



Indirect Comparison of **Cetuximab vs. Panitumumab** in metastatic colorectal cancer.

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Background:

In the absence of comparative studies of Cetuximab vs. Panitumumab in metastatic colorectal cancer (MCCR), we propose to perform an indirect comparison of both drugs for this indication.

Objective:

To perform an adjusted indirect comparison of the two pivotal clinical trials of Cetuximab and Panitumumab, designed versus the best supportive care as a common comparator in patients with chemotherapy-refractory metastatic colorectal cancer..

Material and method:

On 5/04/2014 a literature searching was performed in Pubmed without finding indirect comparisons.

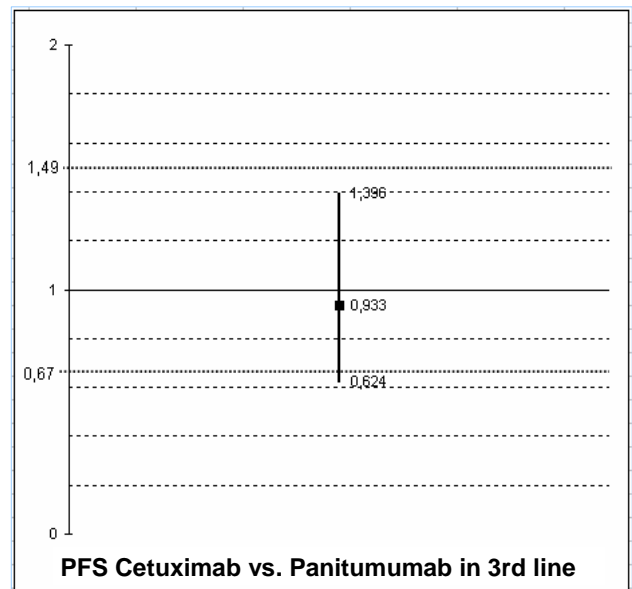
The adjusted indirect comparison was performed with the results shown in subsequent updates of the pivotal clinical trials, in which subgroups of patients with K-RAS wild-type were analyzed.

It was tested the homogeneity of the studies, concerning the population studied and the results of the treatment groups, were comparable with each other directly. Progression-free survival (PFS) was taken as the most clinically relevant variable available, as it allowed a proper comparison, although it was not the primary endpoint in both studies. For our study we used the Bucher's method, which combines the studies through analysis adjusted for the result of the control group. Comparison Indirect Treatment (ITC) application, developed by the Canadian Agency for Drugs and Technologies in Health (CADTH) was used.

The margin of equivalence (the maximum difference considered clinically irrelevant) was defined.

Results:

In adjusted indirect comparison by Bucher method, using Wells calculator, an insignificant Hazard Ratio (HR) obtained for Cetuximab vs. Panitumumab, relative to PFS. Therefore, we have no objective evidence that a drug is superior to another. The HR: 0.933 is very close to 1, and CI95% 0.624-1.396. Exceeds the margin of equivalence established (0,67-1,49) only at the lower limit, affecting a probability of 94.65% that the result is above 0.67, result obtained by Shakespeare calculator.



Conclusions:

We consider both therapeutic treatments might be considered as equivalent alternatives refer to PFS in third line.