THE CCP SCORE PROVIDES SIGNIFICANT PROGNOSTIC INFORMATION IN GLEASON SCORE ≤ 6 PATIENTS

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INTRODUCTION

The Cell Cycle Progression (CCP) score was developed and validated to provide prognostic information to prostate cancer patients in all risk groups [1-7]. These previous studies of CCP focused on distant oncologic outcomes (e.g., BCR, metastases, and mortality). Each individual study lacked power to demonstrate prognostic utility of the score in low-risk patients, owing to low event rate.

RESULTS

The cell cycle progression signature was a significant predictor of outcome in the meta-analysis.

In univariate analysis, both CCP and CCR scores were significant predictors of outcome (Table 2).

- CCP: HR = 1.50, p = 0.0099CCR: HR = 1.83, p = 0.0014
- CCP remained significant after adjusting for CAPRA (HR = 1.46, p = 0.019) (Table 2).
- CCP also remained significant in a de novo multivariable model adjusting for the components of CAPRA, including PSA, clinical stage, % positive cores and age of diagnosis (HR = 1.47, p = 0.017) (Table 3).

Table 2. Univariate and Bivariate Models

<table>
<thead>
<tr>
<th>Variable</th>
<th>HR</th>
<th>95% CI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP</td>
<td>1.50</td>
<td>1.11, 2.03</td>
<td>0.0099</td>
</tr>
<tr>
<td>CAPRA</td>
<td>1.27</td>
<td>1.03, 1.56</td>
<td>0.030</td>
</tr>
<tr>
<td>CCR</td>
<td>1.83</td>
<td>1.27, 2.63</td>
<td>0.0014</td>
</tr>
</tbody>
</table>

Table 3. Univariate and Multivariable Models with CAPRA Components

<table>
<thead>
<tr>
<th>Covariate</th>
<th>IQR</th>
<th>HR</th>
<th>95% CI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Positive Cores</td>
<td>33.3</td>
<td>1.05</td>
<td>0.70, 1.58</td>
<td>0.80</td>
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<tr>
<td>Age at Diagnosis (yrs)</td>
<td>10.0</td>
<td>1.55</td>
<td>1.02, 2.35</td>
<td>0.037</td>
</tr>
</tbody>
</table>

CONCLUSIONS

The CCP score predicts oncologic outcomes in Gleason 6 or less prostate cancer patients.

This meta-analysis adds to the evidence that CCP score provides significant prognostic discrimination to patients with low-risk localized disease.

REFERENCES