Positive Quality Intervention: Niraparib (Zejula®): Dose Modifications Based on Weight and Platelet Counts

**Description:** The purpose of this PQI is to highlight key criteria for appropriate monitoring, dosing, and administration to improve the dispensing and management of patients taking niraparib.

**Background:** Niraparib is indicated for the maintenance treatment of patients with recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in a complete or partial response to platinum-based chemotherapy. Additional indication in patients with three or more prior chemotherapy regimens and whose cancer is associated with homologous recombination deficiency (HRD) positive status (BRCA+ or BRCA- with Genomic Instability Positive (GIS+) disease). Niraparib efficacy is particularly pronounced in patients with BRCA1/2 mutations but also yields therapeutic benefit in those without germline BRCA mutations. Discontinuation due to thrombocytopenia, anemia, and neutropenia occurred, respectively, in 3%, 1%, and 2% of patients. Retrospective analysis of the pivotal phase III NOVA clinical trial reveals most dose adjustments occurred within 3 months and did not appear to compromise efficacy.

**PQI Process:**
- Verify dose on initial fill—labeled starting dose is 300 mg once daily
  - **Consider starting at 200 mg daily for patients with baseline weight < 77 kg or baseline platelets < 150K**
  - In practice, it has been seen at starting doses of 100 mg once daily as well
- Ensure patients should start treatment with niraparib no later than 8 weeks after their most recent platinum-containing regimen
- Consider bevacizumab discontinuation before initiation of treatment with niraparib
- Ensure appropriate monitoring:
  - CBC weekly x 4 weeks, monthly x 11 months, then periodically
  - Heart rate and BP monthly x 12 months, then periodically

**Dose Adjustments:**
- Discontinue if adverse effect that has not resolved within 28 days or grade ≥ 3 while on 100 mg/day

**Dose Adjustments for hematologic toxicity:** **MINIMUM dose 100 mg/day**

<table>
<thead>
<tr>
<th>Platelets &lt; 100 K</th>
<th>1st Occurrence: HOLD* until platelets ≥ 100 K</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Monitor CBC weekly until resolved)</td>
<td>- Resume same dose</td>
</tr>
<tr>
<td></td>
<td>- However, if &lt; 75K, reduce dose by 100 mg</td>
</tr>
<tr>
<td>2nd Occurrence: HOLD* until platelets ≥ 100K</td>
<td>- Reduce by 100 mg/day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANC &lt; 1.0 or Hg &lt; 8 g/dL</th>
<th>HOLD* until ANC ≥ 1.5 or Hg ≥ 9 g/dL</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Monitor CBC weekly until resolved)</td>
<td>- Reduce dose by 100 mg/day</td>
</tr>
</tbody>
</table>

*Hold for maximum of 28 days. Discontinue if not resolved within 28 days or if dose reduction needed beyond 100 mg/day

**Important notice:** NCODA has developed this Positive Quality Intervention platform. This platform represents a brief summary of medication uses and therapy options derived from information provided by the drug manufacturer and other resources. This platform is intended as an educational aid and does not provide individual medical advice and does not substitute for the advice of a qualified healthcare professional. This platform does not cover all existing information related to the possible uses, directions, doses, precautions, warning, interactions, adverse effects, or risks associated with the medication discussed in the platform and is not intended as a substitute for the advice of a qualified healthcare professional. The materials contained in this platform are for informational purposes only and do not constitute or imply endorsement, recommendation, or favoring of this medication by NCODA, which assumes no liability for and does not ensure the accuracy of the information presented. NCODA does not make any representations with respect to the medications whatsoever, and any and all decisions, with respect to such medications, are at the sole risk of the individual consuming the medication. All decisions related to taking this medication should be made with the guidance and under the direction of a qualified healthcare professional. Updated 10.8.21
Patient Centered Activities:

- Provide Oral Chemotherapy Education (OCE) Sheet
- Take once daily, with or without food
- Taking at bedtime may minimize nausea
  - Moderate to high emetogenic risk per NCCN guidelines
- Advise patients of warnings:
  - Myelodysplastic syndrome/acute myeloid leukemia
  - Bone marrow suppression
  - Cardiovascular effects (hypertension, tachycardia)
  - Embryo-fetal toxicity
- Consider weekly home blood pressure and heart rate monitoring
- Recommend and ensure patient has stool softeners/laxatives as needed for constipation
- Recommend and ensure patient has home antiemetic as needed for nausea/vomiting
  - Ex. 5HT-3 such as ondansetron
- Financial Assistance:
  - Quick start and bridge program
  - Commercially insured patients

References:
5. TESARO. Niraparib incidence and management of thrombocytopenia. TESARO Response letter; 2018.
8. ZEJULA® [Package Insert]. Waltham, MA: Tesaro, Inc.