Clinical Policy Title:	niraparib
Policy Number:	RxA.573
Drug(s) Applied:	Zejula®
Original Policy Date:	03/06/2020
Last Review Date:	12/07/2020
Line of Business Policy Applies to:	All lines of business

Background

Niraparib (Zejula®) is a poly (ADP-ribose) polymerase (PARP) inhibitor. It is indicated:

- for the maintenance treatment of adult patients with advanced epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in a complete or partial response to first line platinum-based chemotherapy.
- for the maintenance treatment of adult patients with recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in a complete or partial response to platinum-based chemotherapy.
- for the treatment of adult patients with advanced ovarian, fallopian tube, or primary peritoneal cancer who have been treated with three or more prior chemotherapy regimens and whose cancer is associated with homologous recombination deficiency (HRD) positive status defined by either:
  - a deleterious or suspected deleterious BRCA mutation, or
  - genomic instability and who have progressed more than six months after response to the last platinum-based chemotherapy.

Dosing Information

Drug Name	Indication	Dosing Regimen	Maximum Dose
niraparib (Zejula®)	Ovarian, fallopian tube, or primary peritoneal cancer	For patients weighing <77 kg (<170 lbs) or with a platelet count < 150,000/µL, 200 mg PO once daily. For patients weighing ≥77 kg (≥170 lbs) and a platelet count ≥150,000/µL, 300 mg PO once daily.	300 mg/day

Dosage Forms

- Capsules: 100 mg

Clinical Policy

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

I. Initial Approval Criteria

A. Ovarian Cancer (must meet all):

1. Diagnosis of one of the following (a, b, or c);
   a. Member has advanced epithelial ovarian, fallopian tube, or primary peritoneal cancer AND member has had complete or partial response to first-line platinum-based chemotherapy;
   b. Member has recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer AND member has had a complete or partial response to platinum-based chemotherapy.
   c. Both i and ii:
      i. Disease is associated with HRD positive status defined by one of the following (1 or 2):
         1) Documentation of deleterious or suspected deleterious germline BRCA mutation;
         2) Documentation of genomic instability and disease has progressed > 6 months after response to the last platinum-based chemotherapy;
      ii. Failure of ≥ 3 prior chemotherapy regimens (see Appendix B), unless contraindicated or clinically significant adverse effects are experienced;
2. Prescribed by or in consultation with an oncologist;
3. Age 18 years of age or older;
4. Completed ≥ 2 platinum-based chemotherapy regimens and is in a complete or partial response;
5. Request meets one of the following (a or b)*:
   a. Dose does not exceed 300 mg (3 capsules) per day;
   b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (prescriber must submit supporting evidence).

Approval Duration
Commercial: 6 months
Medicaid: 6 months

II. Continued Therapy Approval

A. Ovarian Cancer (must meet all):

1. Member is currently receiving medication that has been authorized by RxAdvance, or member has met initial approval criteria for the covered indication and has received this medication for at least 30 days;
2. Member is responding positively to therapy;
3. If request is for a dose increase, request meets one of the following (a or b):
   a. New dose does not exceed 300 mg (3 capsules) per day;
   b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (prescriber must submit supporting evidence).

Approval Duration
Commercial: 12 months
Medicaid: 12 months

III. Appendices

APPENDIX A: Abbreviation/Acronym Key
FDA: Food and Drug Administration
PARP: Poly (ADP-ribose) polymerase
HRD: homologous recombination deficiency

APPENDIX B: Therapeutic Alternatives
Below are suggested therapeutic alternatives based on clinical guidance. Please check drug formulary for preferred agents and utilization management requirements.

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
Ovarian Cancer		
Alimta® (pemetrexed)	Various	Varies
Alkeran® (melphalan)	Various	Varies
Avastin® (bevacizumab)	Various	Varies
carboplatin (Paraplatin®)	Various	Varies
cisplatin	Various	Varies
cyclophosphamide	Various	Varies
docetaxel (Taxotere®)	Various	Varies
doxorubicin (Doxil®, Adriamycin®)	Various	Varies
etoposide	Various	Varies
gemcitabine	Various	Varies
ifosfamide (Ifex®)	Various	Varies
irinotecan (Camptosar®)	Various	Varies
oxaliplatin	Various	Varies
topotecan (Hycamtin®)	Various	Varies
altretamine	Various	Varies

Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.

APPENDIX C: Contraindications/Boxed Warnings

- Contraindication(s):
  - None.

- Boxed Warning(s):
  - None.

APPENDIX D: General Information

- Zejula® has high bioavailability (around 73%) and extensive tissue distribution, as well as a long half-life (36 hours).
- Platinum-based chemotherapies have served as the standard of care for ovarian cancer treatment for decades. It induces cross-linking between purine bases in DNA, lesions that require homologous recombination (HR) to repair. In ovarian cancer patients who harbor a homologous recombination deficiency, compromised repair of DNA lesions is thought to contribute to their response to platinum-based chemotherapies.

References

1. Zejula Prescribing Information. Waltham, MA: Tesaro, Inc., April 2020. Available at: https://www.gsksource.com/pharma/content/dam/GlaxoSmithKline/US/en/Prescribing_Information/Zejula/pdf/ZEJULA-PI-PIL.PDF . Accessed November 05, 2020.
2. Mirza MR, Monk BJ, Herrstedt J, et al. Niraparib Maintenance Therapy in Platinum- Sensitive, Recurrent Ovarian Cancer. N Engl J Med. 2016 Dec 1;375(22):2154-2164. Epub 2016 Oct 7. Accessed October 01, 2020.
3. Niraparib. In: National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at: http://www.nccn.org/professionals/drug_compendium. Accessed October 01, 2020.
4. Morgan RD, Clamp AR, Evans DGR, Edmondson RJ, Jayson GC. PARP inhibitors in platinum-sensitive high-grade serous ovarian cancer. Cancer Chemother Pharmacol. 2018;81(4):647-658. Accessed October 01, 2020.

Review/Revision History	Review/Revision Date	P&T Approval Date
Policy established.	01/2020	03/06/2020
Policy was reviewed: 1. Clinical policy title was updated as “niraparib”. 2. Background updated to include more indications 3. Line of business policy applies to all lines of business. 4. Initial approval criteria I.A.1 was updated to add new diagnosis criteria. 5. Dosing information updated. 6. Continued therapy approval criteria II.A.1 was rephrased to “Member is currently receiving medication that has been authorized by RxAdvance..” 7. Appendices A, B & D updated. 8. References were reviewed and updated.	11/05/2020	12/07/2020