Usefulness of Collaborative Stage (CS) Site Specific Factors (SSF) 3, 4, 5 and 6 in describing Short-term Mortality Risk Disparities for Type II Endometrial Cancers in Metropolitan Detroit (2010-2011) and SEER-18 (2010)

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BACKGROUND AND PURPOSE

SEER began collecting Site Specific Factors (SSF) 3-6 for Endometrial Cancers in 2010:
- SSF 3: # of pelvic nodes examined (PNE)
- SSF 4: # of pelvic nodes positive (PNP)
- SSF 5: # of para-aortic nodes examined (PANE)
- SSF 6: # of para-aortic nodes positive (PANP)

This investigation implemented due to:
- Continuing budget cuts in the face of additional required data items to collect
- Paucity of data found in the medical chart for some new SSF with Collaborative Stage v.2

SEER also collects:
- # regional lymph nodes positive (RLNP)
- # regional lymph nodes examined (RLNE)
- SSF 6: # of para-aortic nodes examined (PANE)

SEER also collects:
- # regional lymph nodes positive (RLNP)
- # regional lymph nodes examined (RLNE)

METHODS

DEMOGRAPHIC, HISTOLOGIC, TREATMENT CHARACTERISTICS

RESULTS

MORTALITY RISK DISPARITIES

Table 1. Demographic and Histologic Characteristics of Type II Endometrial Cancers in Metropolitan Detroit 2010-2011

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>2010-2011</th>
<th>SEER-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at Diagnosis (mean years)</td>
<td>63</td>
<td>62</td>
</tr>
<tr>
<td>Insurance</td>
<td>83% (35%)</td>
<td>77% (25%)</td>
</tr>
<tr>
<td>Race</td>
<td>1.63 (0.89, 2.98) p=0.12</td>
<td>1.61 (0.87, 2.95) p=0.12</td>
</tr>
<tr>
<td>AJCC Stage, Grade</td>
<td>2.70 (1.43, 5.12) p=0.002</td>
<td>2.67 (1.41, 5.02) p=0.003</td>
</tr>
<tr>
<td>Surgery</td>
<td>1.32 (0.90, 1.95) p=0.19</td>
<td>1.32 (0.89, 1.96) p=0.19</td>
</tr>
<tr>
<td>Radiation</td>
<td>1.18 (0.32, 4.37) p=0.81</td>
<td>1.20 (0.33, 4.39) p=0.81</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>0.98 (0.52, 1.86) p=0.96</td>
<td>1.02 (0.53, 1.94) p=0.94</td>
</tr>
</tbody>
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Table 2. Proportional Hazards Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjusted:</th>
<th>Crude:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race, Age, SEER Summary Stage, Surgery, Radiation, Chemo, RLN Examined, RLN Positive</td>
<td>1.62 (0.89, 3.07) p=0.12</td>
<td>1.74 (1.08, 2.79) p=0.02</td>
</tr>
<tr>
<td>Race, Age, SEER Summary Stage, Surgery, Radiation, Chemo, RLN Examined, RLN Positive</td>
<td>1.63 (0.89, 2.98) p=0.12</td>
<td>1.74 (1.08, 2.79) p=0.02</td>
</tr>
</tbody>
</table>

Limitations:

- Slightly higher proportion of African Americans in the crude model (HR=1.45, p=0.21)
- Mortality risk higher in African Americans in the crude model (HR=1.84, p=0.05)
- No significant difference in AJCC stage 3+ (HR=1.08, p=0.58)

Conclusions:

- Our analysis did not show evidence to support association of pelvic and para-aortic nodes examined and positive for short term mortality risk disparities analysis in Type II endometrial cancers.
- Further investigation into the usefulness of these variables are recommended.