What Is Maintenance Treatment? What Are the Goals of Treatment?

In ovarian cancer, “maintenance” is treatment given to patients who are in response to chemotherapy in order to:
• Delay disease progression
• Slow growth of remaining cancer cells
• Preserve response to chemotherapy

Maintenance treatment is…
administered with the goal of prolonging PFS, while maintaining quality of life

Patients can receive maintenance treatment for months to years, and it may be appropriate for long-term dosing if the following qualifications are met:

- Effective
- Manageable adverse events (AEs)
- Convenient

Is Maintenance Treatment Associated With Improved Outcomes for Patients With Ovarian Cancer?

Multiple studies have demonstrated benefit of poly ADP ribose polymerase inhibitor (PARPi) maintenance in recurrent disease

<table>
<thead>
<tr>
<th>PARPi Maintenance</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median PFS range: 7–21 mo</td>
<td>Median PFS range: 4–6 mo</td>
</tr>
</tbody>
</table>

7–16 mo longer PFS with PARPi maintenance in certain patient types

Anti-angiogenic maintenance is associated with clinical benefit in recurrent disease

<table>
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<th>Bevacizumab Maintenance</th>
<th>Placebo</th>
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<tr>
<td>Median PFS range: 11–14 mo</td>
<td>Median PFS range: 8–10 mo</td>
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</table>

3–4 mo longer PFS with anti-angiogenic maintenance

• PARPi or anti-angiogenic maintenance treatment has been shown to significantly prolong PFS after response to 1L chemotherapy
  – In the 1L setting, PARPi maintenance is currently only indicated for BRCAmut disease

• Maintenance treatment has also been shown to significantly prolong PFS in the 2L+ setting in patients with platinum-sensitive ovarian cancer (PSOC)
  – In the 2L setting, PARPi maintenance is indicated for both BRCAwt and BRCAmut disease

What Are Some of the Key Safety Considerations for Patients With Ovarian Cancer Who Are Undergoing Maintenance Treatment?

Management of AEs requires balancing efficacy with AE severity and long-term effects

Some of the AEs associated with anti-angiogenic therapy include bleeding AEs (including hemorrhage), gastrointestinal (GI) perforations, and surgery and wound healing complications

Some of the AEs associated with PARPi therapy include hematologic AEs (eg, thrombocytopenia, anemia, neutropenia), GI AEs (eg, nausea, vomiting), and hypertension
  • AEs are often manageable with dose reduction
  • GI AEs can be managed with as-needed medications
### Which Therapies Are Currently FDA-Approved for Maintenance Treatment of Patients With Ovarian Cancer? Is Biomarker Testing Required?

#### FDA-Approved Maintenance Treatments

<table>
<thead>
<tr>
<th>Drug (Class)</th>
<th>Summary of Maintenance Indication (Pivotal Trial Name)</th>
<th>Dosing &amp; Administration</th>
<th>Biomarker Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Niraparib (PARPi)</strong></td>
<td>2L+ maintenance in platinum-sensitive ovarian cancer (PSOC) (NOVA)</td>
<td>300 mg PO (3 × 100 mg once daily)</td>
<td>No</td>
</tr>
<tr>
<td><strong>Olaparib (PARPi)</strong></td>
<td>1L maintenance in BRCA&lt;sup&gt;mut&lt;/sup&gt; ovarian cancer (OC) in response to platinum (SOLO-1)</td>
<td>300 mg PO (2 × 150 mg twice daily)</td>
<td>Yes, gBRCA&lt;sup&gt;mut&lt;/sup&gt; OC only</td>
</tr>
<tr>
<td><strong>Rucaparib (PARPi)</strong></td>
<td>2L+ maintenance in PSOC (ARIEL3)</td>
<td>600 mg PO (2 × 300 mg twice daily)</td>
<td>No</td>
</tr>
<tr>
<td><strong>Bevacizumab (anti-angiogenic)</strong></td>
<td>In combination with chemotherapy, followed by bevacizumab monotherapy for advanced OC after initial surgical resection (GOG-0218)</td>
<td>15 mg/kg IV every 3 weeks</td>
<td>No</td>
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<td><strong>Niraparib (PARPi)</strong></td>
<td>In combination with chemotherapy, followed by bevacizumab monotherapy for recurrent OC in response to platinum (GOG-0213, OCEANS)</td>
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### Which Clinical Trials Are Evaluating 1L Maintenance in Patients With Ovarian Cancer?

- **PARPi monotherapy maintenance**
  - ENGOT-ov43/KEYLYNK-001 (olaparib)
  - PRIMA (niraparib)
  - VELIA/GOG-3005 (veliparib)

- **PARPi + anti-angiogenic maintenance**
  - OVARIO (niraparib + bevacizumab)
  - PAOLA-1 (olaparib + bevacizumab)

- **PARPi + immunotherapy maintenance**
  - ATHENA (rucaparib + nivolumab)
  - JAVELIN Ovarian PARP 100 (talazoparib + avelumab)

- **Triple combination maintenance**
  - DUO-O (olaparib + durvalumab + bevacizumab)
  - FIRST (niraparib + dostarlimab ± bevacizumab)

### Select Phase 2 or 3 Studies Evaluating 1L Maintenance Treatment

To learn more about maintenance treatment for patients with ovarian cancer, visit [www.GemstoneOncology.com/maintenance-treatment](http://www.GemstoneOncology.com/maintenance-treatment)

### What is GEMSTONE?

- GemstoneOncology.com is a dynamic initiative that provides comprehensive educational resources peer-developed by the GEMSTONE Committee for healthcare providers, including downloadable slide modules, case study discussions, and more
- The GEMSTONE Committee is a group of experts in gynecologic oncology dedicated to improving the standard of care for women with gynecologic cancers