Addition of Bevacizumab or Cetuximab to First Line Chemotherapy in the Treatment of K-ras Wild type metastatic Colorectal Carcinoma

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Abstract

Purpose: Mutations in *K-ras* gene are found in 30–40% of colorectal carcinoma (CRC) and are associated with poor response to Cetuximab or Panitumumab. Thus, *K-ras* testing is mandatory for patients with metastatic CRC (mCRC) but genotyping mistakes can be a result of many factors. The combination of Capecitabine with Irinotecan (XELIRI) was proven effective and addition of Bevacizumab as well as Cetuximab was studied with good tolerance and promising results. The aim of this study was to compare the efficacy and safety of XELIRI-Bevacizumab with that of XELIRI-Cetuximab in the first-line treatment of K-ras wild type mCRC.

Patients and methods: This is pilot study including 20 patients with mCRC K-ras wild type treated at Saudi German hospital, KSA & private center in Cairo, Egypt. The primary objective was to confirm non-inferiority of XELIRI-Bevacizumab compared with XELIRI-Cetuximab for progression-free survival (PFS).

Results: At median follow up of 12 months, the overall response rate (ORR) was 45% with 1-year PFS 75%. Comparing the 2 arms, ORR was 50% in Arm 1 compared to 40% in Arm 2 (p=0.952) while clinical benefit was 60% in both arms. PFS at 1-year was 80% in Arm 1 versus 70% in Arm 2 (p=0.612) with HR 0.63 (95%CI 0.10 - 3.79).

Conclusion: Adding Bevacizumab to XELRI is not inferior to adding Cetuximab to the same regimen in 1st line therapy of K-ras wild mCRC with acceptable and manageable toxicity profiles and maybe preferable in absence of accurate and reliable K-ras testing.