testosterone recovery > 150 ng/dL	over150	1 = Recovery >150, 0 = Did not recover >150	
Local Progression Status	LOCALPD	0 = No Local Progression, 1 = Local Progression	
Number of treatment cycles	CYCLENO	0-6	
Total Dose of Docetaxel (mg)	sumdtax		

LABEL	NAME	ELEMENTS	COMMENTS
Docetaxel Dose Modifications	DTAXMOD	Dose reduced, Dose delayed and reduced	Missing indicates no dose modifications
Off treatment due to progression	offtrtpg	Off treatment due to progression	Missing indicates patient did not go off treatment due to progression.
Intraoperative rectal injuries	rectinj	0=No, 1=Yes	
Intraoperative ureter injuries	uretinj	0=No, 1=Yes	
Postoperative death	death	0=No, 1=Yes	
Postoperative bleeding	bleed	0=No, 1=Yes	
Postoperative low hemoglobin	hgb	0=No, 1=Yes	
Evaluable for Adverse Events	evalae	0=Not evaluable 1=Evaluable	