

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-D5 (AE3PLUS)

Description: The NCT00377156- D5 (AE3PLUS) dataset is one of 5 datasets associated with PubMed ID 27458945. This dataset includes multiple records for each patient that experienced at least one grade 3 or higher adverse event. There are 282 records for 90 patients. Included is the maximum adverse event grade experienced over the course of the study. Includes all grade 3 or higher adverse events reported, regardless of attribution to study treatment. Note: only grade 3 or higher CNS necrosis are included in this dataset.

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-D5 (AE3PLUS) 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 |
| AE_TERM | Adverse Event Description | Text | |
| AE_CODE | Adverse Event Code | MedDRA code for adverse event | MedDRA Code (v. 9.0) |
| AE_GRADE | Adverse Event Grade | 3 4 5 | Graded using the Common Terminology Criteria for Adverse Events (CTCAE) - version 3.0 |