

# RTOG 0522

## For Patients with Stage III or IV Head and Neck Cancer

### RTOG 0522 Available Through the CTSU

A Randomized Phase III Trial of Concurrent Accelerated Radiation and Cisplatin Versus Concurrent Accelerated Radiation, Cisplatin and Cetuximab (C225) [Followed by Surgery for Selected Patients] for Stage III and IV Head and Neck Carcinomas

#### Patient Population

See Section 3.0 for Complete Eligibility Details

- Patients must have histologically proven diagnosis of squamous cell carcinoma of the oropharynx, hypopharynx, or larynx (no primary of the oral cavity, nasopharynx, sinuses, or salivary gland allowed).
- Disease must be selected stage III or IV (T2N2-3M0, T3-4NanyM0); there must be no distant metastases.
- Patients must not have had any prior systemic chemotherapy for the *study cancer*.
- Patients must not have had any prior radiation that would result in overlap of radiation therapy fields.
- Patients must not have had initial surgical treatment other than a diagnostic biopsy of the primary site or nodal sampling of neck disease.
- Patients must have adequate hematologic, renal, hepatic and cardiac function.
- Patients must not have a prior allergy to any of the study drugs.
- Patients must not have had prior therapy that specifically and directly targets the EGFR pathway.
- Patients must not have any severe co-morbid conditions (see Section 3.2.6).

**Number of Participants: 720**

#### Treatment Plan

##### Arm 1

- Accelerated radiation\*
- Cisplatin 100mg/m<sup>2</sup> IV Days 1 and 22

##### Arm 2

- Cetuximab 400mg/m<sup>2</sup> IV x 1 (initial dose)  
*Followed at least 5 days later by*
- Cetuximab 250mg/m<sup>2</sup> IV qweek x 7 doses
- Accelerated radiation\*
- Cisplatin 100mg/m<sup>2</sup> Days 1 and 22

##### Both Arms

Eight to nine weeks after treatment, a select group of patients (those with N2a, n2b and N3 disease and those with ≤ 3cm nodes on one side or both sides with questionable neck findings) will be assessed for appropriateness for surgery.

\*Radiation can be given as 3D-CRT or IMRT.

3D-CRT: 1.8 Gy/fraction, five fractions a week for 6 weeks (total = 54 Gy in 30 fractions) plus a boost of 1.5 Gy/fraction as a second daily fraction for a total of 12 treatment days (18 Gy total).

IMRT: 2 Gy/fraction to primary tumor and involved nodes and 1.6 Gy/fraction to subclinical disease sites for 35 fractions over 6 weeks (total of 70 Gy and 56 Gy respectively).

**RTOG  
Protocol Chair:**  
Kian Ang, MD

#### Patient Enrollment

Non-RTOG Members: CTSU Patient Registrar 1-888-462-3009

#### Protocol Information

CTSU Help Desk 1-888-823-5923, CTSUcontact@westat.com, www.ctsu.org

**Please Enroll Your Eligible Patients!**

# Schema

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|          | Primary Site         |                |                           | 8-9 Weeks Post-Treatment         | Selected Patients          |
|----------|----------------------|----------------|---------------------------|----------------------------------|----------------------------|
|          | 1. Larynx            |                |                           |                                  |                            |
|          | 2. Non-Larynx        |                |                           |                                  |                            |
|          |                      |                | <sup>b</sup> Arm 1        |                                  | <sup>b</sup> Required Neck |
|          | <b>Nodal Status</b>  |                | Accelerated Fractionation | Reassessment                     | Dissection:                |
| <b>S</b> | 1. N0                | <sup>a</sup> R | by Concomitant Boost      | Required CT scan                 | Persistent nodal           |
| <b>T</b> | 2. N1, N2a, N2b      | <b>A</b>       | (AFX-CB) or IMRT          | or MRI for N2-N3 <sup>c</sup>    | disease, but               |
| <b>R</b> | 3. N2c, N3           | <b>N</b>       | plus cisplatin            | and N1-N2c patients <sup>c</sup> | Complete response          |
| <b>A</b> |                      | <b>D</b>       |                           |                                  | of primary                 |
| <b>T</b> | <b>Zubrod Status</b> | <b>O</b>       |                           | These patients also              |                            |
| <b>I</b> | 1. 0                 | <b>M</b>       |                           | can receive post-                | For details of             |
| <b>F</b> | 2. 1                 | <b>I</b>       | <sup>b</sup> Arm 2        | treatment PET/CT                 | surgery for primary,       |
| <b>Y</b> |                      | <b>Z</b>       | Accelerated Fractionation | scan                             | see Section 8.0            |
|          | <b>Use of IMRT</b>   | <b>E</b>       | by Concomitant Boost      |                                  |                            |
|          | 1. No                |                | (AFX-CB) or IMRT          | If suspicion of relapse:         |                            |
|          | 2. Yes               |                | plus cisplatin            | Directed biopsy                  |                            |
|          |                      |                | plus cetuximab            |                                  |                            |
|          | <b>Pre-Treatment</b> |                |                           |                                  |                            |
|          | <b>PET/CT</b>        |                |                           |                                  |                            |
|          | 1. No                |                |                           |                                  |                            |
|          | 2. Yes               |                |                           |                                  |                            |

- a. See Section 5.1-5.3 for pre-registration requirements. **NOTE:** It is mandatory that the treating physician determine the radiation therapy technique (3D-CRT vs. IMRT) to be used prior to the site registering the patient.
- b. See Sections 6.0, 7.0, and 8.0 for details of radiation therapy, drug therapy, and surgery.
- c. All patients with N2a, N2b, and N3 disease and patients with  $\leq 3$  cm nodes on one side (N1) or both sides (a subset of N2c) with questionable neck findings