Oncology Clinical Pathways
Gestational Trophoblastic Neoplasia

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VA Oncology Clinical Pathways
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Gestational Trophoblastic Neoplasia – Presumptive Conditions

VA automatically presumes that certain disabilities were caused by military service. This is because of the unique circumstances of a specific Veteran's military service. If a presumed condition is diagnosed in a Veteran within a certain group, they can be awarded disability compensation.

Gulf War and Post 9/11 Veterans

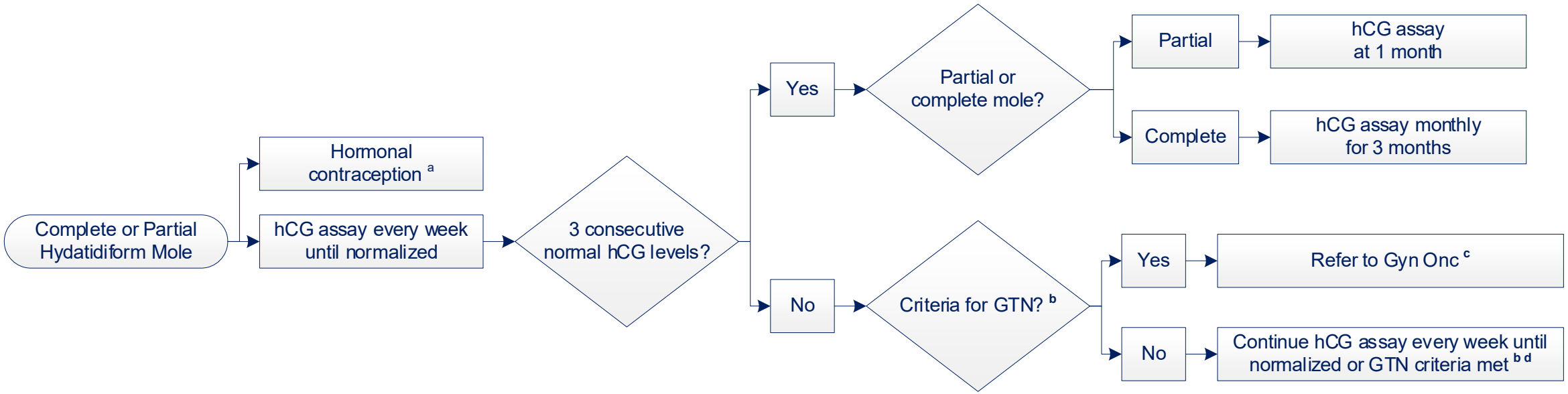
If the patient served on or after Sept. 11, 2001, in Afghanistan, Djibouti, Egypt, Jordan, Lebanon, Syria, Uzbekistan, or Yemen or if the patient served in the *Southwest Asia theater of operations, or Somalia, on or after Aug. 2, 1990, specific conditions include:

- Reproductive cancer of any type

* The Southwest Asia theater of operations refers to Iraq, Kuwait, Saudi Arabia, the neutral zone between Iraq and Saudi Arabia, Bahrain, Qatar, the United Arab Emirates, Oman, the Gulf of Aden, the Gulf of Oman, the Persian Gulf, the Arabian Sea, the Red Sea, and the airspace above these locations.

For more information, please visit U.S. Department of Veterans Affairs - Presumptive Disability Benefits (va.gov)

Gestational Trophoblastic Neoplasia – Complete or Partial Hydatidiform Mole



Clinical trial(s) and shared decision making always considered on pathway. For assistance in finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

[a] **Hormonal contraception** recommended until surveillance completed, at least 6 months

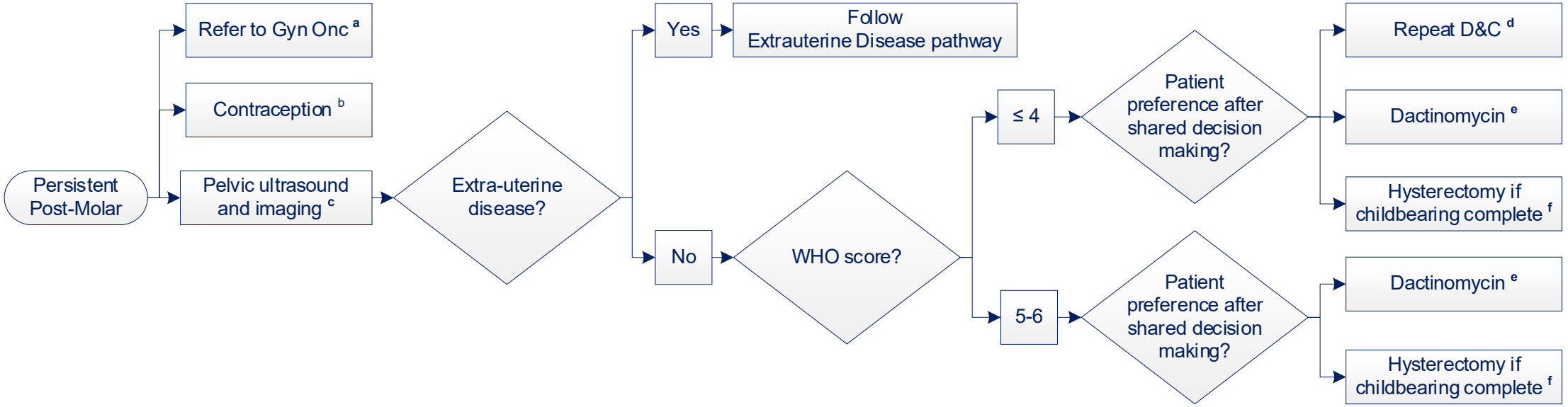
[b] **Criteria for GTN** hCG levels plateau (within +/- 10% of prior hCG level) for 4 values over 3 weeks or hCG levels increase ≥ 10% for 3 values over 2 weeks

[c] **Refer to NTO** if local gyn oncologist not available via IFC Durham order (select BGSOE)

[d] **If hCG assay** normalized, refer to Surveillance pathway

GTN gestational trophoblastic neoplasia

Gestational Trophoblastic Neoplasia – Persistent Post-Molar



Clinical trial(s) and shared decision making always considered on pathway. For assistance in finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

[a] **Refer to NTO** if local gyn oncologist not available via IFC Durham order (select BGSOE)

[b] **Contraception** recommended until surveillance completed; hormonal contraception or IUD placement preferred

[c] **Imaging** pelvic ultrasound and chest x-ray; if chest x-ray positive for metastases, obtain CT chest-abdomen-pelvis and brain MRI with or without contrast; if CT chest performed, do not count lesions <1 cm as metastatic disease for WHO score

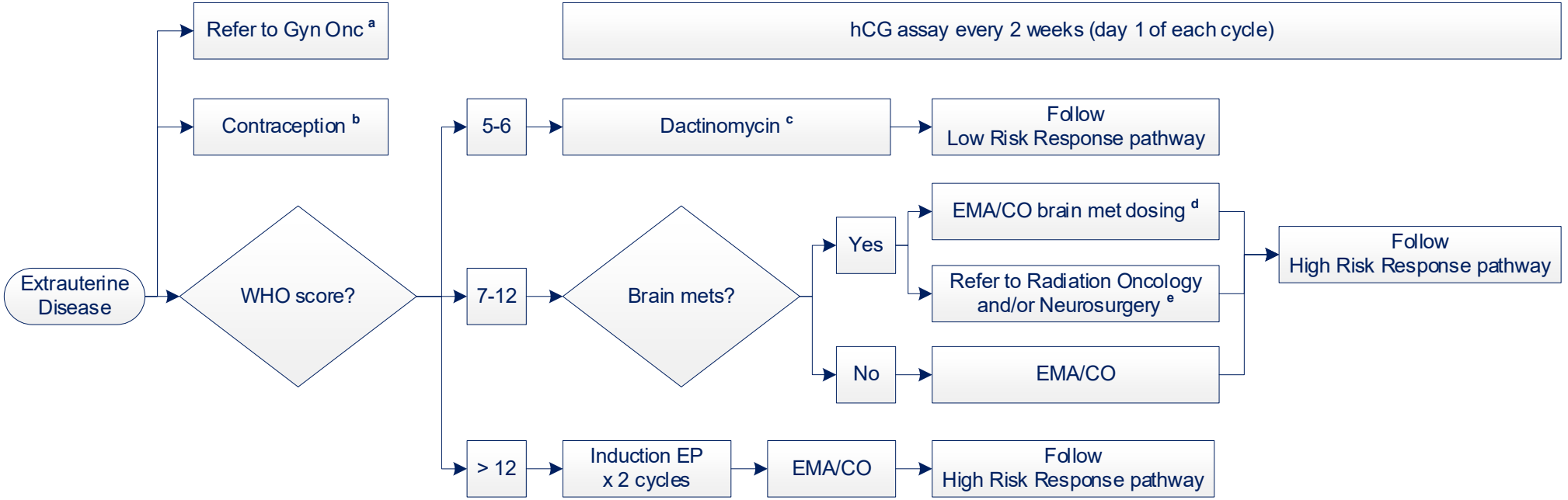
[d] **D&C** if patient desires future fertility; consider repeat D&C as 40% of patients may avoid chemotherapy in low-risk GTN if D&C performed

[e] **Dactinomycin** dosing per International Society for the Study of Trophoblastic Diseases (ISSTD) guidelines for GTN treatment

[f] **Hysterectomy** preferred if childbearing is complete

D&C dilation and curettage
GTN gestational trophoblastic neoplasia

Gestational Trophoblastic Neoplasia – Extrauterine Disease



Clinical trial(s) and shared decision making always considered on pathway. For assistance in finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

[a] **Refer to NTO** if local gyn oncologist not available via IFC Durham order (select BGSOE)

[b] **Contraception** recommended until surveillance completed; hormonal contraception preferred, not IUD

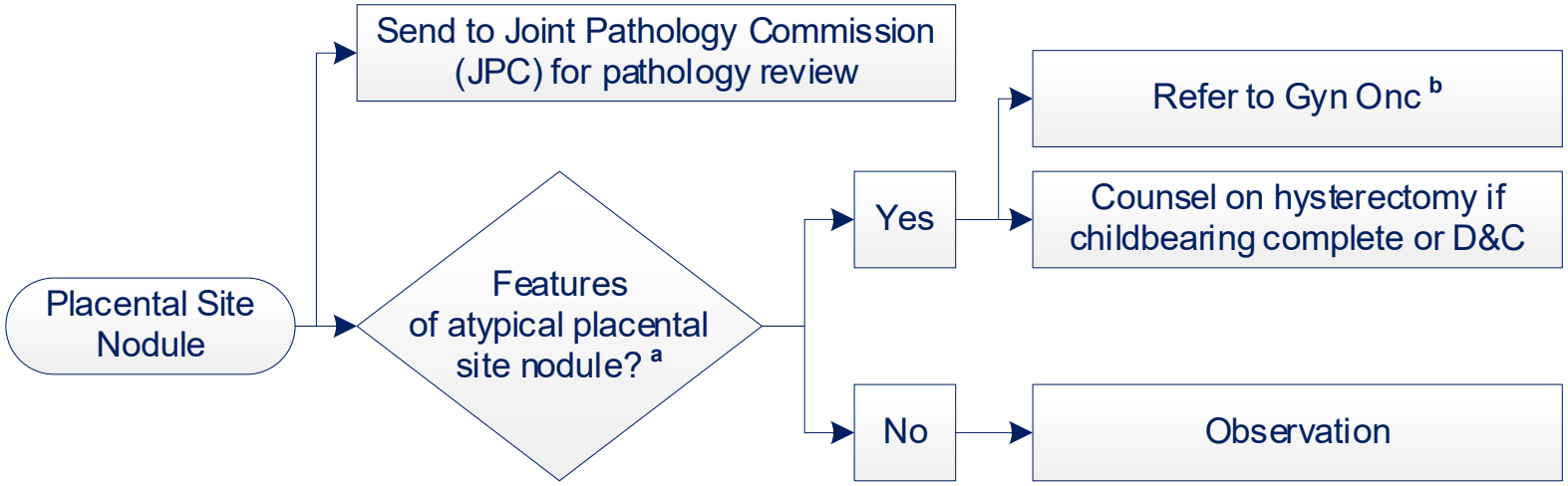
[c] **Dactinomycin** dosing per International Society for the Study of Trophoblastic Diseases (ISSTD) guidelines for GTN treatment

[d] **EMA/CO brain met dosing** if brain metastases, increase methotrexate and leucovorin doses per reference

[e] **Refer to Neurosurgery** if solitary brain metastasis present or acute surgical decompression indicated

EMA/CO etoposide, methotrexate, dactinomycin / cyclophosphamide, vincristine
EP etoposide, cisplatin
GTN gestational trophoblastic neoplasia

Gestational Trophoblastic Neoplasia – Placental Site Nodule



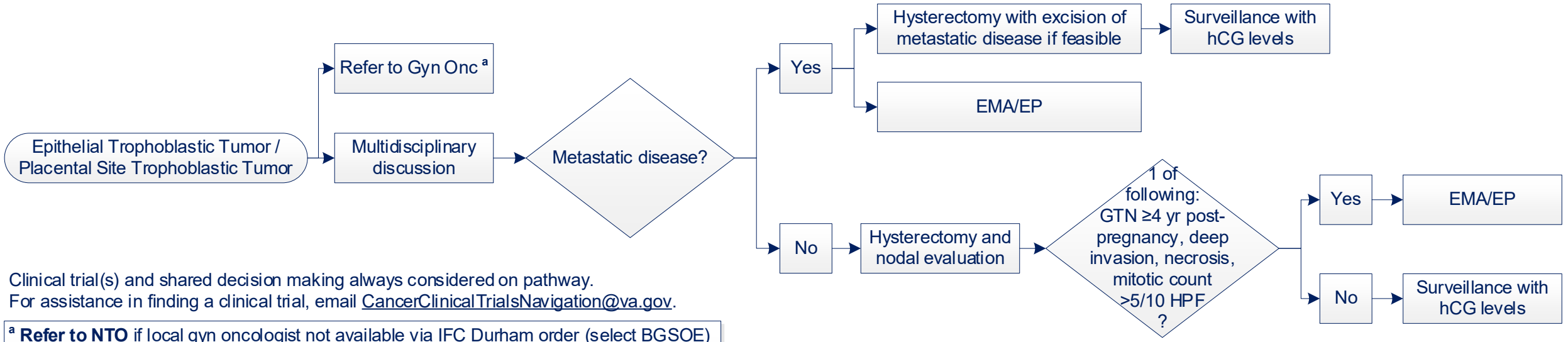
Clinical trial(s) and shared decision making always considered on pathway. For assistance in finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

[a] **Features of atypical placental site nodule** presence of both cytologic and nuclear atypia and/or proliferation rates between normal PSN and ETT (> 5% and < 10% positive for the proliferation marker Ki-67 [MIB-1] in cytokeratin [AE1/AE3]-positive lesional cells

[b] **Refer to NTO** if local gyn oncologist not available via IFC Durham order (select BGSOE)

D&C dilation and curettage

Gestational Trophoblastic Neoplasia – Epithelial Trophoblastic Tumor / Placental Site Trophoblastic Tumor

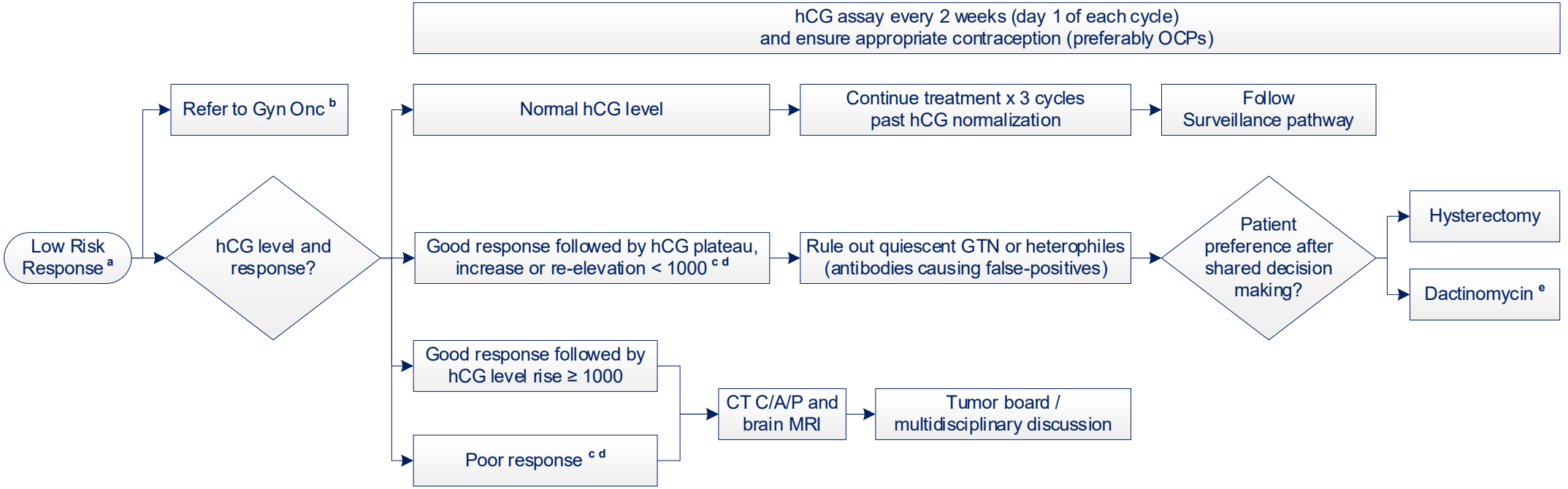


Clinical trial(s) and shared decision making always considered on pathway.
For assistance in finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

[a] **Refer to NTO** if local gyn oncologist not available via IFC Durham order (select BGSOE)

EMA/EP etoposide, methotrexate, dactinomycin / etoposide, cisplatin
ETT epithelial trophoblastic tumor
GTN gestational trophoblastic neoplasia
HPF high power field
PSTT placental site trophoblastic tumor

Gestational Trophoblastic Neoplasia – Low Risk Response



Clinical trial(s) and shared decision making always considered on pathway. For assistance in finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

[a] **Low Risk** WHO score <7

[b] **Refer to NTO** if local gyn oncologist not available via IFC Durham order (select BGSOE)

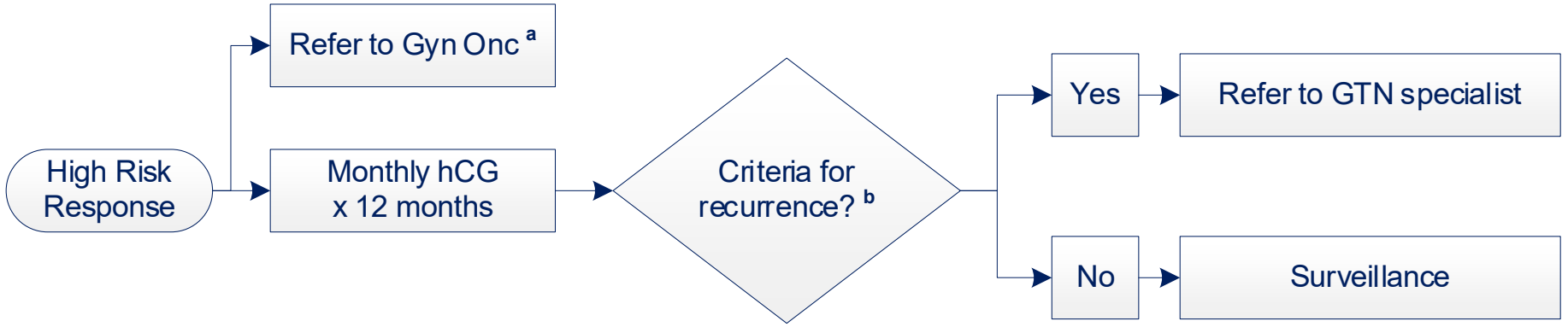
[c] **hCG plateau** <10% over 3 cycles

[d] **hCG increase** rise >10% over 2 cycles

[e] **Dactinomycin** dosing per International Society for the Study of Trophoblastic Diseases (ISSTD) guidelines for GTN treatment

C/A/P chest, abdomen, pelvis
GTN gestational trophoblastic neoplasia
OCP oral contraception

Gestational Trophoblastic Neoplasia – High Risk Response



Clinical trial(s) and shared decision making always considered on pathway. For assistance in finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

[a] **Refer to NTO** if local gyn oncologist not available via IFC Durham order (select BGSOE)

[b] **Criteria for recurrence** hCG levels plateau (within +/- 10% of prior hCG level) for 4 values over 3 weeks or hCG levels increase ≥ 10% for 3 values over 2 weeks

GTN gestational trophoblastic neoplasia

Gestational Trophoblastic Neoplasia – Surveillance

In subsequent pregnancy, obtain first trimester ultrasound, send to pathology placenta and/or any products of conception if miscarriage then obtain hCG 6-8 weeks after gestational event

Surveillance

	Partial Hydatidiform Mole	Complete Hydatidiform Mole	Low Risk Response	High Risk Response	ETT/PSTT				
					Year 1	Year 2	Year 3	Year 4-5	Year 6-10
hCG level [a]	Weekly until normalized then at 1 month	Weekly until normalized then monthly for 3 months	Monthly x 12 months		Monthly	Every 3 months		Every 6 months	Annually
Imaging					CT C/A/P every 6-12 months x 1-2 years		Annually (lifelong)		

Clinical trial(s) and shared decision making always considered on pathway. For assistance in finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

[a] **hCG level** hCG levels plateau (within +/- 10% of prior hCG level) for 4 values over 3 weeks or hCG levels increase ≥ 10% for 3 values over 2 weeks

C/A/P chest, abdomen, pelvis
ETT epithelial trophoblastic tumor
GTN gestational trophoblastic neoplasia
PSTT placental site trophoblastic tumor

Gestational Trophoblastic Neoplasia – WHO Scoring Metastatic

WHO Scoring Metastatic [a]

Prognostic Factor	Criteria	Score [b]
Age	≥ 40 years	1
Preceding pregnancy	Abortion	1
	Term	2
Interval [c]	4-6 months	1
	7-12 months	2
	> 12 months	4
Pretreatment serum hCG	≥ 1,000 and < 10,000 IU/mL	1
	≥ 10,000 and < 100,000 IU/mL	2
	≥ 100,000 IU/mL	4
Largest tumor, including uterine	≥ 3 and <5 cm	1
	≥ 5 cm	2
Site of metastases	Lungs	0
	Spleen, kidneys	1
	Gastrointestinal tract	2
	Brain, liver	4
Number of metastases identified	1-4	1
	5-8	2
	> 8	4
Number of chemotherapy agents used unsuccessfully	1	2
	≥ 2	4

Clinical trial(s) and shared decision making always considered on pathway.
For assistance in finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

[a] **WHO Scoring Metastatic** pelvic ultrasound and chest x-ray or CT chest-abdomen-pelvis; if chest x-ray positive for metastases, obtain CT chest-abdomen-pelvis and brain MRI with out without contrast

[b] **Score** total score obtained by adding the score for each prognostic factor: ≤ 6 low risk, > 6 high risk

[c] **Imaging** between the end of the preceding pregnancy and the start of chemotherapy

GTN gestational trophoblastic disease
hCG human chorionic gonadotropin

Molecular Testing Table

Eligibility	Test Category	Test Type	Recommended Vendors	NPOP Coverage	Specimen Type
Gestational Trophoblastic Neoplasia	Molecular testing is not required for standard prognostication and therapy.				

Gestational Trophoblastic Neoplasia – References

Persistent Post-Molar

Dactinomycin Dosing

1. Lok C, van Trommel N, Braicu EI, et al. Practical guidelines for the treatment of gestational trophoblastic disease: collaboration of the European Organisation for the Treatment of Trophoblastic Disease(EOTTD)—European Society of Gynaecologic Oncology (ESGO)—Gynecologic Cancer InterGroup (GCIG)—International Society for the Study of Trophoblastic Diseases (ISSTD). *J Clin Oncol*. 2025 May;43(18):2119-2128.

Repeat D&C

1. Osborne RJ, Filiaci VL, Schink JC, et al. Second curettage for low-risk nonmetastatic gestational trophoblastic neoplasia. *Obstet Gynecol*. 2016 Sep;128(3):535-542.

Extrauterine Disease

Dactinomycin Dosing

1. Lok C, van Trommel N, Braicu EI, et al. Practical guidelines for the treatment of gestational trophoblastic disease: collaboration of the European Organisation for the Treatment of Trophoblastic Disease(EOTTD)—European Society of Gynaecologic Oncology (ESGO)—Gynecologic Cancer InterGroup (GCIG)—International Society for the Study of Trophoblastic Diseases (ISSTD). *J Clin Oncol*. 2025 May;43(18):2119-2128.

EMA/CO Brain Met Dosing

1. Rustin GJ, Newlands ES, Begent RH, Dent J, Bagshawe KD. Weekly alternating etoposide, methotrexate, and actinomycin/vincristine and cyclophosphamide chemotherapy for the treatment of CNS metastases of choriocarcinoma. *J Clin Oncol*. 1989;7(7):900-903.
2. Lurain JR, Singh DK, Schink JC. Primary treatment of metastatic high-risk gestational trophoblastic neoplasia with EMA-CO chemotherapy. *J Reprod Med*. 2006;51(10):767-772.

Epithelial Trophoblastic Tumor / Placental Site Trophoblastic Tumor

EMA/EP

1. Ghaemmaghami F, Modares M, Arab M, et al. EMA-EP regimen, as firstline multiple agent chemotherapy in high-risk GTT patients (stage II-IV). *Int J Gynecol Cancer*. 2004 Mar-Apr;14(2):360-5. doi: 10.1111/j.1048-891X.2004.014222.x

Low Risk Response

Dactinomycin Dosing

1. Lok C, van Trommel N, Braicu EI, et al. Practical guidelines for the treatment of gestational trophoblastic disease: collaboration of the European Organisation for the Treatment of Trophoblastic Disease(EOTTD)—European Society of Gynaecologic Oncology (ESGO)—Gynecologic Cancer InterGroup (GCIG)—International Society for the Study of Trophoblastic Diseases (ISSTD). *J Clin Oncol*. 2025 May;43(18):2119-2128.