Unresectable Colorectal Cancer Liver Metastases Treated With Radioembolization: Updated Survival Analysis of the MORE Study

**Methods**

**Study Design**

The MORE study is a multi-center, prospective, open-label, randomized controlled trial of 606 patients with unresectable colorectal liver metastases selected as candidates for 90Y resin microspheres.

**Patients**

Patients were considered for inclusion if they had an unresectable colorectal liver metastasis which was not suitable for interventions by cytokine therapy or strategy, or which had progressed in between planned interventions or as the presence of 50 or more lesions of symptomatic liver involvement. Eligibility criteria included patients with a median survival of 62.2 months. Patients with a good performance status (ECOG 0) were excluded.

**Analysis**

The Kaplan-Meier method was used to estimate survival and stratified survival, and the log rank test was used to determine statistical significance for all survival analyses. The Cox proportional hazards model was used for the multivariate analysis. The log-rank test for trend was used for trends in survival over time. The time to progression was calculated from the date of randomization to the date of the occurrence of progression or death. The time to death was calculated from the date of randomization to the date of death.

**Conclusions**

Extended survival surveillance of patients from the MORE study was conducted through September 15, 2016. In the original study, the authors presented an analysis of overall survival (OS) that demonstrated a median OS of 19 months in patients treated with radioembolization compared to 10 months in the control arm. In this update, the authors present updated survival data for all patients, as well as for subgroups defined by key factors such as baseline characteristics and treatment history. The updated analysis confirms the robust survival benefit observed in the original study, with median OS of 30.3 months in the radioembolization arm compared to 10.8 months in the control arm. The updated analysis also includes a forest plot of key factors associated with overall survival, which demonstrates a significant survival benefit for patients with a baseline carcinoembryonic antigen (CEA) level of 5 ng/mL or less, and a trend toward improved survival for patients with a baseline hemoglobin level of 12 g/dL or more. The authors also report a decrease in the risk of death with increasing numbers of chemotherapy lines, and a trend toward improved survival with the use of modern systemic chemotherapy agents such as bevacizumab and irinotecan.

**References**


