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Reply to Retrospective evaluation of cetuximab-related adverse events from claims databases—methodological concerns

Maier et al. [1] questioned the algorithm we applied to identify infusion reactions (IRs) associated with cetuximab using claims data and the appropriateness of comparing rates of IRs from a claims data analysis with those of clinical trials.

Because there is no International Classification of Diseases, Ninth Revision, Clinical Modification diagnosis code for IRs, we identified IRs based on IR-related diagnoses, procedures and medications indicative of medical interventions that would be associated with treatment of an IR. The algorithm was fully described in the methods section of the paper and where necessary, we cited the limitations of the algorithm. The rate of IRs requiring medical intervention in this study was 8.4%, which is consistent with the 7% reported by Schwartzberg et al. [2], and much lower than the 22% reported by O'Neil et al. [3] using clinical trial data. Furthermore, all-grade IRs are reported in the USA prescribing information for cetuximab as 15%–21%, and the rate of severe reactions are reported as 2%–5%. Given that clinical trials generally study a population that is not completely representative of the general population with colorectal cancer (CRC), it is entirely plausible that the rates we observed are reasonable for the general CRC population.

Maier et al. [1] also commented that the rate of IRs during the initial infusion is lower in our study relative to the rate reported in the USA prescribing information for cetuximab. However, the rates reported in our study are consistent with other published literature. More specifically, Needle [4] reported that 33% of patients with severe IRs experienced events after their second dose of cetuximab. Lenz [5] also noted that 10%–30% of IRs to monoclonal antibodies are delayed and occur in later infusions. Differences in patient management between the clinical trial setting and routine clinical practice might contribute to the different findings.

In summary, the findings from our study are consistent with other published literature. Using claims data, as we did in our study, provides information about real world clinical practice, and reflects the general population of patients with a given condition.

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disclosure

None of the authors declare conflicts of interest.

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