## The management of skin toxicity during cetuximab treatment in advanced colorectal cancer: how much does it cost? A retrospecive economic assessment from a single-center experience

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## ABSTRACT

Aims and background. Skin rash is a predictable and manageable side effect of anti-EGFR therapy such as cetuximab. The aim of this study is to estimate the costs for the foreseeable management of skin toxicity in patients treated with cetuximab in our institute in order to assess the direct medical economic impact.

**Methods and study design.** We retrospectively analyzed all consecutive patients with advanced colorectal cancer treated with cetuximab at our institute from June 2006 to May 2011. We evaluated the severity and mean duration of skin rash for each grade and we identified the costs for the different therapeutic interventions. Patients were treated according to the general consensus management of skin toxicity associated with cetuximab treatment.

**Results.** We evaluated 31 patients. The median follow-up was 28.95 months (range, 1.84-75.49). At last follow-up 10 patients (32.3%) were alive with metastases, 18 patients (58.1%) had died, 1 patient (3.2%) was alive without evidence of disease, and 2 patients (6.5%) were lost to follow-up. The median progression-free survival was 8.26 months and the median overall survival 32.89 months. Nineteen patients (61.3%) developed skin toxicities: 7 patients (22.6%) grade 1, 9 patients (29.0%) grade 2, 3 patients (9.7%) grade 3; no grade 4 skin toxicity was observed. The median duration of grade 1 toxicity was 79 days (no specific treatments were started), of grade 2 toxicity 95 days (cost range,  $\in$  199.50-294.50) and of grade 3 toxicity 64 days (cost range,  $\in$  159.42-233.90).

**Conclusions.** Our experience, through the analysis of nonselected cases, showed that the management of skin toxicities related to cetuximab is not so expensive. We recommend proper care of low-grade toxicities in order to reduce progression to high-grade toxicities and the resulting risk of hospitalization, which really impacts on costs.

*Key words:* cetuximab, economic, colorectal cancer, skin toxicity.

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