

Chemotherapy choices and doses in frail and elderly patients with advanced colorectal cancer: an MRC randomised clinical trial (FOCUS2)

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Background: Frail elderly patients, though commonly treated, are under-represented in trials. Evidence is needed to guide drug choices and doses in this population.

Methods: FOCUS2 is a multicenter, 2×2 factorial trial in patients with untreated metastatic colorectal cancer, unfit for full-dose combination therapy. Physical, mental, comorbidity and QL status were assessed at baseline. Randomisation was to (A) infusional fluorouracil (FU); (B) oxaliplatin plus FU (OxFU); (C) capecitabine (Cap); or (D) OxCap. Standard regimens were used, but starting at 80% standard doses. Patients were considered for dose-increase to 100% after 6 wks, with full health/QL and tumour reassessment after 12 wks. Two factorial questions were asked: (AB v CD) – does replacing FU with Cap improve QL? (1° endpoint: improved QL at 12 wk); and (AC v BD) – what benefit is Ox in this population? (1° endpoint: PFS). Baseline factors were assessed as potential predictors of treatment outcome using a composite scale (good; intermediate; poor) incorporating response, toxicity/AEs, and patient views.

Results: 459 patients were randomised. 43% were aged over 75 yr, 35% 70–75 yr, 22% under 70 yr; 29% were performance status 2, 49% PS1, 22% PS0. Outcomes are presented in the table.

Outcomes	A FU	B OxFU	C Cap	D OxCap	AB v CD (FU v Cap)	AC v BD (± Ox)
PFS hazard ratio (n=459)					HR = 1.03, p = 0.7650	HR = 0.88, p = 0.1794
RR by wk 12 (n=364)	15%	42%	15%	39%	p = 0.641	p < 0.0001
Dose increased at wk 6	50%	36%	41%	31%	p = 0.09	p = 0.01
Any gr ≥3 tox in 1st 12 wks	24%	29%	37%	41%	p = 0.006	p = 0.264
60-d all-cause mortality	16%	4%	9%	10%	p = 0.862	p = 0.097
Improved QL at 12 wks (n=246)	59%	51%	64%	47%	p = 0.887	p = 0.043
Improved EQ5D score (n=263)	60%	75%	61%	62%	p = 0.334	p = 0.189
Improved ADL score (n=179)	54%	51%	37%	40%	p = 0.05	p = 0.99

In univariate analysis, pre-treatment factors correlating with good or poor treatment outcome included: nausea/vomiting and pain score (both $p < 0.001$); nutritional score and fatigue (both $p < 0.005$); EQ5D score, number of disease sites and liver-only disease (all $p < 0.01$); dyspnoea and raised WBC ($p < 0.05$). Multivariate logistic regression analyses are being performed on these data.

Conclusions: The strategy of starting at 80% standard doses with escalation at 6 weeks appears successful in limiting toxicity. In this population, substituting capecitabine for FU increase rates of grade ≥3 toxicity and did not improve QL. Adding oxaliplatin increased the response rate but had only a non-significant effect on PFS. Further analysis of prediction of outcomes from baseline assessment data will be presented.