Ovarian

Non-Metastatic, Newly Diagnosed or Recurrent Disease (somatic)

FDA/NCCN approved · Germline mutation testing When and what should be tested? BRCA 1/2 Treatment eligible · Somatic mutation testing along with limited NGS panel for MSI, TMB, dMMR, BRAF, NTRK, BRCA 1/2 in tissue, other · All patients with non-metastatic disease homologous recombination repair genes**, LOH score Performance status of ECOG 0-2 Consider comprehensive germline mutation panel · At initial diagnosis or upon progression · Hereditary Ovarian Syndrome Germline mutation testing Patients with hereditary risk syndromes BRCA 1/2 negative – reflex to comprehensive NGS panel · Tissue sample preferred · Consider liquid biopsy if lack of tissue **Emerging** · Comprehensive NGS panel

MRD

Regular monitoring including, but not limited to CEA, AFP, CA-125, LDH and CA19-9 is required as standard of care. **CHEK2, BARD1, BRIP1, PALB2, RAD50, RAD51C, ATM, ATR, EMSY, Fanconi anemia genes, MMR genes,.



Ovarian

Advanced Disease or Progressed on Treatment (somatic)

When and what should be tested?

- Treatment eligible
- Stage IV, PS of ECOG 0-2
- Advanced disease or progression on treatment
- · Patients with hereditary risk syndromes
- · Tissue sample preferred
- Consider liquid biopsy if lack of tissue

FDA/NCCN approved

- BRCA 1/2 (to guide treatment selection)
- MSI-H/dMMR
- TMB
- NTRK
- ER
- HER2
- HRRm analysis/Loss of heterozygosity
- FR-alpha
- RET gene arrangement
- BRAF V600E
- HRD
- · Hereditary Ovarian Syndrome
 - Germline mutation testing
 - BRCA 1/2 negative reflex to comprehensive NGS panel
- · Recurrent Disease
 - Somatic mutation testing along with limited NGS panel for MSI,
 TMB, dMMR, NTRK*, HRD, BRCA 1/2 in tissue, other
 homologous recombination repair genes**, LOH score, KRAS
 - Consider comprehensive germline mutation panel

Emerging

- · Comprehensive NGS panel
- RAF, MEK, NaPi2b

Informational Considerations

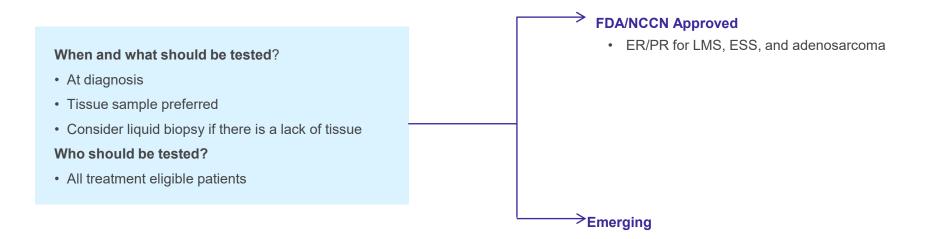
 Cu isotope (serum), exosomes (ascites), IncRNA and mRNA, ALDH1, GSTP

Regular monitoring including, but not limited to CEA, AFP, CA-125, LDH and CA19-9 is required as standard of care. **CHEK2, BARD1, BRIP1, PALB2, RAD50, RAD51C, ATM, ATR, EMSY, Fanconi anemia genes, MMR genes,.



Uterine Cancer

Newly diagnosed disease





Uterine Cancer

Metastatic or Recurrent disease

→ FDA/NCCN Approved • ER/PR When and what should be tested? NTRK · At time of metastasis or disease recurrence MSI/MMR · Tissue sample preferred • TMB · Consider liquid biopsy if there is a lack of tissue RET Who should be tested? ALK • BRCA · All treatment eligible patients • HER2 →Emerging



Endometrial Cancer

Newly diagnosed disease

When and what should be tested? • At diagnosis • Tissue sample preferred • Consider liquid biopsy if there is a lack of tissue Who should be tested? • All treatment eligible patients FDA/NCCN Approved • ER/PR for stage III/IV • HER2 for all p53 aberrant carcinomas regardless of histology • POLE • MMR • MSI • p53 by IHC



Endometrial Cancer

Metastatic or Recurrent disease

→ FDA/NCCN Approved • ER/PR When and what should be tested? · HER2 for all p53 aberrant carcinomas regardless of histology · At time of disease recurrence • POLE · Tissue sample preferred MMR · Consider liquid biopsy if there is a lack of tissue MSI Who should be tested? TMB NTRK · All treatment eligible patients p53 by IHC > Emerging

