**EARLY NEUTROPENIA IS ASSOCIATED WITH SURVIVAL IN MEN WITH METASTATIC CASTRATION-RESISTANT PROSTATE CANCER (mCRPC) WHEN TREATED WITH CABAZITAXEL: AN ANALYSIS OF TROPIC PHASE III TRIAL**

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**Aim:** In TROPIC trial cabazitaxel (CBZ) plus prednisone (P) showed a significant overall survival (OS) benefit versus mitoxantrone plus P in mCRPC patients progressing during or after docetaxel. The most common adverse event in this trial was grade $\geq 3$ neutropenia (82%). In this post-hoc analysis of TROPIC, we analysed the influence of chemotherapy-induced neutropenia on OS.

**Methods:** The lowest neutrophil count (ANC) was collected during the first cycle in 371 patients treated with CBZ. The influence of the lowest absolute neutrophil count (ANC) as a continuous variable after cycle 1 was evaluated in a Cox proportional-hazard survival model, adjusted for performance status, pain and measurable disease at baseline.

**Results:** A low ANC during cycle 1, good performance status and absence of pain were associated with a significantly greater OS (Table 1). Median OS was 14.3 months (95% CI 12.9, 16.7) in pts. with Grad 0-2 Neutropenia and 15.4 months (95% CI 14.3, 17.9) in pts. with Grade 3-4 neutropenia.

**Conclusions:** CBZ associated neutropenia needs to be managed carefully to avoid complications leading to treatment delay or discontinuation. Our results suggest that a low ANC during cycle 1 may be associated with an OS benefit. These data deserve confirmation in prospective studies. Source of funding: Sanofi.

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<table>
<thead>
<tr>
<th>Variable</th>
<th>HR</th>
<th>95% CI</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest neutrophil count by Day 8*</td>
<td>1.13</td>
<td>[1.02-1.26]</td>
<td>0.022</td>
</tr>
<tr>
<td>ECOG performance status (0-1 vs 2)</td>
<td>2.75</td>
<td>[1.72-4.41]</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Pain (No vs Yes)</td>
<td>2.07</td>
<td>[1.53-2.80]</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Measurable disease (No vs Yes)</td>
<td>1.15</td>
<td>[0.87-1.53]</td>
<td>0.324</td>
</tr>
</tbody>
</table>

*continuous variable - 67 missing values

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