# Cancer Center

### MD Anderson Epithelial Ovarian Cancer

Page 1 of 10

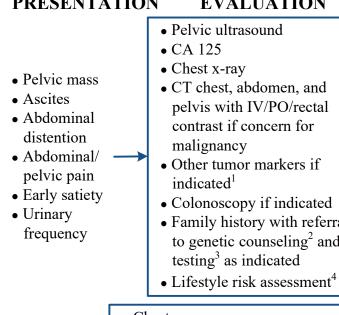
Making Cancer History®

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

Yes

No

Note: If available, clinical trials should be considered as preferred treatment options for eligible patients (Gynecologic Oncology Clinical Trials). Other comorbidities are taken into consideration prior to treatment selection. PRIMARY TREATMENT **END OF PRIMARY** CLINICAL **INITIAL PRESENTATION EVALUATION** • Hysterectomy/BSO<sup>5</sup> with comprehensive staging<sup>6</sup> • Pelvic ultrasound



• Family history with referral to genetic counseling<sup>2</sup> and • Chest x-ray • CA 125 • CT chest, abdomen and pelvis with IV/PO/rectal contrast • Genetic counseling<sup>2</sup> and testing<sup>3</sup> for high grade non-mucinous epithelial ovarian cancer,

Consider laparoscopic assessment for disease resectability and biopsy to confirm diagnosis if carcinomatosis present by CT imaging and patient is medically stable for surgery

Yes

Incomplete

surgery and/or

staging?

Able to achieve optimal resection  $\leq 1 \text{ cm}$ ?

TREATMENT EVALUATION

Yes

Response?

• If Stage I, consider fertility sparing surgery (See Fertility Sparing Treatment algorithm) and Oncofertility consult<sup>7</sup> (see Fertility Preservation Prior to Cancer Treatment algorithm)

• If Stage II - IV, cytoreductive surgery

- Neoadjuvant chemotherapy<sup>8</sup> for 3 to 6 cycles
- Consider clinical trial<sup>9</sup>

• CT chest. abdomen, and pelvis with IV/PO/rectal contrast • CA 125

- Consider
- laparoscopy cytoreductive
- See Page 5 for relapsed/progression treatment

Interval

surgery

See Page 2

for treatment by stage<sup>6</sup>

<sup>4</sup> See Physical Activity, Nutrition, Obesity Screening and Management, and Tobacco Cessation Treatment algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice

<sup>5</sup> If Stage I and patient desires fertility preservation, consider unilateral salpingo-oophorectomy (USO) and staging

<sup>7</sup> Refer to Reproductive Endocrinologists

Diagnosis

surgery or

biopsy

by previous

including primary peritoneal cancer and fallopian tube cancer

Department of Clinical Effectiveness V11

<sup>&</sup>lt;sup>6</sup> Refer to Prat, J., & FIGO Committee on Gynecologic Oncology. (2014). Staging classification for cancer of the ovary, fallopian tube, and peritoneum. International Journal of Gynecology & Obstetrics, 124(1), 1-5. doi:10.1016/j.ijgo.2013.10.001

<sup>&</sup>lt;sup>8</sup> See Appendix A: Systemic Therapy Regimens

<sup>&</sup>lt;sup>9</sup> See Gynecologic Oncology Clinical Trials

BSO = bilateral salpingo-oophorectomy

<sup>&</sup>lt;sup>1</sup> Consider *HE4* in patients with normal CA 125

<sup>&</sup>lt;sup>2</sup> See Genetic Counseling algorithm to assess criteria for referral

<sup>&</sup>lt;sup>3</sup> Consider both germline and somatic mutation testing (including HRD testing if BRCA germline or somatic mutation are negative). Consider testing at initial diagnosis or at the time of surgery.

**STAGE** 

### MD Anderson Epithelial Ovarian Cancer

**Page 2 of 10** 

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

Note: If available, clinical trials should be considered as preferred treatment options for eligible patients (Gynecologic Oncology Clinical Trials). Other comorbidities are taken into consideration prior to treatment selection.

**TREATMENT** 

- Low risk<sup>1</sup> → See Page 4 for Surveillance Stage IA, IB Reassessment • CA 125 or other tumor markers See maintenance on Page 3 Taxane and platinum doublet<sup>3</sup> (e.g., CEA, CA19-9, HE4) if Stage IC, II and/or relapsed/progression for at least 6 cycles<sup>4</sup> initially elevated treatment on Page 5 • CT chest, abdomen, and pelvis with IV/PO/rectal contrast Residual tumor < 1 cm Stage III, or IV -Taxane and platinum doublet<sup>3</sup> Residual tumor  $\geq 1$  cm with or without bevacizumab Stage IVA or IVB for at least 6 cycles

<sup>&</sup>lt;sup>1</sup> Low risk - Grade 1 endometrioid or low grade serous histology

<sup>&</sup>lt;sup>2</sup> High risk - Grade 2 or 3 endometrioid, high grade serous, clear cell, or carcinosarcoma

<sup>&</sup>lt;sup>3</sup> See Appendix A: Systemic Therapy Regimens

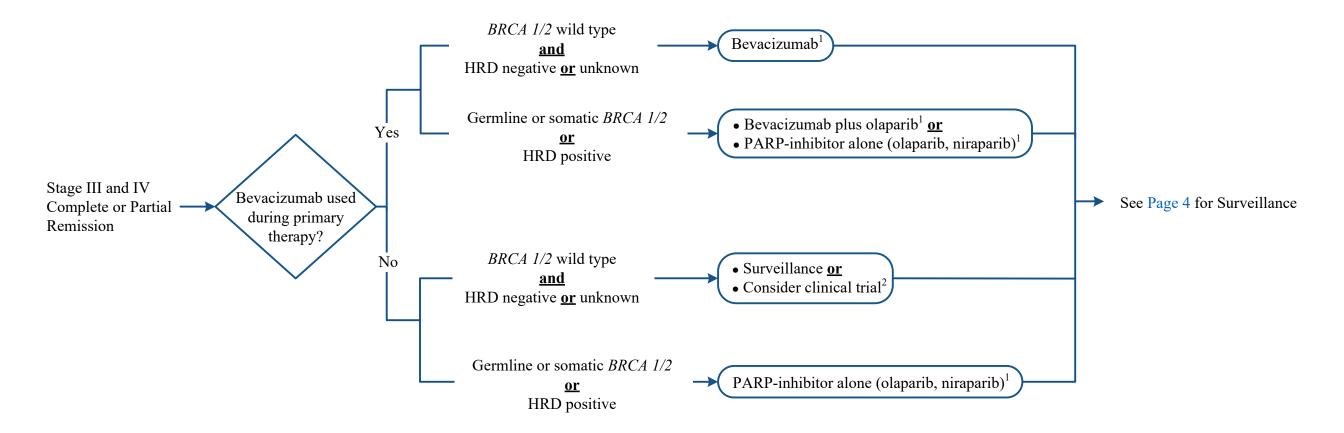
<sup>&</sup>lt;sup>4</sup> Three cycles may be considered in patients with non-high grade serous histologies

Page 3 of 10

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

Note: If available, clinical trials should be considered as preferred treatment options for eligible patients (Gynecologic Oncology Clinical Trials). Other comorbidities are taken into consideration prior to treatment selection.

#### MAINTENANCE TREATMENT



HRD = homologous recombination deficiency

<sup>&</sup>lt;sup>1</sup> See Appendix A: Systemic Therapy Regimens

<sup>&</sup>lt;sup>2</sup> See Gynecologic Oncology Clinical Trials



**Page 4 of 10** 

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

Note: If available, clinical trials should be considered as preferred treatment options for eligible patients (Gynecologic Oncology Clinical Trials). Other comorbidities are taken into consideration prior to treatment selection.

#### **SURVELLIANCE**

Surveillance to include the following:

- Review of symptoms (pain, persistent headache, shortness of breath, vaginal bleeding and/or discharge, chronic cough, and change in bowel or bladder habits)
- Pelvic exam during clinic visits
- CA 125 or other tumor markers if initially elevated
- Pap test is *not* recommended
- Routine diagnostic imaging is not recommended

Recommended surveillance schedule:

- Year 1: Every 3 months
- Year 2: Every 3-4 months
- Years 3-5: Every 6 months
- For patients 5 years post-treatment and NED see Survivorship Ovarian Cancer algorithm

NED = no evidence of disease

**Page 5 of 10** 

Making Cancer History®

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

Note: If available, clinical trials should be considered as preferred treatment options for eligible patients (Gynecologic Oncology Clinical Trials). Other comorbidities are taken into consideration prior to treatment selection.

#### RELAPSED/PROGRESSION TREATMENT • Discuss Goal Concordant Care (GCC) with patient or if clinically indicated, with Patient Representative<sup>2</sup> • Consider supportive care for selected patients • Progression or no response • Salvage chemotherapy/biotherapy<sup>1</sup> with or without bevacizumab on primary chemotherapy or • Hormonal therapy for patients with low-grade ovarian cancer • Relapse < 6 months after • Trimetinib for patients with low-grade ovarian cancer stopping platinum-based • NGS, MSI by PCR, and HLA testing for primary tumor chemotherapy<sup>1</sup> (taxane and • IHC for HER2/neu and FOLR1 platinum resistant) • Clinical trial<sup>3</sup> • Delay until clinical or radiologic relapse or treat as clinically indicated • BRCA testing, if not already performed • HRD tumor testing if germline BRCA testing negative • NGS, MSI by PCR, and HLA testing for primary tumor Serially rising CA 125 • IHC for HER2/neu and FOLR1 • Clinical trial<sup>3</sup> • Discuss Goal Concordant Care (GCC) with patient or if clinically indicated, with Patient Representative<sup>2</sup> • Consider supportive care for selected patients Relapse $\geq$ 6 months after • Platinum-based doublet with or without bevacizumab<sup>1</sup> plus stopping platinum-based bevacizumab maintenance therapy or chemotherapy<sup>1</sup> • Platinum doublet followed by PARP inhibitor maintenance therapy • BRCA testing, if not already performed Consider cytoreductive • HRD tumor testing if germline BRCA testing negative Clinical or radiologic surgery or radiation therapy • NGS, MSI by PCR, and HLA testing for primary tumor HRD = homologous recombination deficiency relapse in selected patients • IHC for HER2/neu and FOLR1 MSI = microsatellite instability HLA = human leukocyte antigen • Clinical trial<sup>3</sup> IHC = immunohistochemistry • Discuss Goal Concordant Care (GCC) with patient or if clinically indicated, with Patient Representative<sup>2</sup> See Appendix A: Systemic Therapy Regimens <sup>2</sup> GCC should be initiated by the Primary Oncologist. If Primary Oncologist is unavailable, Primary Team/Attending • Consider supportive care for selected patients Physician to initiate GCC discussion and notify Primary Oncologist. Patients, or if clinically indicated, the Patient

GCC discussion. Refer to GCC home page (for internal use only).

Representative should be informed of therapeutic and/or palliative options. GCC discussion should be consistent,

timely, and re-evaluated as clinically indicated. The Advance Care Planning (ACP) note should be used to document

<sup>&</sup>lt;sup>3</sup> See Gynecologic Oncology Clinical Trials



Page 6 of 10

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

#### **APPENDIX A: Systemic Therapy Regimens**

Adjuvant Therapy	<ul> <li>Paclitaxel 135 mg/m² IV over 3 hours on Day 1 with cisplatin 75-100 mg/m² IP on Day 2 and paclitaxel 60 mg/m² IP on Day 8 every 3 weeks for 6 cycles</li> <li>Paclitaxel 175 mg/m² IV over 3 hours with carboplatin AUC 5-6 IV over 1 hour every 3 weeks for 6 cycles</li> <li>Docetaxel 75 mg/m² IV over 1 hour with carboplatin AUC 5 IV over 1 hour every 3 weeks for 6 cycles</li> <li>Paclitaxel 175 mg/m² IV over 3 hours with carboplatin AUC 5-6 IV over 1 hour every 3 weeks for 6 cycles. Starting Day 1 of Cycle 2 give bevacizumab 15 mg/kg IV over 30 minutes every 3 weeks.</li> <li>Option for patients with mucinous ovarian cancer:</li> <li>Oxaliplatin 130 mg/m² IV over 2 hours on Day 1 and capecitabine 850 mg/m² PO twice daily on Days 1 through 14 followed by 7 day rest period every 3 weeks</li> </ul>		
Neoadjuvant Therapy	<ul> <li>Paclitaxel 175 mg/m² IV over 3 hours with carboplatin AUC 5-6 IV over 1 hour every 3 weeks for 3 to 6 cycles</li> <li>Docetaxel 75 mg/m² IV over 1 hour with carboplatin AUC 5 IV over 1 hour every 3 weeks for 3 to 6 cycles</li> <li>Paclitaxel 175 mg/m² IV over 3 hours with carboplatin AUC 5-6 IV over 1 hour and bevacizumab 15 mg/kg IV over 30 minutes every 3 weeks for 3 to 6 cycles. Bevacizumab should not be given in the cycle prior to surgery.</li> </ul>		
Maintenance Therapy	<ul> <li>Bevacizumab 15 mg/kg IV over 30 minutes every 3 weeks for up to 22 cycles</li> <li>Approved PARP inhibitor therapy until progression (<i>BRCA</i> positive or HRD positive); olaparib for 2 years or niraparib for 3 years</li> <li>Aromatase inhibitors (low-grade serous ovarian cancer)</li> </ul>		
	All systemic chemotherapy agents <sup>1</sup> can be given alone or with bevacizumab (until progression/toxicity)		
Recurrence Therapy	Platinum Sensitive	Platinum Resistant	
	<ul> <li>Paclitaxel and carboplatin</li> <li>Carboplatin and weekly paclitaxel</li> <li>Carboplatin and docetaxel</li> <li>Carboplatin and gemcitabine</li> <li>Carboplatin and liposomal doxorubicin</li> <li>Carboplatin single agent</li> <li>Bi-weekly cisplatin and gemcitabine</li> <li>Approved PARP inhibitor therapy (BRCA positive) until progression/toxicity</li> <li>Trimetinib for low-grade ovarian cancer</li> <li>Fam-trastuzumab deruxtecan-nxki for HER2/neu 2-3+</li> </ul>	<ul> <li>Docetaxel</li> <li>Oral etoposide</li> <li>Gemcitabine</li> <li>Liposomal doxorubicin</li> <li>Weekly paclitaxel</li> <li>Bevacizumab single agent until progression/toxicity</li> <li>Hormonal therapy for low-grade ovarian cancer</li> <li>Approved PARP inhibitor therapy (BRCA positive or</li> <li>Aromatase inhibitor (low-grade serous ovarian cance)</li> <li>Trimetinib for low-grade ovarian cancer</li> <li>Fam-trastuzumab deruxtecan-nxki for HER2/neu 2-3-</li> </ul>	r)

<sup>&</sup>lt;sup>1</sup> Excludes PARP inhibitors

**Page 7 of 10** 

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

#### SUGGESTED READINGS

- Aghajanian, C., Blank, S. V., Goff, B. A., Judson, P. L., Teneriello, M. G., Husain, A., ... Nycum, L. R. (2012). OCEANS: A randomized, double-blind, placebo-controlled phase III trial of chemotherapy with or without bevacizumab in patients with platinum-sensitive recurrent epithelial ovarian, primary peritoneal, or fallopian tube cancer. *Journal of Clinical Oncology*, 30(17), 2039. doi:10.1200/JCO.2012.42.0505
- Armstrong, D. K., Bundy, B., Wenzel, L., Huang, H. Q., Baergen, R., Lele, S., ... Burger, R. A. (2006). Intraperitoneal cisplatin and paclitaxel in ovarian cancer. *New England Journal of Medicine*, 354(1), 34-43. doi:10.1056/NEJMoa052985
- Burger, R. A., Brady, M. F., Bookman, M. A., Fleming, G. F., Monk, B. J., Huang, H., ... Boente, M. (2011). Incorporation of bevacizumab in the primary treatment of ovarian cancer. New England Journal of Medicine, 365(26), 2473-2483. doi:10.1056/NEJMoa1104390
- Chan, J. K., Brady, M. F., Penson, R. T., Huang, H., Birrer, M. J., Walker, J. L., ... Monk, B. J. (2016). Weekly vs. every-3-week paclitaxel and carboplatin for ovarian cancer. *New England Journal of Medicine*, 374(8), 738-748. doi:10.1056/NEJMoa1505067
- Chi, D., Berchuck, A., Dizon, D. S., & Yashar, C. M. (2013). Principles and Practice of Gynecologic Oncology: Sixth Edition. Lippincott Williams & Wilkins.
- Coleman, R. L., Brady, M. F., Herzog, T. J., Sabbatini, P., Armstrong, D. K., Walker, J. L., ... Mannel, R. S. (2017). Bevacizumab and paclitaxel—carboplatin chemotherapy and secondary cytoreduction in recurrent, platinum-sensitive ovarian cancer (NRG Oncology/Gynecologic Oncology Group study GOG-0213): A multicentre, open-label, randomised, phase 3 trial. *The Lancet Oncology*, 18(6), 779-791. doi:10.1016/S1470-2045(17)30279-6
- Coleman, R. L., Oza, A. M., Lorusso, D., Aghajanian, C., Oaknin, A., Dean, A., ... Vulfovich, M. (2017). Rucaparib maintenance treatment for recurrent ovarian carcinoma after response to platinum therapy (ARIEL3): A randomised, double-blind, placebo-controlled, phase 3 trial. *The Lancet*, 390(10106), 1949-1961.doi:10.1016/S0140-6736(17)32440-6
- Coleman, R. L., Spirtos, N. M., Enserro, D., Herzog, T. J., Sabbatini, P., Armstrong, D. K., ... Mannel, R. S. (2019). Secondary surgical cytoreduction for recurrent ovarian cancer. *The New England Journal of Medicine*, 381(20), 1929-1939. doi:10.1056/NEJMoa1902626
- DiSilvestro, P., Banerjee, S., Colombo, N., Scambia, G., Kim, B. G., Oaknin, A., ... Moore, K. N. (2023). Overall survival with maintenance olaparib at a 7-year follow-up in patients with newly diagnosed advanced ovarian cancer and a BRCA mutation: The SOLO1/GOG 3004 trial. *Journal of Clinical Oncology*, 41(3), 609-617. doi:10.1200/JCO.22.01549
- Du Bois, A., Reuss, A., Pujade-Lauraine, E., Harter, P., Ray-Coquard, I., & Pfisterer, J. (2009). Role of surgical outcome as prognostic factor in advanced epithelial ovarian cancer: A combined exploratory analysis of 3 prospectively randomized phase 3 multicenter trials: by the Arbeitsgemeinschaft Gynaekologische Onkologie Studiengruppe Ovarialkarzinom (AGO-OVAR) and the Groupe d'Investigateurs Nationaux Pour les Etudes des Cancers de l'Ovaire (GINECO). *Cancer*, 115(6), 1234-1244. doi:10.1002/cncr.24149
- Fagotti, A., Ferrandina, G., Fanfani, F., G arganese, G., Vizzielli, G., Carone, V., ... Scambia, G. (2008). Prospective validation of a laparoscopic predictive model for optimal cytoreduction in advanced ovarian carcinoma. *American Journal of Obstetrics and Gynecology*, 199(6), 642-e1. doi:10.1016/j.ajog.2008.06.052
- Fagotti, A., Vizzielli, G., De Iaco, P., Surico, D., Buda, A., Mandato, V. D., ... Scambia, G. (2013). A multicentric trial (Olympia–MITO 13) on the accuracy of laparoscopy to assess peritoneal spread in ovarian cancer. *American Journal of Obstetrics and Gynecology*, 209(5), 462-e1. doi:10.1016/j.ajog.2013.07.016
- Foundation for Women's Cancer. (2019). Retrieved from https://www.foundationforwomenscancer.org

Continued on next page

**Page 8 of 10** 

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

#### **SUGGESTED READINGS - continued**

- Gershenson, D. M., Bodurka, D. C., Coleman, R. L., Lu, K. H., Malpica, A., & Sun, C. C. (2017). Hormonal maintenance therapy for women with low-grade serous cancer of the ovary or peritoneum. *Journal of Clinical Oncology*, 35(10), 1103-1111. doi:10.1200/JCO.2016.71.0632
- Gershenson, D. M., Miller, A., Brady, W. E., Paul, J., Carty, K., Rodgers, W., ... Gourley, C. (2022). Trametinib versus standard of care in patients with recurrent low-grade serous ovarian cancer (GOG 281/LOGS): An international, randomised, open-label, multicentre, phase 2/3 trial. *The Lancet*, 399(10324), 541-553. doi:10.1016/S0140-6736(21)02175-9
- González-Martín, A., Pothuri, B., Vergote, I., DePont Christensen, R., Graybill, W., Mirza, M. R., ... Monk, B., J. (2019). Niraparib in patients with newly diagnosed advanced ovarian cancer. New England Journal of Medicine, 381(25), 2391-2402. doi:10.1056/NEJMoa1910962
- Harter, P., Sehouli, J., Vergote, I., Ferron, G., Reuss, A., Meier, W., ... Du Bois, A. (2021). Randomized trial of cytoreductive surgery for relapsed ovarian cancer. *New England Journal of Medicine*, 385(23), 2123-2131. doi:10.1056/NEJMoa2103294
- Jacobs, A. J. (1998). Ovarian cancer: Controversies in management David M. Gershenson, William P. McGuire, eds. New York: Churchill Livingston, 1998. *Journal of the National Cancer Institute*, 90(13), 1009-1010. doi:10.1093/jnci/90.13.1009
- Katsumata, N., Yasuda, M., Isonishi, S., Takahashi, F., Michimae, H., Kimura, E., ... Ochiai, K. (2013). Long-term results of dose-dense paclitaxel and carboplatin versus conventional paclitaxel and carboplatin for treatment of advanced epithelial ovarian, fallopian tube, or primary peritoneal cancer (JGOG 3016): A randomised, controlled, open-label trial. *The Lancet Oncology*, 14(10), 1020-1026. doi:10.1016/S1470-2045(13)70363-2
- Kehoe, S., Hook, J., Nankivell, M., Jayson, G. C., Kitchener, H., Lopes, T., ... Dobbs, S. (2015). Primary chemotherapy versus primary surgery for newly diagnosed advanced ovarian cancer (CHORUS): An open-label, randomised, controlled, non-inferiority trial. *The Lancet*, 386(9990), 249-257. doi:10.1016/S0140-6736(14)62223-6
- Meric-Bernstam, F., Makker, V., Oaknin, A., Oh, D. Y., Banerjee, S., González-Martín, A., ... Lee, J. Y. (2024). Efficacy and safety of trastuzumab deruxtecan in patients with HER2-expressing solid tumors: Primary results from the DESTINY-PanTumor02 phase II trial. *Journal of Clinical Oncology*, 42(1), 47-58. doi:10.1200/JCO.23.02005
- MD Anderson Institutional Policy #CLN1202 Advance Care Planning Policy Advance Care Planning (ACP) Conversation Workflow (ATT1925)
- Mirza, M. R., Monk, B. J., Herrstedt, J., Oza, A. M., Mahner, S., Redondo, A., ... Matulonis, U. A. (2016). Niraparib maintenance therapy in platinum-sensitive, recurrent ovarian cancer. New England Journal of Medicine, 375(22), 2154-2164. doi:10.1056/NEJMoa1611310
- Moore, K. N., Angelergues, A., Konecny, G. E., García, Y., Banerjee, S., Lorusso, D., ... Van Gorp, T. (2023). Mirvetuximab soravtansine in FRα-positive, platinum-resistant ovarian cancer. *The New England Journal of Medicine*, 389(23), 2162-2174. doi:10.1056/NEJMoa2309169
- Moore, K., Colombo, N., Scambia, G., Kim, B. G., Oaknin, A., Friedlander, M., ... DiSilvestro, P. (2018). Maintenance olaparib in patients with newly diagnosed advanced ovarian cancer. New England Journal of Medicine. 379(26), 2495-2505. doi:10.1056/NEJMoa1810858
- National Comprehensive Cancer Network. (2024). NCCN Clinical Practice Guidelines in Oncology: Ovarian Cancer (V3.2024). https://www.nccn.org/professionals/physician\_gls/pdf/ovarian.pdf
- Oza, A. M., Cook, A. D., Pfisterer, J., Embleton, A., Ledermann, J. A., Pujade-Lauraine, E., ... Perren, T. (2015). Standard chemotherapy with or without bevacizumab for women with newly diagnosed ovarian cancer (ICON7): Overall survival results of a phase 3 randomised trial. *The Lancet Oncology*, 16(8), 928-936. doi:10.1016/S1470-2045(15)00086-8
- Perren, T. J., Swart, A. M., Pfisterer, J., Ledermann, J. A., Pujade-Lauraine, E., Kristensen, G., ... Oza, A. M. (2011). A phase 3 trial of bevacizumab in ovarian cancer. *New England Journal of Medicine*, 365(26), 2484-2496. doi:10.1056/NEJMoa1103799

**Page 9 of 10** 

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

#### **SUGGESTED READINGS - continued**

- Poveda, A. M., Selle, F., Hilpert, F., Reuss, A., Savarese, A., Vergote, I., ... Pujade-Lauraine, E. (2015). Bevacizumab combined with weekly paclitaxel, pegylated liposomal doxorubicin, or topotecan in platinum-resistant recurrent ovarian cancer: Analysis by chemotherapy cohort of the randomized phase III AURELIA trial. *Journal of Clinical Oncology*, 33(32), 3836-3838. doi:10.1200/JCO.2015.63.1408
- Prat, J., & FIGO Committee on Gynecologic Oncology. (2014). Staging classification for cancer of the ovary, fallopian tube, and peritoneum. *International Journal of Gynecology & Obstetrics*, 124(1), 1-5. doi:10.3802/jgo.2015.26.2.87
- Pujade-Lauraine, E., Hilpert, F., Weber, B., Reuss, A., Poveda, A., Kristensen, G., ... Ray-Coquard, I. (2014). Bevacizumab combined with chemotherapy for platinum-resistant recurrent ovarian cancer: The AURELIA open-label randomized phase III trial. *Obstetrical & Gynecological Survey*, 69(7), 402-404. doi:10.1097/01.ogx.0000452705.82050.e4
- Pujade-Lauraine, E., Ledermann, J. A., Selle, F., Gebski, V., Penson, R. T., Oza, A. M., ... Vergote, I. (2017). Olaparib tablets as maintenance therapy in patients with platinum-sensitive, relapsed ovarian cancer and a BRCA1/2 mutation (SOLO2/ENGOT-Ov21): A double-blind, randomised, placebo-controlled, phase 3 trial. *The Lancet Oncology*, 18(9), 1274-1284. doi:10.1016/S1470-2045(17)30469-2
- Pujade-Lauraine, E., Wagner, U., Aavall-Lundqvist, E., Gebski, V., Heywood, M., Vasey, P. A., ... du Bois, A. (2010). Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. *Journal of Clinical Oncology*, 28(20), 3323-3329. doi:10.1200/JCO.2009.25.7519
- Ray-Coquard, I., Pautier, P., Pignata, S., Pérol, D., González-Martín, A., Berger, R., ... Harter, P. (2019). Olaparib plus bevacizumab as first-line maintenance in ovarian cancer. *New England Journal of Medicine*, 381(25), 2416-2428. doi:10.1056/NEJMoa1911361
- Rutten, M. J., Gaarenstroom, K. N., Van Gorp, T., van Meurs, H. S., Arts, H. J., Bossuyt, P. M., ... Schreuder, H. W. (2012). Laparoscopy to predict the result of primary cytoreductive surgery in advanced ovarian cancer patients (LapOvCa-trial): A multicentre randomized controlled study. *BMC Cancer*, 12(1), 31. doi:10.1186/1471-2407-12-31.
- Society of Gynecologic Oncology. (2022). Retrieved from http://www.sgo.org
- Van Der Burg, M. E., Van Lent, M., Buyse, M., Kobierska, A., Colombo, N., Favalli, G., ... Pecorelli, S. (1995). The effect of debulking surgery after induction chemotherapy on the prognosis in advanced epithelial ovarian cancer. *New England Journal of Medicine*, 332(10), 629-634. doi:10.1056/NEJM199503093321002
- Vergote, I., Tropé, C. G., Amant, F., Kristensen, G. B., Ehlen, T., Johnson, N., ... Reed, N. S. (2010). Neoadjuvant chemotherapy or primary surgery in stage IIIC or IV ovarian cancer. *New England Journal of Medicine*, 363(10), 943-953. doi:10.1056/NEJMoa0908806



Page 10 of 10

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

#### **DEVELOPMENT CREDITS**

This practice algorithm is based on majority expert opinion of the Gynecologic Oncology and Reproductive Medicine Center providers at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following:

#### **Core Development Team Leads**

Tharakeswara K. Bathala, MBBS, MD (Abdominal Imaging) Jose A. Rauh-Hain, MD (Gyn Onc & Reproductive Med)

#### **Workgroup Members**

Robert Bast, MD (Gyn Onc & Reproductive Med)
Michael W. Bevers, MD (Gyn Onc & Reproductive Med)
Lauren Cobb, MD (Gyn Onc & Reproductive Med)
Olga N. Fleckenstein, BS

David M. Gershenson, MD (Gyn Onc & Reproductive Med)
Michaela Grinsfelder, MD (Gyn Onc & Reproductive Med)
Amir Jazaeri, MD (Gyn Onc & Reproductive Med)
Anuja Jhingran, MD (Radiation Oncology)
Donyika Joseph, PharmD (Pharmacy Clinical Programs)

Ann Klopp, MD, PhD (Radiation Oncology)
Brittnee Macintyre, MSN, APRN, FNP-C

Larissa Meyer, MD (Gyn Onc & Reproductive Med)
Lois M. Ramondetta, MD (Gyn Onc & Reproductive Med)
Aaron Shafer, MD (Gyn Onc & Reproductive Med)
Pamela T. Soliman, MD (Gyn Onc & Reproductive Med)
Anil K. Sood, MD (Gyn Onc & Reproductive Med)
Shannon N. Westin, MD (Gyn Onc & Reproductive Med)

Roni Wilke, MD (Gyn Onc & Reproductive Med)

<sup>\*</sup> Clinical Effectiveness Development Team