Japanese cohort study of first line chemotherapy (CT) for metastatic colorectal cancer (mCRC) containing Fluorouracil, Oxaliplatin and Bevacizumab: EMERaLD study, First report

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BACKGROUND

• An observational cohort study plays a crucial role to understand the current status of clinical practice and can be utilized as database for multi-purpose outcome research. Such database is available in Europe and the United States based on several cohort studies especially in mCRC.

• There is no database available including treatments for mCRC patients in Japan.

OBJECTIVES

We planned and conducted a large cohort study to establish database available including treatments for mCRC patients in Japan.

• Primary endpoints: Overall survival, liver resection rate, R0 liver resection rate

• Secondary endpoints: Progression-free survival, Safety, Sub-group analysis: regimen specific, KRAS status specific, etc

METHOD

• We planned to collect data from more than 1,000 patients as shown below.

• We performed a preplanned interim analysis of first 6 months efficacy and safety data after the 500th and 1,000th patient registration.

• Eligible patients
1) With first line CT including Oxaliplatin and Bevacizumab for mCRC.
2) Treatment-initiated after January, 2010
3) Tumor response image assessment is available.
4) Laboratory test and symptom check during first line CT is available.
5) Able to provide observation data to this study

RESULTS

From October 2010 to September 2011, data from 1,353 patients were recruited from 132 centers in Japan, and we analyzed data on 538 patients of them.

PATIENT CHARACTERISTICS

- Gender
  - Male: 335
  - Female: 203

- Age
  - Median: 65
  - Range: 27-85

- Performance status
  - 0: 453
  - 1: 77
  - 2: 6

- LEA
  - Median: 13.5
  - Range: 0-29.60

- Comorbidity
  - Without: 345
  - With: 193

TREATMENT (6 months)

- Discontinuation
  - continued: 310
  - discontinued: 228

- Treatment duration
  - Median: 91
  - Range: 1-180

- Reasons for discontinuation
  - progression: 63
  - surgery: 57
  - adverse event: 79
  - patient refusal: 21
  - others: 17
  - death: 4

PRIMARYLY DISEASES

- Site
  - Colon: 279
  - Rectum: 238
  - Colorectal: 1

- Metastases
  - Synchronous: 358
  - Metachronous: 180

- Primary lesion
  - Colon: 126
  - Rectum: 175

METASTATIC DISEASES

- Liver metastases (n=538)
  - Total: 368
  - Left: 189
  - Right: 179

- Largest dimension of LM (mm) (n=538)
  - Median: 156
  - Range: 4-230

- Vascular invasion of LM (n=538)
  - Intrahepatic artery: 20
  - Hepatic vein: 44

- Number of LM
  - Median: 5
  - Range: 1-30

- Interest to Bevacizumab
  - KRAS-wild: 49.1%
  - KRAS-mutant: 42.1%
  - KRAS-unknown: 51.1%

- Interfered with regimen-specific
  - KRAS-wild: 14 (8.0%)
  - KRAS-mutant: 11 (6.3%)
  - KRAS-unknown: 10 (5.7%)

- Surgery LR
  - R0: 14 (8.0%)
  - LR: 11 (6.3%)
  - R: 10 (5.7%)

- Liver/Lung/Another (n=37)
  - Liver/Lung: 58
  - Liver/Lung/Another: 44
  - Others: 24

- Adjuvant CT
  - N: 205
  - Y: 238

SURVIVAL (6 months)

- All: 48.3% (95%CI : 44.0% – 52.6%)

- PP5 probability: 84.0% (95% CI : 80.1% – 87.2%)

- OS: 52.6%

SAFETY (6 months)

- Neurotoxicity
  - motor: 56
  - sensory: 17

- Prophylactic CT
  - N: 205
  - Y: 238

- Bleeding
  - N: 58

- Thromboembolic events
  - N: 290

- Other adverse events (n=538)
  - Thromboembolic events: 3
  - Others: 290

CONCLUSION

• We have started the large Japanese cohort study which investigates first line CT for mCRC. We performed a preplanned interim analysis on 538 patients and there was no difference from past reports.

• We will further investigate and analyze 2 years efficacy and safety data on all 1,353 patients.

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