Based on a study using SEER data from 1973 to 2004, the estimated prevalence of all neuroendocrine tumors (NET) in the US was over 100,000 cases in 2004.

Pancreatic neuroendocrine tumors (PNET), when progressive, may be treated with somatostatin analogues (SSA); targeted therapy, and cytotoxic chemotherapy.

Everolimus and sunitinib, both targeted therapies, were approved for PNET in 2011.

Treatment sequences for SSA vary considerably across providers and are not well described in real-world clinical practice settings.

Objective

To longitudinally examine claims data, identify and evaluate real-world treatment patterns of PNET patients newly treated with everolimus, sunitinib, or other SSA therapies.

RESULTS

Duration

Streptozocin / Doxorubicin / Fluorouracil

Descriptive

Switching from cytotoxic and other PNET therapy to everolimus or sunitinib, or Doxorubicin / Fluorouracil

Receipt

Figure 4

0.618

Streptozocin

Sensitivity

Sensitivity

Figure 4: PNET Treatment Patterns Among Newly Treated Patients

Table 1: Patient Demographics Stratified by Index Treatment

Table 2: Type of Cytotoxic & Other PNET Therapies at Index

Figure 4

2015, PHAR, LLC (Graphix)

LIMITATIONS

The study assumed use of everolimus, sunitinib, and other SSA for PNET patients was prior to or during the aforementioned treatment was not assessed. Therefore, readers should be aware of the caveats when interpreting the results. Sensitivity and specificity of our claims-based algorithm for identifying PNET patients has not been validated.

Patients included in this study were those with commercial insurance plans captured in the two claims databases. Results may not be representative of patients with other types of insurance or who are uninsured.

CONCLUSION

Treatment was shown to follow multiple patterns for PNET patients newly treated with everolimus, sunitinib, and other SSA; and there were differences in treatment patterns by region.

The difference in treatment duration may reflect a more favorable tolerability profile in everolimus and sunitinib, and better disease control, differences in administrative schedules, or confounding, as we were unable to control for clinical differences between groups.

Future research, which might include medical chart studies, may be used to evaluate the clinical outcomes associated with these treatment patterns.

Table 1: Patient Demographics Stratified by Index Treatment

Table 2: Type of Cytotoxic & Other PNET Therapies at Index

Table 3: Length of Use of Index Treatment

Table 4: Regimens

Table 5: Regimens

Table 6: Regimens

Table 7: Regimens

Table 8: Regimens

Table 9: Regimens

Table 10: Regimens

Table 11: Regimens

Table 12: Regimens

Table 13: Regimens

Table 14: Regimens

Table 15: Regimens

Table 16: Regimens

Table 17: Regimens

Table 18: Regimens

Table 19: Regimens

Table 20: Regimens

Table 21: Regimens

Table 22: Regimens

Table 23: Regimens

Table 24: Regimens

Table 25: Regimens

Table 26: Regimens

Table 27: Regimens

Table 28: Regimens

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Table 43: Regimens

Table 44: Regimens

Table 45: Regimens

Table 46: Regimens

Table 47: Regimens

Table 48: Regimens

Table 49: Regimens

Table 50: Regimens

Table 51: Regimens

Table 52: Regimens

Table 53: Regimens

Table 54: Regimens

Table 55: Regimens

Table 56: Regimens