

Recurrence-free survival according to treatment modality among elderly stage III colon cancer patients

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Objective

To investigate the effect of adjuvant chemotherapy comprising of capecitabine and oxaliplatin (CAPOX) or capecitabine monotherapy (CapMono) on recurrence-free survival among elderly stage III colon cancer patients treated in clinical practice.

Methods

Study population

- Stage III (pT1-4N1-2M0) colon cancer patients aged ≥ 70 years
- Diagnosed in the southeastern Netherlands between 2005-2012
- Treated with surgery only, surgery + CAPOX, or surgery + CapMono
- Data originate from the Netherlands Cancer Registry

Statistical analyses

- Recurrence-free survival (RFS) was defined as the time from surgery (figure 1A) or end of chemotherapy (figure 1B) to recurrence or death, or last follow-up date and analysed using Kaplan-Meier curves, Log-Rank tests and multivariable Cox regression analyses.
- To overcome the effect of postoperative mortality on long-term survival, only patients who survived the first 90 days after surgery were included in the survival analyses.

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Results

- 750 patients underwent surgery only, 193 patients received CAPOX and 164 patients received CapMono. In the first 90 days after surgery, respectively 120, 2 and 3 patients died in each of these groups.
- Compared to patients receiving CAPOX, crude 5-year RFS was significantly lower for patients undergoing surgery only ($p < 0.0001$) but similar for patients receiving CapMono ($p = 0.911$) (figure 1A), also after casemix adjustment (figure 2, model 1).
- Among patients completing all planned cycles, RFS after 48 months ($n < 10$ after this time for CAPOX) was similar for patients receiving CAPOX and patients receiving CapMono ($p = 0.836$). Among patients not completing all planned cycles, RFS was also similar between both regimens ($p = 0.611$) (figure 1B). After casemix adjustment, similar results were found. Additionally, although no statistical significance was reached, the risk of recurrence or death tended to be higher for patients who did not complete all cycles as compared to patients who did complete all cycles (figure 2, model 2).

Conclusions

- Among elderly stage III colon cancer patients, receipt of CAPOX/ CapMono is associated with improved RFS. The advantage seems to differ according to completion of all planned cycles but does not differ by regimen. These data suggest that the addition of oxaliplatin might not be justified, although interpretation should be cautious due to the observational nature.

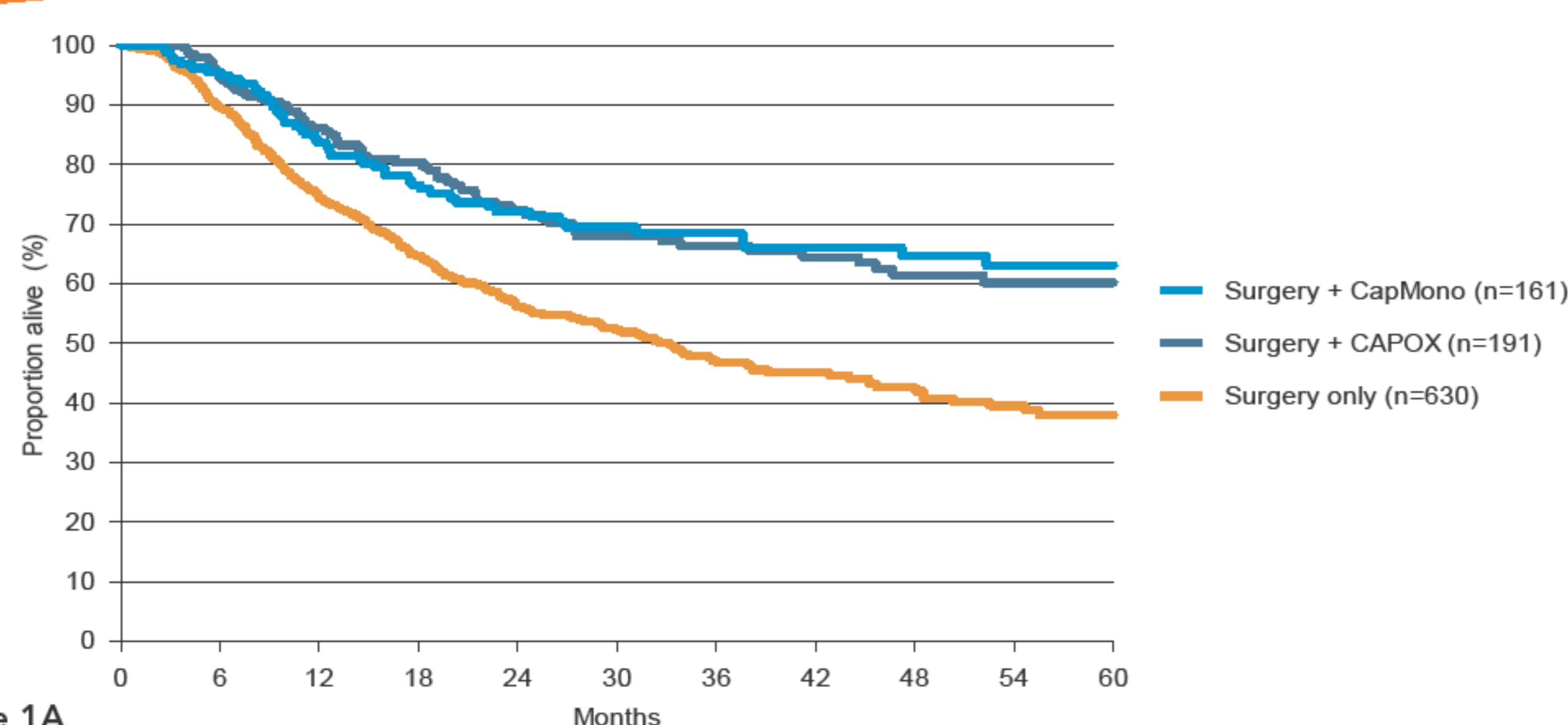


Figure 1A
Recurrence-free survival according to treatment modality among elderly stage III colon cancer patients

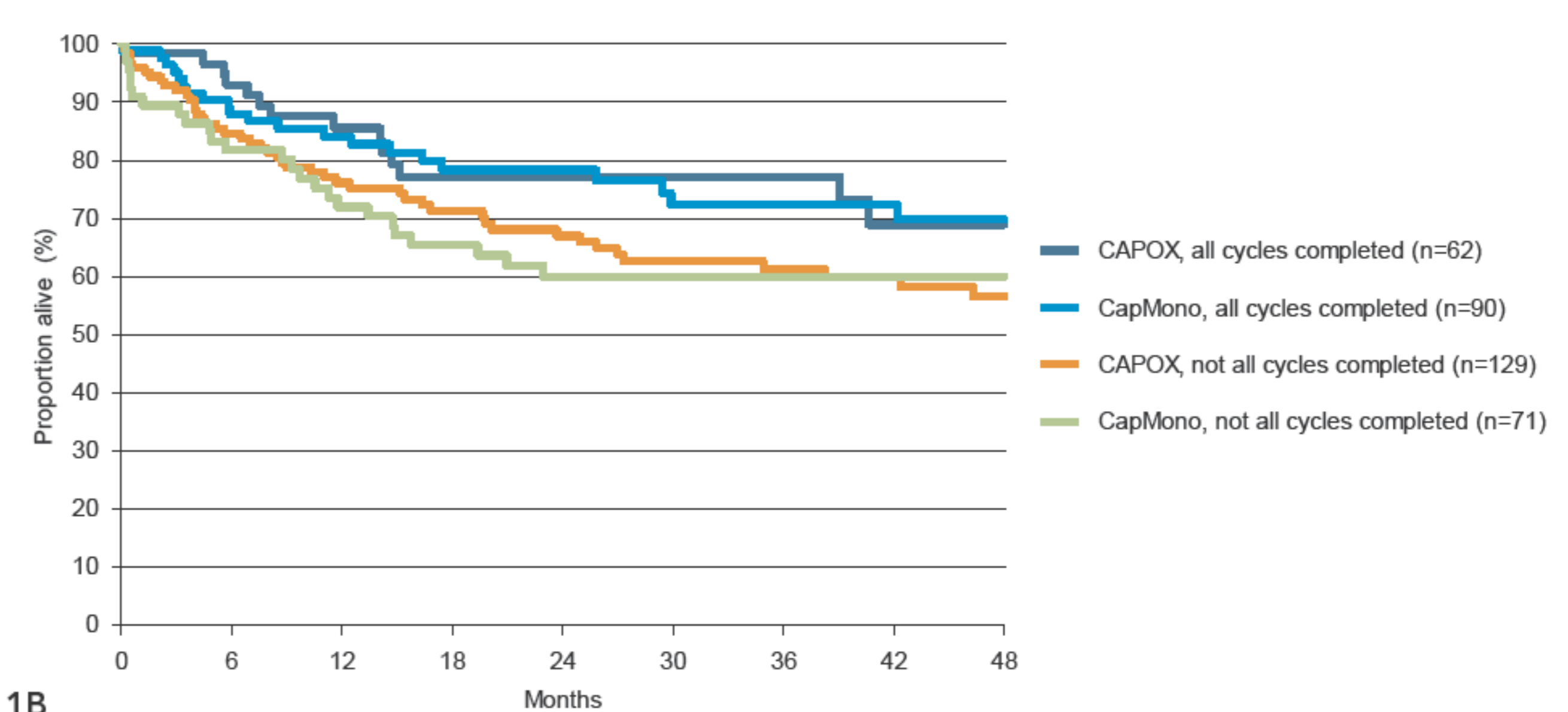


Figure 1B
Recurrence-free survival according to adjuvant chemotherapy regimen and completion of all planned cycles among elderly stage III colon cancer patients

Figure 2
Adjusted hazard ratios for recurrence or death according to treatment modality (model 1, $n=982$) or adjuvant chemotherapy regimen and completion of all planned cycles (model 2, $n=352$) among elderly stage III colon cancer patients

Hazard ratio # with corresponding 95% confidence interval.

#Adjusted for age, gender, comorbidity, ASA score, pT-pN stage, tumour subsite, differentiation grade and period of diagnosis

