BACKGROUND

Neuroendocrine tumors (NET) comprise a broad set of rare tumors, approximately 23 of which occur in the gastrointestinal tract. Surgery may be curative in the early stages, but delayed diagnosis is typical.

NCCN guidelines for unresectable and metastatic GI NET recommend somatostatin analogues (SSA) as first-line treatment, but do not recommend a particular treatment sequence for the remaining therapies.

To date, there have been no studies using large claim databases to assess real-world treatment patterns of GI NET.

OBJECTIVE

To describe the current real-world treatment patterns of GI NET in a large sample of patients from two commercial claims databases.

METHODS

Retrospective, cross-sectional study using 2009-2014 data from 2 U.S. commercial claims databases: Truven Health Analytics MarketScan and PharMetrics.

Study population:

Inclusion Criteria: Age ≥18
2. 1 or 2 outpatient claims for GI NET (benign or malignant) within the study period (1/1/2009-12/31/2014)

Exclusion Criteria:

1. Lack of at least six months enrollment before the index date (baseline)
2. Variable follow up: until end of enrollment or 12/31/14, whichever came first.

RESULTS

- 2,258 newly treated GI NET patients were identified (Figure 1).
- 59.6% started first-line therapy with SSA monotherapy, 33.3% CC, 3.6% TT, and 0.1% IF.
- 75 patients (3.3%) received SSA in combination with either CC or TT (Figure 2).
- Most common second line was combination therapy with SSA (i.e., CC or TT added).
- Patients with first-line SSA, most received second line SSA.
- 99.9% of patients had no subsequent pharmacological after first-line therapy (Table 1).
- There was no clear pattern visible after first-line therapy (Table 2, Figure 3).
- Liver directed therapy appeared dispersed throughout periods of both pharmacological treatment and periods of no treatment, so conclusions about treatment patterns are based on limited information.

CONCLUSIONS

- More than half of pharmacologically treated patients began treatment with SSAs, which appears to have been well-tolerated based on average duration of use over 18 months (1.8 years).
- One-third of patients began therapy with chemotherapy, which is recommended by NCCN guidelines only if no other options are feasible.
- Despite the many available treatment options, more than half of patients had no subsequent pharmacological treatments after discontinuing first-line therapy despite continued enrollment in health plan.
- Studies directed at verifying these results are warranted; ideally these studies will be performed using clinically detailed information from medical charts.

REFERENCES


LIMITATIONS

- Results reflect only patients with commercial insurance and not those with Medicaid, Medicare or no insurance.
- Patient demographics and procedures were identified using ICD-9-CM diagnosis codes, NDC codes, and CPT procedure codes; pathologic diagnoses were not available, and misclassification may have occurred.
- Missclassification of ongoing patients as newly treated may have occurred if there were treatment gaps of ≤6 months.
- Less than 10% of patients were observed to initiate second-line treatment, so conclusions about treatment patterns are based on limited information.
- Median enrollment of less than 2 years likely prevented us from observing second-line treatment in many patients.
- Data are from 2009-2014 and patterns may have changed since then due to newly approved agents for GI NET.

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