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### Phase III study with FOLFIRI/cetuximab versus FOLFIRI/cetuximab followed by cetuximab (Cet) alone in first-line therapy of RAS and BRAF wild-type (wt) metastatic colorectal cancer (mCRC) patients: The ERMES study

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## Background

The optimal intensity of anti-EGFR-based first line therapy for *RAS/BRAF* wt mCRC once achieved disease control is controversial. A maintenance strategy with anti-EGFR monotherapy could be a valuable option to preserve efficacy while sparing toxicity.

## Methods

Patients with untreated *RAS/BRAF* wt mCRC were randomly assigned (1:1) to receive either FOLFIRI/Cet until PD/toxicity (arm A) or FOLFIRI/Cet for 8 cycles followed by Cet alone (arm B). Co-primary endpoints were non-inferior PFS in the modified per-protocol (mPP) population (pts treated beyond cycle 8) and lower incidence of grade (G)  $\geq 3$  AEs for arm B compared to arm A. To test non-inferiority 386 events were needed, and the upper HR boundary was set at 1.33. Secondary endpoints were PFS in the intent to treatment (ITT) population (pts who received at least one dose), OS in mPP and ITT, ORR and QoL. Translational analyses on tissue sample and liquid biopsies were planned.

## Results

From May 2015 to March 2020, 606 pts were randomized: 300 assigned to arm A and 306 to arm B. Median FU was 22.3 (15-33.8) months (m). Drop-out rate was around 40%. In the mPP population (arm B 183/arm A 154) 291 events occurred with mPFS of 10 vs 12.2 m for arm B and A, respectively (HR 1.3, 95%CI 1.03-1.64; p 0.43). In the ITT population (arm B 297/arm A 296) 503 events occurred with mPFS of 9 vs 10.7 m (HR 1.1, 95%CI 0.92-1.31; p 0.39). mOS was 36.6 vs 30.7 m (HR 0.81, 95%CI 0.6-1.09; p 0.22) and 31 vs 25.3 m (HR 0.9, 95%CI 0.72-1.12; p 0.32) in the mPP and ITT population, respectively. G  $\geq 3$  AEs were lower in arm B compared to arm A (39.9 vs 44.2%): neutropenia (9.8/14.9%), febrile neutropenia (2.7/5.2%), diarrhea (8.2/11%), oral mucositis (1.6/5.2%), fatigue (0.6/4.6%) and skin disorders (18/20.1%).

## Conclusions

The ERMES study does not demonstrate non-inferiority of maintenance with Cet alone. The higher-than-expected drop-out rate and subsequent reduced statistical power might have impaired the results. The ITT analysis and OS results are suggestive for a strategy of de-escalation treatment with only cetuximab. Ongoing translational analyses might allow to select pts benefitting from de-escalation strategy.

## Clinical trial identification

NCT02484833.

## **Legal entity responsible for the study**

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## **Disclosure**

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