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HEAD AND NECK CANCER

Second-line afatinib shows promise

Patients with recurrent and/or metastatic head and neck squamous-cell carcinoma and disease progression after first-line platinum-based chemotherapy have a dismal prognosis. There is no standard second-line therapy; however, afatinib, an irreversible inhibitor of HER family kinases, has shown efficacy in this setting.

The LUX-Head & Neck 1 phase III trial randomly assigned patients to afatinib ($n = 322$) or methotrexate ($n = 161$) therapy. Median progression-free survival (PFS) was 2.6 months with afatinib versus 1.7 months ($P = 0.03$). "The study was also powered to detect a difference in overall survival, which was not significantly improved," explains lead author Jean-Pascal Machiels, "however, patient-reported outcomes were better with afatinib." Afatinib was associated with delayed deterioration of global health status, less pain, and improved swallowing, potentially related to the prolonged PFS, compared with methotrexate. Furthermore, afatinib toxicity was manageable and deemed favourable to that of methotrexate.

The patients were unselected for disease subtype, ~60% had received prior anti-EGFR antibody therapy, and 51% received further lines of treatment, possibly diluting the treatment effect of afatinib. Notably, patients with human papilloma virus (p16)-negative non-oropharyngeal cancer and local recurrence (rather than metastasis), who had not previously received an anti-EGFR antibody seemed to derive the most benefit in preplanned subgroup analyses.

Machiels concludes, "Afatinib has some activity in head and neck cancer, but we need to better understand which patients will benefit from this therapy."

David Killock

Original article Machiels, J.-P. H. *et al*. Afatinib versus methotrexate as second-line treatment in patients with recurrent or metastatic squamous-cell carcinoma of the head and neck progressing on or after platinum-based therapy (LUX-Head & Neck 1): an open-label, randomised phase 3 trial. *Lancet Oncol*. doi:10.1016/S1470-2045(15)70124-5