

 HEAD AND NECK CANCER

## Gemcitabine improves patient survival

Patients with metastatic nasopharyngeal carcinoma generally receive platinum-containing doublet chemotherapy as a first-line treatment; however, the effectiveness of this approach, even in comparison with supportive therapy alone, has not been directly compared. Now, data from an open-label phase III trial indicate that the efficacy of gemcitabine plus cisplatin is superior to that of fluorouracil plus cisplatin in these patients.

Shaodong Hong, a senior author on this study highlights the reasons for this approach “the requirement for deep-vein catheterization and the short duration of response to fluorouracil mean that finding novel agents for metastatic nasopharyngeal carcinoma is of critical importance”. A total of 362 patients were randomly assigned to receive either gemcitabine plus cisplatin or fluorouracil plus cisplatin for a maximum of six 3-weekly treatment cycles. The trial used an open-label design owing to the need to deliver fluorouracil as a continuous intravenous infusion. Patients treated with gemcitabine plus cisplatin had significantly improved progression-free survival (median of 7.0 versus 5.6 months,  $P < 0.0001$ ), and overall survival (median of 29.1 versus 20.9 months,

$P = 0.002$ ) durations compared with those treated with fluorouracil plus cisplatin. Patients receiving gemcitabine had increased risks of grade  $\geq 3$  leucopenia, neutropenia and thrombocytopenia; however, those treated with fluorouracil had an increased risk of grade  $\geq 3$  mucosal inflammation.

These data indicate the superiority of gemcitabine over fluorouracil in patients with nasopharyngeal carcinoma, and provide clinical evidence in an area for which such evidence has previously been lacking. When asked about future directions, lead author Li Zhang explains “we are currently researching the underlying mechanisms of action of gemcitabine and/or cisplatin in patients with nasopharyngeal carcinoma”, adding that clinical investigations involving the use of bevacizumab in patients with metastatic nasopharyngeal carcinoma are currently underway.

Peter Sidaway

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