The USON EHR data were combined with the Limited Death Access Master File to provide supplementary vitality information.

**METHODS**

- **Data Sources:** The USON SHDR data were combined with the Limited Death Access Master File to provide supplementary vitality information.

**Study Population and Pathway Periods**

- **Eligible patients were adults diagnosed with advanced or metastatic gastric or gastroesophageal junction (GEJ) cancer who initiated first-line (L1) treatment at a USON site between September 2009 and March 2013 or began second-line (L2) therapy after their first L1 therapy.**

- **Patients were excluded if they participated in a clinical trial, had another primary cancer diagnosis, lost fewer than 10 USON visits, received care at a US Oncology site that did not fully integrate EHR capacities, had more than one EHR system associated with research, or had a treatment duration of less than one day.**

- **Patients were assigned to a Pathway period based on the initiation of first and second-line (L2) therapy.**

- **Pathway periods were defined as the time from the implementation of one Pathway to implementation of the next Pathway, with a cumulative sum of patients who obtained treatment in prior Pathway Figure 1.**

**Statistical Analysis**

- **Concordance with NCCN treatment recommendations was assessed by Pathway period based on the version of the guidelines that were in effect during the Pathway period.**

- **Concordance was calculated as a percentage for L1 and L2, respectively.**

- **TTD was defined as duration of L1 and L2 treatments until discontinuation for any reason. OS was estimated from start of L1 therapy.**

- **P values were not reported for the event without extension in analysis of the end of the study period, and, therefore, cannot be calculated.**

- **Time to event analyses were conducted using Kaplan-Meier method.**

- **The Hazard intercept plots were used as a measure of treatment variability.**

**RESULTS**

**Study Population and Table 1:**

- **A total of 2,370 eligible patients were identified for inclusion in this study.**

- **Concordance with Guidelines (Figure 1):**
  - **In the L1 setting, NCCN concordance was initially low at 20.2% before Pathway initiation and was 70.7% in the most recent Pathway period.**
  - **In the L2 setting, NCCN concordance was 44.7% in the first Pathway period and was 74.0% in the most recent Pathway period.**

- **Time to Treatment Discontinuation (TTD) and Treatment Heterogeneity (Figure 2):**
  - **TTD were 1.6 and 1.4 months in the 1L and 2L settings, respectively, before Pathway initiation.**
  - **Treatment heterogeneity as measured by the HHI showed high heterogeneity before Pathway initiation (both L1 and L2) and very homogeneity at 11/2018 (L1) and 12/2018 (L2).**

**OVERALL SURVIVAL (Figure 3):**

- **There was a slight benefit of continuing in most Pathway periods evaluated and limited follow-up among patients in the last Pathway period, limiting the ability to evaluate changes in survival beyond the selected pathway periods.**

**LIMITATIONS**

- **The structured EHR data used in this study were generated during routine patient care and not collected for research purposes; thus, some variables of interest were not available across the study population.**

- **The data presented in this manuscript are descriptive in nature, and support hypothesis generation.**

**CONCLUSIONS**

- **Concordance with NCCN guidelines reached over 70% in both the L1 and L2 settings over multiple implementation periods of the gastric/GJ Pathways.**

- **These data also suggest that there was more homogeneity in later time periods, with TTT reaching nearly 6.900 in both the L1 and L2 settings.**

- **These data are descriptive in nature, and support hypothesis generation.**

**REFERENCES**

- **The US Oncology Network. 2019.**

- **TTE System Requirements (2021).**
  - **http://www.lilly.com/Pages/contact.aspx**
  - **http://www.merck.com/pubs/ww/degs/index.htm**

- **Adherence to the study protocol for the Perioperative Pathways was determined using clinical record software at the site.**

- **No formal statistical comparisons were made to evaluate the robustness between concordance, heterogeneity, and clinical outcomes, as this study was descriptive in nature. Therefore, causal inference cannot be made from these data.**

**ACKNOWLEDGMENTS**

- **The study team would like to acknowledge the work of Mr. Bill Flarry and Ms. Bernadette Herbst from Oncology Data Standards for their editorial assistance.**

**TABLE 1. PATIENT CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Pathway Period</th>
<th>Overall</th>
<th>Pre-Level 1 Pathway</th>
<th>Post-Level 1 Pathway</th>
<th>Pre-CVP Pathway</th>
<th>Post-CVP Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1 vs Level 1 Pathway</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pre-Perioperative vs Perioperative Pathway</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Concordance with Guidelines (Figure 1):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>In the L1 setting, NCCN concordance was initially low at 20.2% before Pathway initiation and was 70.7% in the most recent Pathway period.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>In the L2 setting, NCCN concordance was 44.7% in the first Pathway period and was 74.0% in the most recent Pathway period.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time to Treatment Discontinuation (TTD) and Treatment Heterogeneity (Figure 2):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TTD were 1.6 and 1.4 months in the 1L and 2L settings, respectively, before Pathway initiation.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Treatment heterogeneity as measured by the HHI showed high heterogeneity before Pathway initiation (both L1 and L2) and very homogeneity at 11/2018 (L1) and 12/2018 (L2).</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overall Survival (Figure 3):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>There was a slight benefit of continuing in most Pathway periods evaluated and limited follow-up among patients in the last Pathway period, limiting the ability to evaluate changes in survival beyond the selected pathway periods.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>