

Results of a phase III, randomized, double-blind, placebo-controlled trial of pegfilgrastim (PEG) in patients (pts) receiving first-line FOLFOX or FOLFIRI and bevacizumab (B) for colorectal cancer (CRC).

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Abstract Disclosures

Abstract

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Background: The literature reports that adding biologic to chemotherapy (ctx) may increase the incidence of clinically significant neutropenia. A trial was conducted to evaluate the efficacy of PEG in reducing the incidence of febrile neutropenia (FN) in pts with locally-advanced (LA) or metastatic (m) CRC receiving first-line treatment with either FOLFOX/B or FOLFIRI/B. **Methods:** Key eligibility: ≥ 18 years old; measurable, nonresectable CRC per RECIST 1.1. Pts were randomly assigned 1:1 to either placebo or 6 mg PEG ~ 24 h after ctx/B. The study treatment period included four Q2W cycles, but pts could continue their assigned regimen until progression. Pts were stratified by region (North America vs rest of world), stage (LA vs m CRC), and ctx (FOLFOX vs FOLFIRI). Estimated sample size (N = 800) was based on the expected incidence of grade 3/4 FN (primary endpoint) across the first 4 cycles of ctx/B, powered for PEG superiority over placebo. Other endpoints included overall response rate (ORR), progression-free survival (PFS), and overall survival (OS). **Results:** 845 pts were randomized (Nov 2009 to Jan 2012) and received study treatment; 783 pts completed 4 cycles of ctx/B. Median age was 61 years; 512 (61%) pts were female; 819 (97%) had m CRC; 414 (49%) received FOLFOX, and 431 (51%) received FOLFIRI. Grade 3/4 FN (first 4 cycles) for placebo vs PEG was 5.7% vs 2.4%; OR 0.41; $p = 0.014$. A similar incidence of other \geq grade 3 adverse events was seen in both arms (28% placebo; 27% PEG). See table for additional results. **Conclusions:** PEG significantly reduced the incidence of grade 3/4 FN in this pt population receiving standard ctx/B for CRC. Follow-up is ongoing. Clinical trial information: NCT00911170.

	Placebo (n=423)	PEG (n=422)	Placebo vs PEG
Grade 3/4 FN (95% CI)	5.7% (3.7, 8.3)	2.4% (1.1, 4.3)	Diff = -3.3% (-6.6, 0.0) OR = 0.41 (0.19, 0.86) $p = 0.014$
ORR* (95% CI)	238/420 [†] ; 56.7% (51.8, 61.5)	244/420 [†] ; 58.1% (53.2, 62.0)	Diff = 1.4% (-6.5, 9.3) OR = 1.06 (0.81, 1.39) $p = 0.683$
Median PFS* (95% CI), mo	10.1 (9.3, 11.1)	9.7 (9.2, 10.8)	HR = 1.05 (0.88, 1.26) $p = 0.552$
Median OS* (95% CI), mo	24.6 (21.3, NR)	21.8 (18.5, 25.6)	HR = 1.05 (0.81, 1.36) $p = 0.704$

*Immature data. [†]Measurable disease.