NCCTG Status Report for Study N0074 – May 2011

Phase II Study of ZD1839 (NSC 715055) in Newly Diagnosed Patients with Glioblastoma (Grade 4 Astrocytoma)

Purpose of Study:
1. To assess treatment effectiveness primarily by survival at 52 weeks after biopsy or definitive surgery. Secondary endpoints include response rate, percentage of patients who are progression free at 6 months, time to progression, and survival.
2. To assess the toxicities associated with ZD1839.
3. To assess fatigue, depression, excessive daytime somnolence, and quality of life.

- Translational Research
1. To determine whether specific aberrations in EGFR (amplification and/or mutations) render the tumor differentially sensitive to the tyrphostin ZD1839. To this end, the following laboratory correlates will be performed on the tumor specimens derived from surgery or biopsy.
   i. Assessment of EGFR amplification.
   ii. Assessment of whether EGFR is mutated.
   iii. Assessment of relative levels of total versus activated (phosphorylated) EGFR.
2. To assess individual variation in responses (toxicity and/or activity), pharmacokinetic parameters, and/or biological correlates due to genetic differences in enzymes involved in transport, metabolism and/or mechanism of action of ZD1839.
3. To determine whether pretreatment serum sEGFR (soluble EGFR) concentrations are a useful prognostic indicator and whether altered and/or changing sEGFR concentrations are useful indicators of therapeutic responsiveness and patient outcome.
4. To evaluate the biochemical profile of the tumor during treatment with ZD1839 using the functional neuro-imaging technique of magnetic resonance spectroscopy (MRS).

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Statistician: Wenting Wu Ph.D.

Study Status/Accrual: This study was opened on 03/09/2001 and was closed on 08/02/2002 with a final accrual of 98 patients.

The final complete Status Report was produced Spring, 2005.
The efficacy results for this trial were presented at the 2004 ASCO meeting. Journal of Clinical Oncology 2004, 22(14S), p 1505.

Efficacy results were also reported in this manuscript:

QOL baseline/on-study data: A poster was presented at the 2003 Society of Neuro-Oncology conference and the manuscript has been published in the Journal of Neuro-Oncology (September 5, 2005).

QOL changes over time: A poster was presented at the 2004 ASCO conference. A manuscript has been published in Neurosurgery (Sep 2005, 57: 495-504).


Brown PD, Maurer MJ, Rummans TA, Pollock BE, Ballman KV, Sloan JA, Boeve BF, Arusell RM, Clark MM, Buckner JC: A Prospective Study of