

**Advanced Colorectal Cancer**

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**Baseline Quality of Life Is a Strong and Independent Prognostic Factor for Overall Survival in Metastatic Colorectal Cancer**

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**Background:** Our group previously established that pretreatment baseline quality of life (QOL) is significantly associated with overall survival (OS), independent of treatment arm and performance status (PS) in patients undergoing first-line therapy for metastatic colorectal cancer (mCRC) in the phase III trial N9741 (Hubbard [Turja] ASCO 2008). We now sought to determine if this correlation was independent of other potentially confounding factors such as age, race, number of metastatic sites, and various laboratory parameters.

**Methods:** A total of 1,416 patients with mCRC participating in N9741 (comparing IFL vs. FOLFOX4 vs. IROX) provided data at baseline on overall QOL using a single-item Uniscale test with all test scores transformed to a 0-100 point scale, with 0 representing worst, and 100 best QOL. An association for OS according to clinically deficient (CD-QOL, score 0-50) vs. not clinically deficient (nCD-QOL, score 51-100) baseline QOL scores was tested. A multivariate analysis was performed to adjust for an effect of multiple baseline factors on OS, including baseline PS, age, race, number of metastatic sites, treatment arm, hemoglobin, neutrophil count, alkaline phosphatase, and AST.

**Results:** In univariate analysis, baseline nCD-QOL scores were associated with improved OS, with a HR of 0.66 (95% CI 0.55, 0.78;  $P < .0001$ ). Age  $> 70$  years, PS 1-2,  $> 1$  site of metastasis, and abnormal laboratory values (hemoglobin, neutrophil count, alkaline phosphatase, AST) were associated with decreased OS. After adjusting for all other factors, baseline QOL continued to have a highly statistically significant correlation with OS (HR 0.78, 95% CI 0.66, 0.94;  $P = .007$ ).

**Conclusions:** After adjusting for multiple baseline factors associated with OS including PS, baseline QOL score remains an independent predictor for OS in patients with mCRC. These findings provide

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ABSTRACTS

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further validation of the impact of baseline quality of life on survival outcomes and justify the use of this parameter as a prognostic tool in this disease.