Testicular Cancer

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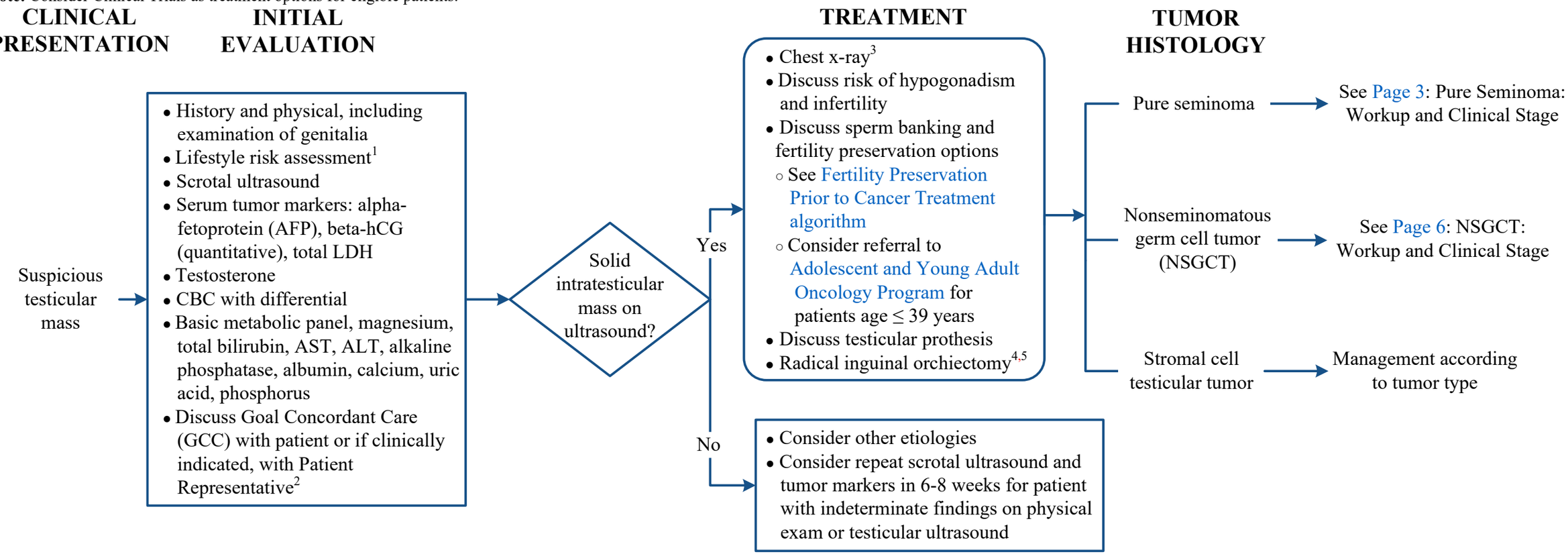
Suspicious Testicular Mass

Note: Consider Clinical Trials as treatment options for eligible patients.



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

[2] 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).

[3] Consider CT chest with contrast depending on clinical presentation, tumor size in patients with nonseminomatous germ cell tumor (NSGCT)

[4] Some well selected patients may qualify for testis-sparing surgery

[5] It is acceptable to administer emergency chemotherapy to selected patients with advanced metastatic NSGCT on the basis of clinical presentation before orchiectomy, and without a tissue diagnosis

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Testicular Cancer

Pure Seminoma: Workup and Clinical Stage

Note: Consider Clinical Trials as treatment options for eligible patients.

HISTOLOGY AND FURTHER WORK-UP

Pure seminoma

- Repeat AFP, beta-hCG, and LDH
- CT abdomen and pelvis with contrast or MRI if CT is contraindicated
- CT chest if abnormal chest x-ray or involved lymph nodes on CT or MRI of abdomen/pelvis
- Bone scan if clinically indicated
- Brain imaging if clinically indicated
- Pulmonary function test (PFT) if bleomycin based treatment planned
- Consider audiometry if cisplatin based treatment planned
- Discuss sperm banking
- Discuss GCC with patient or if clinically indicated, with Patient Representative[1]

AFP within normal limits?

- Yes → Imaging negative for metastasis?
- No → Suspect unrelated source of non-specific AFP?

Imaging negative for metastasis?

- Yes → Elevated post-operative beta-hCG?
- No → Non-pulmonary visceral **or** bone metastases?

Suspect unrelated source of non-specific AFP?

- No → See Page 6: NSGCT Workup and Clinical Stage
- Yes → Imaging negative for metastasis?

Elevated post-operative beta-hCG?

- Yes → TREATMENT
- No → Stage I Good risk[3] → See Page 4: Stage I Pure Seminoma: Post-orchiectomy Management

Non-pulmonary visceral **or** bone metastases?

- Yes → Intermediate risk[3] → See Page 5: Advanced Seminoma: Management
- No → Good risk[3] → See Page 4: Stage I Pure Seminoma: Post-orchiectomy Management

TREATMENT

- Evaluate for hypogonadism and/or cannabinoid/marijuana use. If hypogonadism, administer testosterone and then repeat beta-hCG.
  - Normalization of beta-hCG after administration of testosterone confirms diagnosis of hypogonadism
  - If beta-hCG is still elevated, consider evaluation of occult metastasis and perform FDG PET scan[2]

[1] 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).

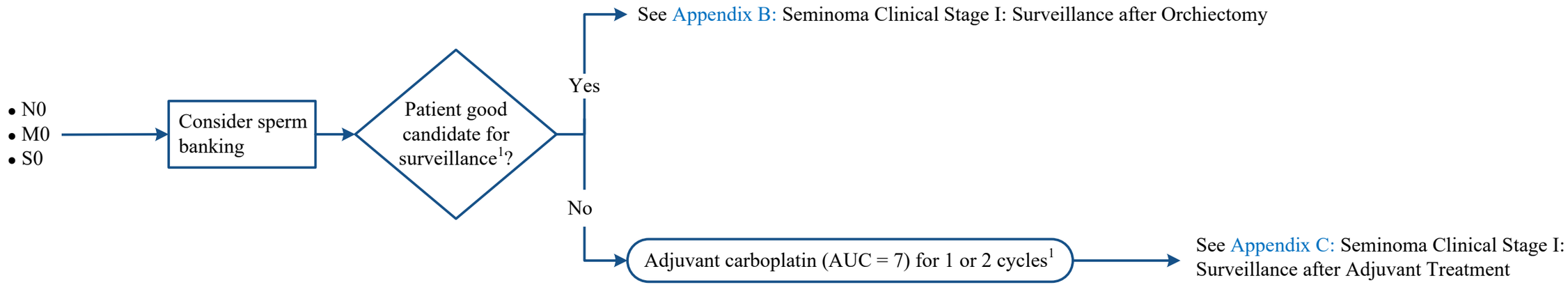
[2] For patients with atypical presentations, such as those with history of orchiopexy and hernia surgery, PET scan may be helpful to determine if metastatic disease is confined *(e.g.*, to the inguinal lymph node) or more widely disseminated

[3] See Appendix A for International Classifications of Germ Cell Cancer

Note: Consider Clinical Trials as treatment options for eligible patients.

TUMOR MARKERS AND STAGING

TREATMENT/SURVEILLANCE



[1] Surveillance is preferred after orchiectomy for most patients with stage I seminoma. Adjuvant carboplatin-based chemotherapy is a less preferred alternative to surveillance which may be indicated for patients unable to maintain compliance with surveillance follow up.

Note: Consider Clinical Trials as treatment options for eligible patients.

CLINICAL STAGE/TREATMENT

RESPONSE TO TREATMENT

SURVEILLANCE

Non-Bulky IIA or IIB (lymph node ≤ 3 cm) →

- Radiation therapy **or**
  - 30 Gy for IIA
  - 36 Gy for select non-bulky IIB
- Cisplatin-based chemotherapy **or**
- RPLND for patients who wish to avoid long-term toxicities from radiation therapy or chemotherapy

→ See Appendix D: Seminoma Clinical Stages IIA and Non-Bulky IIB: Surveillance after Radiation, RPLND, or Post-chemotherapy

Bulky IIB (lymph node > 3 cm), IIC or III →

Good risk[1] →
- EP for 4 cycles **or**
- BEP for 3 cycles

Intermediate risk[1] →
- BEP for 4 cycles **or**
- VIP for 4 cycles

→ CT abdomen and pelvis with contrast **or** MRI abdomen pelvis with contrast

→ Response with residual tumor ≤ 3cm → See Appendix E: Seminoma Clinical Stages Bulky IIB, IIC, and III: Surveillance Post-chemotherapy

→ Response with residual tumor > 3 cm → FDG PET scan 6 weeks post-chemotherapy

- FDG PET scan negative (SUV < 4) → See Appendix E: Seminoma Clinical Stages Bulky IIB, IIC, and III: Surveillance Post-chemotherapy
- FDG PET scan positive (SUV ≥ 4) or not feasible →
  - Radiation therapy **or**
  - Biopsy **or**
  - Surveillance if residual tumor ≤ 3 cm (See Appendix E: Seminoma Clinical Stages Bulky IIB, IIC, and III: Surveillance Post-chemotherapy)

→ Progression → See Page 11: Nonseminoma: Post-chemotherapy Recurrence[2]

BEP = bleomycin, etoposide, and cisplatin
EP = etoposide and cisplatin
VIP = etoposide, ifosfamide, and cisplatin
SUV = standardized uptake value

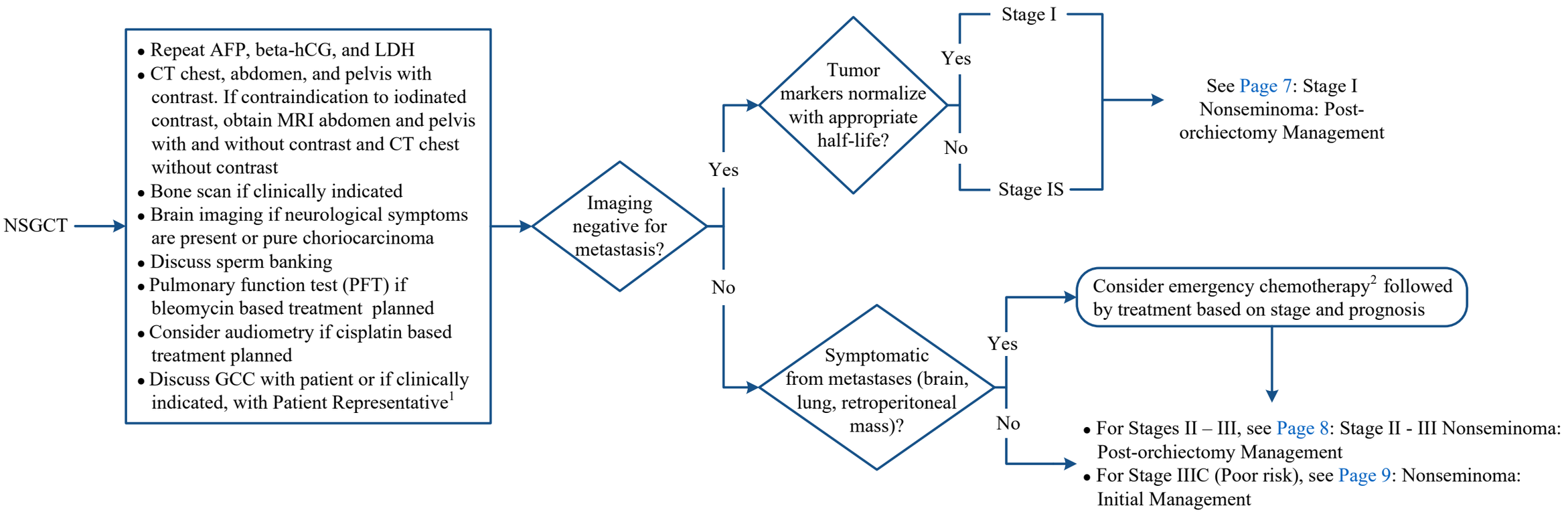
[1] See Appendix A: International Classifications of Germ Cell Cancers
[2] Seminoma that is refractory to chemotherapy is rare and should be managed as nonseminoma

Testicular Cancer

Nonseminomatous Germ Cell Tumor (NSGCT): Workup and Clinical Stage

Note: Consider Clinical Trials as treatment options for eligible patients.

HISTOLOGY **FURTHER WORK-UP** **TREATMENT**



[1] 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).

[2] It is acceptable to administer emergency chemotherapy to selected patients with advanced metastatic NSGCT on the basis of clinical presentation before orchiectomy, and without a tissue diagnosis

Testicular Cancer

Stage I Nonseminoma: Post-orchiectomy Management

Note: Consider Clinical Trials as treatment options for eligible patients.

TUMOR MARKERS AND STAGING

TREATMENT/SURVEILLANCE

- Any pT/Tx
- N0
- M0
- S1-3

→ Stage IS:
- Beta-hCG **or** AFP elevated **and**
- Metastatic workup negative

→
- Clinical trial if available (preferred) **or**
- BEP for 3 cycles **or**
- EP for 4 cycles

→ See Page 10: Nonseminoma: Post-chemotherapy Management

- Any pT/Tx
- N0
- M0
- S0

→ High recurrence features[1]?

Yes → High probability of recurrence is approximately 50% → Embryonal carcinoma predominant and LVI?

Yes →
- BEP for 1 dose (preferred) **or**
- Primary RPLND (if patient not a candidate for adjuvant chemotherapy) **or**
- Surveillance (in pT1-2 compliant patients)

→ See Appendix F: NSGCT Clinical Stage IA/B: Surveillance After Adjuvant BEP x 1 Dose or Primary RPLND **or** Appendix G: NSGCT Clinical Stage I With High-Recurrence Risk Factors: Active Surveillance

No → See Appendix G: NSGCT Clinical Stage I With High-Recurrence Risk Factors: Active Surveillance

No → Low probability of recurrence is approximately 15% →
- Surveillance (preferred)[2] **or**
- Consider primary RPLND **or**
- Consider BEP for 1 dose

→ See Appendix H: NSGCT Clinical Stage I Without High-Recurrence Risk Factors: Active Surveillance **or** Appendix F: NSGCT Clinical Stage IA/B: Surveillance After Adjuvant BEP x 1 Dose or Primary RPLND

BEP = bleomycin, etoposide, and cisplatin
EP = etoposide and cisplatin
LVI = lymphovascular invasion

[1] High recurrence risk features (in the primary tumor): lymphovascular invasion, invasion of spermatic cord or scrotum (pT3-4), invasion of tunica vaginalis, embryonal carcinoma predominant (> 50% embryonal histology in orchiectomy specimen)
[2] Surveillance is preferred, however other treatment options may be indicated for patients unable to maintain compliance with surveillance

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Testicular Cancer

Stage II - III Nonseminoma: Post-orchiectomy Management

Note: Consider Clinical Trials as treatment options for eligible patients.

TUMOR MARKERS AND STAGING

- **Stage IIA, IIB**
  - Any pT/Tx
  - N1-3
  - M0
  - S0-1
- **IIC, IIIA and IIIB**
  - Any pT/Tx
  - Any N, M1a, S0-2, or N1-3, M0, S2

PRETREATMENT WORKUP

S1
- Total LDH < 1.5 times upper limit of normal **and**
- Beta-hCG < 5,000 mIU/mL **and**
- AFP < 1,000 ng/mL?

Yes → Good risk[1]

No →

S2
- Total LDH 1.5-10 times upper limit of normal **or**
- Beta-hCG 5,000-50,000 mIU/mL **or**
- AFP 1,000-10,000 ng/mL

→ Intermediate risk[1]

S3
- Total LDH > 10 times upper limit of normal **or**
- Beta-hCG > 50,000 mIU/mL **or**
- AFP > 10,000 ng/mL

→ Poor risk[1]

Good risk[1] →
- Stage IIA, IIB **and**
- S0 (markers not elevated) **and**
- Teratoma component in primary tumor **and**
- Not embryonal carcinoma predominant tumor?

Yes → Surgical option: RPLND

- Stage pIIA → See Appendix I: NSGCT Pathologic Stage IIA/B: Surveillance After Primary RPLND and did NOT Receive Adjuvant Chemotherapy
- Stage pIIB → EP for 2 cycles

No →
- BEP for 3 cycles **or**
- EP for 4 cycles

Stage IIC, IIIA →

TREATMENT

Intermediate risk[1] →
- BEP for 4 cycles **or**
- VIP for 4 cycles

Poor risk[1] →
- BEP for 4 cycles **or**
- VIP for 4 cycles
- For symptomatic high risk patients; see Page 9: Stage IIIC (Poor Risk) Nonseminoma: Initial Management

All → See Page 10: Nonseminoma: Post-chemotherapy Management

EP = etoposide and cisplatin
BEP = bleomycin, etoposide, and cisplatin
VIP = etoposide, ifosfamide, and cisplatin

[1] See Appendix A: International Classifications of Germ Cell Cancer

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Note: Consider Clinical Trials as treatment options for eligible patients.

TUMOR MARKERS AND STAGING

IIIC, Poor Risk:
- Any pT/Tx, Any N, M1b[1], Any S
- Total LDH > 10 times upper limit of normal **or**
- Beta-hCG > 50,000 mIU/mL **or**
- AFP > 10,000 ng/mL

TREATMENT

To avoid delay in the start of chemotherapy, the diagnosis can be made on clinical grounds and orchiectomy can be deferred

Respiratory distress **or** symptomatic brain metastases?

Yes

Patient with respiratory distress
- Vincristine and cisplatin **or**
- EP (limit to 3 days in unstable patient)

Patient with symptomatic brain metastases
- Primary chemotherapy with **or** without surgery if clinically indicated
- Refer to Brain Metastasis Management algorithm

Continue for a minimum of 4 cycles:
- First line:
  - BEP **or**
  - VIP **or**
- Second line:
  - TIP **or**
  - High dose chemotherapy regimens **or**
  - Stem cell transplant **or**
  - Clinical trial (preferred)

No

- BEP for 4 cycles **or**
- VIP for 4 cycles

Tumor markers normalized or plateau[2]?

Yes → See Page 10: Nonseminoma: Post-chemotherapy Management

No → Additional chemotherapy

BEP = bleomycin, etoposide, and cisplatin
EP = etoposide and cisplatin
TIP = paclitaxel, ifosfamide, and cisplatin
VIP = etoposide, ifosfamide, and cisplatin

[1] M1b - Distant metastases other than to lymph nodes and lungs

[2] Plateau: The observed rate of decline in tumor markers should be compared to the expected serum half-lives of 5-7 days (AFP) and 2-3 days (beta-hCG). It is common to see a slower rate of decline after the second cycle of chemotherapy. A continued rate of decline that is much less than the expected half life and does not normalize should be interpreted as a plateau. The decision to stop chemotherapy should be based on clinical judgement, taking into consideration the clinical status of the patient, which of the markers are elevated, extent of elevation, and after ruling out potential sources of spurious elevation.

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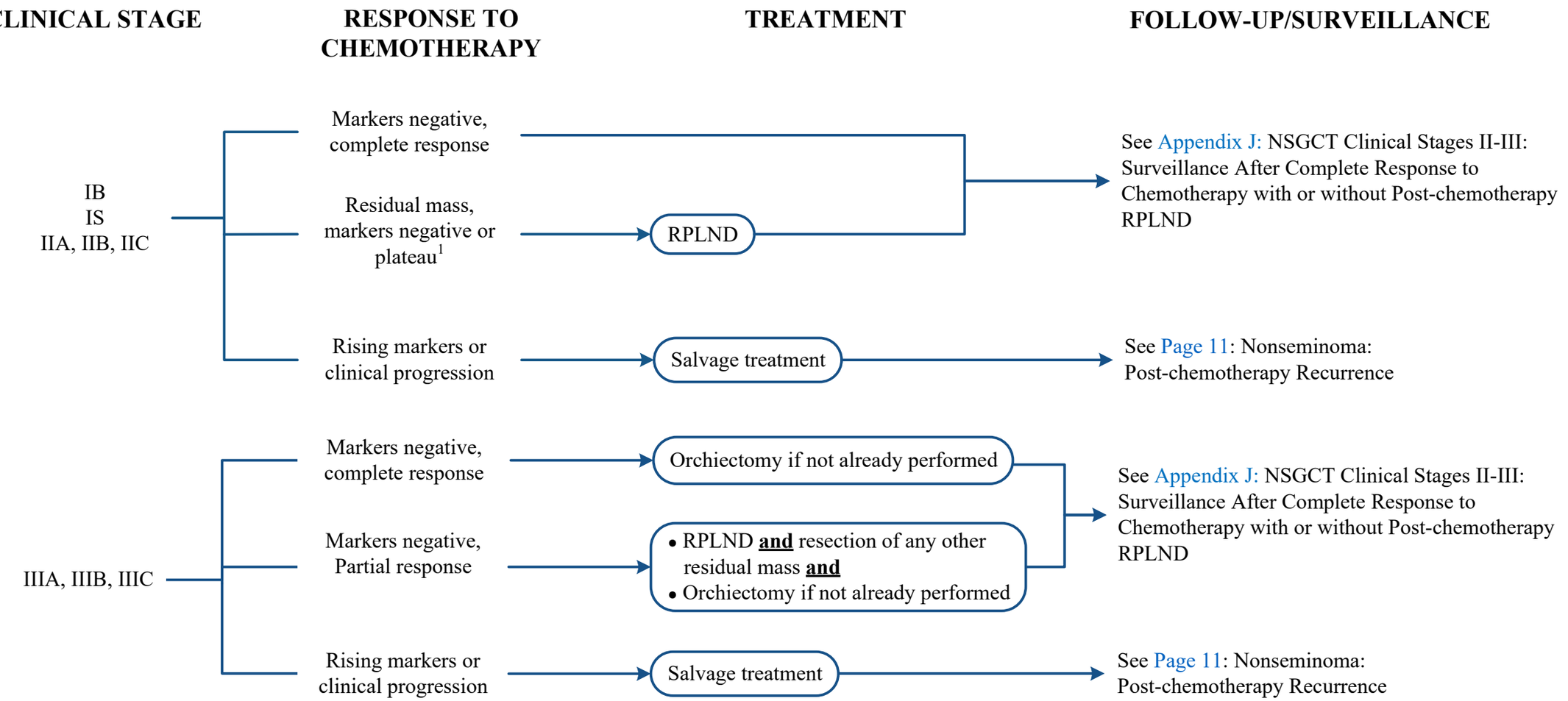
Note: Consider Clinical Trials as treatment options for eligible patients.

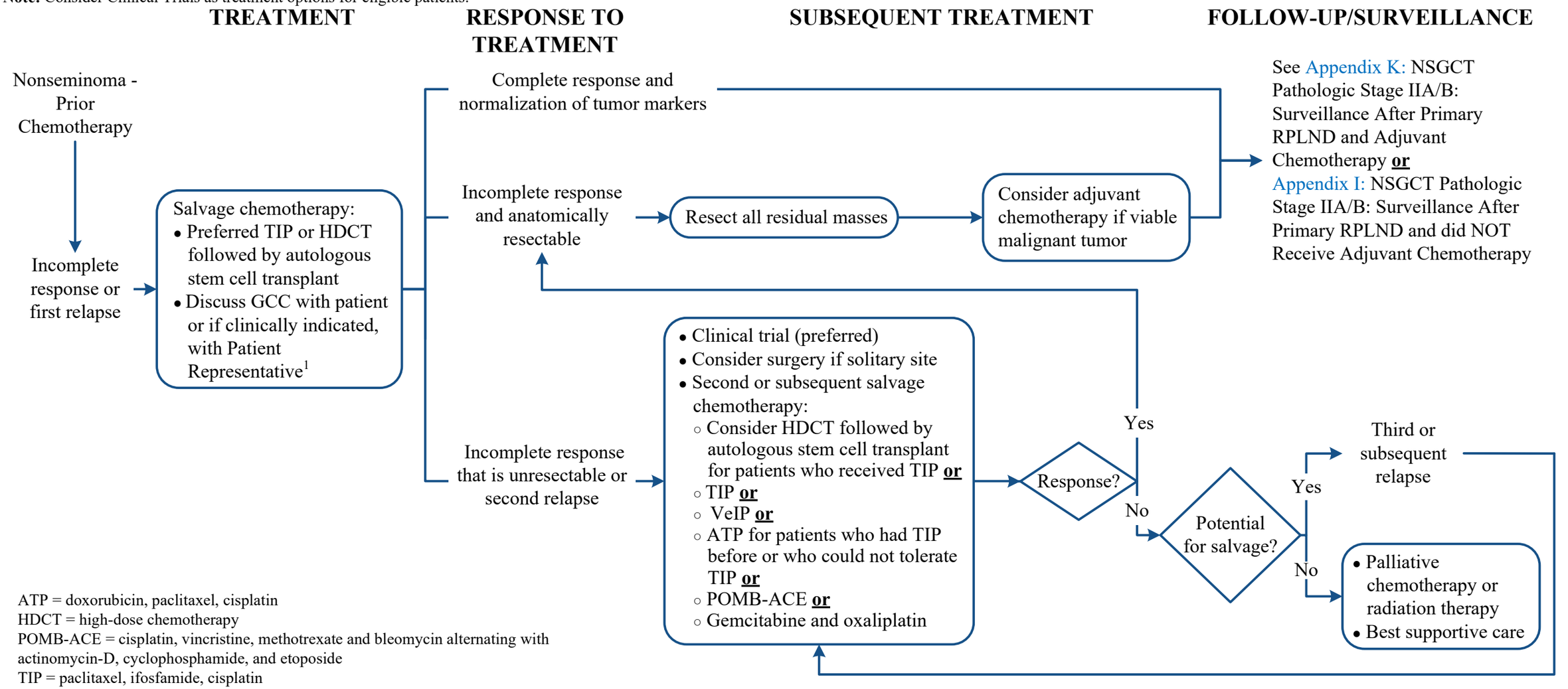


[1] Plateau: The observed rate of decline in tumor markers should be compared to the expected serum half-lives of 5-7 days (AFP) and 2-3 days (beta-hCG). It is common to see a slower rate of decline after the second cycle of chemotherapy. A continued rate of decline that is much less than the expected half life and does not normalize should be interpreted as a plateau. The decision to stop chemotherapy should be based on clinical judgement, taking into consideration the clinical status of the patient, which of the markers are elevated, extent of elevation, and after ruling out potential sources of spurious elevation.

Testicular Cancer

Nonseminoma: Post-chemotherapy Recurrence

Note: Consider Clinical Trials as treatment options for eligible patients.



ATP = doxorubicin, paclitaxel, cisplatin
HDCT = high-dose chemotherapy
POMB-ACE = cisplatin, vincristine, methotrexate and bleomycin alternating with actinomycin-D, cyclophosphamide, and etoposide
TIP = paclitaxel, ifosfamide, cisplatin
VeIP = vinblastine, ifosfamide, cisplatin, mesna

[1] 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).

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APPENDIX A: International Classifications for Germ Cell Cancers[1]

		Nonseminoma	Seminoma
GOOD RISK	**FEATURES**	Testes/retroperitoneal primary **and** No non-pulmonary visceral metastases **and**	Any primary site **and** No non-pulmonary visceral metastases **and**
	All Good Markers: • **AFP**	< 1,000 ng/mL **and**	Normal
	• **Beta-hCG**	< 5,000 IU/L **and**	Any value
	• **LDH**	< 1.5 times upper limit of normal	Any value
INTERMEDIATE RISK	**FEATURES**	Testes/retroperitoneal primary **and** No non-pulmonary visceral metastases **and**	Any primary site **and** Non-pulmonary visceral metastases **and**
	Markers any of: • **AFP**	≥ 1,000 and ≤ 10,000 ng/mL **or**	Normal
	• **Beta-hCG**	≥ 5,000 IU/L and ≤ 50,000 IU/L **or**	Any value
	• **LDH**	≥ 1.5 times upper limit of normal and ≤ 10 times upper limit of normal	Any value
POOR RISK	**FEATURES**	Mediastinal primary **or** Non-pulmonary visceral metastases **or**	No patients classified as poor prognosis
	Markers any of: • **AFP**	> 10,000 ng/mL **or**	
	• **Beta-hCG**	> 50,000 IU/L **or**	
	• **LDH**	> 10 times upper limit of normal	

[1] From the International Germ Cell Consensus Classification from the International Germ Cell Cancer Collaborative Group

APPENDIX B: Seminoma Clinical Stage I: Surveillance after Orchiectomy

Note: Patients with history of seminoma Stage I are eligible for Survivorship when > 2 years from treatment completion and NED.
Refer to Survivorship – Testicular Cancer: Germ Cell algorithm or continue follow-up as indicated. Treat recurrence according to histology and stage at relapse.

Year (at month intervals)	**H&P**[1]	**CT Abdomen/Pelvis with contrast or MRI Abdomen/Pelvis**	**Chest x-ray (Consider CT chest if symptomatic)**
1	Every 3-6 months	Every 3-6 months	As clinically indicated
2	Every 3-6 months	Every 3-6 months	
3	Every 6-12 months	Every 6-12 months	
4	Every 6-12 months	Every 6-12 months	
5	Every 6-12 months	Every 6-12 months	
6 and above	As clinically indicated	As clinically indicated	

APPENDIX C: Seminoma Clinical Stage I: Surveillance after Adjuvant Treatment

Note: Patients with history of seminoma Stage I are eligible for Survivorship when > 2 years from treatment completion and NED.
Refer to Survivorship – Testicular Cancer: Germ Cell algorithm or continue follow-up as indicated. Treat recurrence according to histology and stage at relapse.

Year (at month intervals)	**H&P**[1]	**CT Abdomen/Pelvis with contrast or MRI Abdomen/Pelvis**	**Chest x-ray (Consider CT chest if symptomatic)**
1	Every 6-12 months	Annually	As clinically indicated
2	Every 6-12 months		
3	Annually		
4	Annually	As clinically indicated	
5	Annually		
6 and above	As clinically indicated		

[1] Markers are optional

APPENDIX D: Seminoma Clinical Stages IIA and Non-Bulky IIB: Surveillance after Radiation, RPLND, or Post-chemotherapy[1]

Note: Patients with history of Seminoma stages II – IIIC are eligible for Survivorship at 4-5 years after completion of treatment and NED.

Refer to Survivorship - Testicular Cancer: Germ Cell algorithm or continue follow-up as indicated. Treat recurrence according to histology and stage at relapse.

Year (at month intervals)	**H&P**[2]	**CT Abdomen/Pelvis with contrast or MRI Abdomen/Pelvis**	**Chest x-ray (Consider CT chest if symptomatic)**
1	Every 3 months	At 3 months, then at 9 or 12 months	Every 6 months
2	Every 6 months	Annually	
3	Every 6 months	Annually	As clinically indicated
4	Every 6 months	As clinically indicated	
5	Every 6 months		
6 and above	As clinically indicated		

APPENDIX E: Seminoma Clinical Stages Bulky IIB, IIC, and III: Surveillance Post-chemotherapy[1]

Note: Patients with history of Seminoma stages II – IIIC are eligible for Survivorship at 4-5 years after completion of treatment and NED.

Refer to Survivorship - Testicular Cancer: Germ Cell algorithm or continue follow-up as indicated. Treat recurrence according to histology and stage at relapse.

Year (at month intervals)	**H&P**[2]	**CT Abdomen/Pelvis with contrast**[3,4] **or MRI Abdomen/ Pelvis**[3,4]	**Chest x-ray (Consider CT chest if symptomatic)**
1	Every 4 months	Every 4 months	Every 4 months
2	Every 6 months	Every 6 months	Every 6 months
3	Annually	Annually	Annually
4			
5			
6 and above	As clinically indicated	As clinically indicated	As clinically indicated

[1] For patients with no residual mass or residual mass ≤ 3 cm and normal tumor markers
[2] Markers are optional
[3] Patients with residual masses may require more frequent imaging based on clinical judgment
[4] FDG-PET/CT of skull base to mid-thigh as clinically indicated

APPENDIX F: NSGCT Clinical Stage IA/B: Surveillance After Adjuvant BEP x 1 Dose or Primary RPLND

Note: Patients with history of NSGCT Clinical Stage IA/B are eligible for Survivorship when > 2 years from treatment and NED after completion and/or post-RPLND and/or adjuvant chemotherapy. Refer to Survivorship – Testicular Cancer: Germ Cell algorithm or continue follow-up as indicated. Treat recurrence according to histology and stage at relapse.

Year (at month intervals)	**H&P and Markers**	**CT Abdomen/Pelvis with contrast or MRI Abdomen/Pelvis**	**Chest x-ray (Consider CT chest if symptomatic)**
1	Every 3 months	Annually	Every 6-12 months
2	Every 3 months	Annually	Annually
3	Every 6 months	As clinically indicated	As clinically indicated
4	Every 6 months		
5	Annually		
6 and above	As clinically indicated		

APPENDIX G: NSGCT Clinical Stage I With High-Recurrence Risk Factors[1]: Active Surveillance

Note: Patients with history of NSGCT stage I are eligible for Survivorship when > 2 years from treatment and NED after completion and/or post-RPLND and/or adjuvant chemotherapy. Refer to Survivorship – Testicular Cancer: Germ Cell algorithm or continue follow-up as indicated. Treat recurrence according to histology and stage at relapse.

Year (at month intervals)	**H&P and Markers**	**CT Abdomen/Pelvis with contrast or MRI Abdomen/Pelvis**	**Chest x-ray (Consider CT chest if symptomatic)**
1	Every 2 months	Every 4 months	Every 4 months
2	Every 3 months	Every 4-6 months	Every 4-6 months
3	Every 4-6 months	Every 6 months	Every 6 months
4	Every 6 months	Annually	Annually
5	Annually	As clinically indicated	As clinically indicated
6 and above	As clinically indicated		

[1] High recurrence risk features (in the primary tumor): lymphovascular invasion, invasion of spermatic cord or scrotum (pT3-4), invasion of tunica vaginalis, embryonal carcinoma predominant (> 50% embryonal histology in orchiectomy specimen)

APPENDIX H: NSGCT Clinical Stage I Without High-Recurrence Risk Factors[1]: Active Surveillance

Note: Patients with history of NSGCT stage I are eligible for Survivorship when > 2 years from treatment and NED after completion and/or post-RPLND and/or adjuvant chemotherapy.
Refer to Survivorship – Testicular Cancer: Germ Cell algorithm or continue follow-up as indicated. Treat recurrence according to histology and stage at relapse.

Year (at month intervals)	**H&P and Markers**	**CT Abdomen/Pelvis with contrast or MRI Abdomen/Pelvis**	**Chest x-ray (Consider CT chest if symptomatic)**
1	Every 2 months	At 4-6 months	At 4-6 months and 12 months
2	Every 3 months	Every 6 months	Annually
3	Every 4-6 months	Annually	Annually
4	Every 6 months	As clinically indicated	
5	Annually		
6 and above	As clinically indicated		

[1] High recurrence risk features (in the primary tumor): lymphovascular invasion, invasion of spermatic cord or scrotum (pT3-4), invasion of tunica vaginalis, embryonal carcinoma predominant (> 50% embryonal histology in orchiectomy specimen)

APPENDIX I: NSGCT Pathologic Stage IIA/B: Surveillance After Primary RPLND and did NOT Receive Adjuvant Chemotherapy

Note: Patients with history of NSGCT stages II – IIIC are eligible for Survivorship at 4-5 years after completion of treatment and NED.
Refer to Survivorship – Testicular Cancer: Germ Cell algorithm or continue follow-up as indicated. Treat recurrence according to histology and stage at relapse.

Year (at month intervals)	**H&P and Markers**	**CT Abdomen/Pelvis (with and without contrast) or MRI Abdomen/Pelvis with contrast**	**Chest x-ray (Consider CT chest if symptomatic)**
1	Every 2 months	At 3-4 months	Every 2-4 months
2	Every 3 months	Annually	Every 3-6 months
3	Every 4 months	As clinically indicated	Annually
4	Every 6 months		
5	Annually		
6 and above	As clinically indicated	As clinically indicated	As clinically indicated

APPENDIX J: NSGCT Clinical Stages II-III: Surveillance After Complete Response to Chemotherapy with or without Post-chemotherapy RPLND

Note: Patients with history of NSGCT Stages II – III are eligible for Survivorship at 4-5 years after completion of treatment and NED.
Refer to Survivorship - Testicular Cancer: Germ Cell algorithm or continue follow-up as indicated. Treat recurrence according to histology and stage at relapse.

Year (at month intervals)	**H&P and Markers**	**CT Abdomen/Pelvis with contrast or MRI Abdomen/Pelvis**[1,2]	**Chest x-ray (Consider CT chest if symptomatic)**
1	Every 2 months	Every 6 months	Every 6 months
2	Every 3 months	Every 6-12 months	Every 6 months
3	Every 6 months	Annually	Annually
4	Every 6 months	As clinically indicated	Annually
5	Every 6 months	As clinically indicated	As clinically indicated
6 and above	As clinically indicated		

[1] Patients who have an incomplete response to chemotherapy require more frequent imaging as clinically indicated
[2] Patients with clinical stage II treated with chemotherapy who undergo post-chemotherapy RPLND and are found to have pN0 disease or pN1 pure teratoma require only one post-operative CT or MRI at month 3-4 and then as clinically indicated

APPENDIX K: NSGCT Pathologic Stage IIA/B: Surveillance After Primary RPLND and Adjuvant Chemotherapy

Note: Patients with history of NSGCT stages II – IIIC are eligible for Survivorship at 4-5 years after completion of treatment and NED.
Refer to Survivorship – Testicular Cancer: Germ Cell algorithm or continue follow-up as indicated. Treat recurrence according to histology and stage at relapse.

Year (at month intervals)	**H&P and Markers**	**CT Abdomen/Pelvis with contrast or MRI Abdomen/Pelvis**	**Chest x-ray (Consider CT chest if symptomatic)**
1	Every 6 months	4 months after RPLND	Every 6 months
2	Every 6 months	As clinically indicated	Annually
3	Annually		
4	Annually		
5	Annually		
6 and above	As clinically indicated	As clinically indicated	As clinically indicated

SUGGESTED READINGS

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SUGGESTED READINGS - continued

MD Anderson Institutional Policy #CLN1202 - Advance Care Planning Policy Advance Care Planning (ACP) Conversation Workflow (ATT1925)

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