

Intensity of adjuvant chemotherapy regimens among elderly stage III colon cancer patients

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Objective

To give insight into the use of adjuvant chemotherapy comprising of capecitabine and oxaliplatin (CAPOX) or capecitabine monotherapy (CapMono) and differences in total dosages received 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 chemotherapy comprising of CAPOX or CapMono
- Data originate from the Netherlands Cancer Registry

Statistical analyses

- Logistic regression assessed variables influencing receipt of CAPOX versus CapMono.
- Differences in completion of all planned cycles, delays, and dosage reductions between regimens were calculated using χ^2 -tests.
- The median, interquartile range, minimum and maximum of the total dosage received of each chemotherapy agent was calculated.

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Results

- 193 (54%) patients received CAPOX, 164 (46%) patients received CapMono. Patients aged ≥80 years vs. 70-80 years (14% vs. 58%), diagnosed in 2005-2006 vs. 2011-2012 (40% vs. 55%), with ASA score III-IV vs. I-II (43% vs. 58%), and from some hospitals (range 33-78%) were less likely to receive CAPOX (figure 1).
- Patients receiving CapMono more often completed all planned cycles than patients receiving CAPOX (55% vs. 33%, $p < 0.0001$). Toxicity was the reason for non-completion in 84% for CAPOX and in 65% for CapMono ($p = 0.003$). Other specified reasons which did not differ between regimens were patient/family choice (10-16%); local/distant recurrence (4-6%); and death (3-4%).
- Patients receiving CapMono less often had a delay in at least one cycle due to medical reasons (i.e. laboratory values, toxicity) than patients receiving CAPOX (22% vs. 32%, $p = 0.032$).
- Among patients completing treatment, dosage reduction was applied more often among patients receiving CAPOX (63%) than among patients receiving CapMono (43%) ($p = 0.014$). The most important reason for dosage reduction was toxicity (83% vs. 87%, $p = 0.562$).

Conclusions

- Total dosages for CAPOX and CapMono vary largely between elderly stage III colon cancer patients.
- One-third of elderly receiving CAPOX completed all cycles, and dosage reductions were applied in over half of them. Among elderly receiving CapMono, completion was higher but still relatively low and dosage reductions were applied in almost half of them.

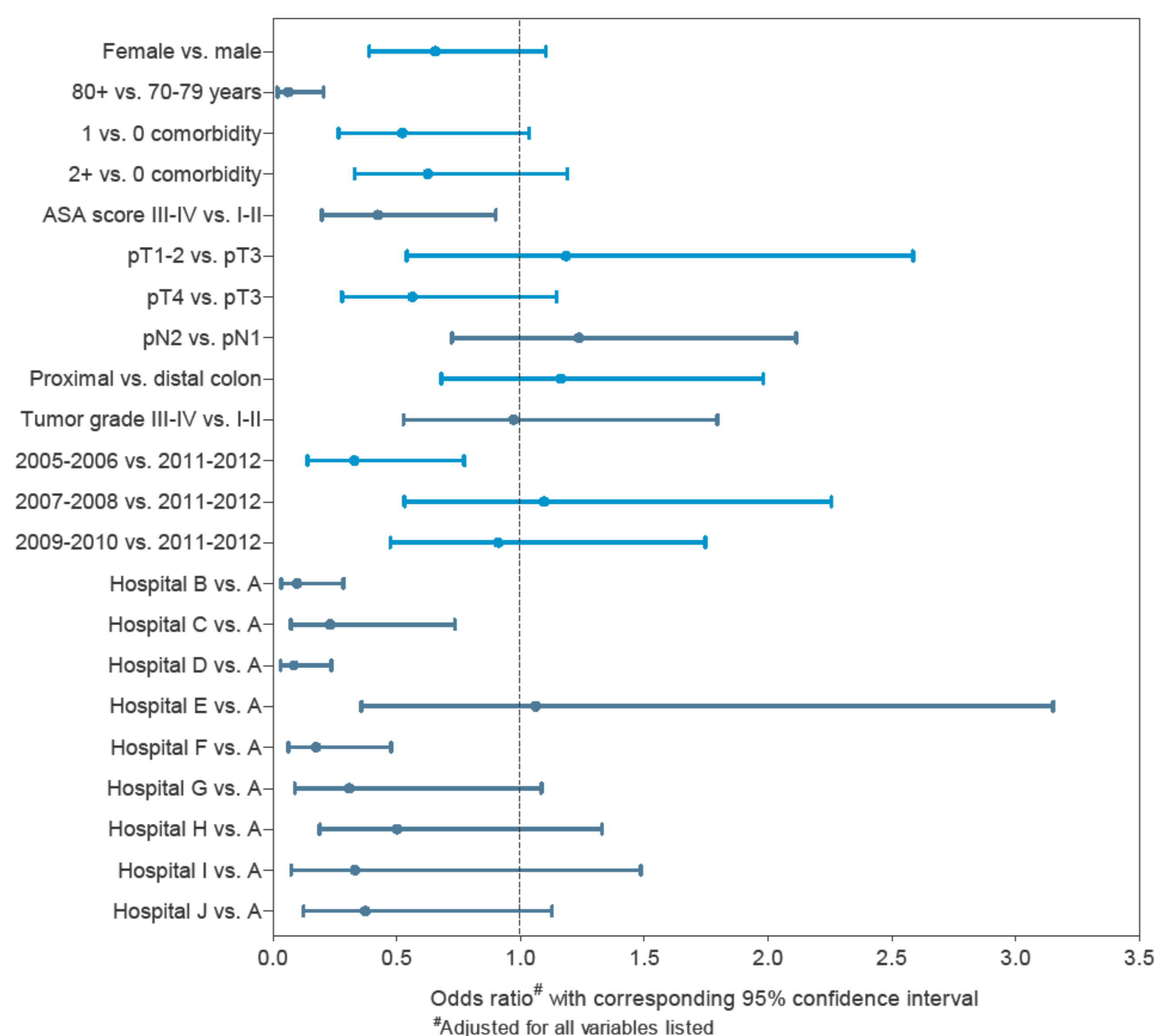


Figure 1 Adjusted odds ratios for receiving CAPOX versus CapMono

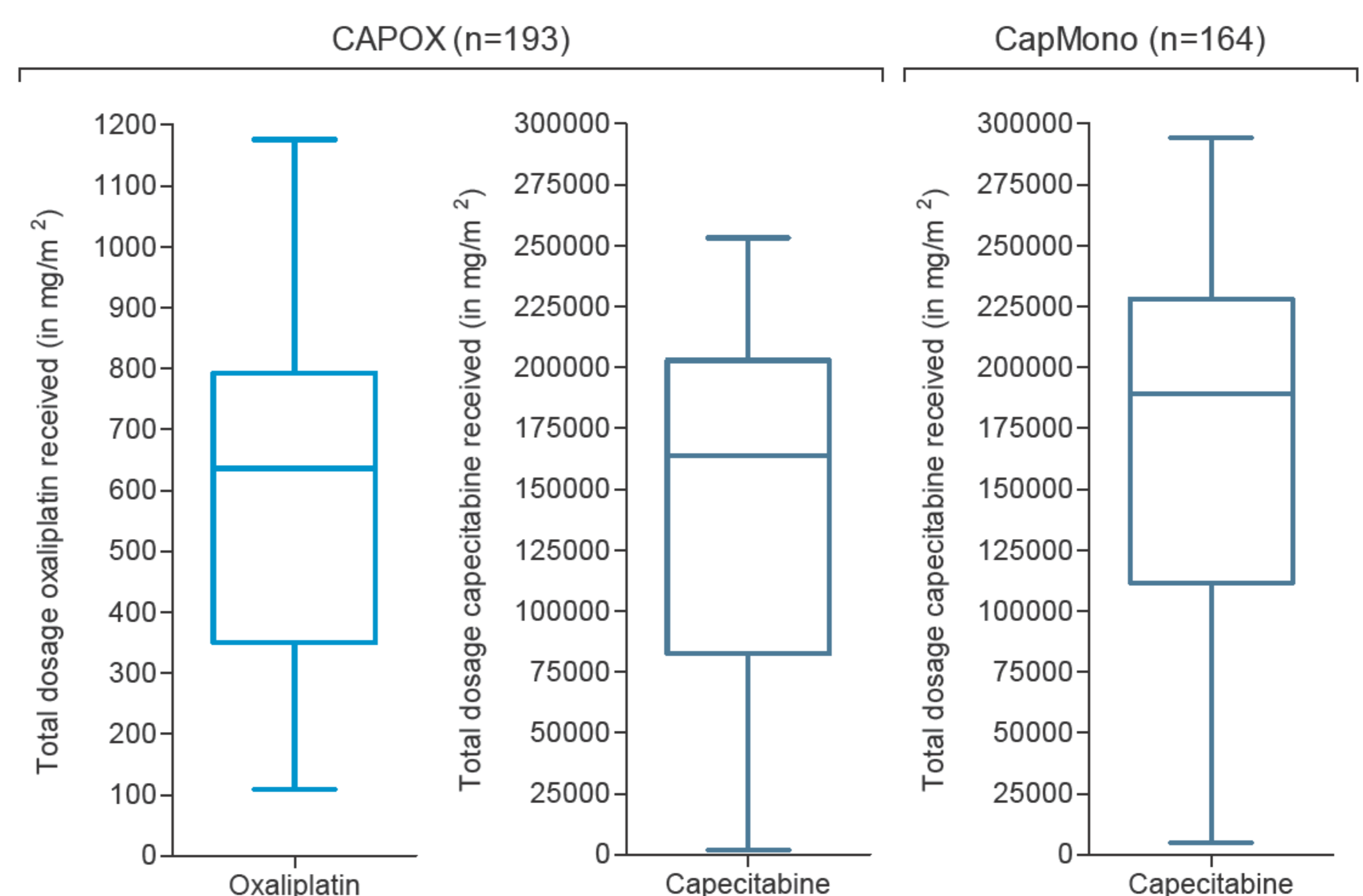


Figure 2 Total dosages received of each chemotherapeutic agent among elderly stage III colon cancer patients Median, interquartile range, minimum and maximum

