Endometrial Cancer

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.*

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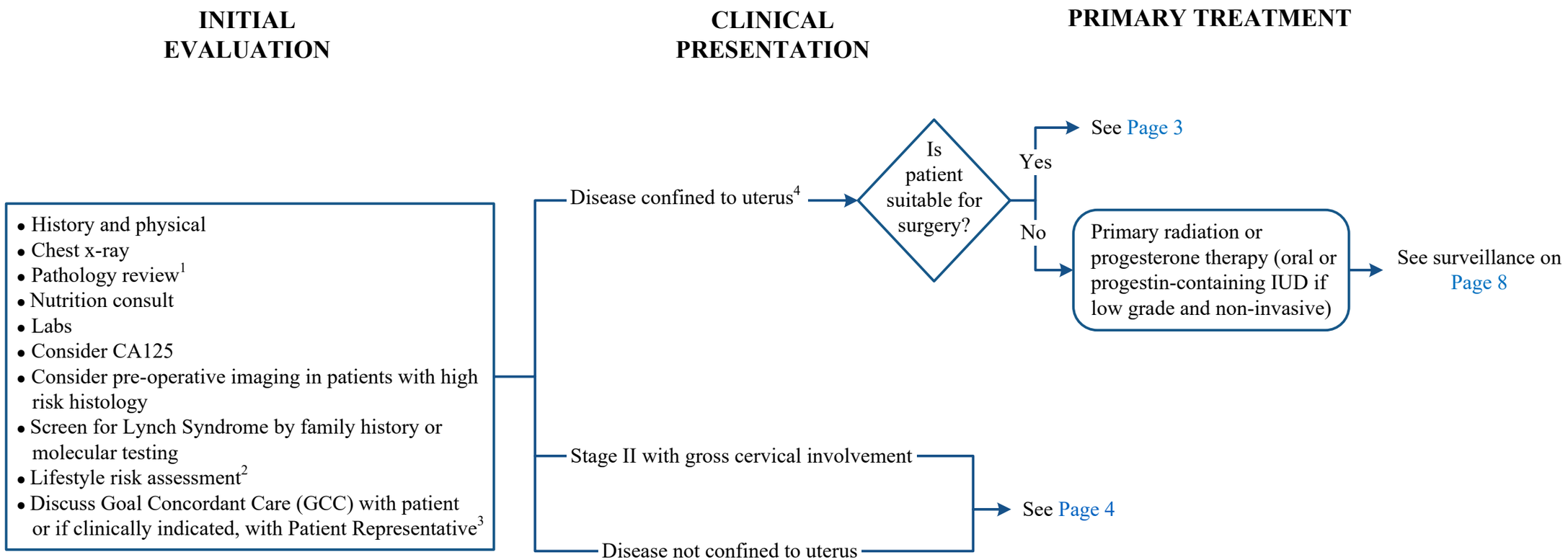
Note: If available, Clinical Trials should be considered as preferred treatment options for eligible patients (www.mdanderson.org/gynonctrials). Other co-morbidities are taken into consideration prior to treatment selection.



IUD = intrauterine device

Note: Please reference the American College of Obstetricians and Gynecologists (ACOG) Guidelines

[1] See MD Anderson Approved Biomarkers

[2] See Physical Activity, Nutrition, and Tobacco Cessation Treatment algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice

[3] GCC should be initiated by the Primary Oncologist. If Primary Oncologist is unavailable, Primary Team/Attending Physician to initiate GCC discussion and notify Primary Oncologist. Patients, or if clinically indicated, the Patient 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 GCC discussion. Refer to GCC home page (for internal use only).

[4] MRI with vaginal contrast (gel preferred) is recommended to assess for myometrial, cervical invasion and assessment of extrauterine disease. PET/CT may help with lymph node involvement. PET/MR if available, may help in T staging, evaluation of lymph nodes, and distant metastasis. If none of these modalities are available, ultrasound can be performed.

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INITIAL EVALUATION

Disease confined to uterus and patient eligible for surgery

Does the patient desire fertility?

Yes

- Dilation and curettage to confirm low-grade disease if initial diagnosis was from endometrial biopsy
- MRI pelvis with IV contrast and vaginal gel to rule out myometrial invasion
- Referral to Oncofertility [see Fertility Sparing Treatment (for Gynecologic Malignancies and Pre-Malignancies) algorithm]

Does the patient have low-grade disease and no myometrial invasion?

Yes

- Progesterone therapy (oral or progestin-containing IUD)
- Re-sample at every 3-6 month interval

Does the patient have progression or persistence of disease > 12 months?

Yes

Hysterectomy[1], BSO, and SLN mapping (see Box A on this page)

No

No

No

A

Hysterectomy[1], BSO, and SLN mapping

Bilateral SLN identified → Conclude procedure

Unable to identify or map bilateral SLN → Intraoperative frozen section

- Grade 1-2, ≤ 50% invasion and tumor diameter ≤ 2 cm → Conclude procedure with/without lymph node dissection
- Grade 1-2, > 50% invasion **or**
- Tumor diameter > 2 cm with any invasion **or**
- Grade 3 and non-endometroid cell type (papillary serous, clear cell, carcinosarcoma) → Side specific staging with pelvic and para-aortic node sampling (omental biopsy for non-endometrioid cell type)

- See Page 5 for endometroid cell type Stage I-II
- See Page 6 for endometroid cell type Stage III-IV
- See Page 7 for non-endometroid cell type

PRIMARY TREATMENT

BSO = bilateral salpingo-oophorectomy
SLN = sentinel lymph nodes
IUD = intrauterine device

[1] Hysterectomy may be performed through open or minimally invasive techniques based on surgeon/patient discretion. Minimal invasive surgery is the preferred method of surgery.

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Endometrial Cancer

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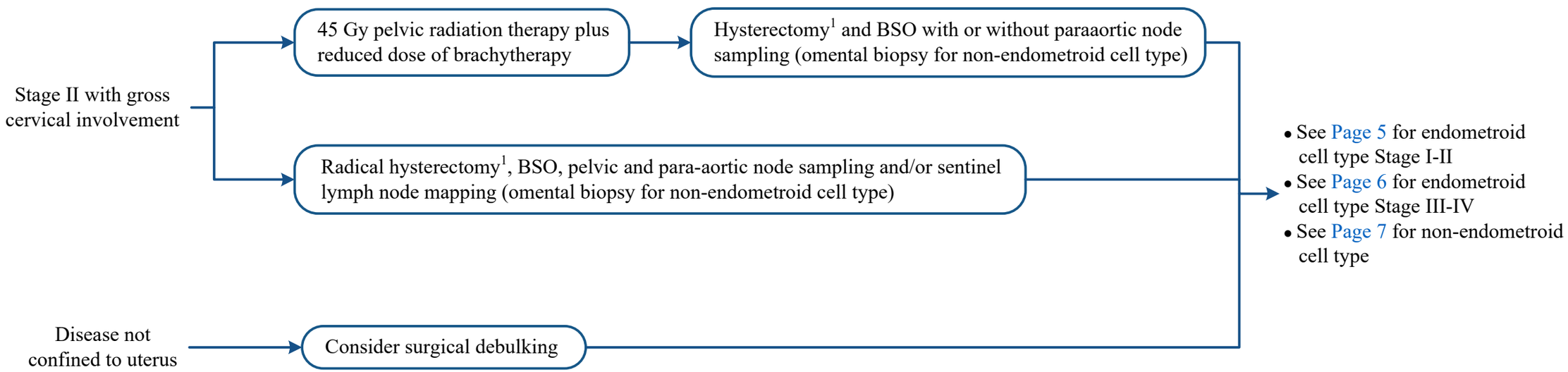
CLINICAL PRESENTATION

PRIMARY TREATMENT



BSO = bilateral salpingo-oophorectomy

Note: Please reference the American College of Obstetricians and Gynecologists (ACOG) Guidelines

[1] Hysterectomy may be performed through open or minimally invasive techniques based on surgeon/patient discretion

Endometrial Cancer (Endometroid Cell Type Stage I-II)

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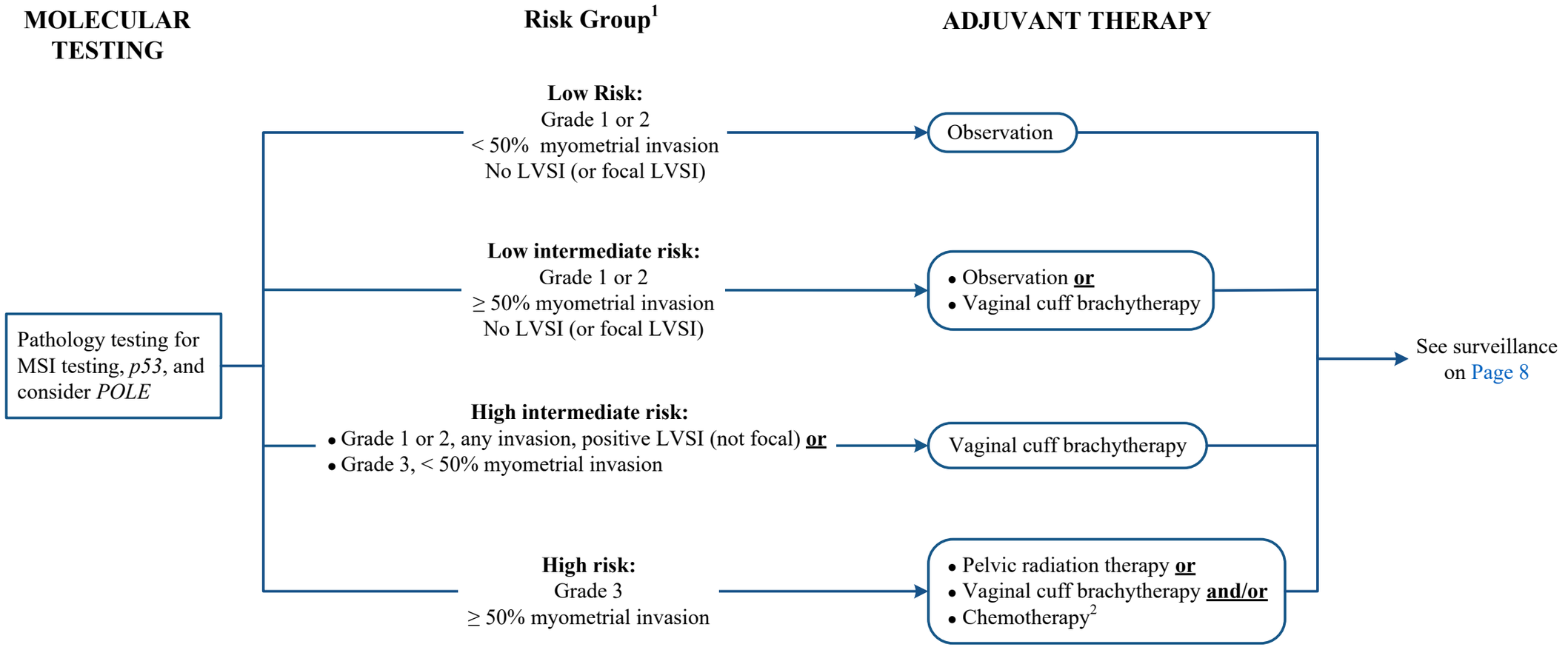


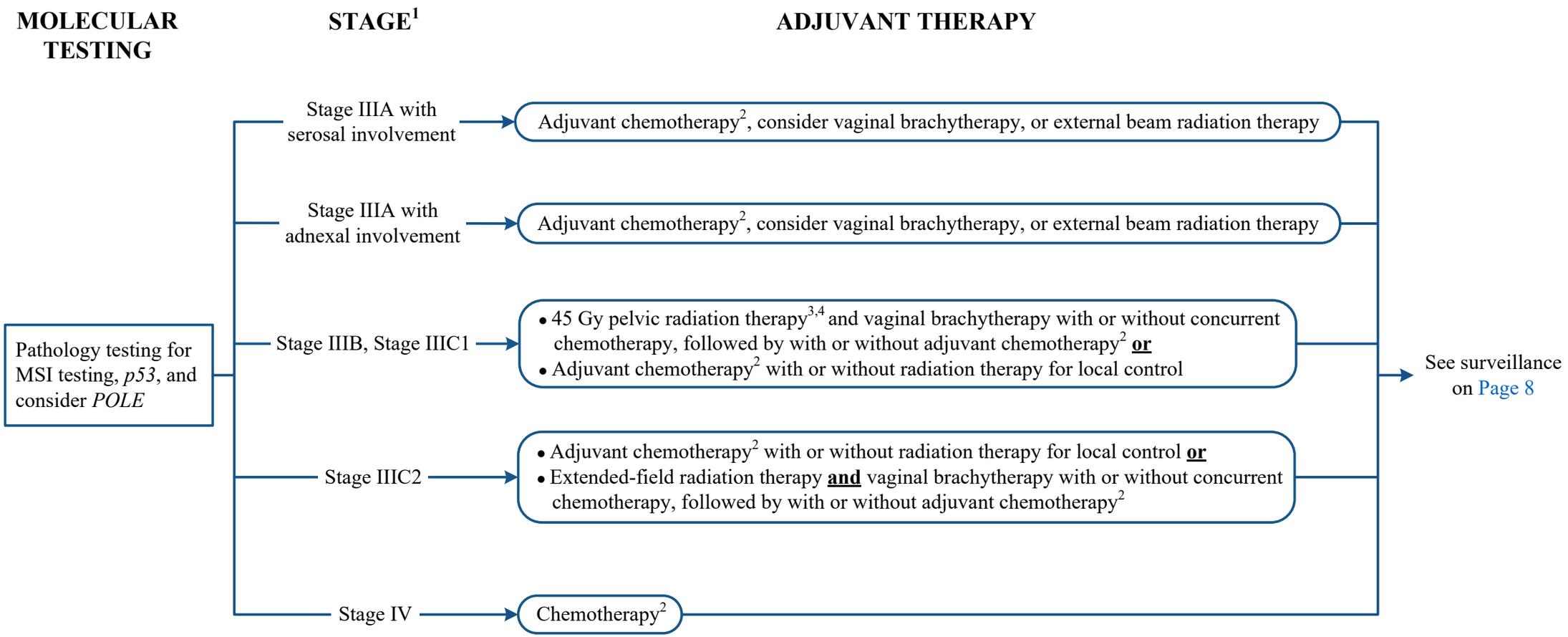
LVSI = lymphovascular space invasion

[1] **Imaging Considerations:**
- CT abdomen and pelvis with IV, oral and rectal contrast. If high chance of recurrence, consider MRI pelvis with IV contrast and vaginal gel.
- For recurrence localization, consider PET/CT
- For distant disease, PET/CT may be useful. MRI will be helpful to assess the extent of locally recurrent disease.

[2] See Appendix A for Systemic Therapy

Endometrial Cancer (Endometroid Cell Type Stage III-IV)

Note: If available, Clinical Trials should be considered as preferred treatment options for eligible patients (www.mdanderson.org/gynonctrials). Other co-morbidities are taken into consideration prior to treatment selection.



[1] Refer to International Federation of Gynecology and Obstetrics (FIGO) Staging: Berek, J. S., Matias-Guiu, X., Creutzberg, C., Fotopoulou, C., Gaffney, D., Kehoe, S., . . . Concin, N. (2023). FIGO staging of endometrial cancer: 2023. *International Journal of Gynecology and Obstetrics, 162*(2), 383-394. https://doi.org/10.1002/ijgo.14923

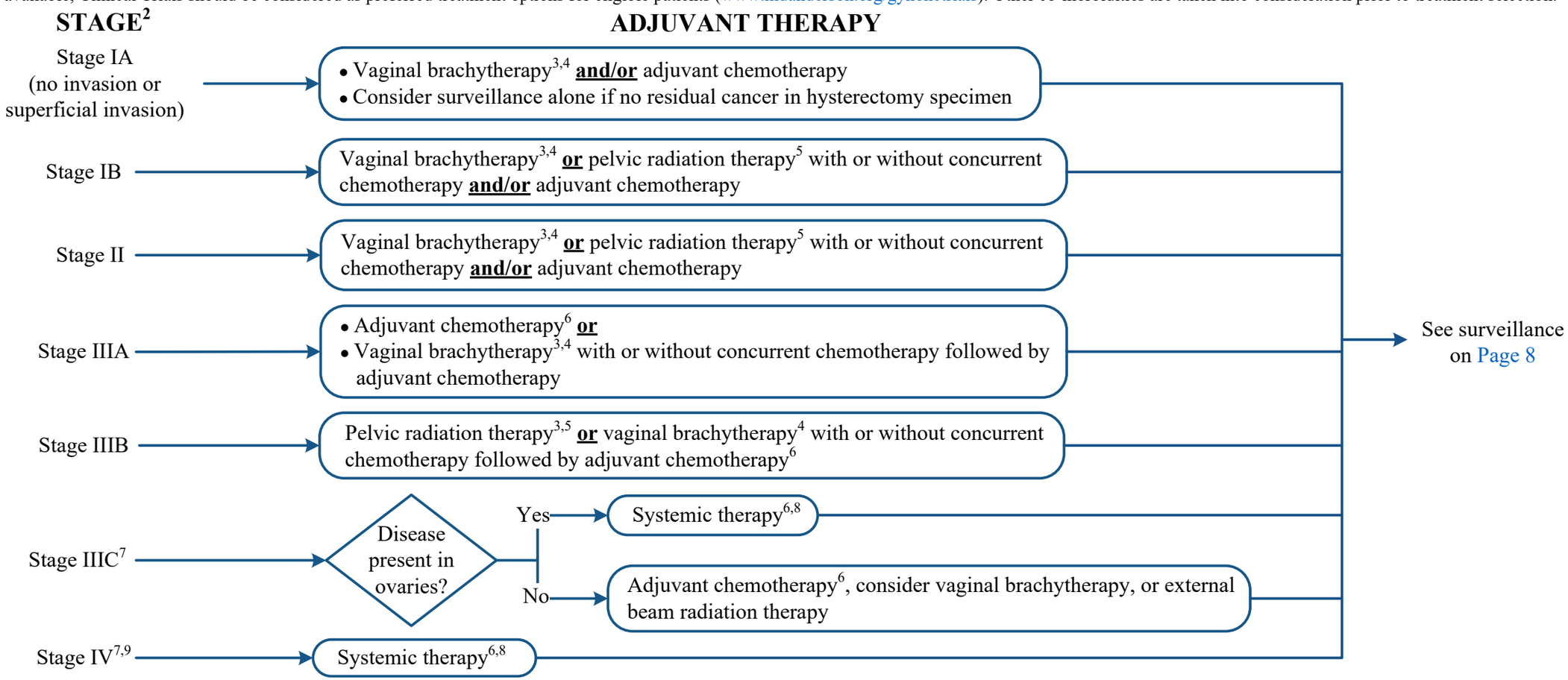
[2] See Appendix A for Systemic Therapy

[3] Consider radiation alone in grade 1,2 patients

[4] Higher dose than 45 Gy needs to be given for sites of ECE (extra-capsular nodal extension) and for any other residual suspicious nodes

Endometrial Cancer (Serous Carcinoma[1], Clear Cell Carcinoma and Carcinosarcoma)

Note: If available, Clinical Trials should be considered as preferred treatment options for eligible patients (www.mdanderson.org/gynonctrials). Other co-morbidities are taken into consideration prior to treatment selection.



[1] For serous carcinoma, consider human epidermal growth factor receptor 2 (HER2) testing
[2] Refer to International Federation of Gynecology and Obstetrics (FIGO) Staging: Berek, J. S., Matias-Guiu, X., Creutzberg, C., Fotopoulou, C., Gaffney, D., Kehoe, S., . . . Concin, N. (2023). FIGO staging of endometrial cancer: 2023. *International Journal of Gynecology and Obstetrics, 162*(2), 383-394. https://doi.org/10.1002/ijgo.14923
[3] Preferred
[4] Stage IA/IB/II/IIIA/IIIB vaginal brachytherapy: Consider MRI with contrast and vaginal gel to asses response
[5] Consider concurrent paclitaxel for disease confined to the pelvis
[6] For serous carcinoma, adjuvant systemic therapy with trastuzumab for HER2 positive tumors
[7] Stage IIIC and IV: Consider PET/CT or contrast enhanced CT with oral and rectal contrast or PET/MR if available
[8] See Appendix A for Systemic Therapy. For stage III/IV or recurrent HER2-positive uterine serous carcinoma, consider paclitaxel, carboplatin, and trastuzumab.
[9] For stage IV with only bladder or rectal involvement without distant disease: Consider MRI with vaginal gel to assess response

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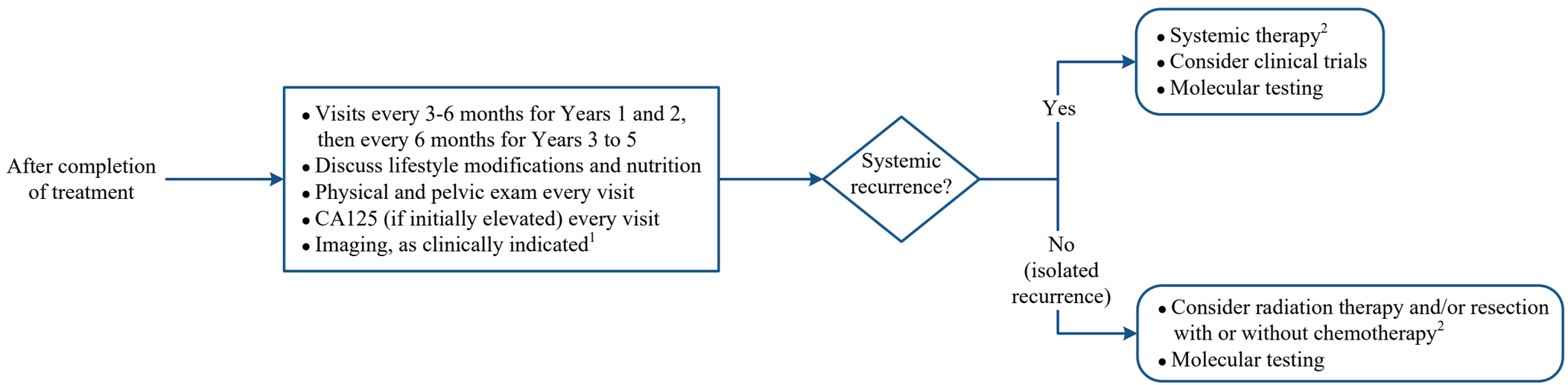
Endometrial Cancer

Note: If available, Clinical Trials should be considered as preferred treatment options for eligible patients (www.mdanderson.org/gynonctrials). Other co-morbidities are taken into consideration prior to treatment selection.

SURVEILLANCE



Note: Please reference the American College of Obstetricians and Gynecologists (ACOG) Guidelines

[1] Consider imaging with development of new symptoms, for patents with high risk for recurrence (*e.g.,* positive pelvic nodes who received pelvic RT only)
[2] See Appendix A for Systemic Therapy

APPENDIX A: Systemic Therapy

Multi-agent Chemotherapy	Single-agent IV Therapy	Hormonal Therapy	Maintenance Therapy
• Paclitaxel and carboplatin • Paclitaxel, carboplatin, and trastuzumab (stage III/IV or recurrent HER2-positive uterine serous carcinoma) • Paclitaxel, carboplatin, and pembrolizumab • Paclitaxel, carboplatin, and dostarlimab-gxly • Docetaxel and carboplatin • Ifosfamide and paclitaxel[1] • Cisplatin and ifosfamide[1] • Cisplatin and gemcitabine • Lenvatinib/pembrolizumab (for pMMR/MSS tumors)	• Cisplatin • Carboplatin • Doxorubicin • Liposomal doxorubicin • Paclitaxel • Nab-paclitaxel • Topotecan • Bevacizumab • Temsirolmus • Docetaxel • Ifosfamide (carcinosarcoma) • Pembrolizumab (for MSI-H/dMMR tumors)	• Everolimus and letrozole • Alternating megestrol acetate and tamoxifen • Megestrol acetate • Medroxyprogesterone acetate • Letrozole	• Trastuzumab • Pembrolizumab • Dostarlimab

dMMR = deficient mismatch repair
pMMR = proficient mismatch repair
MSI-H = high levels of microsatellite instability
MSS = microsatellite stable

[1] For carcinosarcoma, consider ifosfamide/paclitaxel or cisplatin/ifosfamide

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