MedicalXpress

Afatinib improves progression-free survival in head and neck cancer

September 27 2014

The tyrosine kinase inhibitor afatinib significantly improved progression-free survival compared to methotrexate in patients with recurrent or metastatic squamous cell carcinoma of the head and neck after failure of platinum-based chemotherapy, the results of a phase III trial show.

Presented at the ESMO 2014 Congress in Madrid, the Lux-Head & Neck 1 trial showed that patients who received treatment with 40 mg/day oral afatinib had a 20% reduction in risk of progression or death compared to patients who received methotrexate, with a median progression-free survival of 2.6 months.

"The improvement in progression-free survival was associated with a significant delayed worsening of symptoms (such as pain, swallowing and global health status) versus chemotherapy. Patients treated with afatinib had less pain over time than patients treated with methotrexate. "These are important outcomes for patients with these conditions," notes study author Dr Jean-Pascal Machiels, a medical oncologist at Institut Roi Albert II, Cliniques Universitaires St. Luc, in Brussels, Belgium.

Recurrent or metastatic squamous cell carcinoma of the head and neck often has a poor outcome, Machiels explains. "This is a poor prognosis population and a disease that does not get enough attention from the scientific community, because this group of patients often has severe co-morbidities and social problems such as alcoholism and tobacco use."

"Frequently these patients have a relapse in the head and neck area. This

location is responsible of many symptoms that are difficult to palliate: pain, breath disorder and swallowing difficulties."

Afatinib is a compound that irreversibly blocks the ErbB family of cell surface receptors, which includes epidermal growth factor receptor (EGFR), human epidermal growth factor receptor 2 (HER2), HER3 and HER4. Around 90% of squamous cell carcinomas of the head and neck overexpress EGFR.

In the latest trial, researchers aimed to see if inhibiting multiple ErbB receptors simultaneously would improve the clinical efficacy of EGFR-targeted therapy. They studied 483 patients with recurrent or metastatic head and neck squamous cell carcinoma whose cancer had progressed despite treatment with platinum-based therapy. Overall, 322 patients received 40 mg/day oral afatinib and 161 were given 40 mg/m2/week intravenous methotrexate.

The study met its primary endpoint and afatinib significantly improved progression-free survival versus methotrexate, Machiels said. "Afatinib improved progression-free survival and delayed worsening of symptoms, and it is the first tyrosine kinase inhibitor to demonstrate a significant benefit in this disease."

The toxicity profile was acceptable and manageable with afatinib : the most frequent grade 3/4 drug-related adverse events were rash/acne (9.7%) and diarrhea (9.4%). Less treatment-related dose reductions, discontinuations and fatal events were seen with afatinib.

"We are pleased with the results because we showed a benefit, although modest, in a very well-designed controlled trial," Machiels says. "The difference of this trial compared to the others performed in the same setting is that it was a homogenous population. It sets a kind of baseline design that could be used to design further trials."

The trial was not able to demonstrate that afatinib improves survival. "Many potential reasons could explain why we were not able to demonstrate a survival benefit," Machiels says. "It could be simply because afatinib does not improve survival. However, 50% of the patients in both arms received subsequent therapies that could have influenced the survival benefit, for example a significant number of patients received subsequent anti-EGFR therapies in the methotrexate arm."

Future studies should focus on understanding which patient groups derive a clinically meaningful benefit from afatinib, the researchers says. They hope to provide further molecular insights and hypotheses to identify patients who benefit.

"We should hope that based on the new molecular data that is becoming available and through advances in the understanding of the molecular biology of this disease, some new treatments will be investigated in a near future."

Provided by European Society for Medical Oncology

Citation: Afatinib improves progression-free survival in head and neck cancer (2014, September 27) retrieved 4 July 2024 from https://medicalxpress.com/news/2014-09-afatinib-progression-free-survival-neck-cancer.html