


**Collecting Cancer Data: Testis**

2014-2015 NAACCR Webinar Series  
January 8, 2015



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**Q&A**

- Please submit all questions concerning webinar content through the Q&A panel.

Reminder:

- If you have participants watching this webinar at your site, please collect their names and emails.
- We will be distributing a Q&A document in about one week. This document will fully answer questions asked during the webinar and will contain any corrections that we may discover after the webinar.



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**FABULOUS PRIZES**



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**OVERVIEW**  
Testis




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**COUNTS**

- Estimated new cases and deaths from testicular cancer in the United States in 2014:
  - New cases: 8,820
  - Deaths: 380
- Most common solid tumor malignancy among men between 15 and 34 years of age.
- World wide incidence has doubled in last 40 years.




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**FIVE-YEAR RELATIVE\* SURVIVAL RATES (%) BY STAGE AT DIAGNOSIS, 2003-2009**

	Local	Regional	Distant	All Stages
Testis	99	96	74	95

\*Rates are adjusted for normal life expectancy and are based on cases diagnosed in the SEER 18 areas from 2003-2009, all followed through 2010.

Source: Howlader N, Noone AM, Krapcho M, et al. (eds). SEER Cancer Statistics Review, 1975-2010, National Cancer Institute, Bethesda, MD  
[http://seer.cancer.gov/csr/1975\\_2010/](http://seer.cancer.gov/csr/1975_2010/), based on November 2012 SEER data submission, posted to the SEER Web site, April 2013




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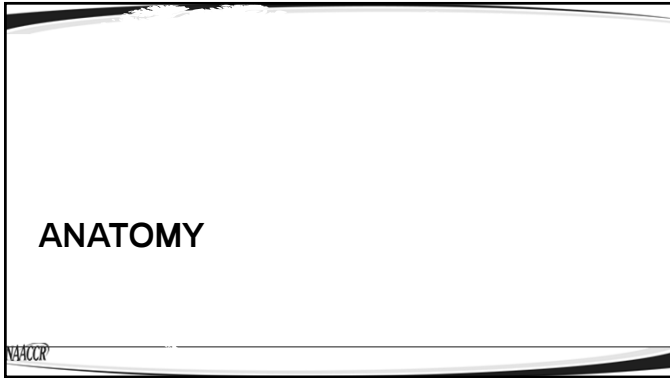
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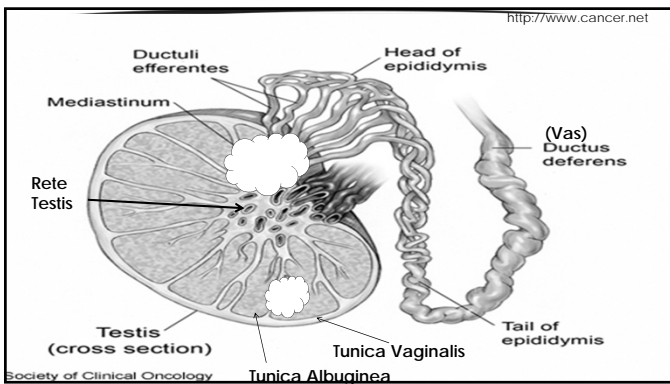
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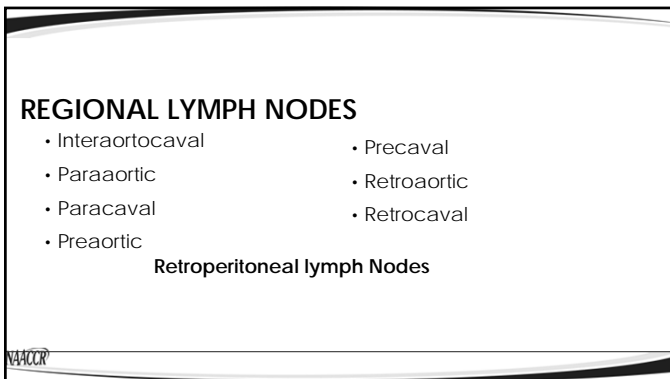
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### REGIONAL LYMPH NODES

- Left testicle drains primarily to the paraaortic lymph nodes
- Right testicle drains primarily to the interaortocaval lymph nodes

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<http://www.cancer.net/sites/cancer.net>

Brain

Thymus

Lymph node Lung

Liver

Spleen

Retroperitoneal nodes

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### ICD O 3 SITES

ICD O 3	Term
C62.0	Undescended testis
C62.1	Descended testis
C62.9	Testis, NOS

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**PATHOLOGY**

- Over 95% of testicular cancers are germ-cell tumors
  - Seminomas 40%
  - Non Seminoma 60%

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**GERM CELL TUMORS (GCT)**

- Seminoma, NOS (9061)
  - Classic (9061)
  - Anaplastic (9062)
  - Spermatocytic (9063)

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**GCT**

- Non-seminoma
  - Embryonal carcinoma (9070/3)
  - Malignant teratoma (9080/3)
    - Teratocarcinoma (9081/3)
      - Mixed embryonal carcinoma and teratoma
    - Malignant teratoma, undifferentiated (9082/3)
    - Malignant teratoma, intermediate (9083/3)
  - Extra-embryonic elements
    - Choriocarcinoma
    - Yolk sac tumor
- *Non-seminoma is the more clinically aggressive tumor*

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**MATURE TERATOMA**

- ICD O 3 histology for Mature Teratoma is 9080/0
- A mature teratoma occurring in adults (post puberty) is reportable.
  - Code to 9080/3
- A mature teratoma (nos) occurring in child is not reportable.
  - Code to 9080/0
  - If physician indicates the mature teratoma is malignant the case is reportable and should be coded to 9080/3

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**MIXED CELL**

- Seminoma mixed with non-seminoma should be considered non-seminoma for treatment decisions

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**NON-GERM CELL TUMORS**

- Leydig cell tumor (8650/3)
- Sertoli cell tumor (8640/3)
- Lymphoma
- Rhabdomyosarcoma
- Melanoma

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**SERUM TUMOR MARKERS**

- Used to help diagnose disease
- Stage disease
- Determine prognosis
- Monitor for relapse
- Levels should be determined
  - Before orchiectomy
  - After orchiectomy
  - Throughout follow-up

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**ALPHA-FETOPROTEIN (AFP)**

- Elevated AFP values are found in non-seminomatous malignancies and mixed tumors of the testis.
  - Rarely occur in pure seminomas
- Can be used to help identify specific cell types and to monitor response to treatment.
- Half life is 5-7 days

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**BETA-HUMAN CHORIONIC GONADOTROPIN (BETA-HCG)**

- Increased levels of Beta-HCG are typically present in both seminomas and non-seminomas.
- Elevated levels after remission indicates a potential relapse.
- Half life is 1-3 days

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**LACTATE DEHYDROGENASE (LDH)**

- An elevated LDH has a prognostic value in men with advanced testicular cancer.
- The LDH may reflect the growth rate and tumor burden in men with advanced disease.
- Increased LDH has been reported in approximately 80% of advanced seminomas and 60% of non-seminomas.
- Half life of LDH is 1-3 days

Prognostic features and markers for testicular cancer management  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2878444/>

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**LYMPH VASCULAR INVASION (LVI)**

- Indicates the presence or absence of tumor cells in lymphatic channels (not lymph nodes) or blood vessels within the primary tumor as noted microscopically by the pathologist.
- Used to determine the T value
  - May be the difference between a T1 and T2
- Lymphovascular invasion is a strong risk factor for recurrence.

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**MULTIPLE PRIMARY AND HISTOLOGY RULES**

Other Rules

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**HISTOLOGY RULES**

- Rule H11
  - Code the histology when only one histologic type is identified
- Rule H13
  - Code the most specific histologic term

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**HISTOLOGY RULES**

- Rule H16
  - Code the appropriate combination/mixed code (Table 2) when there are multiple specific histologies or when there is a non-specific histology with multiple specific histologies
- Rule H17
  - Code the histology with the numerically higher ICD-O-3 code.

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**MULTIPLE PRIMARY AND HISTOLOGY RULES**

Required Histology	Combined With	Combined Term	Code
Teratoma	Embryonal Carcinoma	Teratocarcinoma	9081
Teratoma and one or more histologies in column 2	Seminoma Yolk sac tumor	Mixed germ cell tumor	9085
Choriocarcinoma	Teratoma Seminoma Embryonal	Choriocarcinoma with other germ cell elements	9101

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**POP QUIZ**

- What histology would be assigned to a single tumor consisting of...
  - Seminoma and embryonal carcinoma
  - Malignant teratoma and embryonal carcinoma
  - Seminoma, yolk sac tumor, and teratoma

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**QUESTIONS?**

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**STAGING: TESTIS**

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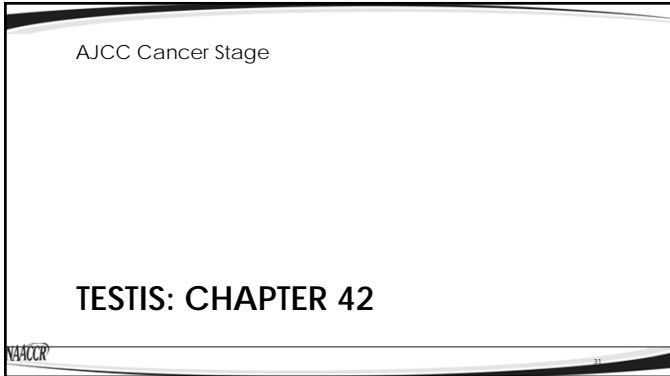
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**Publications & Electronic Products Errata**

**7th Edition Errata\***

Since the publication of the 7th edition of the AJCC Cancer Staging Manual, a few minor staging clarifications were warranted. However, please be assured that the content of the 7th edition, as published in October 2009, is sound and accurate.

**Step 1: Determine which reprint you have**

Printed on acid-free paper  
 (Corrected at 5th printing, 2010)  
 Springer is part of Springer Science+Business Media (www.springer.com)

Reprint information at bottom of page iv, 7th edition Cancer Staging Manual. The original through the fourth reprint are blank for this line.

**Step 2: Click on the appropriate file links in the table below.**

Reprint	Errata Needed	Use File Links
original - 4th reprint	all posted errata	<a href="#">5th reprint</a> <a href="#">6th reprint</a> <a href="#">7th reprint</a>
5th reprint	all errata, AJCC 6th reprint	<a href="#">6th reprint</a>

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AJCC 7th Edition Errata for 5th Reprint Manual Pages Handbook Pages

Since the publication of the 7th edition of the AJCC Cancer Staging Manual, a few minor staging clarifications were warranted as shown in Table 1. However, please be assured that the content of the 7th edition, as published in October 2009, is sound and accurate. The clarifications are listed below in ascending frequency of diagnosis and includes **critical** information for rules based cancer staging:

**Table 1:**

Ch	Publication/Page	Chapter Name	Section	Change
41	Manual – p.457, 461 Handbook – p.525, 534	Prostate	Anatomic Stage/ Prognostic Groups	For Stage IIA, for T2a N0 M0 PSA<20 the Gleason score should be 7 (not ≤ 7) Add T2a N0 M0 PSA<10-20 Gleason ≤ 6
42	Manual – p.460, 472 Handbook – p.539, 544	Testis	Anatomic Stage/ Prognostic Groups	Serum tumor markers used in staging should all be measured post-orchidectomy
33	Manual – p.380 Handbook – p.465	Vulva	Regional Lymph Nodes (N)	In the regional lymph node definitions (yellow box) revise N1a to "One or two lymph node metastases"
30	Manual – p.315, 319 Handbook – p.378, 384	Merkel Cell Carcinoma	Anatomic Stage/ Prognostic Groups	In the shaded stage group box, for Stage IIB add cN1

The following further clarifications include non-essential but **useful** information in using the AJCC 7th Edition as shown in Table 2:

**Table 2:**

Ch	Publication/Page	Chapter Name	Section	Change
14	Manual – p.153 Handbook – p.193	Colon and Rectum	Prognostic Features	Change T4b/R2 to T3/R2 on Figure 14.3
15	Manual – p.169 Handbook – p.216	Anus	Regional Lymph Nodes (N)	Replace Figure 15.10 image with new image C13F9a.tif
16	Manual – p.177 Handbook – p.223	Gastrointestinal Stromal Tumor	Regional Lymph Nodes (N)	Delete NX Regional lymph nodes cannot be assessed Insert asterisk after metastasis in N0 line Add: "if regional node status is unknown, use N0, not NX"

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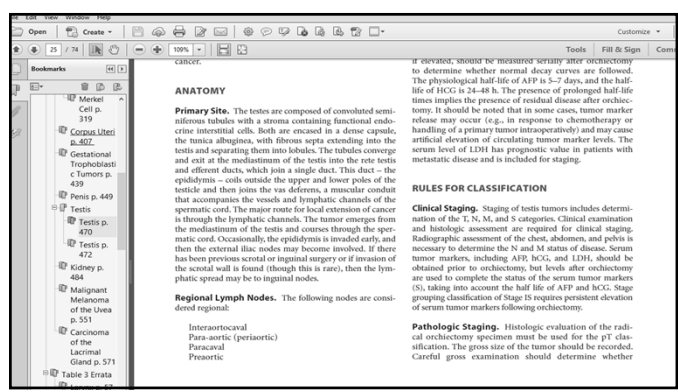
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**AJCC CANCER STAGE: TESTIS**

- ICD-O-3 Topography Codes
  - C62.0, C62.1, C62.9
- ICD-O-3 Histology Code Ranges
  - 8000-8576
  - 8590-8670
  - 8940-8950
  - 8980-8981
  - 9060-9090
  - 9100-9105

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**AJCC CANCER STAGE: TESTIS CLASSIFICATION**

- Clinical staging
  - Clinical exam and histologic assessment
  - Radiographic assessment of chest, abdomen, & pelvis to determine N & M status

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**AJCC CANCER STAGE: TESTIS CLASSIFICATION**

- Pathologic staging
  - Histologic evaluation of orchiectomy specimen to determine pT
  - Assessment of presence or absence of lymphovascular invasion (LVI)
  - Specimen from a defined node-bearing area to classify pN
  - Record diameter of largest involved node, number of nodes involved, & extranodal extension if present
  - Post-orchiectomy serum tumor markers

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**AJCC CANCER STAGE: TESTIS**

- T Category
  - Extent of primary tumor for TNM classified by radical orchiectomy
    - Except for pTis and pT4
    - TX may be used for other categories in absence of orchiectomy

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**AJCC CANCER STAGE: TESTIS**

- T Category
  - TX: Primary tumor cannot be assessed
  - T0: No evidence of primary tumor
  - Tis: Intratubular germ cell neoplasia (carcinoma in situ)
  - T1: Tumor limited to the testis & epididymis without vascular/lymphatic invasion; tumor may invade into the tunica albuginea but not the tunica vaginalis

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**AJCC CANCER STAGE: TESTIS**

- T Category
  - T2: Tumor limited to the testis & epididymis with vascular/lymphatic invasion, or tumor extending through the tunica albuginea with involvement of the tunica vaginalis
  - T3: Tumor invades the spermatic cord with or without vascular/lymphatic invasion
  - T4: Tumor invades the scrotum with or without vascular/lymphatic invasion

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**AJCC CANCER STAGE: TESTIS**

- N Category: *Clinical*
  - NX: Regional lymph nodes cannot be assessed
  - N0: No regional lymph node metastasis
  - N1: Metastasis with a lymph node mass 2 cm or less in greatest dimension; or multiple lymph nodes, none more than 2 cm in greatest dimension
  - N2: Metastasis with a lymph node mass more than 2 cm but not more than 5 cm in greatest dimension; or multiple lymph nodes, any one mass greater than 2 cm but not more than 5 cm in greatest dimension
  - N3: Metastasis with a lymph node mass more than 5 cm in greatest dimension

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**AJCC CANCER STAGE: TESTIS**

- N Category: *Pathologic (pN)*
  - NX: Regional lymph nodes cannot be assessed
  - N0: No regional lymph node metastasis
  - N1: Metastasis with a lymph node mass 2 cm or less in greatest dimension and less than or equal to 5 nodes positive, none more than 2 cm in greatest dimension
  - N2: Metastasis with a lymph node mass more than 2 cm but not more than 5 cm in greatest dimension; or more than 5 nodes positive, none more than 5 cm; or evidence of extranodal extension of tumor
  - N3: Metastasis with a lymph node mass more than 5 cm in greatest dimension

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**AJCC CANCER STAGE: TESTIS**

- M Category
  - M0: No distant metastasis
  - M1: Distant metastasis
    - M1a: Non-regional nodal or pulmonary metastasis
    - M1b: Distant metastasis other than to non-regional lymph nodes and lung

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**AJCC CANCER STAGE: TESTIS**

- Serum tumor markers
  - SX: Marker studies not available or not performed
  - S0: Marker study levels within normal limits
  - S1: LDH < 1.5 X N\* *and* hCG (mlu/ml) < 5,000 *and* AFP (ng/ml) < 1,000
  - S2: LDH 1.5-10 X N *or* hCG (mlu/ml) 5,000-50,000 *or* AFP (ng/ml) 1,000-10,000
  - S3: LDH > 10 X N *or* hCG (mlu/ml) > 50,000 *or* AFP (ng/ml) > 10,000

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**AJCC CANCER STAGE: TESTIS**

Group	T	N	M	S
Stage 0	pTis	N0	M0	S0
Stage I	pT1-4	N0	M0	SX
Stage IA	pT1	N0	M0	S0
Stage IB	pT2	N0	M0	S0
	pT3	N0	M0	S0
	pT4	N0	M0	S0
Stage IS	Any pT/Tx	N0	M0	S1-3

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**AJCC CANCER STAGE: TESTIS**

Group	T	N	M	S
Stage II	Any pT/Tx	N1-3	M0	SX
Stage IIA	Any pT/Tx	N1	M0	S0
	Any pT/Tx	N1	M0	S1
Stage IIB	Any pT/Tx	N2	M0	S0
	Any pT/Tx	N2	M0	S1
Stage IIC	Any pT/Tx	N3	M0	S0
	Any pT/Tx	N3	M0	S1

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**AJCC CANCER STAGE: TESTIS**

Group	T	N	M	S
Stage III	Any pT/Tx	Any N	M1	SX
Stage IIIA	Any pT/Tx	Any N	M1a	S0
	Any pT/Tx	Any N	M1a	S1
Stage IIIB	Any pT/Tx	N1-3	M0	S2
	Any pT/Tx	Any N	M1a	S2
Stage IIIC	Any pT/Tx	N1-3	M0	S3
	Any pT/Tx	Any N	M1a	S3
	Any pT/Tx	Any N	M1b	Any S

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**POP QUIZ**

- Pre-operative imaging: Enlarged left testis; no lymphadenopathy; no distant metastasis
- Pre-operative labs: AFP within normal limits; LDH within normal limits; hCG elevated
- Left radical orchiectomy: 8 cm testicular tumor, seminoma, confined to the testis; lymph vascular invasion present
- Post-operative labs: AFP, LDH, and hCG within normal limits

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**POP QUIZ**

- What is the AJCC clinical stage?
- What is the AJCC pathologic stage?

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Summary Stage 2000  
<http://seer.cancer.gov/tools/ssm/>

**TESTIS**

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**SUMMARY STAGE 2000: TESTIS**

- 0 In situ
  - Noninvasive; intraepithelial
- 1 Localized only
  - Invasive tumor with/without vascular invasion limited to: body of testis; rete testis; tunica albuginea
  - Surface implants
  - Tunica NOS
  - Tunica vaginalis involved
  - Localized NOS

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**SUMMARY STAGE 2000: TESTIS**

- 2 Regional by direct extension only
  - Extension to: dartos muscle, ipsilateral; epididymis with/without vascular/lymphatic invasion; scrotum, ipsilateral; spermatic cord, ipsilateral; vas deferens
- 3 Regional lymph node(s) involved only
  - Contralateral or bilateral nodes
    - Aortic, external iliac, pericaval, pelvic, retroperitoneal, spermatic vein
  - Regional lymph nodes NOS

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**SUMMARY STAGE 2000: TESTIS**

- 4 Regional by BOTH direct extension AND regional lymph node(s) involved
  - Codes 2 + 3
- 5 Regional NOS

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**SUMMARY STAGE 2000: TESTIS**

- 7 Distant site(s)/lymph node(s) involved
  - Distant lymph node(s)
    - Inguinal; other distant lymph node(s)
  - Extension to
    - Contralateral scrotum; penis
  - Ulceration of scrotum
  - Further contiguous extension
  - Metastasis
    - Adrenal gland; kidney; retroperitoneum; testis, bilateral
- 9 Unknown if extension or metastasis

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**POP QUIZ**

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- Pre-operative labs: AFP within normal limits; LDH within normal limits; hCG elevated
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- Post-operative labs: AFP, LDH, and hCG within normal limits

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**POP QUIZ**

- What is the Summary Stage 2000?
  - 1 Localized only
  - 2 Regional by direct extension only
  - 3 Regional lymph node(s) involved only
  - 4 Regional by BOTH direct extension AND regional lymph node(s) involved
  - 5 Regional NOS
  - 7 Distant site(s)/lymph node(s) involved

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Collaborative Stage Data Collection System (CS) V0205

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**CS EXTENSION: TESTIS**

- Code 000: In situ, intraepithelial, noninvasive; intratubular germ cell neoplasia
- Codes 160-330 & 460-550
  - T category based on CS Extension, SSF4 (Radical Orchiectomy Performed), & Lymph-vascular Invasion (LVI)
  - Derives T1, T2, T3
- Codes 600-810
  - Scrotal involvement

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**CS LYMPH NODES: TESTIS**

- Code 100: Aortic; retroperitoneal; spermatic vein
- Code 200: Pericaval
- Code 300: Pelvic, external iliac WITH previous scrotal or inguinal surgery
- Code 350: 300 + 200
- Code 400: Inguinal WITH previous scrotal or inguinal surgery
- Codes 100-500: N Category based on SSF5 (Size of Metastasis in Lymph Nodes), Regional Nodes Positive, & CS Lymph Nodes Eval

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**CS METS AT DX: TESTIS**

- Code 11: Pelvic, external iliac WITHOUT previous scrotal or inguinal surgery
- Code 12: Inguinal WITHOUT previous scrotal or inguinal surgery
- Code 13: Specified distant lymph nodes other than codes 11 or 12; distant lymph node(s) NOS
- Code 20: Distant metastasis to lung
- Code 25: 20 + (11, 12, or 13)
- Code 40: Metastasis to other distant sites with or without metastasis to lung and/or distant lymph node(s); carcinomatosis
- Code 60: Distant metastasis NOS

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**POP QUIZ**

- Pre-operative imaging: Enlarged left testis; no lymphadenopathy; no distant metastasis
- Pre-operative labs: AFP within normal limits; LDH within normal limits; hCG elevated
- Left radical orchiectomy: 8 cm testicular tumor, seminoma, confined to the testis; lymph vascular invasion present
- Post-operative labs: AFP, LDH, and hCG within normal limits

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**POP QUIZ**

- What is the code for CS Extension?
  - 160: Body of testis; rete testis; tunica albuginea
  - 200: Tunica vaginalis involved; surface implants
  - 300: Localized NOS
  - 999: Unknown

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**POP QUIZ**

- What is the code for CS Lymph Nodes?
  - 000: No regional lymph node involvement
  - 500: Regional lymph nodes NOS
  - 800: Lymph nodes NOS
  - 999: Unknown

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**POP QUIZ**

- What is the code for CS Mets at DX?
  - 00: No distant metastasis
  - 11: Distant lymph nodes without previous scrotal or inguinal surgery
  - 60: Distant metastasis NOS
  - 99: Unknown

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**SSF4: RADICAL ORCHIECTOMY PERFORMED**

- T category based on CS Extension, SSF4, & Lymph-vascular Invasion (LVI)
- Documents if radical orchiectomy was performed (010), not performed (000), or unknown (999)

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**SSF5: SIZE OF METASTASIS IN LYMPH NODES**

- N Category based on SSF5, Regional Nodes Positive, & CS Lymph Nodes Eval
- Codes incorporate size range for metastasis in regional lymph node mass and absence or presence of extranodal extension
- If extranodal extension is not mentioned in path, assume it is not present

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**PRE-ORCHIECTOMY SERUM TUMOR MARKERS**

- SSF6: Pre-Orchiectomy Alpha Fetoprotein (AFP) Lab Value
- SSF7: Pre-Orchiectomy Alpha Fetoprotein (AFP) Range
- SSF8: Pre-Orchiectomy Human Chorionic Gonadotropin (hCG) Lab Value
- SSF9: Pre-Orchiectomy Human Chorionic Gonadotropin (hCG) Range
- SSF10: Pre-Orchiectomy Lactate Dehydrogenase (LDH) Range

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**PRE-ORCHIECTOMY LAB VALUE**

- Assign code 000 for exactly 0.0
- Use code 995 if patient is treated prior to orchiectomy and record lab value in post-orchiectomy SSF
- Use code 996 if no orchiectomy; record lab value in post-orchiectomy SSF
- Use code 997 if test done but actual lab value not stated

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**PRE-ORCHIECTOMY RANGE**

- Use codes 991-993 if test unavailable but physician statement of result is available
- Use code 995 if patient is treated prior to orchiectomy and record range in post-orchiectomy SSF
- Use code 996 if no orchiectomy; record range in post-orchiectomy SSF

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**POST-ORCHIECTOMY SERUM TUMOR MARKERS**

- SSF13: Post-Orchiectomy Alpha Fetoprotein (AFP) Range
- SSF15: Post-Orchiectomy Human Chorionic Gonadotropin (hCG) Range
- SSF16: Post-Orchiectomy Lactate Dehydrogenase (LDH) Range

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**POST-ORCHIECTOMY RANGE**

- If initial post-orchietomy test remains elevated, review subsequent tests until plateau occurs and code that test
- Use code 990 if post-orchietomy test is unknown but pre-orchietomy test was normal
- Use codes 991-993 if post-orchietomy test is unavailable but physician's statement of result is documented
- If patient is treated prior to orchietomy or orchietomy is not performed, record initial lab value in post-orchietomy SSF

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**POP QUIZ**

- Pre-operative imaging: Enlarged left testis; no lymphadenopathy; no distant metastasis
- Pre-operative labs: AFP within normal limits; LDH within normal limits; hCG elevated
- Left radical orchietomy: 8 cm testicular tumor, seminoma, confined to the testis; lymph vascular invasion present
- Post-operative labs: AFP, LDH, and hCG within normal limits

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**POP QUIZ**

- What is the code for SSF4?
  - a. 000: Radical orchiectomy not performed
  - b. 010: Radical orchiectomy performed
  - c. 988: Not applicable
  - d. 999: Unknown

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**POP QUIZ**

- What is the code for SSF5?
  - a. 000: No lymph node metastasis
  - b. 010: Lymph node metastasis mass 2 cm or less without pathologic extranodal extension
  - c. 020: Lymph node metastasis mass more than 2 cm but not more than 5 cm OR pathologic extranodal extension
  - d. 030 Lymph node metastasis mass more than 5 cm

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**POP QUIZ**

- What is the code for SSF6?
  - a. 000: 0 ng/ml
  - b. 997: Test ordered, results not in chart
  - c. 998: Test not done
  - d. 999: Unknown
- What is the code for SSF7?
  - a. 000: Within normal limits
  - b. 010: Range 1 (S1) above normal & less than 1,000 ng/ml
  - c. 992: Pre-orchietomy AFP unknown but pre-orchietomy serum tumor markers NOS stated to be normal
  - d. 997: Test ordered, results not in chart

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**POP QUIZ**

- What is the code for SSF8?
  - a. 000: mIU/ml
  - b. 997: Test ordered, results not in chart
  - c. 998: Test not done
  - d. 999: Unknown
- What is the code for SSF9?
  - a. 000: Within normal limits
  - b. 991: Pre-orchietomy human chorionic gonadotropin (hCG) stated to be elevated
  - c. 992: Pre-orchietomy hCG unknown but pre-orchietomy serum tumor markers NOS stated to be normal
  - d. 997: Test ordered, results not in chart

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**POP QUIZ**

- What is the code for SSF10?
  - a. 000: Within normal limits
  - b. 991: Pre-orchietomy LDH stated to be elevated
  - c. 992: Pre-orchietomy LDH unknown but pre-orchietomy serum tumor markers NOS stated to be normal
  - d. 997: Test ordered, results not in chart

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**POP QUIZ**

- What is the code for SSF13?
  - a. 000: Within normal limits
  - b. 990: Post-orchietomy AFP unknown but pre-orchietomy AFP was normal
  - c. 992: Post-orchietomy AFP unknown but post-orchietomy serum tumor markers NOS stated to be normal
  - d. 999: Unknown

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**POP QUIZ**

- What is the code for SSF15?
  - a. 000: Within normal limits
  - b. 990: Post-orchietomy hCG unknown but pre-orchietomy hCG was normal
  - c. 992: Post-orchietomy hCG unknown but post-orchietomy serum tumor markers NOS stated to be normal
  - d. 999: Unknown

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**TREATMENT**

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**DIAGNOSIS**

- Physical exam
- Ultrasound (diagnostic)
  - Other Imaging (staging)
    - PET Scan for Seminoma
- Tumor Markers
- *Biopsy not usually done*

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**TREATMENT**

- More than 90% of patients with germ cell tumors are cured.
- That includes 70-80% of patients with advanced tumors who are treated with chemotherapy.

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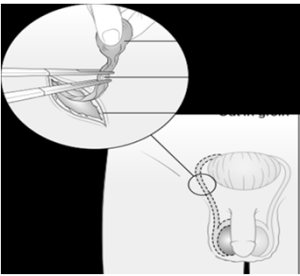
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**SURGERY**

- 20 Local or partial excision of testicle
- 30 Excision of testicle WITHOUT cord
- 40 Excision of testicle WITH cord or cord not mentioned (radical orchiectomy)
- 80 Orchiectomy, NOS (unspecified whether partial or total testicle removed)



Cancer Research UK

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**SURGERY**

- 30 Excision of testicle, WITHOUT cord
  - [SEER Note: Orchiectomy not including spermatic cord]
- 40 Excision of testicle WITH cord or cord not mentioned (radical orchiectomy)
  - [SEER Note: Orchiectomy with or without spermatic cord]
- 80 Orchiectomy, NOS (unspecified whether partial or total testicle removed)

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**SERUM MARKERS**

- Serum markers should be assessed before orchiectomy to establish a benchmark and repeated after orchiectomy.

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**SERUM MARKERS**

- S0 - Tumor marker levels within the reference range
- S1 - LDH <1.5 times the reference range AND hCG level < 5000 mIU/mL AND AFP level < 1000 ng/mL
- S2 - LDH level 1.5-10 times the reference range OR hCG level 5000-50,000 mIU/mL OR AFP level 1000-10,000 ng/mL
- S3 - LDH level > 10 times the reference range OR hCG level > 50,000 mIU/mL OR AFP level >10,000 ng/mL

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**SEMINOMA**

- Seminoma-Orchiectomy followed by
  - Stages IA and IB
    - Patients with pT1 or pT2 Active surveillance if applicable
    - Radiotherapy or chemotherapy
  - Stage IS
    - Radiation
  - Stage IIA and IIB
    - Radiation
    - Chemotherapy may be an alternate treatment for some IIB patients
  - Stage IIC and III
    - Standard chemotherapy

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**RADIATION**

- Infradiaphragmatic beam radiation
- May include para-aortic nodes and/or ipsilateral iliac nodes

<http://www.cancer.net/sites/cancer.net>

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**NON SEMINOMA**

- Non seminoma-Orchiectomy followed by...
  - Stage IA
    - Surveillance or RPLND
  - Stage IB
    - RPLND or Chemotherapy
  - Stage IS
    - Chemotherapy

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**CHEMOTHERAPY**

- Etoposide
- Cisplatin
- Bleomycin
- Mesna
- Ifosmfamide

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**NON SEMINOMA**

- Non seminoma-Orchiectomy followed by...
  - Stage IIA-depends on serum markers
    - Normal serum markers-RPLND followed by chemo or surveillance
    - Elevated serum markers-chemo followed by RPLND or surveillance

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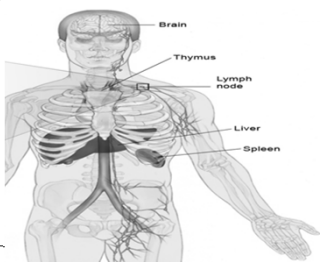
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**LYMPH NODE DISSECTION**

<http://www.cancer.net/sites/cancer.net>

- Retroperitoneal lymph node dissection (RPLND)



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**NON SEMINOMA**

- Non seminoma-Orchiectomy followed by...
  - Stage IIB-depends on imaging and serum markers
    - Negative serum markers metastasis limited to retroperitoneal lymph nodes treatment is similar to 2A or chemo followed by RPLND
    - If elevated serum markers and metastasis beyond the retroperitoneal lymphatics, then RPLND not recommended. Chemotherapy only.
  - Stage IIC and IIIA
    - Chemotherapy only

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**NON SEMINOMA-ADVANCED STAGE**

- Non seminoma-Orchiectomy followed by...
- Stage IIIB (intermediate risk)-Chemotherapy
- Stage IIIC (poor risk)-Chemotherapy

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**QUESTIONS?**

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**POP QUIZ**

- What is the code for SSF16?
  - a. 000: Within normal limits
  - b. 990: Post-orchietomy LDH unknown but pre-orchietomy LDH was normal
  - c. 992: Post-orchietomy LDH unknown but post-orchietomy serum tumor markers NOS stated to be normal
  - d. 999: Unknown

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**COMING UP...**

- Collecting Cancer Data: Uterus  
• 2/5/15
- Abstracting & Coding Boot Camp  
• 3/5/15



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**AND THE WINNERS ARE.....**



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**CE CERTIFICATE QUIZ/SURVEY**

- Phrase
- Link  
<http://www.surveygizmo.com/s3/1946545/Testes-2015>



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