

## The outcome of targeted therapies in metastatic renal cell carcinoma in elderly patients: Which impact in daily clinical practice?

Jacopo Giuliani<sup>1</sup> and Marina Marzola<sup>2</sup>

<sup>1</sup>Mater Salutaris Hospital, Italy

<sup>2</sup>St. Anna University-Hospital, Italy

**Introduction:** The incidence of renal cell carcinoma cases diagnosed in the elderly population ( $\geq 65$  years-old) is rising as a result of an increasing life expectancy. Up to the end of the last decade cytokine-based therapy was the only, even if only moderately effective systemic therapy. The treatment of mRCC has changed dramatically over the past few years: targeted therapies have fundamentally altered the therapy of mRCC. Despite this, the role of targeted therapies is still poorly documented in elderly patients with metastatic renal cell carcinoma (mRCC). The aim of this study is to evaluate the outcome of target therapies in elderly patients in daily clinical practice after the era of cytokine-based therapy in mRCC.

**Materials and Methods:** We retrospectively analyzed all consecutive elderly patients with mRCC treated at clinical oncology unit of the University Hospital of Ferrara (Italy) from June 1998 to September 2010. We divided the general case study into 2 subgroups: patients treated only with immunotherapy and patients treated with targeted therapies in first or subsequent lines and we compare results in term of overall survival (OS), censoring surviving patients at the time of last follow-up, with statistical significance ( $p < 0.05$ ) of differences evaluated by log-rank test; the initial date for survival was calculated from the date mRCC was first recognized.

**Results:** Among 61 patients affected by mRCC treated in the same period at our Clinical Oncology Unit, 27 patients (44.3%) were elderly patients: 13 patients (48.1%) were treated with only cytokine-based therapy and 14 patients (51.9%) were treated with target therapies in first line or subsequent lines. At last follow-up (September 2010), 6 patients (22.2%) were alive with metastasis, 19 patients (70.4%) were deceased and 2 patients (7.4%) were lost during follow-up (PFU). Median time follow-up was 19.3 months (range 2.1-70.3). For patients treated with only immunotherapy (especially in early years, before 2007) median time follow-up was 28.6 months (range 2.1-70.4) and for patients treated with target therapies (especially in late years, after 2007 for patients with previous treatment for mRCC) median time follow-up was 15.3 months (range 5.8-54.8). Median age was 70.0 years (range 65-81 years). Twenty (74.1%) were "young-old" patients ( $65 \leq x < 74$  years old) and 7 patients were "old-old" ( $75 \leq x < 84$  years old); there were not "oldest-old" patients ( $\geq 85$  years old). The general case study is summarized on Table 1. Median OS for patients treated only with immunotherapy was 29.2 months (95% Confidence Interval: 9.8-48.5). Median OS for patients with target therapies was 19.8 months (95% Confidence Interval: 11.1-28.5). By the univariate analysis there was no statistical significance difference in OS ( $p = 0.900$ ) between the two subgroups

**Conclusion:** The incidence of mRCC in elderly patient is high in the clinical practice. Our data do not seem to confirm a significant impact in terms of survival after the introduction of target therapies in the elderly population. These results probably confirm the need for a longer follow-up before we can draw conclusions on the actual impact of the introduction of targeted therapies in this subgroup. An understanding of the efficacy and safety of targeted agents in elderly patients with mRCC is essential to provide individualized therapy.

giuliani.jacopo@alice.it

## The possible role of inflammation in the association between periodontal disease and cancer

Hani Fadel

Taibah University College of Dentistry, Saudi Arabia

The results of several epidemiologic studies suggest a possible positive association between periodontal disease and the risk of cancer, particularly in the mouth, the upper gastrointestinal tract, the lung and the pancreas. Several hypotheses have been proposed to explain these observed associations. These include the effect of chronic systemic inflammation and the increased exposure to carcinogenic nitrosamines through smoking or diet. Moreover, periodontitis has been suggested as a marker of the body's immune function, with implications on tumor growth and progression. This presentation sheds some light on the available evidence concerning the association between periodontal disease and cancer.