

Alliance for Clinical Trials in Oncology N0574:

Phase III Randomized Trial of the Role of Whole Brain Radiation Therapy in Addition to Radiosurgery in the Management of Patients with One to Three Cerebral Metastases

ClinicalTrials.gov Identifier: NCT00377156

Study Background

Trial Design: A randomized phase III trial, using a 1:1 randomization, patients go on to

- Arm A: Radiosurgery (SRS)
- Arm B: Radiosurgery (SRS) + Whole Brain Radiation (WBRT)

This study was designed to include 70 patients who were accrued by Z0300, as N0574 is meant to be a continuation of ACOSOG Z0300.

Objectives: Primary

To ascertain in patients with one to three brain metastases whether there is less neurocognitive progression at 3 months post-radiosurgery in patients who receive SRS alone (Arm A) compared to patients who receive SRS combined with WBRT (Arm B).

Secondary

- To ascertain in patients with one to three brain metastases whether there is equal (or greater) time to central nervous system (CNS) failure (brain) in patients who receive SRS alone (Arm A) compared to patients who receive SRS combined with WBRT (Arm B).
- To ascertain in patients with one to three brain metastases whether there is improved QOL in patients who receive SRS alone (Arm A) compared to patients who receive SRS combined with WBRT (Arm B).
- To ascertain in patients with one to three brain metastases whether there is longer duration of functional independence in patients who receive SRS alone (Arm A) compared to patients who receive SRS combined with WBRT (Arm B).
- To ascertain in patients with one to three brain metastases whether there is better long-term neurocognitive status in patients who receive SRS alone (Arm A) compared to patients who receive SRS combined with WBRT (Arm B).
- To tabulate and descriptively compare the post-treatment adverse events associated with the interventions.

- To compare in patient with one to three brain metastases the overall survival in patients who receive SRS alone (Arm A) compared to patients who receive SRS combined with WBRT (Arm B).

**Stratification
Factors:**

1. Age (years)
 - 18 to 59
 - ≥ 60
2. Extracranial disease controlled (months)
 - ≤ 3
 - > 3
3. Number of brain metastases
 - 1
 - 2
 - 3

**Study
History:**

- 07/28/2006 Study was activated. This trial is a continuation of the ACOSOG trial Z0300, which was closed by ACOSOG leadership in 2004.
- 10/24/2008 Amendment 3, updated the objectives of the study to make neurocognitive progression the primary endpoint.
- 12/19/2013 Study permanently closed to accrual.

Publication Information

Analysis Type: Primary Endpoint Analysis

PubMed ID: 27458945

Citation: Brown PD, Jaeckel K, Ballman KV, Farace E, Cerhan JH, Anderson SK, Carrero XW, Barker FG, Deming R, Burri SH, Ménard C, Chung C, Stieber VW, Pollock BE, Galanis E, Buckner JC, Asher, AL. Effect of Radiosurgery Alone vs Radiosurgery With Whole Brain Radiation Therapy on Cognitive Function in Patients With 1 to 3 Brain Metastases: A Randomized Clinical Trial. *JAMA*. 2016;316(4):401-409. doi:10.1001/jama.2016.9839

Associated Datasets: NCT00377156-D1 (BASE)
NCT00377156-D2 (NCOG3MO)
NCT00377156-D3 (QOLDATA)
NCT00377156-D4 (LTSURV)
NCT00377156-D5 (AE3PLUS)

Dataset Information

Dataset Name: NCT00377156-D4 (LTSURV)

Description: The NCT00377156- D4 (LTSURV) dataset is one of 5 datasets associated with PubMed ID 27458945. This dataset includes multiple records per patient for Cognitive Scores and QOL Scores: at 3-months, 6-months, 9-months, 12-months, and 15-months. A long-term survivor is a patient that has a baseline cognitive evaluation and at least one evaluation that was completed 365 days or more later.

Notes:

- The study team decided to provide data available for all patients, not only long-term survivors.
- There may be some discrepancies between the data and supplemental eTable 12, but the data are correct.

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)

NCT00377156-D4 (LTSURV) Data Dictionary

Variable Name	Variable Description	Codes	Notes
STUDY_ID	Study Identifier	N0574	
SUBJECT	Subject	Character values	De-identified patient ID
ARM	Randomized Treatment Arm	A = SRS B = SRS + WBRT	SRS = Radiosurgery WBRT = Whole Brain Radiotherapy
timepoint	Time point	1 = 3 months 2 = 6 months 3 = 9 months 4 = 12 months 5 = 15 months	
QOL FACT-BR Scores and Subscores			
If more than 50% of items in each subscore are missing, then the subscore value is not computed and it is set to missing. For all scores, higher scores indicate better quality of life.			
pwb	Physical Well-Being Subscore	0-28	Missing = score is not available
sfwb	Social/Family Well-Being Subscore	0-28	
ewb	Emotional Subscore	0-24	
fwb	Functional Subscore	0-28	
factg	FACT-Br General Score	0-108	

Variable Name	Variable Description	Codes	Notes
br	Additional Concerns	0-92	
factbr	FACT-Br Total Score	0-200	
Other QOL measures			
barthel	Barthel ADL index (Functional Independence)	0 to 100 in 5-point increments Missing = patient not evaluated.	
Cognitive Test Scores			
Z-scores are computed using published normative data for each score included in testing. A missing Z-score represents data unavailable, due to patient not completing that section of the cognitive evaluation.			
ztotrec	Hopkins Verbal Learning Test-Revised (HVLTR): Immediate Recall		Sum of Trial 1, Trial2, Trial 3
zdelrec	Hopkins Verbal Learning Test-Revised (HVLTR): Delayed recall total		
zdindex	Hopkins Verbal Learning Test-Revised (HVLTR): Recognition		
zmatime	Trail Making Test Part A		Time to complete (seconds) Discontinued after 3 minutes
zmbtime	Trail Making Test Part B		Time to complete (seconds) Discontinued after 5 minutes
zcowatot	Controlled Oral Word Association Test: Total		Adjusted score (total words + correction)
zgpstime	Grooved Pegboard Test		Time to complete in seconds (for dominant hand)