Background

- Adding oxaliplatin to adjuvant 5FU and leucovorin improved 3-year Disease-Free Survival (DFS) and Overall Survival (OS) after resection of stage II and III colon cancer in the MOSAIC study. 

- Prognosis of patients with stage II and III colon cancer is better in patients with proficient MMR (dMMR) tumors than in patients with proficient MMR.

- Data suggest that 5FU benefit in stage II and III colon cancer is better in patients with proficient MMR (dMMR) than in patients with proficient MMR (pMMR).

- MMR status in stage II and III colon cancer limits conclusive evidence for oxaliplatin benefit.

Flow-chart

- Methods

  - Of the 2246 pts included in MOSAIC study, formalin-fixed, paraffin-embedded (FFPE) tissue blocks or stages of 1276 pts were obtained.

  - Twenty two samples with insufficient tumor tissue were excluded from this translational study.

  - pMMR status was determined by immunohistochemistry (IHC) of the protein products of MLH1, MSH2, MSH6, and PMS2 genes.

  - In 11 pts with inconclusive IHC (negative staining of both tumor and internal control), pMMR status was determined by pantheral PCR with 5 mononucleotide repeats.

Results

Conclusions

- Findings of these translational analyses in MOSAIC show Hazard Ratio in favor of FOLFOX4 vs LV5FU2 in dMMR colon cancer patients.

- Low dMMR prevalence in stage II & III colon cancer limits conclusive evidence for oxaliplatin benefit in this population, even in this large study.

- Analyses of colon cancer MMR status in patients included in the MOSAIC study support the use of FOLFOX in patients with dMMR stage II and III cancer.

References


Sponsored by GERCOR (www.canceronet.com)