



Positive Quality Intervention: Niraparib: 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 (Zejula®).

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 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

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Dose Adjustments:

- Discontinue for any 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****

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| <p>Platelets < 100 K</p> <p><i>(Monitor CBC weekly until resolved)</i></p> | <p>1st Occurrence: HOLD* until platelets ≥ 100 K</p> <ul style="list-style-type: none"> • Resume same dose • However, if < 75K, reduce dose by 100 mg <p>2nd Occurrence: HOLD* until platelets ≥ 100K</p> <ul style="list-style-type: none"> • Reduce by 100 mg/day |
| <p>ANC < 1.0 or Hg < 8 g/dL</p> <p><i>(Monitor CBC weekly until resolved)</i></p> | <p>HOLD* until ANC ≥ 1.5 or Hg ≥ 9 g/dL</p> <ul style="list-style-type: none"> • Reduce dose by 100 mg/day |
| <p><i>* Hold for maximum of 28 days. Discontinue if not resolved within 28 days or if dose reduction needed beyond 100 mg/day.</i></p> | |

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 stool softeners/laxatives as needed for constipation
- Recommend home antiemetic as needed for nausea/vomiting
 - Ex. 5HT-3 such as: Ondansetron

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Financial Assistance:

- Quick start and bridge program—offers 15 day supply while awaiting insurance authorization (up to 5 refills)
- Commercially insured patients
 - \$0 copay, up to \$26,000 per year

References:

1. Mirza MR, Monk BJ, Herrstedt J, et al. Niraparib maintenance therapy in platinum-sensitive, recurrent ovarian cancer. *NEJM*. 2016; 375 (22): 2154 – 64.
2. Moore KN, Mirsa MR, Matulonia UA. The poly (ADP ribose) polymerase inhibitor niraparib: Management of toxicities. 2018; 149: 214 – 220.
3. National Comprehensive Cancer Network. Antiemesis (Version 2.2018). https://www.nccn.org/professionals/physician_gls/pdf/antiemesis.pdf Accessed May 17, 2018.
4. National Comprehensive Cancer Network. Ovarian cancer (Version 2.2018). https://www.nccn.org/professionals/physician_gls/pdf/ovarian.pdf Accessed May 15, 2018.
5. TESARO. Niraparib incidence and management of thrombocytopenia. TESARO Response letter; 2018.
6. TESARO. Retrospective analysis of the NOVA trial to assess potential predictors for early dose modification. TESARO Response Letter; 2018.
7. Gonzalez A, Mirza MR, et al. A Prospective Evaluation of tolerability of niraparib dosing based upon baseline body weight and platelet count. *Annals of Oncology* (2018) 29 (suppl_8): vii332-vii358.10.1093/annonc/mdy285
8. ZEJULA [Package Insert]. Waltham, MA: Tesaro, Inc; 2019

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