Study Design and Data Source
• Initiation date (IRI between 11/1/2015 and 8/31/2017. Data provided for study were de-identified via technology for analysis. A retrospective descriptive analysis was performed using the irinotecan (IRI) dosing scheme between IRI initiation and diagnosis. – Grade 3 and 4 neutropenia was calculated as neutrophil counts <1000-

Patient Population
The study sample included 257 patients; demographic and clinical characteristics are summarized in Table 1.

METHODS
Study Design and Data Source
• A retrospective descriptive analysis was performed using the Flatiron Health longitudinal de-identified survival and geographically diverse database derived from electronic health record (EHR) data which includes data from over 265 cancer clinics representing more than 2 million active US cancer patients for analysis.
• Patient-level data include structured and unstructured data, curated via technology- enabled abstraction.
• Data provided for study were de-identified with provisions in place to prevent re-identification and protect patients confidentiality.

Patient Selection
• This analysis identified and evaluated adult patients diagnosed with mPcC between 1/1/2014 and 8/31/2017 and treated with naI-IRI between 1/1/2015 and 8/31/2017.
• Eligible patients were those who initiated naI-IRI treatment at least 90 days prior to 8/31/2017, were at least 18 years old, had last visit date and death date that occurred on or after naI-IRI initiation date (Figure 1).

Measures and Statistical Analyses
• Baseline demographics and clinical characteristics, dose intensity (DI), dose modification, and degree of exposure (DOE) (on or after index date), grade 3-4 adverse events (AE), patient factors, and reasons for discontinuation were determined.
• Dose intensity was the total dose (in mg/m²) of naI-IRI given to patients within the first 6 weeks of initiating a naI-IRI regimen.
• Dose modification was defined as a difference of ±25 mg/m² from the indicated dose per consecutive administrations (or orders if missing administration).
• Grading of adverse events was only possible for lab values and used the NCI CTCAE grading scheme between naI-IRI initiation and diagnosis.

Duration of Exposure
• The median DOE for all patients was 7.3 weeks (IQR 3.4 – 17.1). Table 4 contains a summary for each subgroup.

Table 3. Duration of Exposure

Figure 2. Dose Intensity at 6 weeks

Dose Modification
• Overall, 27.2% of patients experienced a dose modification (Table 4); when stratified by median DI similar rates were seen for below median DI and at or above median DI.

Adverse Events
• Neutropenia was the only AE with labs to measure during treatment and before the naI-IRI containing regimen.

Table 5. Grade 3 or 4 Neutropenia

Growth Factor Usage
• For all groups, a higher proportion of patients were on growth factor therapy at naI-IRI treatment compared with during treatment.

Reasons for Discontinuation
• Progression was the most common reason for discontinuation for all groups and was most common for treatment-related symptoms not due to therapy (Table 6).

LIMITATIONS
• EHR data are subject to possible entry errors and missing information which could have led to extreme or incorrect values.
• Age was limited to 85 years and younger for de-identification reasons therefore the true age of the older patients of the population and true average age of the overall population is underestimated.
• Diagnosis codes from the structured data were captured at the oncology clinic. Conditions not relevant to cancer may not have been captured, potentially leading to an underestimate of the true comorbidity burden.

CONCLUSIONS
• Compared to the NAPOLI-1 trial, this real-world analysis demonstrated similar DI results, however patients had fewer dose modifications and were slightly older, with worse performance status than those in the trial.
• Similarly, rates of treatment related reasons for discontinuation were comparable: 10.5% in this analysis vs. 11.1% in NAPOLI-1.
• Below median DI was associated with an increased proportion of patient discontinuation due to side effects and patient request; as opposed to progression in the ≥ median DI group, suggesting that median DI reflect overall patient performance.
• Larger patient cohort analyses will further elucidate dosing patterns and outcomes in patients treated with naI-IRI.

References