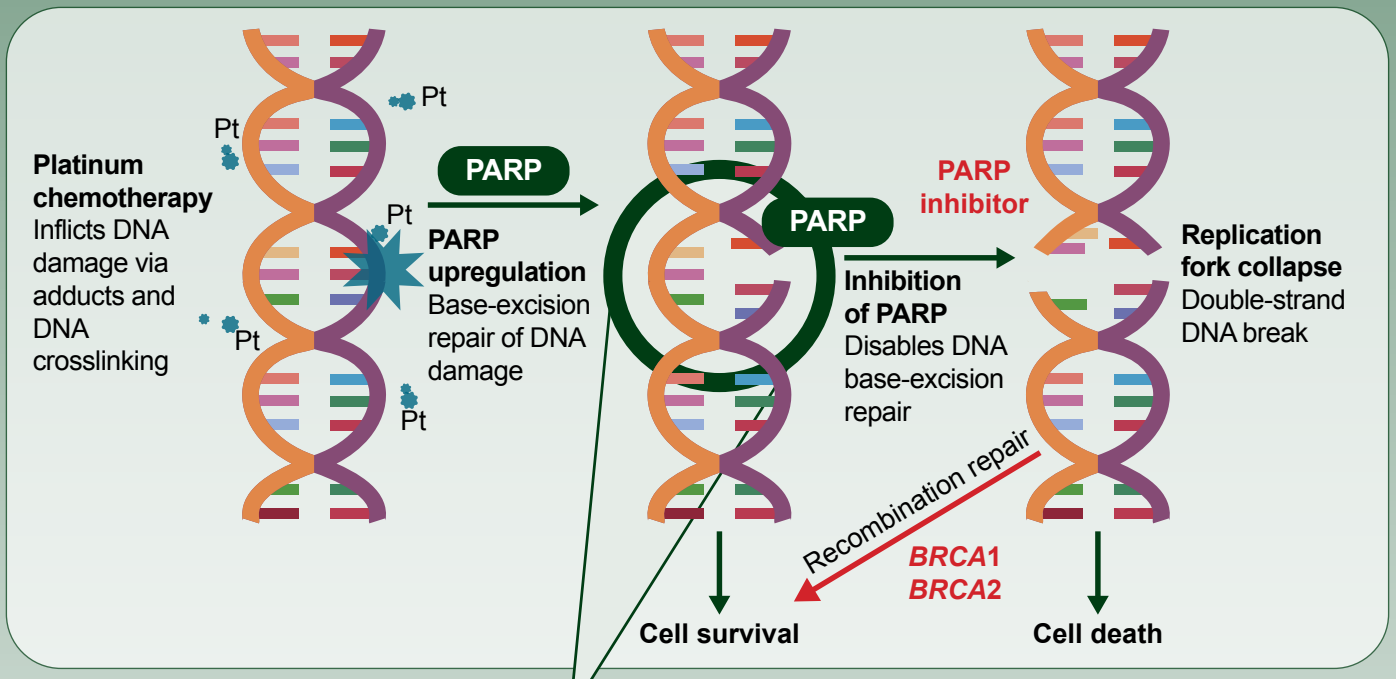
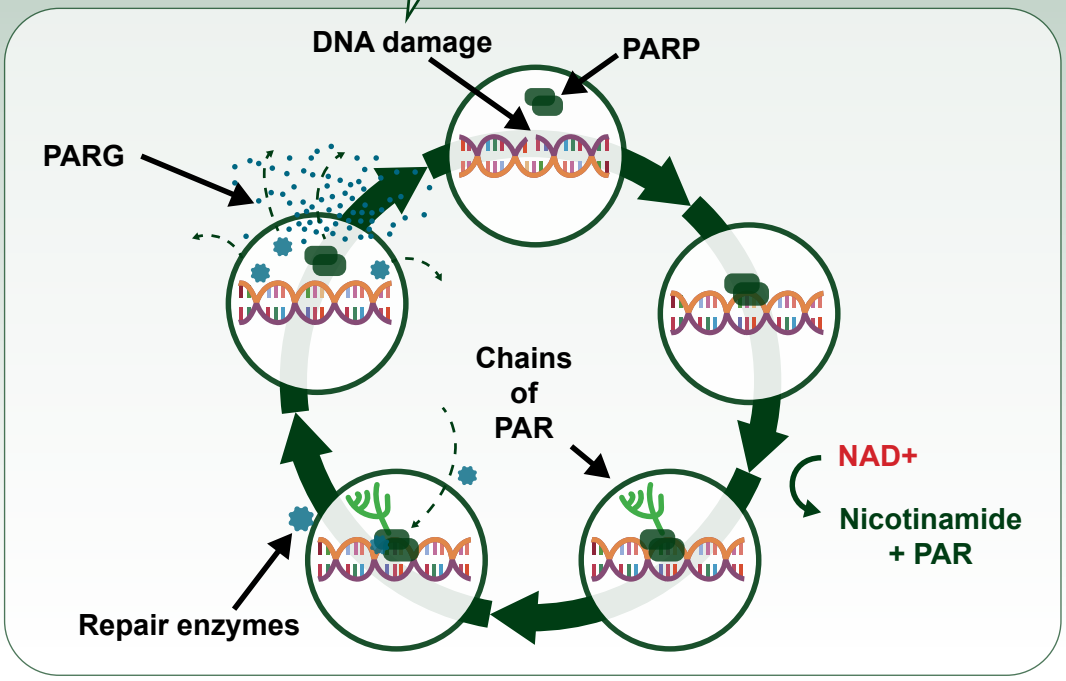
PRACTICE AID

PARP Inhibitors: Molecular Mechanism of Action[1,2]

Full abbreviations, accreditation, and disclosure information available at **PeerView.com/CHG40**

PeerView Oncology





1. Adapted from O'Shaughnessy J et al. 2009 American Society of Clinical Oncology Annual Meeting (ASCO 2009). Abstract 3. 2. Adapted from Toss A, Cortesi L. *J Cancer Sci Ther.* 2013;5:409-416.

PRACTICE AID

PARP Inhibitors for the Treatment of Ovarian Cancer

PeerView Oncology

Full abbreviations, accreditation, and disclosure information available at **PeerView.com/CHG40**

Agents: Indication and Dosing Information[1-4]

Agent	Indicated for	FDA-Approved Companion Diagnostic	Dosing
Niraparib	Treatment of patients with advanced ovarian cancer who have been treated with ≥3 prior chemotherapy regimens and whose cancer is associated with HRD-positive status	**HRD status testing using myChoice CDx**	Niraparib 300 mg taken orally once daily
	Maintenance treatment in patients with recurrent epithelial ovarian cancer who are in a complete or partial response to platinum-based chemotherapy	**N/A**	Niraparib 200 mg taken orally once daily for patients weighing <77 kg (<170 lb) OR with a platelet count <150,000/mcL Niraparib 300 mg taken orally once daily for patients weighing ≥77 kg (≥170 lb) AND with a platelet count ≥150,000/mcL
	Maintenance treatment in patients with advanced ovarian cancer who are in a complete or partial response to first-line platinum-based chemotherapy	**N/A**	
Olaparib	Treatment of patients with g*BRCA*mut advanced ovarian cancer previously treated with ≥3 chemotherapies	***BRCA1/2* testing using BRACAnalysis CDx or next-generation sequencing using FoundationOne CDx**	Olaparib 300 mg taken orally twice daily For moderate renal impairment (CrCl: 31-50 mL/min), reduce dosage to 200 mg orally twice daily
	Maintenance treatment in patients with recurrent ovarian cancer who are in a complete or partial response to platinum-based chemotherapy	**N/A**	
	Maintenance treatment in patients with deleterious or suspected deleterious g*BRCA*mut or s*BRCA*mut advanced ovarian cancer who are in a complete or partial response to first-line platinum-based chemotherapy	***BRCA1/2* testing using BRACAnalysis CDx or next-generation sequencing using FoundationOne CDx**	
	Maintenance treatment in combination with bevacizumab in patients with advanced epithelial ovarian cancer who are in a complete or partial response to first-line platinum-based chemotherapy and whose cancer is HRD positive	**HRD status testing using Myriad myChoice CDx**	
Rucaparib	Treatment of patients with g*BRCA*mut and/or s*BRCA*mut advanced ovarian cancer previously treated with ≥2 chemotherapies	***BRCA1/2* testing using BRACAnalysis CDx or FoundationOne Liquid CDx; next-generation sequencing using FoundationFocus CDx*BRCA* or FoundationOne CDx**	Rucaparib 600 mg orally twice daily
	Maintenance treatment in patients with recurrent ovarian cancer who are in a complete or partial response to platinum-based chemotherapy	**N/A**	

Spectrum of Adverse Events With PARP Inhibitors

Common AEs
- Hematologic: anemia, thrombocytopenia, neutropenia, and lymphocytopenia
- Gastrointestinal: nausea, vomiting, diarrhea, constipation, abdominal pain, dysgeusia, and decreased appetite
- Constitutional: fatigue, asthenia, and dyspnea
- Laboratory abnormalities: elevated creatinine, ALT, AST, and cholesterol

Serious AEs
- Bone marrow suppression and MDS/AML
- Lung-related: pneumonitis
- Cardiovascular effects: hypertension and hypertensive crisis
- Embryo-fetal toxicity

Next-Generation PARP Inhibitors on the Horizon

AZD5305 is a highly selective PARP1 inhibitor and trapper[5,6]

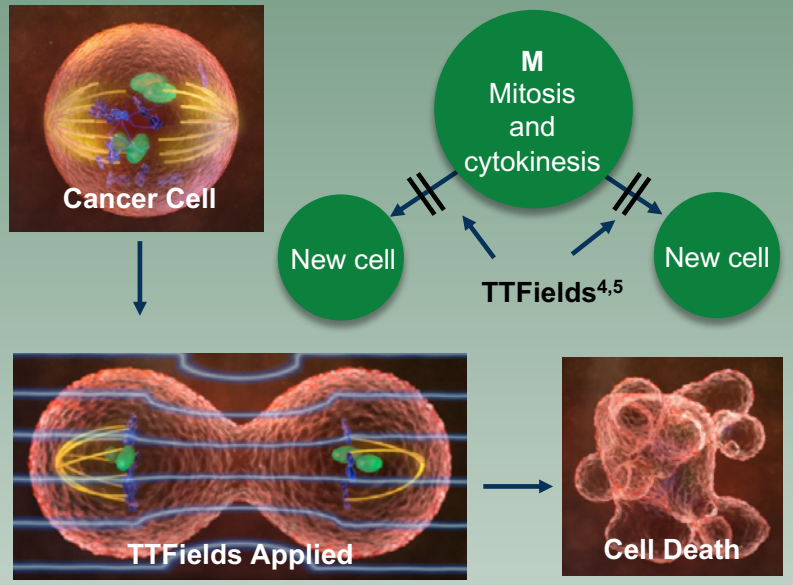
1. Zejula (niraparib) Prescribing Information. https://www.accessdata.fda.gov/drugsatfda_docs/label/2021/208447s022s024lbl.pdf. 2. Lynparza (olaparib) Prescribing Information. https://medicalinformation.astrazeneca-us.com/home/prescribing-information/lynparza-tablets-pi.html. 3. Rubraca (rucaparib) Prescribing Information. https://www.accessdata.fda.gov/drugsatfda_docs/label/2020/209115s008lbl.pdf. 4. https://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/InVitroDiagnostics/ucm301431.htm. 5. https://clinicaltrials.gov/ct2/show/NCT04644068. 6. Johannes J et al. 2021 American Association for Cancer Research Annual Meeting (AACR 2021). Abstract ND05.

PRACTICE AID

Understanding Tumor Treating Fields in Cancer

Full abbreviations, accreditation, and disclosure information available at **PeerView.com/CHG40**

PeerView Oncology



TTFields Treatment

- Causes minimal damage to healthy cells
- Does not stimulate or heat tissue
- Mild to moderate skin irritation is the most common adverse event reported[6,7]

TTFields Regulatory Status

- Approved in certain countries for the treatment of adults with glioblastoma[8,9]
- Approved in the U.S. for mesothelioma[10]
- Under investigation in multiple solid tumor types[11]

TTFields in Ovarian Cancer[12]

GOG-3029/INNOVATE-3

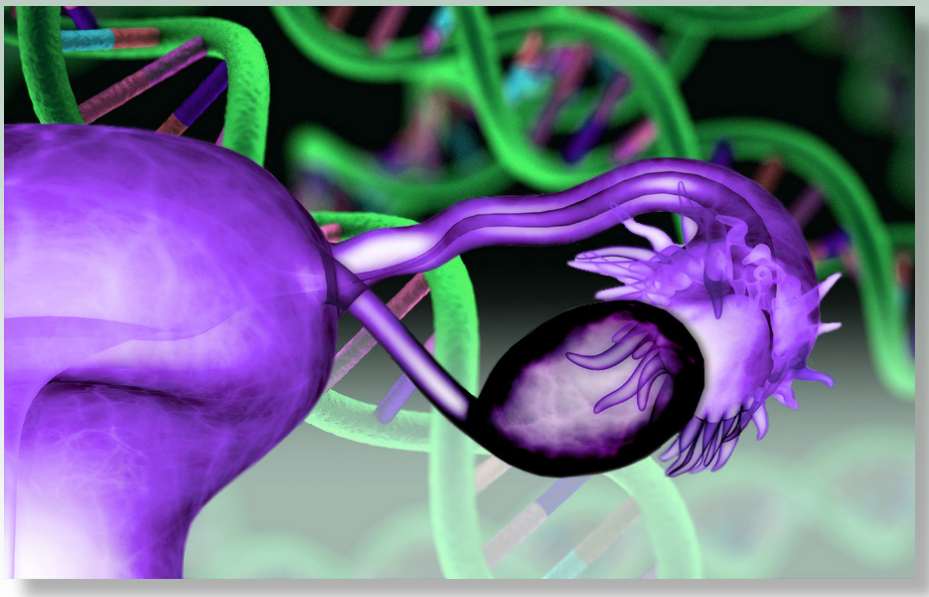
NCT03940196

Pivotal, Randomized, Open-Label Study of TTFields (200kHz) Concomitant With Weekly Paclitaxel for the Treatment of Recurrent Ovarian Cancer

Regimen: Continuous TTFields + paclitaxel 80 mg/m^2 IV weekly for 8 wk and then on d 1, 8 and 15 of each subsequent 28-d cycle vs paclitaxel alone following the same schedule

Primary endpoint: OS

Estimated N = 540



1. Gutin PH, Wong ET. *Am Soc Clin Oncol Educ Book*. 2012;32:126-131. 2. Kirson ED et al. *Proc Natl Acad Sci USA*. 2007;104:10152-10157. 3. Lacouture ME et al. *Front Oncol*. 2020 July 28. eCollection 2020. 4. Gutin PH et al. *Am Soc Clin Oncol Educ Book*. 2012;32:126-131. 5. Kirson ED et al. *Proc Natl Acad Sci USA*. 2007;104:10152-10157. 6. Vergote I et al. *Int J Radiat Oncol*. 2018;102:e370. 7. Vergote I et al. ASTRO 2019. Abstract 3362. 8. Kirson ED et al. *Proc Natl Acad Sci USA*. 2007;104:10152-10157. 9. Stupp R et al. *Eur J Cancer*. 2012;48:2192-2202. 10. https://www.fda.gov/medical-devices/recently-approved-devices/novottftm-100l-system-h180002. 11. https://www.clinicaltrials.gov. 12. https://clinicaltrials.gov/ct2/show/NCT03940196.