**ABSTRACT**

**BACKGROUND:** Symptoms and complications of metastatic colorectal cancer (mCRC) differ by metastatic sites and other factors. There is a paucity of data from prospective studies reporting outcomes for patients with peritoneal carcinomatosis (pcCRC) as a manifestation of mCRC. We characterized the clinical course of pcCRC pts enrolled in two prospective randomized trials of chemotherapy and contrasted that with other manifestations of mCRC (non-pcCRC).

**METHODS:** A total of 3056 pts enrolled in (N9741 & N9744) were evaluated. Clinical outcomes included overall survival (OS) and progression-free survival (PFS). Asymptomatic (no carcinomatosis) and symptomatic (pcCRC) pts were compared. Cox proportional-hazard model was used to assess the adjusted associations.

**RESULTS:** The characteristics of the pcCRC group (N=364) were similar to the non-pcCRC group in median age (63 vs 61, p=0.22), gender (57% males vs 44%, p=0.23), performance status (ECOG PS 0-1 94% vs. 98%, p=0.06), but differed in frequency of liver (63% vs. 82%, p<0.001) and lung metastases (41% vs. 33%, p<0.001). OS and PFS between pcCRC and non-pcCRC pts. The impact of systemic chemotherapy was analyzed separately for 1st (N9741) and 2nd line treatment (N9841). Cox proportional-hazard model was used to assess the adjusted associations.

**PATIENT CHARACTERISTICS**

- **Overall survival (OS)**: Progression-free survival (PFS, minor outcome measure)

**TREATMENT**

**GOAL**

- To assess the impact of peritoneal carcinomatosis (pcCRC) on overall survival among patients treated on prospective randomized trials for mCRC.
- To compare the impact of chemotherapy on pcCRC and non-pcCRC subgroups of mCRC.

**RESULTS**

**Study population**

- mCRC n=248
- non-pcCRC n=2095

**Overall Survival by Trial and Carcinomatosis Status**

**Multivariable Cox Model**

**Key Findings**

- pcCRC is a significant predictor of survival among patients with mCRC.
- Survival is longer than in most historical retrospective studies.
- Future studies may consider:
  - stratification based on carcinomatosis status
  - combination of treatments, such as chemotherapy and intraperitoneal chemotherapy

**CONCLUSION**

The first report to establish peritoneal carcinomatosis from CRC (pcCRC) as a significant predictor of overall and progression-free survival.

**Bibliography**