

difference in locoregional control, progression free survival or overall survival between the SQ and IV amifostine groups. Nausea, vomiting and hypotension were all less severe with SQ amifostine. Thus, in this study the results with SQ amifostine were very similar to those of the IV amifostine in the Brizell study.

**Antonadou et al (IJROBP, 42, 1031a, 1988)** performed a randomized Phase II study of chemoradiation +/- amifostine in the treatment of head and neck cancer. The patients were treated with carboplatin with (90mg/m<sup>2</sup> qW) with concurrent XRT (2Gy/fx to 60-74Gy) +/- IV amifostine (300mg/m<sup>2</sup>). The incidence of grade II acute xerostomia was 83% with chemoradiotherapy alone versus 27% in the patients pretreated with amifostine. The incidence of grade II acute mucositis was 73% with chemoradiotherapy alone versus 23% in the patients pretreated with amifostine. The increased dose of amifostine (300mg/m<sup>2</sup> vs.200mg/m<sup>2</sup>) appears to provide even a greater degree of protection against xerostomia. Furthermore, the increased dose of amifostine also protects against mucositis.

**Koukourakis et al (JCO, 18:2226, 2000)** performed a Phase II study of radiotherapy +/- SQ amifostine (500mg/2.5cc saline). One hundred forty patients with head and neck, thoracic and pelvic cancers were treated in this study. For head and neck cancers the incidence of grade III-IV acute mucositis was 30% with radiotherapy alone versus 0% in the patients pretreated with amifostine, and the incidence of grade II acute mucositis was 30% with radiotherapy alone versus 27% in the patients pretreated with amifostine. Thus, greater than or equal to grade II acute mucositis was 60% vs. 27%. For thoracic cancers the incidence of grade III-IV acute mucositis was 20% with radiotherapy alone versus 4% in the patients pretreated with amifostine, and the incidence of grade II acute mucositis was 34% with radiotherapy alone versus 16% in the patients pretreated with amifostine. Thus, greater than or equal to grade II acute mucositis was 54% vs. 20%. For pelvic cancers the incidence of grade III-IV acute mucositis was 15% with radiotherapy alone versus 0% in the patients pretreated with amifostine, and the incidence of grade II acute mucositis was 35% with radiotherapy alone versus 13% in the patients pretreated

with amifostine. Thus, greater than or equal to grade II acute mucositis was 50% vs. 13%. They also studied treatment breaks, and in all instances patients pretreated with amifostine prior to their daily radiotherapy treatments had statistically significantly fewer treatment breaks.

### Conclusion

In conclusion, amifostine is a unique and very useful adjunct in the treatment of head and neck, thoracic and pelvic cancers treated with radiotherapy +/- chemotherapy. There appears to be a dose response, with the recommended dosing being either 500mg/2.5cc saline SQ or ≥ 300mg/m<sup>2</sup> rapid IV push. These doses of amifostine provide significant protection against radiotherapy and chemoradiotherapy induced xerostomia and mucositis. Amifostine is generally well tolerated with the major side effects being nausea, vomiting, hypotension and fatigue. All of these side effects are generally less severe with the SQ and rapid IV push dosing. The optimal time of treatment with amifostine is 30 to 60 minutes prior to the daily radiotherapy treatments. To date, there have not been any randomized published studies demonstrating tumor protection. OA

## The Magic Continues...

The ONS 30<sup>th</sup> Annual Congress took place April 28-May 1, 2005 in Orlando, FL. The goal of this meeting was to provide oncology nurses with educational experiences and networking opportunities that enhance the provision of excellence in oncology nursing and quality cancer care.

We hope our nurse members' ONS experience was sweetened by a visit to our booth during the show. We appreciate all of our members who stopped by to support our group and look forward to hearing more of your input in the months ahead.

### OA Pre-ONS Meeting

Oncology Associates held its Pre-ONS Meeting April 26-27, 2005 in Orlando, FL. OA Nurse Members participated in a number of interactive clinical sessions including, "Overview of the Aromatase Inhibitor Class," "Antiemetic Options for CINV in 2005," "Proteasome Inhibition: Novel Therapies for Multiple Myeloma," "Pharmacoeconomics of Antiemetics in the New Practice Environment," "Care of the



*Brent Evans, OA Executive Vice President, and Kelly Desatnik, OA Marketing Director greet visitors at the OA booth at ONS this past May.*

Patient with Neuropathy," and "Preparation and Administration of Abraxane."

OA Nurse Members exchanged ideas about improving coding and billing forms and learned about recent legislative updates, including details on the CAP/MVI program (see FIS article on P. 28). This interactive meeting was instrumental in preparing our members for a successful ONS Congress. OA

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