PD – 027 Efficacy of retreatment with anti-EGFRs in metastatic colorectal cancer is not predictable by clinical factors related to prior lines of therapy: a multi-institutional analysis

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Introduction: Retrospective analyses and phase 2 studies suggest that administering an anti-EGFR in advanced lines may be effective in mCRC pts who achieved benefit from a 1st-line anti-EGFR containing regimen. The identification of clinical features associated with benefit from anti-EGFR re-treatment (re-tx) in pts experiencing PD during 1st-line anti-EGFR (rechallenge) or after its interruption (reintroduction), is a major clinical need.

Methods: A real-life data-base including a total of 5530 pts treated at 6 institutions from December 2010 to October 2018 was queried. Pts retreated with anti-EGFRs, with RAS/BRAF wild-type status on tissue samples, who had received a 1st-line anti-EGFR-based tx with at least SD as best response, and at least one further line of therapy before anti-EGFR re-tx, were included. The association with RECIST response (RR), PFS and OS was investigated for the following variables: RR (PR or CR vs SD) and PFS during 1st-line; time from the last anti-EGFR administration to 1st-line PD (i.e. re-introduction vs rechallenge); reason for anti-EGFR discontinuation in 1st-line (PD vs. other); number of anti-EGFR-free lines of therapy before re-tx; anti-EGFR free interval (time between the last anti-EGFR administration in 1st-line and the time of re-tx); primary tumor side; time from the diagnosis of metastatic disease to re-tx ($\geq$ vs. $<$ 18 mos).

Results: Data from 86 pts were retrieved. In total, 56 (65%) and 30 (35%) received anti-EGFR rechallenge or reintroduction, respectively. Median anti-EGFR free interval was 15.1 mos. The RR during re-tx was 19.8%, with a DCR of 46.5%. Median PFS and OS were 3.6 and 10.2 mos, respectively. No significant association of investigated features with RR and PFS was observed. No differences in RR or PFS were observed among pts receiving anti-EGFR re-tx as rechallenge or reintroduction (20.4% vs 23.1%, P=.99; median PFS: 3.49 vs 4.97 mos; P=.61). Patients with left-sided tumors had longer OS (HR 0.50; 95% CI, 0.26-0.93; P=.005).

Conclusion: Clinical factors that are generally believed to affect the efficacy of anti-EGFR re-tx are not confirmed in our series. Therefore, clinicians should not rely on those characteristics in their decision-making on anti-EGFR re-tx, and adequate studies for implementing liquid biopsy in clinical practice are urgently needed.