

## MANAGEMENT OF TESTICULAR TUMORS

**A: Essential**

**B: Optimal**

**C: Optional**

Patient with testicular mass/lower abdominal mass with missing testis

Clinical examination  
(Suspicion of tumor)-Undescended testis

Tumor Markers (A)

- AFP, BhCG,LDH (A)
- USG –Scrotum (A)
- CT scan(Thorax, Abdo, Pelvis)(A)
- Semen analysis (B)
- Sperm banking (B)

High Inguinal Orchiectomy (A)  
( Scrotal Orchiectomy should not be done)

HPR, Post Orchiectomy tumor marker (A)

Staging and risk stratification  
(A)

- USG Testis(A)
- Ejaculated sperm preservation if family not completed (B)
- Risk Stratification (A)
- CT ( T+A+P) (A)
- Repeat Tumour Markers after High Inguinal Orchiectomy at least after 7-10 days (A)

- USG guided FNAC (C)
- Onco TESE if ejaculated sperm cryopreservation not feasible.(C)
- Brain Imaging if case of symptoms and patients with metastatic disease with multiple lung metastases or high b-hCG values.(B)
- Fertility investigations: Total testosterone; Luteinising hormone; Follicle-stimulating hormone (C)

**A: Essential**

**B: Optimal**

**C: Optional**

## STAGE – I SEMINOMA

Seminoma Stage I Disease

High Inguinal Orchiectomy (A)

Risk Stratification (B)

- Size > 4cm
- Stromal invasion of the rete testis

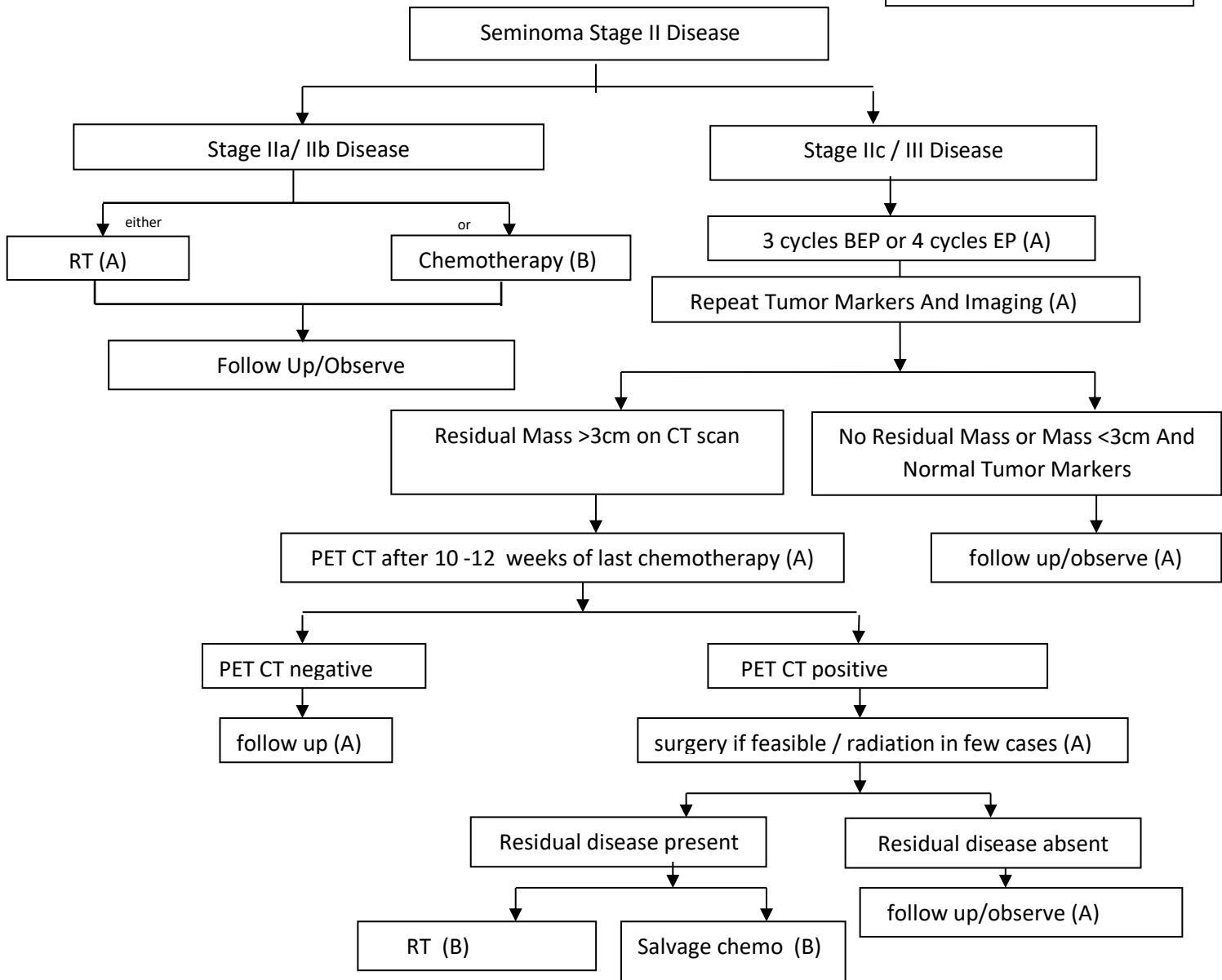
Single Agent Carboplatin AUC 7 x 1 cycle (A)  
Dose of Carboplatin as per GFR calculated as per DTPA  
Or as per 24 hr Urinary Creatinine (A)  
Or  
- Prophylactic RT to paraaortic nodes(A)  
Or  
2 cycle of Carboplatin AUC 7 (B)  
Or  
Close Surveillance (Imaging And Tumor Markers) (B)

**STAGE – II /III SEMINOMA**

**A: Essential**

**B: Optimal**

**C: Optional**



- For Stage II A: RT (A)
- For Stage II B: Chemotherapy (A)
- FDG PET CT for Post chemo seminoma if residual lesion > 3cm (A)
- For PET positive residual masses , consider surgery if feasible preferably at high volume centre (A)
- For Stage II A: Chemotherapy (B)
- For Stage II B: RT (B)
- RT to PET positive residual disease if inoperable (C)

**A: Essential**  
**B: Optimal**  
**C: Optional**

**STAGE I NSGCT**

NSGCT stage I disease with normalised tumour markers



High Inguinal Orchiectomy (A)



Risk Adapted Approach : as per Histopathological features \* (A)



Low Risk

High Risk



Surveillance (C)

1# BEP (B)

NS – RPLND and further treatment as per HPR (C)

1# BEP(A)

NS – RPLND (C)

\* High risk for stage I includes: Lymphovascular invasion (LVI) + or Embryonal carcinoma component > 40%

**STAGE II and III NSGCT**

**A: Essential**  
**B: Optimal**  
**C: Optional**

Risk stratification as per IGCCC (A)

Good risk

Intermediate /Poor risk

3# BEP/4 #EP (A)

4# BEP (A) or 4# VIP (C)

Tumour markers  
Normal

Residual Mass on Imaging  
CECT T+A+P (A) with  
normalization of tumour  
markers

CECT Thorax + Abdomen +Pelvis: Normal

Residual Mass on Imaging CECT  
T+A+P (A) with normalization of  
tumor markers

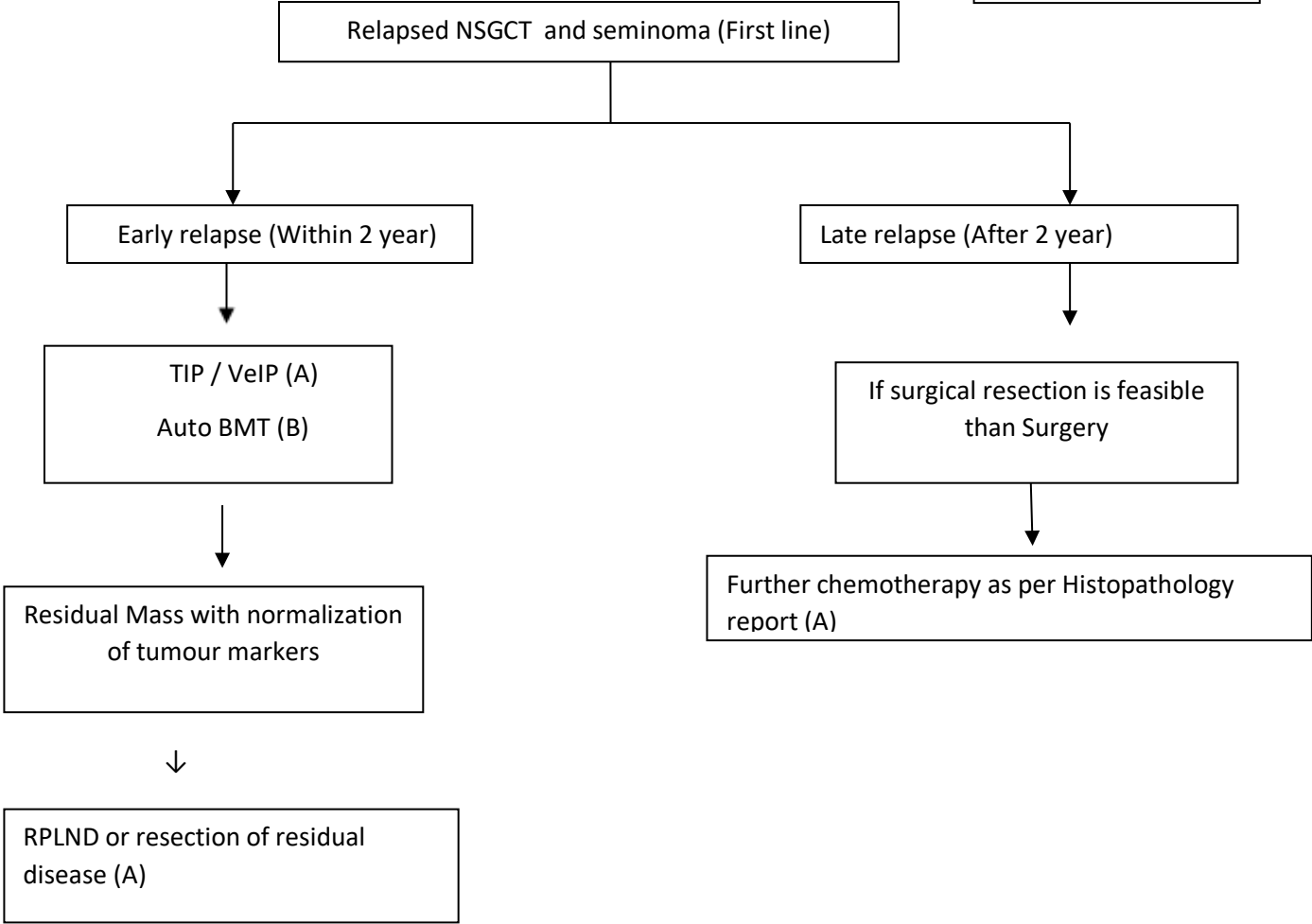
Observation and follow up (A)

RPLND or resection of residual disease

Observation Vs 2 # cycles of  
Chemotherapy as per Histo  
pathology report in RPLND  
(A)

Observation Vs 2 #  
cycles of Chemotherapy  
as per Histo pathology  
report in RPLND (A)

**A: Essential**  
**B: Optimal**  
**C: Optional**



**A: Essential**  
**B: Optimal**  
**C: Optional**

Relapse NSGCT and Seminoma (Second relapse )



Gemcitabine and Oxaliplatin / Gemctabine and Paclitaxel / TIP (if not used previously ) ( B )  
Or Auto BMT ( B )

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