

Effective Date: September 28, 2007
Supersedes: None
Related Documents:

ALL ANATOMIC PATHOLOGY GROSSING MEMOS

AP-SP-GM-MEM-001-1 v.1

Purpose

The purpose of this document is to provide a procedure for the review of all memos related to the current gross dissection of surgical specimens.

Principle

The principle is to review all pertinent memos so that all grossing procedures can be implemented.

Procedure

Follow the steps listed below:

1. Review and be familiar with all memos that follow.
2. Update the memo section of surgical pathology manual when new memos are issued.

References

All current Anatomic Pathology Department Memos written by Dr. John C. Watts.

POSTED

Date/Initials

12/11/07 SS

Document control

The following indicates location and number of authorized copies of this document.

- Surgical Pathology - Office Copy (1)
- Surgical Pathology - All Pathologists' Assistants - Bench Copies (See Note)
- Pathology Residents/Fellow - Office Copies (See Note)

Note: The number of copies of the document that are issued will vary based on the number of Pathologists' Assistants, Pathology Residents, and Pathology Fellows. A list of all individuals who are issued a copy of the document will be kept in the front of the Surgical Pathology Crossing Manual and will be updated yearly.

Document history

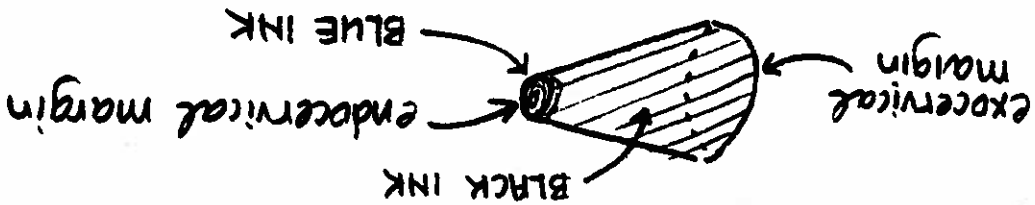
The table below is used to capture staff signatures and dates associated with initial document preparation, annual review, and revisions.

Signature	Date
Prepared by: Anne E. Branchida	9-28-07
Approved by: Ab. Vazquez	12/15/07
Revised by:	
Approved by: [Signature]	12/10/08
Reviewed by: Anne E. Branchida	10-20-09
Reviewed by: [Signature]	10/20/11
Reviewed by: [Signature]	04/02/13
Reviewed by: [Signature]	2/14/15
Reviewed by: [Signature]	3/19/2015
Reviewed by: [Signature]	10/27/17
Reviewed by: [Signature]	10/22/19
Reviewed by: [Signature]	12/20/21

To: Staff, Residents and PA's
From: John C. Watts, M.D. Jcw
Date: June 5, 1997
Department: Anatomic Pathology
Department: Anatomic Pathology

Subject: ISSUES IN SURGICAL PATHOLOGY DISCUSSED AT JUNE STAFF MEETING

Processing of cervical cone biopsy specimens: Henceforth, all cold cone biopsy specimens in which the endocervical margin can be recognized grossly should be sectioned longitudinally without amputation of the endocervical margin. The cone biopsy margins should be painted with black ink as usual. However, in addition, the endocervical tip of the specimen should be marked with blue ink prior to sectioning (see diagram below).



Lipoma-like tumors: One section per centimeter largest diameter should be submitted for histologic examination of all soft tissue tumors having the gross appearance of lipoma. This should be done regardless of whether the tumor is a deep-seated mass or a superficial (subcutaneous) tumor. This rule does not apply to the fat removed at inguinal hernia repair. This fat can be designated properitoneal adipose tissue, and if grossly unremarkable can still be handled by gross examination alone.

Gross-only specimens: We cannot legally bill for gross-only specimens processed by residents, unless the attending pathologist has also examined the specimen personally. Therefore, the residents should put aside all of their gross-only specimens and contact the attending pathologist to come in at some point and view them. This rule does not apply to gross-only specimens processed by the pathologist's assistants.

Documentation of pathologist's examination of gross-only surgical specimens: For gross-only specimens, this documentation above your signature reads, "I reviewed the findings and agree with the report," rather than "I reviewed all slides and agree with the report." During proofreading of the report, please be sure that the appropriate statement has been placed on the gross-only specimen reports.

Transportation of diagnostic lymph node biopsy specimens: We have been requested by the surgical nurse managers and medical director of the operating rooms to collect all diagnostic lymph node biopsy specimens from the operating room. This will ensure that we receive the specimens in the fresh state for triage. The pathologist on frozen-section/ORC duty will be paged to the resident or pathologist's assistant. We have agreed not to bill the pathologist can delegate this duty to the resident or pathologist's assistant.

the patient for this service, unless we are asked to provide an intraoperative assessment (either ORC or frozen section). Therefore, do not record these specimens as ORC cases, unless your intraoperative opinion is solicited.

Review of all diagnostic lymph node biopsies by Dr. Michele Rooney: Dr. Rooney would like to further develop special expertise in diagnostic lymph node pathology and classification of lymphomas, so that she can function as our intradepartmental consultant for these specimens. Dr. Rooney would welcome the opportunity to see all such specimens in conjunction with the responsible attending pathologist. Please make an effort to show her all such cases and benefit from her expertise.

slp
6-5-97

Inter-department communication

To: See distribution

From: John C. Watts, M.D. *JCW*

Date: February 6, 1998

Department: Anatomical Pathology

Department: Anatomical Pathology

Subject: FORMALIN SAFETY

In an effort to protect employees from exposure to formaldehyde, and to reduce the effects of a formalin spill, the following actions are to be taken in the surgical pathology area, effective immediately:

1. PERSONAL PROTECTIVE EQUIPMENT (PPE):

ACTION:

During accessioning of specimens, which includes sorting of specimens and paperwork, and typing information into the computer, the following PPE **MUST** be worn at all times:

- Gloves
- Blue Gown (NOT fabric lab coats) fastened closed
- Goggles/Safety Goggles

RATIONALE: This will provide more protection for employees from formaldehyde/formalin hazards, as required by OSHA.

2. POURING OF FORMALIN:

ACTION:

If any formalin or other fixative is being poured into a container, this action is to be done in a sink in a grossing room. NOT in the accessioning area.

This includes transferring of a specimen from one container to another, adding more formalin/fixative to a specimens container, or filling empty specimen containers.

RATIONALE: In case of a spill, the formalin/fixative will be washed down the sink. This will expose personnel to less fumes and make clean up easier.

In case of a spill on the floor, the grossing room door can be closed. This action will contain the spill within the gross room. By containing the formalin/fixative, fewer people will be exposed to the formalin/fixative vapors. In addition, the work in the accessioning area and in the other grossing rooms can continue, so there will be no interruption of the work flow.

- 1. Neill, M.D., Chair, Anatomical Pathology Safety Committee
- 3. O'Hare, Manager, Anatomical Pathology
- 5. Scallise, Supervisor, Histology
- A. VanDeWiele, Supervisor, Surgical Pathology
- C. Robbins

To: PA'S, Residents, and Staff

From: John C. Watts, M.D.

Date: February 17, 1998

Subject: SAMPLING OF GROSSLY BENIGN BREAST RE-EXCISION SPECIMENS

The conclusion of the USCAP abstract reproduced below seems prudent to me. I urge you to submit at least 2 blocks per centimeter largest diameter of such specimens. Of course, you are welcome to submit more than this number of blocks if the attending staff pathologist wishes you to do so.

Breast Pathology

74 Sampling of Grossly Benign Breast Re-excisions: A Multidisciplinary Approach to Assessing Adequacy

S. Abraham, K. Fox, D. Frazer, L. Solin, and C. Reynolds. University of Pennsylvania Medical Center, Philadelphia, PA

Background: The widespread use of breast-conserving therapy in the treatment of breast cancer has resulted in increasing numbers of re-excision specimens requiring histologic assessment for residual disease and margin status. Since many re-excisions are performed for only microscopically positive or close margins, re-excision specimens often appear grossly negative and directed tissue sampling cannot be performed. The issue of adequate sampling in these specimens has not been addressed in the literature. We have used a multidisciplinary approach to identify the clinically important lesions in breast re-excisions and develop a cost-effective approach to tissue sampling.

Design: We reviewed 97 consecutive cases of grossly negative breast re-excisions in which all tissue had been embedded. Detailed histologic findings were presented to a medical oncologist, radiation oncologist, and surgeon, who assessed the clinical impact of each diagnosis. The probability of detecting each clinically important lesion was calculated using sampling schemes of 1 and 2 blocks/cm of maximum specimen diameter. **Results:** Forty-seven specimens contained residual invasive or in situ carcinoma and 50 were histologically negative. Of the 47 positive specimens, 30 resulted in a major change in patient management (recommendation for additional surgery), 10 resulted in minor changes (alteration in XRT dosing or adjuvant chemotherapy regimen), and 7 did not alter management. A total of 1,867 blocks were submitted. If 1 block/cm had been submitted and the remainder of the specimen examined only if initial sections revealed residual carcinoma, then 901 blocks would have been processed (52% reduction), but we would have missed an average of 3.7 cases resulting in a major change in therapy, and 3.3 cases resulting in a minor change. In contrast, 2 blocks/cm would have missed an average of less than 1 case each of diagnoses resulting in major and minor therapy changes (0.9 and 0.8 cases, respectively), and 315 (17%) fewer tissue blocks would have been processed. **Conclusion:** We recommend submitting 2 blocks/cm in grossly benign re-excisions, and examining the remainder of the tissue only if carcinoma is detected on initial sections.

To:

P.A.'s, Residents, and Staff

From:

John C. Watts, M.D.

Date:

February 18, 1998

Subject:

SURGICAL PATHOLOGY SPECIMEN BILLING

In order to help the charge coders decide how to charge certain types of specimens, please remember to include the following information in your surgical pathology reports:

1) Type of surgical procedure for breast specimens:

Possibilities include:

- **Biopsy**, either incisional or excisional, for benign or malignant lesions.
- **Partial or segmental mastectomy** for a malignant neoplasm. A "lumpectomy" should be regarded as a partial/segmental mastectomy rather than an excisional biopsy.
- **Simple or modified radical mastectomy** for a malignant neoplasm. The latter includes, by definition, removal of axillary lymph nodes.

I have revised checklist "A" for breast biopsies to include this information. Checklist "B" should only be used for simple and modified radical mastectomy specimens.

2) Lymph node biopsy specimens: Please remember to include in your "Special Procedures" section the following item: "special stain: Wright-Giemsa stain of touch imprints."

jas
cc:

Thomas O. Robbins, M.D.
James S. Neill, M.D.
Bridget O'Hare
Christine Lewis
Dorothy Tersigni
Pat Van Hemm
Julie Silke

Surgical Procedure: (incisional/excisional biopsy, or partial/segmental mastectomy) * Invasive Carcinoma

Largest diameter.....
Histologic type.....
Histologic grade (Bloom-Richardson/Elston):
Angiolymphatic invasion.....
Surgical margin involved.....
Distance of tumor to closest margin.....
In-Situ Carcinoma

Largest diameter.....
Histologic type.....
Architectural pattern(s).....
Nuclear grade.....
Comedocarcinoma component.....
Extensive intraductal component.....
($\geq 25\%$ DCIS inside the invasive tumor and at least one focus of DCIS beyond the edges of the invasive tumor)

Surgical margin involved.....
Distance of tumor to closest margin.....
Radiographic Abnormality Identified.....
Estrogen/Progesterone Receptor Analysis by Immunohistochemistry.....
Tissue for Ploidy/S-Phase Analysis.....

BLOOM RICHARDSON (ELSTON MOD.)

FEATURE SCORE

Tubule formation	Majority of tumor (>75%)	1
	Moderate degree (10-75%)	2
	Little or none (<10%)	3
Nuclear pleomorphism	Uniform cells (size is not criterion)	1
	Moderate increase in variability	2
	Marked variation (often prominent nucleoli)	3
Mitotic counts (per 10 HPF)	0-5	1
	6-10	2
	> 11	3

Final Grade
3-5 points: grade I - well differentiated
6-7 points: grade II - moderately differentiated
8-9 points: grade III - poorly differentiated

NUCLEAR GRADE

(for pure in-situ carcinoma only)
(See Diagn Pathol 1994; 11: 167-180)

Grade 1 (well differentiated)

- Monomorphic nuclei of uniform size, regular outline and spacing
- Fine, uniform chromatin
- Nucleoli small or absent
- Mitoses rare or absent

Grade 2 (moderately differentiated)

- Some variation in nuclear size, outline, and spacing
- Fine to coarse chromatin
- Nucleoli present, not prominent
- Occasional mitoses

Grade 3 (poorly differentiated)

- Marked variation in nuclear size, irregular outline and spacing
- Chromatin coarse and clumped
- Nucleoli prominent

APR 01

Beaumont

William Beaumont Hospital

Inter-department communication

To: PA's, Resident and Staff
From: John C. Watts, M.D. JW
Date: March 27, 1998
Department: Anatomical Pathology
Department: Anatomical Pathology

Subject: REVISION OF CHECKLIST V: WHOLE MOUNT SPECIMENS OF PROSTATE CARCINOMA

Attached is the latest revision of the checklist. The first item has been changed from Gleason grade to Gleason score. The entry here should include the total Gleason score followed in parenthesis by the new items, but merely tighten up the checklist by removing possible responses, which will now be located underneath the checklist and will not appear on the final checklist. These items now represent mutually exclusive responses, which you should fill in to the checklist. For example, regarding "Extent of glandular involvement," there are three possible responses: "These are listed below under the single asterisk and only one should be chosen. The same applies to status of "Resection margins" and "Seminol vesicles." Note that if the seminal vesicles are positive, you should also specify which seminal vesicle is involved and whether tumor is confined to the seminal vesicle or involves the perivesicle fat.

Please direct any questions or comments to me by Wednesday, April 1, 1998 (April's Fools responses not accepted!). If I have not heard from any of you by then, I will assume that the checklist is acceptable and will activate it.

JCW:skp

Gleason score (primary + secondary patterns):
 Extent of neoplasm.....
 Single focus or multiple foci (specify)..
 Size of largest focus (greatest single
 dimension).....
 Extent of glandular involvement.....
 Percent of gland involved.....
 Prostatic capsule
 Prostatic capsule identifiable.....
 Extension through prostatic capsule.....
 Location(s) of capsular extension.....
 Resection margins.....
 Seminal vesicles.....
 Pelvic and iliac lymph nodes
 Number positive/number examined
 Right.....
 Left.....
 /
 Size of largest metastasis.....
 /
 Extranodal extension of metastasis.....

POSSIBLE RESPONSES

Neoplasm involves less than half of one lobe
 Neoplasm involves more than half of one lobe
 Neoplasm involves both lobes

*** Negative
 (neoplasm does not involve inked margin)
 Positive
 (neoplasm infiltrates to the inked edge;
 specify location[s])

*** Negative
 Positive (specify the following)
 Right
 Left
 Confined to seminal vesicle
 Into perivesicle fat

To: PA's, Residents, and Staff
From: John C. Watts, M.D. *JCW*
Date: September 9, 1998
Department: Anatomical Pathology
Department: Anatomical Pathology

Subject: ORC/FROZEN SECTION EXAMINATION OF RADIOACTIVE BREAST AND MELANOMA SPECIMENS

I have contacted Cheryl Schultz regarding the radiation hazard posed by immediate examination of breast and melanoma specimens in the operating room. She has indicated that we are in no danger by doing this. The delay of 24-72 hours prior to gross examination of such specimens has been instituted mainly to avoid chronic, long-term contamination of our instruments and tissue processors. The amount of radiation in these specimens is so low that we can, for instance, safely handle and examine lumpectomy specimens for tumor margins should we be requested to do so in the operating room. Ms. Schultz also indicated that a metal transport container is not necessary to transport these specimens from the operating room to the Surgical Pathology laboratory. The outer wax container to be used for such transport is mainly to help avoid surface contamination should the specimen be dropped during transit. Again, the amount of radiation released by the specimen is negligible in terms of danger to us. We will be wearing radiation rings/badges for the first 60 uses, and we will be monitored by Radiation Safety to make sure that we are not exposed to dangerous levels of radioactivity.

Ms. Schultz has kindly agreed to provide us with an in-service educational program regarding radiation safety measures involved in the sentinel lymph node projects. Ms. Schultz will address us at 8:00 am on Friday, September 11 in our conference room. The program should take 30 minutes or less. The remainder of the hour will be occupied by Dr. Hankin's gross kodachrome conference. Please make an effort to attend this in-service session, and feel free to ask any questions you may have regarding radiation risk in these projects.

(Please see attached communication from Ms. Schultz, which *JCW* just arrived)

Ms. Cheryl Schultz
Sharon Scalise
Amy Van de Wiele

jas
cc:

Inter-department communication

To:

John Watts, M.D.

From:

Cheryl Culver Schultz, M.S.

Date:

September 3, 1998

Department: Radiation Safety Officer

Department: Anatomic Pathology

Subject: Handling of Radioactive Specimens from Sentinel Node Localization Procedures

The "Procedure for Handling and Transport of Radioactive Specimens from Sentinel Node Localization" specifies a minimum of 24 hours prior to routine processing of the specimens by Pathology. The purpose of the waiting period is to allow significant decay of the radioactive tracer to its nonradioactive state prior to the complex processing which involves multiple pieces of instrumentation, liquid phases, and steps which could temporarily contaminate commonly used equipment, benches, etc.

To assist the surgeons, direct handling of the sentinel node and tissue specimens by the Pathology staff may be required. There is no appreciable, measurable external radiation exposure to the staff handling these specimens. To illustrate this, we can compare this procedure to other routine diagnostic radioactive tracer procedures performed each day on hundreds of outpatients.

The amount of radioactive tracer administered to the patient for sentinel node localization (melanoma and breast) is forty times less than the amount of radioactive tracer administered to a typical nuclear medicine patient for a bone scan. We detect the tracer in the sentinel node with a specially designed probe which is so sensitive that it can detect background levels of radiation. The radiation exposure from these patients is so low that we require no special precautions for isolation of these patients, or exclusion of pregnant staff from caring for these patients. The following precautions apply to Pathology staff who directly handle specimens which contain the radioactive tracer before the minimum recommended waiting period.

1. Wear gloves to prevent potential radioactive contamination on your hands. If you suspect that your hands are contaminated due to defective gloves, please contact Nuclear Medicine at ext. 14100, and ask that the physicist survey your hands with a radiation detector.
2. Directly handle the specimen for as short a period of time as possible.
3. Pathology staff, who directly handle the specimens before the minimum recommended waiting period, will be assigned a film or ring badge for the first ten patients. The radiation doses recorded on the badges will then be reported to the Radiation Safety Committee.
4. Any questions regarding the handling, collection or transportation of these specimens may be directed to the Nuclear Medicine Department or the Radiation Safety Officer (ext. 10548).

To: See Distribution
From: John C. Watts, M.D. *JW*
Date: November 18, 1998
Department: Anatomical Pathology
Department: Anatomical Pathology

Subject: UPDATE ON SENTINEL LYMPH NODE PROJECT

The following items were discussed at an update meeting on Wednesday, November 18:

- 1) The biopsy/mastectomy specimens injected with radionuclide can be safely handled immediately. We may be called to the OR to assess the gross margins of such specimens. There is no danger in doing so.
- 2) The specimens need now be held only 12 hours prior to grossing. This means that residents will now be able to follow through the grossing of such cases.
- 3) Wearing of ring badges is now considered optional.
- 4) Beginning immediately, we will prepare scrape cytology preparations as well as frozen sections from all sentinel lymph nodes for the next 50 cases. Dr. Bernacki and I will get together with residents and PAs to demonstrate preparation of the cytology smears.

JCW:skp

Distribution: SPA's, PA's, Residents, and Staff

To: PA's and Residents
Department: Anatomic Pathology
From: Sharon Scalise
Department: Anatomic Pathology
Date: 12/31/98

Subject: Metal Objects

Please place a green dot sticker on the top of any specimen container having any type of metal object sent from surgery. This will alert John before he dumps the specimen for grinding. If he does not remove the metal object, it may damage the disposal system and has a potential of shooting small metal fragments out which could injure anyone standing in the vicinity.

cc: Surgical pathology assistants

To:

P.A.'s, Residents and Staff

From:

John C. Watts, M.D.

JCW

Date:

February 16, 1999

Subject:

GROSS DESCRIPTION OF FALLOPIAN TUBES SEGMENTS FROM TUBAL LIGATION PROCEDURES

The standard, programmed gross description of fallopian tube segments applies only to those specimens that are truly cylindrical and lack fimbriae. Any other type of specimen must be individually described, and the presence of fimbriae should be noted. The gross description may be important for those patients who subsequently wish to undergo a surgical reversal to restore fertility.

ICW:skp

To:	Staff	Department: Anatomical Pathology
From:	John C. Watts, M.D. <i>JCW</i>	Department: Anatomical Pathology
Date:	February 19, 1999	

Subject: GROSS-ONLY SURGICAL SPECIMENS

CLIA '88 mandates that a staff pathologist must personally examine all specimens submitted for gross-only examination. The specimens can first be examined and dictated by a P.A. or resident, but they must then be personally examined by a pathologist within 24 hours. Accordingly, beginning Monday, February 22, I have asked Army Van De Weile to set aside all such specimens each day. Pathologists assigned to Gross I, Gross II, and frozen sections should stop in surgical pathology after 3:00 p.m. each day to view the specimens before they are stored. Alternatively, if you wish, you can examine and dictate all such specimens yourself. Please let Army know which alternative you prefer.

JCW:skp

cc: Sharon Scalise
Amy Van De Weile
Surgical Pathology Assistants
P.A.'s
Residents and Fellow

To: PA's, Residents, and Staff
From: John C. Watts, M.D. *JCW*
Date: October 28, 1999

Subject: **SPECIMENS**
PATHOLOGY PROTOCOL FOR BREAST SENTINEL LYMPH NODE (SLN) BIOPSY

There is some confusion about the handling of breast SLN specimens. This memo will summarize our protocol.

1. SLN's will almost always be delivered fresh, in which case they are subject to the entire protocol. SLN's received in formalin will not have either frozen sections or cytology scrape preparations performed, but will be subject to the rest of the protocol.

2. Any specimen identified as an SLN is subject to the protocol, regardless of whether it is detected by the blue dye method, Tc-99 lymphoscintigraphy, or both.
3. All lymph nodes identified as sentinel lymph nodes are subject to the protocol, regardless of how many, or whether they are received in one or in separate specimen jars.

4. If the SLN is grossly positive, this should be confirmed by frozen section (FS) and cytology scrape preparation (CSP). Step sections and immunohistochemistry (IHC) will not be done on these nodes.
5. Lymph nodes less than 5 mm should be submitted for FS examination without sectioning. Lymph nodes equal to or greater than 5 mm should be sectioned and entirely submitted for FS examination, regardless of the number of blocks required.

6. All tissue from each FS block should be submitted for permanent histologic examination, including two levels cut at 40 um intervals, regardless of the size of the lymph node or the number of blocks required to embed it entirely. Pure fat should not be submitted.

7. Cytology scrape preparations should be prepared in the ratio of one slide per tissue block. For example, a large node that requires three blocks for total embedding, will have 3 CSP slides. Scrapings from all pieces of tissue included in a single block can be put on a single slide for Papanicolaou staining. CSP's should be prepared prior to performing the FS. We do not prepare touch preparations or imprints, which are less sensitive than CSP's.

8. If metastases are discovered on frozen or permanent histologic sections, or cytology scrape preparations, IHC will not be done.

9. If metastases are not detected in the permanent histologic sections, both levels from each block should be submitted for cyokeratin AE1/AE3 immunohistochemistry.

10. The results of all studies performed (i.e., FS, CSP, permanent histologic sections, and IHC) should be included in the report for each SLN.

To: PAs, Residents and Staff
From: John C. Watts, M.D. *JCW*
Date: January 25, 2000

Department: Anatomic Pathology
Department: Anatomic Pathology

Subject: SENTINEL LYMPH NODE BIOPSY PROTOCOL

The sentinel lymph node research project has stopped recruiting new patients. Therefore, we no longer need to handle the sentinel lymph node biopsies by special protocol. Henceforth, sentinel lymph nodes should be handled just like any other axillary lymph node removed from patients with breast cancer. Thus, these lymph nodes should be embedded entirely for histologic examination. We will no longer routinely examine these lymph nodes at multiple levels, nor will we perform cytology scrape preparations or frozen sections, nor will we perform immunohistochemistry on any of these lymph nodes.

CC: Sharon Scalise
Amy VanDeWeile
Susan Slayton
Jean Jax
Stephan Stasiw

To: PA's, Residents, and Staff
From: John C. Watts, M.D. *JCW*
Date: August 15, 2000
Department: Anatomical Pathology
Department: Anatomical Pathology

Subject: COLOR - CODED PROSTATE BIOPSIES

Dr. Ken Kernen, a new staff urologist, obtains multiple (up to 12 or more) needle biopsy specimens from different sites in the prostate gland from each of his patients for diagnosis and staging. Rather than submit each biopsy core in a separate jar, he will distinguish them from each other by painting them individually with different color inks, and submit them together in several jars. He will provide a code that identifies each color by site. Please list each site separately in both the gross dictation and diagnosis line in your report. If, by chance, he does not submit a color code with the biopsy specimens, then you can list the biopsy cores separately by color alone.

cc: Amy VanDeWeile
Sharon Scalise

To: PA's, Residents & Staff
From: John C. Watts, M.D. *JCW*
Date: October 9, 2000
Department: Anatomical Pathology
Department: Anatomical Pathology

Subject: NSABP B32 BREAST SENTINEL LYMPH NODE PROJECT

The hospital is enrolled to participate in this research project: Jane Pettinga, M.D. is the principal investigator. The research protocol requires intraoperative assessment of sentinel lymph nodes by scrape cytology, and the mechanism for doing this has already been established. After this intraoperative assessment, the sentinel lymph nodes will be delivered to surgical pathology to be accessioned and assigned to one of the surgical pathologists on duty that day. The sentinel lymph nodes should be processed just like any other breast lymph node: they should be sectioned and entirely submitted for microscopic examination, but no levels should be cut and no cytokeratin immunohistochemistry should be done, unless the latter is required to confirm a suspicious focus, as we would do for any other off-protocol specimen.

Participation in this study demands that we adhere to very specific requirements for documentation of our findings in the final surgical pathology report. I have attached a list of these requirements, and a sample pathology report that outlines the specific format required for the study. In brief, each sentinel lymph node biopsy specimen jar will be identified with a preprinted specimen label that contains information regarding the specimen. All of this information must be dictated into the final surgical pathology report, including the specimen number, the location (axillary level), a hot spot number, the ex-vivo count, and whether or not blue dye was used. Again, all of this information should be present on the specimen label. If not, please contact the surgeon and he or she will have to provide that information to us. It is not our job to track that information down. The results of the intraoperative cytology examination should also be included in the surgical pathology report following the gross dictation for that specimen and can be titled "intraoperative cytologic examination: negative for metastatic carcinoma." or, if positive, "positive for metastatic carcinoma." Lymph nodes from the axillary dissection specimen should be divided into two levels: lower (level I) and upper (level II)". Lymph nodes from each level should be reported separately in the report. The rest of the information needed is already in our checklist. Please contact me if you have any questions about these cases.

APPENDIX VIII

REQUIRED NSABP B32 Source Documentation

OPERATIVE REPORT

For proper source documentation, the following information should be included in the surgical operative report or as an addendum to the report, and be dictated by the participating surgeon.

1. Patient's name
2. Location of tumor in breast
3. Time of injection (TSC)
4. Dose of TSC injected (millicuries)
5. Volume of TSC injected
6. Volume blue dye injected
7. Time of primary survey with gamma detector
8. Location of hotspots and counts
9. Background counts
10. Location of resected sentinel lymph nodes
11. Ex vivo counts of resected sentinel lymph nodes
12. Blue dye present in node or duct
13. Bed count of excision field
14. Steps used if hotspot not found
15. Intraoperative cytology results of sentinel lymph nodes
16. Whether or not completion axillary dissection was performed

PATHOLOGY REPORTS

For proper source documentation and critical linkage purposes, the following information should be included in the pathology report(s).

1. Patient's name
2. For each sentinel lymph node specimen submitted:
(The descriptive information on the preprinted B32 specimen labels should be dictated verbatim into the gross description and final diagnosis sections of the pathology report.)
Specimen # or letter
Location
Hotspot #
Ex Vivo Count
Whether or not blue dye was present in duct or node
3. Results of intraoperative cytology
4. Lymph nodes from an axillary dissection should be labeled "Axillary Dissection, Level"
5. Maximum pathologic tumor size (including invasive and intraductal components)
6. Tumor type
7. Receptor status
8. Histologic grade

SAMPLE PATHOLOGY REPORT PROVIDED (Appendix X)

APPENDIX X

SAMPLE PATHOLOGY REPORT

FOR NSABP B-32

S99-4702

NAME: (Patient's name)

DOB: 6/30/54

MRN: 00019567

DATE COLLECTED: 3/1/99

DATE RECEIVED: 3/1/99

DATE REPORTED: 3/4/99

ORD PHYS: Jane Smith, MD

ATT PHYS: John Brown, MD

GROSS:

Specimen 1 labeled "Axilla Level I, Hotspot 1, Count 3303, Blue dye YES" received fresh is a 2.5 x 1.5 x 1.0 cm fragment of fibrofatty tissue. Embedded within the fibrofatty tissue is a 1.5 x 1.0 x 0.7 cm tan-pink moderately firm lymph node. The node is sectioned. Touch preparations are prepared from the cut surfaces. Touch preparation diagnosis: negative for tumor. The lymph node is submitted in its entirety in cassette A.

Specimen 2 labeled "Axilla Level I, Hotspot 1, Count 2800, Blue dye YES" received fresh is a 2.2 x 1.3 x 1.0 cm fragment of fibrofatty tissue. Embedded within the fibrofatty tissue is a 1.2 x 1.0 x 0.4 cm tan-pink firm lymph node. The node is sectioned. Touch preparations are prepared from the cut surfaces. Touch preparation diagnosis: positive for tumor. The lymph node is submitted in its entirety in cassette B.

Specimen 3 labeled "Axillary Dissection, Level I" received...

Specimen 4 labeled "Axillary Dissection Level II" received...

Specimen 5 is identified as Right Breast Mass and consists of...

DIAGNOSIS:

1. Lymph node, Axilla Level I, Hotspot 1, Count 3303, Blue dye YES: one lymph node negative for malignancy (0/1).
2. Lymph node, Axilla Level I, Hotspot 1, Count 2800, Blue dye YES: one lymph node positive for carcinoma with capsular invasion (1/1).
3. Lymph nodes, Axillary Dissection, Level I: seven lymph nodes negative for malignancy (0/7).
4. Lymph nodes, Axillary Dissection, Level II: five lymph nodes negative for malignancy (0/5).
5. Right Breast Mass, Excisional Biopsy: Invasive Lobular Carcinoma, 1.0 cm greatest dimension, poorly differentiated, ER/PR Studies pending.

To: PA's, Residents, and Staff
From: John C. Watts, M. D. *JCW*
Date: December 8, 2000
Department: Anatomical Pathology
Department: Anatomical Pathology

Subject: Prostate Needle Core Biopsy Specimens

Our histotechnologists have become quite adept at flatly embedding needle core biopsy fragments of prostate for optimum histologic sections. Therefore, effectively immediately we will embed three, rather than two, cores in each cassette. So that I can monitor the quality of these sections, please let me know if this change presents any problems with your specimens.

cc: Sharon Scalise
Amy Van DeWeile
Steve Stasiw

To: PA's Residents, and Staff

Department: Anatomic Pathology

From: John C. Watts, M.D.

Department: Anatomic Pathology

Date: December 29, 2000

Subject: Sentinel Lymph Node Biopsy for DCIS and Microinvasive Ductal Carcinoma

Attached is a summary of a discussion regarding sentinel lymph node biopsy for patients with large or palpable DCIS, or microinvasive ductal carcinoma, detected on needle core biopsy. Consensus of the group was that sentinel lymph node biopsy is appropriate for these patients. Since these patients will not be entered on protocol, immunohistochemical stain for cytokeratin should be done on each lymph node block, unless metastasis is detected by an H&E. As always, a positive immunohistochemical stain requires confirmation if the cells are actually malignant by review of the H&E slide. If that determination is negative or equivocal, then metastasis should not be diagnosed.

SENTINEL LYMPH NODE BIOPSY FOR DCIS

December 22, 2000

The Breast Cancer Research Team discussed the pros and cons of performing sentinel lymph node biopsy for ductal carcinoma in situ. Recent studies from Sloan-Kettering and the Moffett Cancer Center were reviewed, which showed 6 to 13% node positivity in DCIS patients undergoing sentinel lymph node biopsy. Most of these were micrometastases found by immunohistochemical staining. Discussion centered around the significance of micrometastases and the relative risks and benefits of sentinel node biopsy in light of the possibility of over-treating some patients with DCIS. The consensus of the group was that it would be appropriate to perform sentinel node biopsies in women in whom there was a significant chance that their breast harbored invasive disease. At present, most of the breast surgeons at Beaumont are now performing low axillary node dissections in these patients, and it was felt that a sentinel node biopsy would have greater accuracy with probably less morbidity.

The following conditions were agreed upon as being appropriate for consideration of sentinel node biopsy in patients with DCIS:

1. A large area of involvement requiring mastectomy.
2. Palpable disease.
3. Significant mass on mammogram.
4. Microinvasion (less than one mm) on core biopsy or questionable invasion on core biopsy.
5. The presence of lymphovascular invasion.

Veronica Decker and I checked with NSABP and Tmic is acceptable for B-32. Therefore, Tmic lesions could be handled with no axillary surgery, with sentinel lymph node biopsy, or with B-32.

The significance of immunohistochemical staining for cytokeratin was also discussed. The consensus was that to insure the accuracy of the sentinel node biopsy, the immunohistochemical staining should be done, but this should only be called positive if the presence of malignant cells can be confirmed on H&E staining. It was recommended that a combination of techniques of blue dye and technetium-99 be used. In the case of widespread disease, injection at the upper outer limit of the disease mammographically would be recommended, as discussed in the study from Sloan-Kettering. Alternatively, subareolar injection could be considered.

Since several members were unable to be present or were called away, I am circulating this synopsis to be sure that this is the consensus of the group. This should be considered as a guideline for consideration of sentinel node biopsy in DCIS, but not necessarily a recommendation. If you agree with this guideline, please check and sign below.

I agree _____

(Signature)

I disagree _____

(Signature)

Date _____

To: PA's, Residents, and Staff
From: John C. Watts, M.D. *JCW*
Date: January 8, 2001
Department: Anatomie Pathology
Department: Anatomie Pathology

Subject: ANTHOLOGY OF SENTINEL LYMPH NODE MEMOS

In response to Dr. Hawkin's suggestion at the recent staff meeting, I have compiled copies of all my memos regarding sentinel lymph node biopsy, both on protocol and off protocol, in a notebook located in the Surgical Pathology laboratory. This notebook, which is labeled "BREAST SLN MEMOS" on the spine, is located with the other notebooks in the bookshelf on the east wall of the Surgical Pathology laboratory. Incidentally, instructions for handling pediatric tumors on protocol can also be found in a notebook in this same area.

To: P.A.'s, Residents and Staff
scw

From: John C. Watts, M.D.

Date: June 5, 2001

Subject: SECTIONING OF LYMPH NODES

Lymph nodes recovered from lymph node dissections (e.g., axillary dissections for breast cancer) should ordinarily be sectioned transversely (perpendicular to the long axis) at 2-3 mm intervals, and all sections should be submitted for histologic examination. However lymph nodes smaller than 5 or 6 mm in size can be bivalved longitudinally, and both halves submitted. Sentinel lymph nodes from breast cancer patients for intraoperative cytologic examination must be sectioned longitudinally (as required by NSABP protocol). Both halves should be submitted for histologic examination, and levels can be cut, if indicated.

cc: Dr. Jane Pettinga
Dr. Pamela Benitez

To: PA's, Residents and Staff
From: John C. Watts, M.D. *JCW*
Date: October 12, 2001

Subject: NEOPLASM
REVISED CHECKLIST C: PULMONARY LOBECTOMY/PNEUMONECTOMY FOR

The attached revised checklist clarifies the status of the pleura in resection specimens for bronchogenic carcinoma. Invasion into the deeper layers of the visceral pleura, without invasion to the surface of the visceral pleura, has no clinical import. Two levels of pleural invasion have significance for prognosis and staging. The first is invasion to the surface of the visceral pleura, with tumor present on the pleural surface uncovered by mesothelium. The second is invasion of parietal pleura. Obviously, we can only assess the second parameter if an extrapleural resection has been done. The checklist is revised to contain two entries regarding the pleura. The first is "invasion to visceral pleural surface," which can be answered "yes" or "no." The second item is "invasion of parietal pleura." This can be answered "yes" or "no" only if an extrapleural resection has been done. If there is invasion of the parietal pleura, the parietal pleura resection argues are important and should be commented on in the report. If no extrapleural resection has been done, we cannot evaluate parietal pleural invasion and should therefore respond "not applicable" in the check list.

cc: Robert Welsh, M.D.
Joel Seidman, M.D.
K. P. Ravikrishnan, M.D.

Type of specimen.....*

Largest diameter of tumor.....

Distance from bronchial surgical margin.....

Histologic type.....

Histologic grade.....

Invasion to visceral pleural surface.....

Invasion of parietal pleura#.....

Angiolymphatic invasion.....

Obstructive pneumonitis**.....

Peribronchial lymph nodes.....

Total number found.....

Number containing metastatic neoplasm:.....

(Other) lymph nodes.....

Total number found.....

Number containing metastatic neoplasm:.....

Total number found.....

Number containing metastatic neoplasm:.....

* List each group of lymph nodes separately by site.

** If yes, state whether it involves the hilar region
but not the entire lobe (or lung), or whether it
involves the entire lobe (or lung).

If parietal pleura not included with specimen,
answer "not applicable".

To: PA's, Residents and Staff
From: John C. Watts, M.D. *JCW*
Date: October 18, 2001
Department: Anatomie Pathology
Department: Anatomie Pathology

Subject: DEPTH OF INVASION FOR CERVICAL CARCINOMA

Some of the treatment protocols for cervical cancer require additional information regarding depth of stromal invasion (i.e., inner third, middle third, or outer third of cervical wall), in addition to the actual depth measured in mm/cm. We can most easily provide this information in the report and checklist as a ratio of depth of invasion/total thickness of cervical wall. The clinicians can complete the calculation to determine which third of the wall is involved, if they wish. I have included this as a reminder in the 2 cervical tumor checklists (attached)

D - DCERVICAL CONE BIOPSY

* Express as a ratio: depth of invasion/total thickness of cervical wall

Type of tumor.....
Grade of tumor.....
Multifocal or single focus.....
Length of tumor in endocervical canal.....
Depth of tumor invasion*.....
(measured from epithelial-stromal junction):
Angiolymphatic invasion.....
Tumor in endocervical margins.....
Tumor in ectocervical margins.....

E - ECERVICAL - HYSTERECTOMY FOR CERVICAL CANCER

* Express as a ratio: depth of invasion/total thickness of cervical wall

Type of tumor.....
Grade of tumor.....
Gross size of tumor (if visible grossly).....
Length of tumor in endocervical canal.....
Extension to lower uterine segment of endometrium:
Depth of invasion*.....
Angiolymphatic invasion.....
Parametrial involvement.....
Status of resection margins
Vaginal.....
Parametrial.....

To: PA's, Residents, and Staff

From: John C. Watts, M.D. *JCW*

Date: December 11, 2001

Subject: SENTINEL LYMPH NODES: UPDATE

In order to streamline the processing of sentinel lymph nodes, I recommend the following changes in the way these specimens are processed:

- 1) All sentinel lymph node blocks should be cut at three levels initially. The levels should be deep, and the last level should sample the deepest part of the specimen.

- 2) An unstained section should be picked up on PLUS slides at each level and held.

If the initial H&E-stained levels are negative for metastatic carcinoma, immunohistochemistry for cytokeratin AE1/AE3 (in the case of breast cancer) or for S-100 (in the case of malignant melanoma) should be ordered at one level only. Performing immunohistochemistry at all three levels is not advocated by most experts in the field, and should be done only if the individual pathologist decides that it is necessary in a given case.

cc: Sharon Scalise
Amy VandeWiele

To: PA's, Residents, and Staff
 From: John C. Watts, M.D. *JCW*
 Date: December 11, 2001
 Department: Anatomical Pathology
 Department: Anatomical Pathology

Subject: PROCESSING OF THIN-NEEDLE CORE BIOPSY SPECIMENS

We are beginning to receive an increased number of thin-needle core biopsy specimens of solid tumors, many of which come from Diagnostic Radiology. We need to standardize the way we handle these specimens to conserve tissue for adjunctive studies, if needed. We have agreed to the following procedure: 1) one ribbon of serial sections stained with H&E, 2) then four more ribbons of serial sections placed on four PLUS slides and set aside unstained for further studies, and 3) a final ribbon of serial sections stained with H&E. Note: all of these ribbons are serial sections, NOT step sections (levels). We will continue to handle other needle core biopsy specimens (e.g., prostate gland, breast, etc.) in the usual manner. If in doubt about a particular case, check with your staff pathologist or me.

Sharon Scalise
 Amy VandeWiele

To: PAs, Residents and Staff
From: John C. Watts, M.D. *JCW*
Date: January 4, 2002
Department: Anatomical Pathology
Department: Anatomical Pathology

Subject: REVISED BREAST BIOPSY (A) AND MASTECTOMY (B) CHECKLISTS

Please note two changes in the attached, revised checklists. The changes have been made to accommodate the finding of isolated tumor cells in axillary lymph nodes by immunohistochemistry that cannot be found in the corresponding H&E-stained section. The TNM supplement, published in 2001, creates a category to accommodate such cases; they are classified as pN0(i+). We shall continue to consider such lymph nodes negative for metastasis for staging and treatment purposes, as recommended by the TNM supplement, but the new entry will allow us to recognize such cases for future computer retrieval. The prognostic and therapeutic implications of such a finding are presently unknown. For the entry regarding isolated tumor cells detected only by immunohistochemistry, there are three possible replies: "none (0)"; a number 1 or more; or "not applicable" (if immunohistochemistry is not done). Remember that sentinel lymph nodes positive by immunohistochemistry but negative by H&E should be handled in the same way.

A - BREAST BIOPSY FOR CARCINOMA

(Revised 1/3/02)

Surgical Procedure.....
(Incisional/excisional biopsy, partial mastectomy)
Prior needle core biopsy at Royal Oak.....

Invasive Carcinoma
Largest diameter.....
Histologic type.....
Histologic grade (Bloom-Richardson/Elston).....
Angiolymphatic invasion.....
Status of surgical margins.....*

In-Situ Carcinoma
Largest diameter.....
Histologic type.....
Architectural pattern(s).....
Nuclear grade.....
Comedocarcinoma component.....
Status of surgical margins.....*

Axillary Lymph Nodes
Sentinel lymph node(s) .. (Positive/Examined).....
Total number examined.....
Number with metastatic neoplasm by histology.....
Size of largest metastasis.....
Invasion through nodal capsule.....
Number with isolated tumor cells detected
only by immunohistology [pN0(i+)].....
Radiog, aphic abnormality identified.....
Location of calcification(s) if present.....
ER, PR, and HER-2/neu Receptor Analyses.....**
Surgical margins evaluated microscopically.....

B - MASTECTOMY FOR CARCINOMA

(Revised 1/3/02)

Prior needle core biopsy at Royal Oak.....

Invasive Carcinoma

Largest diameter.....
Tumorous ulceration of skin.....
Multifocal.....
Histologic type.....
Histologic grade (Bloom-Richardson/Elston).....
Angiolymphatic invasion in breast tissue.....
Dermal lymphatic invasion.....
Status of surgical margins..... *

In-Situ Carcinoma

Largest diameter.....
Histologic type.....
Architectural pattern(s).....
Nuclear grade.....
Comedocarcinoma component.....
Status of surgical margins..... *

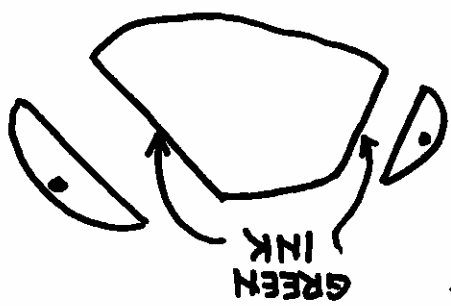
Axillary Lymph Nodes

Sentinel lymph node(s) .. (Positive/Examined).....
Total number examined.....
Number with metastatic neoplasm by histology.....
Size of largest metastasis.....
Number with isolated tumor cells detected
only by immunohistology [pN0(i+)].....
Invasion through nodal capsule.....
ER, PR, and HER-2/neu Analyses..... **
Surgical margins evaluated microscopically.....

To:	PA's, Residents & Staff	Department: Anatomical Pathology
From:	John C. Watts, M.D.	Department: Anatomical Pathology
Date:	January 4, 2002	

Subject: **GROSS DISSECTION OF RADICAL PROSTATECTOMY SPECIMENS**

After removal of the apical and basal caps for transverse sectioning, the newly cut surfaces should be painted with green ink as shown in the diagram.



The green ink will then mark cut surfaces of the prostate that do NOT represent surgical margins of resection. We will thus be able to recognize such surfaces microscopically, and will not have to waste time cutting and examining levels in the paraffin block looking for blue or black ink to indicate surgical margins on these surfaces. Please see me if you have any questions about the need for doing this or how to do it.

Memo

To: All AP Personnel

From: Ali Armin, M.D. *hA*

Date: 05/27/03

Re: Liver Biopsies Associated With Cholecystectomy Specimens

Liver biopsies now frequently accompany cholecystectomy specimens. Almost all of these patients have hepatic nodularity or signs and symptoms associated with nonalcoholic fatty liver disease.

Please order the "NASH" section and stain protocol on these liver biopsies.

**William Beaumont Hospital
Anatomic Pathology**

To: PA's, Residents, and Staff
From: John C. Watts, M.D. *JCW*
Date: May 28, 2003
Department: Anatomical Pathology
Department: Anatomical Pathology

Subject: DISEASE
PATHOLOGIC EVALUATION OF BIOPSY SPECIMENS FOR HIRSCHSPRUNG'S

Doctors Morden and Chan have requested that we develop a departmental policy for uniform handling of biopsy specimens for the diagnosis of Hirschsprung's disease. After discussing the issue with Drs. Chang and Armin, we have developed the following policy: The diagnosis of Hirschsprung's disease is ideally established by deep mucosal biopsy, where specimens are available for both permanent sections and ACE enzyme histochemistry. Ordinarily, two biopsy specimens are required: one in formalin for permanent sections, and one unfixed for enzyme histochemistry. On occasion, only one unfixed specimen is delivered to the department. In this situation, the specimen, if large enough, is divided for both permanent sections and for enzyme histochemistry. If not large enough, it is used for permanent sections only. On occasion, intraoperative frozen section is requested to establish the diagnosis of Hirschsprung's disease or determine whether the biopsy specimen is adequate for diagnosis. The intraoperative frozen section diagnosis of Hirschsprung's disease is fraught with a great deal of difficulty and is not terribly reliable, even in the best and most experienced hands (see AJSP 24:1675-1677, 2000). Nevertheless, we have agreed to the following approach: the frozen section pathologist will be paged to the room to collect the specimen and perform the frozen section. If the pathologist confidentially identifies ganglion cells in the frozen section slide, he/she should report the finding to the pediatric surgeon, and nothing further need be done intraoperatively. If the pathologist does not find ganglion cells or is uncertain about their presence, he/she should contact Dr. Chang to immediately review the frozen section slides. If Dr. Chang is not available, Dr. Armin or Dr. Watts should be contacted instead.

JCW:smc

Cc: Dr. Robert Morden
Dr. Winston Chan

To: Distribution

From: John C. Watts, M.D. *JCW*

Date: May 29, 2003

Department: Anatomical Pathology

Department: Anatomical Pathology

Subject: PRECAUTIONS FOR LABORATORY PROCESSING OF SPECIMENS FROM PATIENTS SUSPECTED OF HAVING SEVERE ACUTE RESPIRATORY SYNDROME (SARS)

Special precautions are outlined below for processing of laboratory specimens obtained from patients suspected of having SARS. To date, there have been no documented cases of SARS at William Beaumont Hospital or anywhere else in the State of Michigan. Furthermore, there have been no documented clusters of SARS among laboratory workers anywhere in the United States. Despite the foregoing, it seems prudent to develop guidelines for handling specimens from such patients, should they be encountered here. Because SARS, or potential SARS, is readily recognizable on clinical and epidemiologic grounds, IT IS THE POLICY OF WILLIAM BEAUMONT HOSPITAL THAT ANY SPECIMENS SENT TO THE LABORATORIES FROM SUCH PATIENTS WILL BE PROMINENTLY LABELED AS SUCH. Therefore, special precautions other than standard (universal) precautions are not needed for processing specimens that are NOT so identified. The following precautions must be taken with any such specimens. Recommendations departing from (less stringent than) current CDC interim guidelines have been discussed with and approved by Jeffrey Band, M.D., Corporate Director of Epidemiology.

A) Standard (universal) precautions (use of disposable gloves and a laboratory gown or other cover) only. Careful attention should be given to hand hygiene after removal of gloves. These precautions must be used in the following circumstances:

- Pathologic examination and processing of formalin-fixed or otherwise inactivated tissues
- Molecular analysis of extracted nucleic acid preparations
- Electron microscopic studies with glutaraldehyde-fixed tissues
- Routine staining and microscopic analysis of fixed smears
- Processing of blood and urine specimens not involving procedures that might cause splashes, sprays, or aerosolization

B) Standard (universal) precautions, **PLUS** use of goggles and a face shield or a standard surgical mask, to provide barriers to mucosal surface exposure.

- Processing of any specimens using procedures that are likely to generate splashes or sprays.

C) Precautions listed under "B" above, **PLUS** respiratory protection must be used to process fresh, unfixed specimens. Respiratory protection includes use of sealed centrifuge rotors or sample cups. Rotors and cups should be loaded and unloaded in a biological safety cabinet, if possible. Furthermore, a properly fit-tested filter respirator (N-95 or higher) must be used by all persons performing these procedures or present in the immediate area. Whenever possible (autopsy examination excepted), these procedures should be performed in a laminar flow biological safety cabinet. These precautions must be used in the following circumstances:

- Gross autopsy examination
- Pathologic examination and processing of unfixed tissues, especially from respiratory or gastrointestinal tracts.
- Aliquoting and/or diluting unfixed body fluid specimens other than blood and urine, especially if originating from the respiratory tract.
- Nucleic acid extraction procedures involving unfixed specimens
- Preparation and fixing of smears for microscopic analysis
- Any procedure involving centrifugation, sonication, or vortexing of unfixed specimens.

Work surfaces and equipment should be decontaminated after specimens are processed. Standard virucidal laboratory disinfectants can be used.

JCW:smc

Distribution:

All Laboratory Supervisors
Pathologists' Assistants
Residents
Staff Pathologists
Dr. Jeffrey Band
Dr. Mark Kolins
Dr. Frederick Kiechle

To: See Distribution
From: Peggy A. Wenk, HTL(ASCP)SLS
Department: Anatomical Pathology
Date: July 9, 2003

Subject: Prostate Seeds - Minutes of July 1, 2003 meeting, and proposed actions

On July 1, 2003, Peggy Wenk (Anat. Path. Safety Officer), Cheryl Culver Schultz (WBH Radiation Safety Officer) and Greg Edmundson (Medical Physicist) met to discuss the handling of radiation seeds in prostate specimens received in Surgical Pathology/Histology Laboratory (SP/Hx). The following is the minutes of that meeting:

THREE TYPES OF METAL "RADIATION SEEDS" THAT MIGHT BE FOUND:

1. Markers - that indicate the location of the tumor. These are not radioactive.
2. Iodine 125 - which is not used at WBH, but is used at other locations. It has a 1/2 life of 60 days.
3. Palladium - which is used at WBH and other locations. It has a 1/2 life of 15-17 days.

THREE TYPES OF PROSTATE SPECIMENS THAT MIGHT BE RECEIVED IN SP/HX:

1. Transurethral resections (TUR) - might have seeds or markers mixed in with the chips.
2. Incidental whole prostates - prostate removed with a colon/rectum or bladder (cancer in colon/rectum or bladder)
3. Prostatectomies - whole prostate removed. Cancer is usually in the prostate.

LABORATORY PERSONNEL WHO ARE GREATEST RISK OF EXPOSURE TO RADIATION SEEDS:

1. Pathologist Assistants and Residents - Gross in/breadloaf whole prostates or pick out TUR chips for placement into cassettes. Have to remove seeds from tissue with forceps.
2. Histotechs - Section/microtome macrosections. Have to remove seeds from tissue with forceps.

OTHER FACTORS:

1. Literature searches: Have not found any published articles on the subject of prostate removal with radiation seeds in it, and the associated dangers to OR or SP/Hx personnel.
2. Numbers:

- a. The numbers of prostate seed implants is increasing every year, so the number of incidents where SP/Hx receives prostate specimens with radiation seeds is predicted to increase in the future.
- b. Number of whole prostates received in 2001 was 180, number in 2002 was 220. Estimated number of whole prostates (incidental or primary) received every year with radiation seeds is 4-8 per year.
- c. Number of prostate TUR received every year is unknown, but more than whole prostates. Number of prostate TUR received with radiation seeds is unknown, but the number is higher than for whole prostates.

3. Lack of information: The laboratory does not have information on:

- a. what types of radioactive seeds are received
- b. how much time has elapsed from the time of implant to the time of the surgery when the specimen is being received in the laboratory
- c. how radioactive (if at all) the seeds are, when received in the laboratory (though they are known to be low levels)
- d. how much radiation the laboratory personnel are being exposed to when handling the seeds, at the different lengths of time after the implantation

4. Informed: SP/Hx is not informed that a specimen has had radiation seeds implanted.

5. NRC: Radioactive seeds must be disposed of via NRC regulations, and those handling the seeds must be monitored.

To: Distribution
 From: John C. Watts, M.D. JCW
 Date: December 16, 2003
 Department: Department of Surgery
 Department: Anatomic Pathology

Subject: EXEMPTED SURGICAL SPECIMENS

Attached is a revised and updated list of surgical specimens that are exempt from mandatory pathologic examination (i.e. do not need to be submitted to us for evaluation), and those that can be submitted for gross examination only. The specimens on these lists are not examined at all or are only examined grossly, because to do more than that provides no clinically relevant or important information, and represents cost without benefit. These lists have been approved by the College of American Pathologists (CAP), our surgical subspecialty chiefs, the chairs of both Surgery and Obstetrics/Gynecology, and the Medical Executive Board (December 9, 2003), as required by JCAHO. Although these specimens are exempt from mandatory gross or microscopic examination, such examination can and should be done whenever clinical or gross findings suggest a significant abnormality, or when the surgeon wants independent documentation of specimen removal for diagnosis. Items newly added to these lists are marked with an asterisk. All of the remaining specimens were already present on the previously approved list of exemptions. No specimens have been deleted from prior lists.

JCW:smc

Distribution: Staff Pathologists

Resident Pathologists

Pathologists Assistants

Amy Van de Wiele/Surgical Pathology Assistants

Sharon Scallise

Stephan Stasiw

SURGICAL SPECIMENS EXEMPT FROM MANDATORY PATHOLOGIC EXAMINATION

(Specimens in bold and with an asterisk are new additions to the lists)
(Revised 9/23/03)

CARDIOTHORACIC AND VASCULAR SURGERY

- Rib segments or other tissues removed only for purposes of gaining surgical access (except with prior history of malignancy).
- Rotary atherectomy specimens
- * Saphenous vein segments harvested for coronary artery bypass

GENERAL SURGERY (including Colon & Rectal, Urologic, and Pediatric Surgery)

- Bullets and other medicolegal foreign bodies given directly in chain of custody to law enforcement officers
- Foreign bodies (excluding those related to medical misadventure)
- Gallstones given to the patient
- Radiation devices
- Rib segments or other tissues removed only for purposes of gaining surgical access (except with prior history of malignancy)
- * Skin or other normal tissue (except breast) removed during a cosmetic or reconstructive procedure (e.g., abdominoplasty)
- * Skin scars (except those at the site of previous radical surgery for malignant neoplasm)
- Therapeutic devices such as catheters, gastrostomy tubes, stents, and sutures that have not contributed to patient illness, injury, or death
- Therapeutic radioactive sources
- Visibly normal breast cyst aspirate

OBSTETRICS AND GYNECOLOGY

- Foreskins from circumcision of newborn infants
- * Intrauterine contraceptive devices without attached soft tissue
- Ovarian cyst fluid (for cytology)
- Peritoneal fluid (for cytology)
- Placentas that are grossly normal
- * Skin scars (except those at the site of previous radical surgery for malignant neoplasm)
- Visibly normal breast cyst aspirate
- Ovarian cyst fluid including granulosa cells obtained during IVF procedure intended for concurrent use during *in vitro* fertilization procedures.
- Endometrial biopsies taken for endometrial cell culture for similar procedure as above
- Fallopian rings removed at time of tubal reanastomosis
- Pessaries or other vaginal appliance removed from clinically well patients

OPHTHALMOLOGY

- Cataracts

ORAL SURGERY

- Dental appliances
- Teeth

ORTHOPEDIC SURGERY

- Arthroscopy specimens (meniscal shavings, chondral shavings, and soft tissues)
- Bone donated to the bone bank
- Bone and soft tissue segments removed as part of corrective or reconstructive orthopedic procedures (e.g., rotator cuff repair, synostosis or syndactyly repair, spinal fusion, total hip replacement, total knee replacement)
- Bone spurs
- Carpal ligaments
- Fracture fragments and soft tissue from trauma
- Orthopedic appliances and therapeutic devices
- Osteocartilaginous loose bodies
- Skin scars (except those at the site of previous radical surgery for malignant neoplasm)
- Spinal surgery specimens (disc, ligament, and bone)
- Toenails/fingernails removed incidentally

OTOLARYNGOLOGY

- * Middle ear ossicles
- * Myringotomy tubes
- * Normal tissue removed during a cosmetic or reconstructive procedure (e.g., cleft palate repair)
- * Uvulopalatopharyngoplasty specimens removed for sleep apnea

PLASTIC SURGERY

- * Fat removed by liposuction
- * Skin or other normal tissue (except breast) removed during a cosmetic or reconstructive procedure (e.g., blepharoplasty, cleft palate repair, abdominoplasty, rhinoplasty, rhytidectomy, syndactyly repair), provided it is not continuous with a lesion
- * Skin scars (except those at the site of previous radical surgery for malignant neoplasm)
- * Breast implants removed at patient request.

SURGICAL SPECIMENS SUBMITTED FOR GROSS EXAMINATION ONLY

CARDIOTHORACIC AND VASCULAR SURGERY

- Atherosclerotic plaque from endarterectomy procedures
- * Prosthetic cardiac valves without attached tissue
- Vascular grafts without thrombi

GENERAL SURGERY (Including Colon & Rectal, Urologic, and Pediatric Surgery)

- Breast implant prostheses
- Traumatic amputations
- Varicose veins
- Vascular grafts without thrombi
- Hernia sacs

OPHTHALMOLOGY

- * Extraocular muscle from strabismus operations

ORAL SURGERY

- * Temporomandibular joint specimens

ORTHOPEDIC SURGERY

- Bunions
- Digits (accessory, rudimentary, supernumerary)
- Hammer toes
- Meniscus (torn)

OTOLARYNGOLOGY

- Nasal septum and turbinates
- * Tonsils and adenoids from infants and children

PLASTIC SURGERY

- Digits (accessory, rudimentary, supernumerary).

To: PA's, Residents and Staff
From: John C. Watts, M.D. *JCW*
Date: March 28, 2006
Department: Anatomical Pathology
Department: Anatomical Pathology

Subject: STANDARDIZED SURGICAL PATHOLOGY REPORT FORMAT

Listed below is the standardized surgical pathology report format for Royal Oak and Troy hospitals discussed at our last staff meeting and approved at today's Clinical Practice Council meeting. You will note that the format is essentially identical to what we have used for several years. Please note that the location of a Comment/Microscopic Description should consistently follow the Summary Checklist field and precede the Gross Description field. The intent is to standardize reports from the Royal Oak, Troy, and BRL facilities, and to emphasize the most important information by putting it at or near the top of the report.

FORMAT:

- Microscopic Diagnosis (and positive results box, if indicated)
- Summary Checklist (if indicated)
- Comment/Microscopic Description (if indicated)
- Gross Description
- Special Procedures
- Immunohistochemistry and Immunofluorescence Results Form/Special Stain Results Form (if indicated)
- Positive Stamp (if indicated)
- Audit Stamp (if indicated)

JCW:smc

CC: Mark Kolins, M.D.

To:

Staff

From:

MPV



Date:

May 31, 2006

Subject: WHIPPLE SPECIMEN CHECKLIST

The Whipple specimen checklist for pancreatic (W1) and ampullary / periaampullary (W2) tumors will be available for use starting Monday, June 5, 2006.

Please add the attached checklists to your current Checklist Manual.

Thanks.

W1 - PANCREATIC NEOPLASMS

(WHIPPLE)

Histopathologic type: *

Histologic grade: well, moderate, poorly differentiated (for adenocarcinoma only)
 Tumor location: pancreatic head, pancreatic body, pancreatic tail, diffuse
 Tumor size: < 2 cm > 2 cm

Direct tumor extension

Peripancreatic soft tissue: present or absent
 Common bile duct: present or absent
 Duodenal muscularis propria: present or absent
 Ampulla of Vater: present or absent

Lymphovascular invasion: present or absent
 Extramural large nerve perineural invasion: present or absent

Surgical margin status

Pancreatic parenchymal surgical margin: positive or negative or not applicable
 Portal vein/vena caval bed margin: positive or negative
 Common bile duct margin: positive or negative
 Proximal mucosal (gastric/duodenal) margin: positive or negative
 Distal mucosal (jejunal) margin: positive or negative

Lymph nodes

No. of involved lymph nodes/Total no. of lymph nodes:
 Superior (splenic artery):

Inferior pancreatic:
 Anterior pancreaticoduodenal:
 Posterior pancreaticoduodenal:

Splenic hilar lymph node (for tumors in body and tail only):

* WHO Histologic classification of pancreatic neoplasms

Exocrine Malignant: Ductal adenocarcinoma, Mucinous adenocarcinoma, Mucinous cystadenocarcinoma; Exocrine Malignant: Mucinous cystadenocarcinoma, Mucinous adenocarcinoma, Acinar cell carcinoma; Intraductal papillary mucinous carcinoma with or without invasion
 Exocrine Borderline: Mucinous cystic neoplasm with moderate dysplasia, solid-pseudopapillary neoplasm
 Endocrine: Pancreatic endocrine tumor

Lymph nodes:

Superior: lymph nodes superior to head and body of pancreas
 Inferior: lymph nodes inferior to head and body of pancreas
 Anterior: anterior pancreaticoduodenal, pyloric and proximal mesenteric lymph nodes
 Posterior: posterior pancreaticoduodenal, common bile duct or pericholedochal and proximal mesenteric nodes
 Splenic: (for tumors in body and tail) nodes of the splenic hilum and tail of pancreas

TNM staging of pancreatic cancer

T1 < 2 cm tumor limited to pancreas
 T2 > 2 cm tumor limited to pancreas
 T3 Invasion of soft tissue adjacent to the pancreas (i.e. retroperitoneal soft tissue, mesenteric fat, mesocolon, greater and lesser omentum, and peritoneum, the common bile duct, and/or duodenum (including the ampulla of Vater)
 T4 Involvement of celiac axis or superior mesenteric artery (unresectable primary tumor)
 Stage 1A: T1N0 Stage 1B: T2N0 Stage 2A: T3N0 Stage 2B: T1-3, N1 Stage 3: T4, any N
 Ret: CAP protocol for pancreas, January 2005

W2 - AMPULLARY/PERIAMPULLARY NEOPLASMS (WHIPPLE)

Histopathologic type: *
 Histologic grade: well, moderate, poorly differentiated
 (for adenocarcinoma only)
 Tumor size: cm
 Depth of invasion: **

Lymphovascular invasion: present or absent
 Extramural large nerve perineural invasion: present or absent

Surgical margin status
 Pancreatic parenchymal surgical margin: positive or negative or
 not applicable
 Portal vein/vena caval bed margin: positive or negative
 Common bile duct margin: positive or negative
 Proximal mucosal (gastric/duodenal) margin: positive or negative
 Distal mucosal (jejunal) margin: positive or negative

Lymph nodes
 No. of involved lymph nodes/total no. of lymph nodes:

Superior (splenic artery):
 Inferior pancreatic:
 Anterior pancreaticoduodenal:
 Posterior pancreaticoduodenal:
 Splenic hilar lymph node:

* WHO Histologic classification of extrahepatic bile ducts
 Adenocarcinoma, NOS; Papillary adenocarcinoma; Adenocarcinoma, intestinal type; Adenocarcinoma,
 gastric foveolar type; Mucinous adenocarcinoma; Clear cell adenocarcinoma; Signet-ring cell
 carcinoma; Adenosquamous carcinoma; Squamous cell carcinoma; Small cell carcinoma; Large cell
 neuroendocrine carcinoma; Undifferentiated carcinoma; Biliary cystadenocarcinoma

Lymph nodes:
 Superior: lymph nodes superior to head and body of pancreas
 Inferior: lymph nodes inferior to head and body of pancreas
 Anterior: anterior pancreaticoduodenal, pyloric and proximal mesenteric lymph nodes
 Posterior: posterior pancreaticoduodenal, common bile duct or pericholedochal and
 Splenic: (for tumors in body and tail) nodes of the splenic hilum and tail of pancreas
 proximal mesenteric nodes

** Depth of invasion
 T1 tumor limited to the ampulla of Vater or sphincter of Oddi
 T2 tumor invades duodenal wall
 T3 tumor invades pancreas
 T4 tumor invades peripancreatic soft tissues or other adjacent organs or structures

Stage IA: T1N0 Stage IB: T2N0 Stage 2A: T3N0 Stage 2B: T1-3, N1 Stage 3: T4, any N

Ref: CAP protocol for ampulla of Vater tumors (ampullary and periampullary carcinomas), Jan 2005

To: PA's, Residents and Staff

Department: Anatomic Pathology

From: John C. Watts, M.D. *JCW*

Department: Anatomic Pathology

Date: June 8, 2005

Subject: **REVISED SURGICAL PATHOLOGY CHECKLISTS**

Attached are revised checklists for pulmonary lobectomy/pneumonectomy for neoplasm, and nephrectomy for renal cell carcinoma. These checklists were discussed and approved at the June staff meeting. Please replace the current versions with these new versions.

JCW:smc

C - LOBECTOMY - PULMONARY LOBECTOMY/PNEUMONECTOMY FOR NEOPLASM (Revised 6/2/05)

Type of specimen.....
 Largest diameter of tumor.....
 Distance from bronchial surgical margin.....
 Histologic type.....
 Histologic grade.....
 Invasion of visceral pleura.....
 * Invasion of parietal pleura.....
 ** Angiolymphatic invasion.....
 *** Obstructive pneumonitis.....

Lymph Nodes: ***
Peribronchial lymph nodes.....
 (Other) lymph nodes:
 --- /
 --- /

* List as "present" if tumor penetrates through visceral pleural elastic layer (determined with elastic stain) OR is present at pleural surface; or as "absent" if tumor does not extend to pleura or penetrate through pleural elastic layer.

** If parietal pleura not included with specimen, answer "not applicable".

*** If yes, state whether it involves the hilar region, but not the entire lobe (or lung), or whether it involves the entire lobe (or lung).

**** List each group of lymph nodes separately by site.

Specimen laterality.....	:
Tumor location.....	:
Tumor size.....	:
Histologic type.....	:
(clear cell, granular cell, or mixed)	:
Fuhrman nuclear grade.....	:
Renal or large vein invasion.....	:
Invasion through renal capsule.....	:
Invasion into renal sinus.....	:
Lymph nodes (# positive/total #).....	:
Surgical margins	:
Vascular.....	:
Hilar soft tissue.....	:
Cortical soft tissue.....	:

Table 2-2
Criteria of Fuhrman et al.⁴³ for Assessing Nuclear Grade in Renal Adenocarcinoma

Nuclear grade 1	Composed of cells with small (approximately 10 µm), round, uniform nuclei with inconspicuous or absent nucleoli.
Nuclear grade 2	Have larger (approximately 15 µm) nuclei that exhibit irregularities in outline and have nucleoli when examined under high (x 400) magnification.
Nuclear grade 3	Have even larger nuclei (approximately 20 µm) with an obviously irregular outline and prominent large nucleoli evident even at low (x 100) power.
Nuclear grade 4	Exhibit features similar to the grade 3 tumors with the addition of bizarre, often multilobed, nuclei and heavy chromatin clumps

REFERENCE: Am J Surg Pathol 1982; 6:655-663

To: PA's, Residents and Staff

From: John C. Watts, M.D. *JCW*

Date: June 16, 2005

Subject: EXAMINATION OF EXCISED CARDIAC VALVES

I have recently learned from the Vice President, Clinical Affairs of a case in which two surgically excised cardiac valves from a single patient were examined in our laboratory. Significant abnormalities, including two cusp perforations and one cusp tear, were overlooked by the PA. Furthermore, the valves were not reviewed grossly by the pathologist before the case was signed out. I would like to re-emphasize departmental policy in this regard:

1. Gross findings are crucially important in the evaluation and diagnosis of cardiac valvular disease. All excised cardiac valves (both native and prosthetic) are to be reviewed grossly by the responsible pathologist, in addition to the PA or resident. The specimens are not to be sectioned until they have been examined by the pathologist. The PA or resident must notify the responsible pathologist that a valve is awaiting their review. Dr. Hartry should be consulted for unusual or difficult specimens.

2. All explanted prosthetic valves, and all excised native valves showing unusual gross abnormalities (other than calcific aortic stenosis and myxomatous degeneration of mitral or aortic valves) should be photographed before they are sectioned.

Of course, it would be very helpful if the cardiac surgeons could provide us with meaningful clinical information and imaging findings on the specimen request form, when appropriate, so that maximum benefit could be obtained from our examination of these specimens.

JCW:smc

PC: Leslie Roher, M.D.
Jeffrey M. Altschuler, M.D.
Harold Z. Friedman, M.D.

JCW

To: PA's, Residents and Staff

From: John C. Watts, M.D.

Date: November 8, 2005

Department: Anatomic Pathology

Department: Anatomic Pathology

Subject: REVISED ESOPHAGOGASTRECTOMY CHECK LIST "M"

Attached please find the newly revised esophagogastrrectomy checklist. As discussed and approved at the recent staff meeting, the checklist was revised to more specifically delineate the location of lymph nodes in these specimens. The PA's and residents should embed the lymph nodes from each area under separate tag numbers and specifically designate them in the summary of cassettes section in the gross report.

JCW:smc

Tumor location.....
Tumor size.....
Histologic type.....
Histologic grade.....
Depth of invasion.....

Margins
Distance from proximal resection margin.....
Distance from distal resection margin.....
Distance from radial resection margin.....

Lymph Node Metastases
Middle paraesophageal (# positive/# examined).....
Lower paraesophageal (# positive/# examined).....
Lesser curvature gastric (# positive/# examined)..
Greater curvature gastric (# positive/# examined):

Vascular/lymphatic invasion.....

Other Lesions
Barrett's esophagus.....
Dysplasia and in situ carcinoma.....
Involvement of other organs.....

To: PAs, Residents and Staff
From: John C. Watts, M.D. *JCW*
Date: February 28, 2005

Department: Anatomical Pathology
Department: Anatomical Pathology

Subject: REPORTING NEGATIVE OR NON-DIAGNOSTIC SPECIMENS

According to the February issue of the *Pathology Coding Alert*, and confirmed by Melissa Karr, we must be careful to document the work done on such specimens in order to justify reimbursement. Accordingly, the use of microscopic diagnoses such as: "No pathologic diagnosis," "no pathologic abnormality," "non-diagnostic specimen," "insufficient tissue for diagnosis," or "specimen unsatisfactory for diagnosis" should be avoided. Instead, it is better to document what is present (see attached examples), and a comment can then be added about the absence of other pertinent findings, or the adequacy of the specimen. Unless we document the work done, we run the risk of not being reimbursed for it.

If a tiny specimen is received and grossly described, but no tissue is present in the block or slides cut, use the diagnosis "specimen failed to survive processing." For reimbursement purposes, such specimens will be coded as 88300 (gross examination only).

JCW:smc
Attachments: 2 examples
CC: Stephan Stasiw
Sharon Scalise
Melissa Karr

WILLIAM BEAUMONT HOSPITAL - ROYAL OAK
PATHOLOGIC REPORT

NAME: [REDACTED]
HOSP. NO: [REDACTED]
LOCATION: SP
PT TYPE: SP
DATE OF PROCEDURE: 2/24/2005
DATE RECEIVED: 2/24/2005
DOCTOR: Alfonso V O'Neill, M.D.
SPEC NO: ROS-05-1
SEX: M

SPECIMEN: LLL BIOPSY

PRE-OP DIAGNOSIS:
POST-OP DIAGNOSIS:

CLINICAL INFORMATION: R/O Lung cancer

MICROSCOPIC DIAGNOSIS:

LUNG (LEFT LOWER LOBE), ENDOBRONCHIAL BIOPSY

---FRAGMENTS OF NORMAL BRONCHIAL MUCOSA AND SUBMUCOSA

Comment: There is no histologic evidence of inflammation, granulomatous infiltration, or neoplasm in this specimen.

GROSS:

Received in formalin labeled "bronchial biopsy LLL" are three soft, tan-red to white tissue fragments varying from 0.1 up to 0.4 cm in greatest dimensions. All/1, no G. ms/jcw/bp

Special Procedures: Step sections

JCW/b

I have reviewed all slides and the report.
John C. Watts M.D.
Pathologist
Electronically signed 02/25/2005

PATHOLOGIC REPORT

WILLIAM BEAUMONT HOSPITAL - ROYAL OAK
PATHOLOGIC REPORT

SPEC NO. ROS-05-01
AGE: 23
SEX: M

NAME: [REDACTED]
HOSP. NO.: [REDACTED]
LOCATION: SP
PT TYPE: SP
DATE OF PROCEDURE: 2/23/2005
DOCTOR: Eugene Gelzayd, M.D.

SPECIMEN: A. DUODENAL BIOPSY; B. ANTRUM BIOPSY; C. DISTAL ESOPHAGEAL BIOPSY;
D. TERMINAL ILEUM BIOPSY; E. SIGMOID COLON BIOPSY

PRE-OP DIAGNOSIS:
POST-OP DIAGNOSIS:
CLINICAL INFORMATION: Heartburn, dyspepsia, suspected esophageal reflux, Crohn's disease, c hronic asthma

MICROSCOPIC DIAGNOSIS:

A. DUODENUM, BIOPSY
--- NORMAL DUODENAL MUCOSA
--- NO EVIDENCE OF DUODENITIS
B. STOMACH (BODY AND ANTRUM), BIOPSY
--- NORMAL GASTRIC MUCOSA
--- NO EVIDENCE OF GASTRITIS
--- DIFF-QUIK STAIN FOR HELICOBACTER PYLORI IS NEGATIVE
C. DISTAL ESOPHAGUS, BIOPSY
--- MODERATE CHRONIC INFLAMMATION INVOLVING CARDIA-TYPE JUNCTIONAL
MUCOSA
--- NO EVIDENCE OF SPECIALIZED INTESTINAL METAPLASIA OR DYSPLASIA
D. TERMINAL ILEUM, BIOPSY
--- PROMINENT LYMPHOID FOLLICLES
--- NO EVIDENCE OF ILEITIS
E. SIGMOID COLON, BIOPSY
--- NORMAL COLONIC MUCOSA
--- NO EVIDENCE OF ACTIVE OR QUIESCENT COLITIS, OR DYSPLASIA

GROSS:

A. Received in formalin and labeled "duodenum biopsy" are six irregular
portions of tan, soft tissue ranging from 0.1 to 0.4 cm. All/2, no G
(three pieces in each).
B. Received in formalin and labeled "antrum R/O H-Pylori" are four
irregular portions of tan, soft tissue, ranging from 0.2 to 0.4 cm.
All/1, no G

Department: Anatomic Pathology & Administration

John C. Watts, M.D.

From:

January 18, 2005

Date:

Subject: SURGICAL SPECIMENS EXEMPT FROM MANDATORY PATHOLOGIC EXAMINATION, AND SPECIMENS SUBMITTED FOR GROSS EXAMINATION ONLY

Attached please find newly revised lists of surgical specimens exempt from mandatory pathologic examination, and specimens submitted for gross examination only. The lists were revised at the request of Medical Administration to achieve a uniform corporate policy applicable to both the Royal Oak and Troy facilities. The lists have been approved respectively by the Chairs of the Departments of Surgery and Obstetrics and Gynecology, and by the Medical Executive Board.

The lists have been forwarded to the Department of Surgery for implementation. You will note that many of the specimens exempt from examination on the prior list have now been transferred to the gross examination list, so that we can anticipate an increase in gross only specimens beginning in the near future. Please remember that anything removed at surgery that does not appear on one of the attached list must be routinely submitted for microscopic examination; for example, tonsils and adenoids will again be submitted for microscopic examination. Of course, any specimen on the exempt list could be submitted for our examination if clinical or intraoperative findings suggest an abnormality, or if a surgeon desires independent documentation of surgical removal or clinical diagnosis. Specimens ordinarily submitted for gross examination only can be examined microscopically at the discretion of the surgeon, if a clinical finding warrants, or at the discretion of the pathologist, pathology resident, or PA if a gross finding suggests an abnormality.

Please review and familiarize yourselves with the items on both lists, which have been revised extensively.

JCW:sme

Distribution:

All Staff Pathologists

All Pathologists Assistants

Sharon Scalise

Amy VandeWeile

Stephan T. Stasiw

Randy Haase

Melissa Karr

Barbara Shaub

W. J. Black

James R. Brander

fat Neal

[Handwritten signature]

12/11/10
11/17/10

1.24.2025

1-31-17

SPRE-EE-1

5002-02-1

90-08-1

50-02-1

at

Name

Reviewed by:

**SURGICAL SPECIMENS EXEMPT FROM MANDATORY
PATHOLOGIC EXAMINATION
December 8, 2004**

CARDIOTHORACIC AND VASCULAR SURGERY

- Rotary atherectomy specimens
- Saphenous vein segments harvested for coronary artery bypass

GENERAL SURGERY (including Colon & Rectal, Urologic, and Pediatric Surgery)

- Bullets and other medicolegal foreign bodies given directly in chain of custody to law enforcement officers
- Radiation devices
- Therapeutic radioactive sources

OBSTETRICS AND GYNECOLOGY

- Foreskins from circumcision of newborn infants
- Placentas that are grossly normal (Royal Oak only)
- Ovarian cyst fluid including granulosa cells obtained during IVF procedure intended for concurrent use during *in vitro* fertilization procedures.
- Endometrial biopsies taken for endometrial cell culture for similar procedure as above

OPHTHALMOLOGY

- Cataracts

ORTHOPEDIC SURGERY

- Bone donated to the bone bank

SURGICAL SPECIMENS SUBMITTED FOR GROSS EXAMINATION ONLY
December 8, 2004

CARDIOTHORACIC AND VASCULAR SURGERY

- Atherosclerotic plaque from endarterectomy procedures
- Prosthetic cardiac valves without attached tissue
- Rib segments or other tissues removed for purposes of gaining surgical access (except with prior history of malignancy)
- Vascular grafts without thrombi

GENERAL SURGERY (including Colon & Rectal, Urologic, and Pediatric Surgery)

- Breast implant prostheses
- Foreign bodies (excluding those related to medical misadventure)
- Gallstones to be given to the patient
- Rib segments or other tissues removed only for purposes of gaining surgical access (except with prior history of malignancy)
- Skin or other normal tissue (except breast) removed during a cosmetic or reconstructive procedure (e.g. abdominoplasty)
- Skin scars (except those at the site of previous radical surgery for malignant neoplasm)
- Therapeutic devices such as catheters, gastrostomy tubes, stents, and sutures that have not contributed to patient illness, injury, or death
- Varicose veins
- Vascular grafts without thrombi
- Hernia sacs

OBSTETRICS AND GYNECOLOGY

- Intrauterine contraceptive devices without attached soft tissue
- Placentas that are grossly normal (Troy only)
- Skin scars (except those at the site of previous radical surgery for malignant neoplasm)
- Fallopian rings removed at time of tubal reanastomosis
- Pessaries or other vaginal appliance removed from clinically well patients

OPHTHALMOLOGY

- Extraocular muscle from strabismus operations

ORAL SURGERY

- Teeth
- Temporomandibular joint specimens

ORTHOPEDIC SURGERY

- Bone spurs
- Bunions
- Digits (accessory, rudimentary, supernumerary)
- Hammer toes
- Meniscus (torn)
- Orthopedic appliances and therapeutic devices
- Osteocartilaginous loose bodies
- Skin scars (except those at the site of previous radical surgery for malignant neoplasm)
- Toenails/fingernails removed incidentally

OTOLARYNGOLOGY

- Middle ear ossicles
- Nasal septum and turbinates without soft tissue component
- Normal tissue removed during a cosmetic or reconstructive procedure (e.g., cleft palate repair)
- Uvulopalatopharyngoplasty specimens removed for sleep apnea

PLASTIC SURGERY

- Breast implants
- Digits (accessory, rudimentary, supernumerary)
- Fat removed by liposuction
- Skin or other normal tissue (except breast) removed during a cosmetic or reconstructive procedure (e.g., blepharoplasty, cleft palate repair, abdominoplasty, rhinoplasty, rhytidectomy, syndactyly repair), provided it is not continuous with a lesion
- Skin scars (except those at the site of previous radical surgery for malignant neoplasm)

To: PA's, Residents and Staff
From: John C. Watts, M.D. *JCW*
Date: March 16, 2007
Department: Anatomical Pathology
Department: Anatomical Pathology

Subject: OPTHLAMIC PATHOLOGY SPECIMENS

Until Dr. Folberg has had the opportunity to visit our laboratory and demonstrate his preference for gross examination of enucleated eyes, he has asked that all enucleation specimens, particularly those excised for tumor or trauma, be sent to him in formalin after we accession them in the surgical pathology laboratory. He would prefer to cut these specimens himself for medical-legal reasons, until he has had the opportunity to properly instruct us on his method for dissection.

Dr. Folberg has also asked that we try to provide him with as much history as we can for each specimen that we send him. Dr. Williams, Chair of Ophthalmology, will instruct his residents to fill out a detailed history form for each specimen submitted for pathologic examination. If you don't receive such a form, please contact the ophthalmology resident for clinical information before sending the case to Dr. Folberg.

PC: George Williams, MD
Robert Folberg, MD

JCW:sme

To:

PA's, Residents and Staff

From:

John C. Watts, M.D.

Date:

September 27, 2007

Subject: OCULAR MELANOMA PROTOCOL

Dr. Robert Folberg, our ophthalmic pathology consultant, has requested that we perform the following stains on a representative block for all enucleation specimens for ocular melanoma:

1. H&E
2. H&E after melanin bleach
3. Standard PAS stain
4. PAS stain after melanin bleach, omitting hematoxylin counterstain

These stains should be routinely ordered on a representative block and sent to Dr. Folberg for all cases that are referred to him for consultation.

JCW:smc

PC:

Amy VandeWiele
Sharon Scalise
Jennifer Lehmann
Stephan Stasiw

To:

Distribution

Department:

John C. Watts, M.D.

Department: Anatomic Pathology

Date:

September 28, 2007

Subject: HEMATOLYMPHOID SPECIMEN TRIAGE

Diagnostic hematology specimens are triaged to the hematopathologists on Tuesdays, Wednesdays, and Fridays. There is some confusion in the Surgical Pathology Laboratory about assigning specimens under special circumstances. This memo provides guidelines regarding triage of those specimens:

- A) Specimens that should be assigned to hematopathologists on their scheduled days:
- All specimens delivered fresh for lymphoma work-up.
 - Lymph nodes picked up in Surgery and brought down to the Surgical Pathology Laboratory for lymphoma work-up by the FS/ORC pathologist.
 - Lymph nodes for which an intraoperative gross diagnosis has been requested but no frozen section done (an exceedingly rare event).
 - Lymph nodes and extranodal specimens in which an intraoperative frozen section or touch preparation has been done, and the process appears to be lymphoma.
 - Endoscopic and CT/US-guided biopsies with prior history of lymphoma.
 - Splenectomy specimens.
- B) Specimens that should remain in Anatomic Pathology:
- Endoscopic biopsies where a separate specimen is submitted to flow cytometry by the endoscopist, but lymphoma is only part of a broad differential diagnosis.
 - CT/ultrasound biopsies in which a separate specimen for flow cytometry is obtained by the radiologist, but lymphoma is only part of a broad differential diagnosis.

On occasion, a case will be sent to the hematopathologists that turns out not to be lymphoma. Dr. Blenc has agreed to return those cases to Anatomic Pathology for sign-out. Likewise, surgical pathologists should consult the hematopathologists for help with the diagnosis of the extranodal biopsy specimens that turn out to be lymphoma.

Distribution: Surgical Pathology Assistants

Sharon Scalise

Jennifer Lehmann

PA's, Residents and Staff (Anatomic Pathology)

Hematopathologists (Drs. Blenc, Douglas-Nikitin, Smith)

Pat Schmidt

Dr. Mark Kolins

To: AP/CP Staff Pathologists, Path Residents,
Hemepath Fellows, Surg Path, PAs,
Histology, Cytopathology, Cytogenetics

From: M. Venturina, M.D. 

Department Pathology

Department Pathology

Date: September 3, 2008

Subject: Updated Lymphoma Protocol

Please see the attached revised lymphoma protocol which will be in effect starting September 8, 2008. This will be used for excision/incision biopsies of lymph nodes submitted fresh for lymphoma work-up. The changes have been approved by staff pathologists from both Anatomic and Clinical Pathology involved in lymphoma sign-out with helpful input from Cytogenetics (Dr. Micalé), Histology and Surg Path Labs. Thank you for your cooperation.

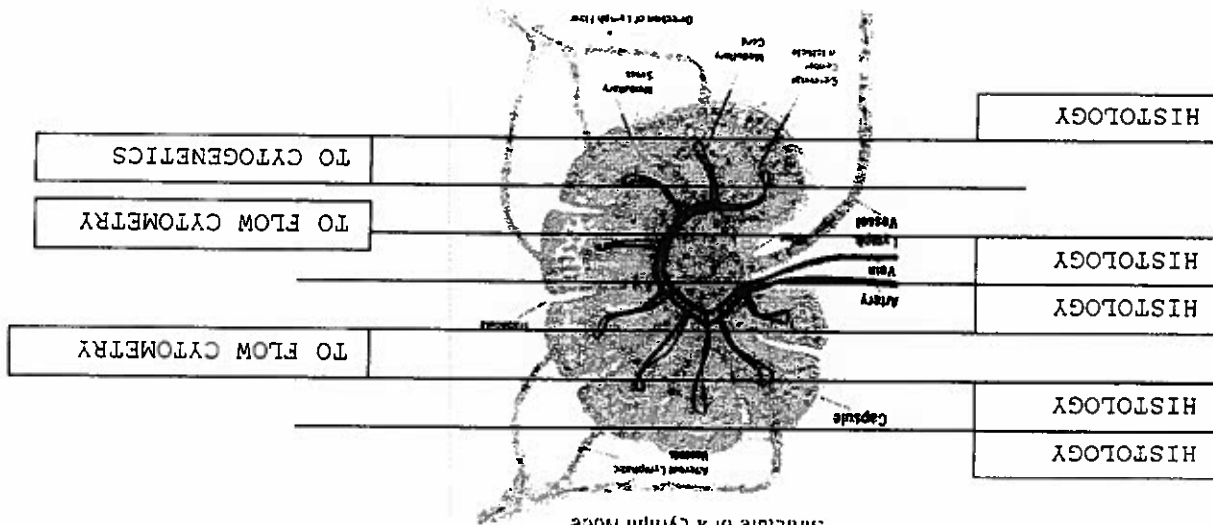
LYMPHOMA WORK-UP PROTOCOL (for lymph nodes submitted fresh) Note: This may not apply to needle cores and incision/excision specimens submitted in formalin.

1. State the dimensions, color and consistency of the specimen; note presence of nodularity or necrosis.

2. Serially section perpendicular to the long axis of the node at 2 mm intervals.

3. Sections to be submitted/Studies to be performed if tissue is adequate
 - For routine histology (if enough tissue, submit first block in z-fixative and rest in formalin; if not enough, submit tissue in formalin only)
 - For flow cytometry: submit about 0.5 cm tissue in an RPMI-containing vial; tissue must be representative and taken from non-necrotic area
 - For routine cytogenetics: submit about 0.5 cm in a Cytogenetics transport media /TMI (conical tube with blue cap); tissue must be taken from non-necrotic area. Note: For 'hold' cases, please notify Surg Path (8-9042) within 24 hrs if specimen will be run.
 - For FISH studies: make 4 air-dried touch-imprints of the cut surface on charged slides (2 touches per glass slide) for possible FISH studies. Note: These slides will be picked up by the Cytogenetics Lab. The staff pathologist will have to call Cytogenetics (8-9030) if specific FISH tests are to be performed.
 - For Diff Quik stain: make 2 air-dried touch imprints of the cut surface on uncharged slides both of which will be stained by Cytology Lab with Diff Quik stain.
4. If tissue is not adequate for all of the above studies, consult the staff pathologist but remember that ROUTINE HISTOLOGY is the priority.

Structure of a Lymph Node



Notes for Resident/PA:

1. Submit tissue in **BLUE CASSETTES** and labeled "LN".

2. If grossed before 2 pm, place cassettes in end-of-day machine.

by Surg Path.

4. Do not overpack cassette with tissue; submit additional cassettes instead.
5. Tissue sections should not be more than 1.5 x 1.0 x 0.2 cm.

Notes for Histology:

1. Please **embed BLUE CASSETTES LN early** (considered as 'rush' case).

2. Please routinely cut H & E sections at 2 um thickness for both Anatomic and Clinical Pathologist.

Note for Surg Path:

Cases received after 2 pm will be assigned to the next-day lymphoma pathologist and will be placed into the "3pm next day overnight fix"

cc: Suresh Gehani, M.D.
David Grossman, M.D.

Renee has downloaded the recently (October, 2009) updated pTNM staging criteria from the CAP website. These have been assigned page numbers corresponding to those already included in your blue notebooks. Please substitute the updated pages for those currently in your notebooks.

Subject: Updated pTNM Staging Criteria

Date: February 23, 2010

From: John C. Watts, M.D.

JCW

To: P.A.'s, Residents and Staff

Department: Anatomic Pathology

Department: Anatomic Pathology

Date / Initials

3-9-10

Inter-department communication

POSTED

Beaumont
William Beaumont Hospital

Thorax-Lung

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Cannot be assessed, or tumor proven by presence of malignant cells in sputum or bronchial washings but not visualized by imaging or bronchoscopy

___ pT0: No evidence of primary tumor

___ pTis: Carcinoma in situ

___ pT1a: Tumor 2 cm or less in greatest dimension, surrounded by lung or visceral pleura, without bronchoscopic evidence of invasion more proximal than the lobar bronchus (ie, not in the main bronchus); or

___ pT1b: Tumor greater than 2 cm, but 3 cm or less in greatest dimension, surrounded by lung or visceral pleura, without bronchoscopic evidence of invasion more proximal than the lobar bronchus (ie, not in the main bronchus)

___ pT2a: Tumor greater than 3 cm, but 5 cm or less in greatest dimension surrounded by lung or visceral pleura, without bronchoscopic evidence of invasion more proximal than the lobar bronchus (ie, not in the main bronchus); or

___ pT2b: Tumor greater than 5 cm or less in greatest dimension with any of the following features of extent: involves main bronchus, 2 cm or more distal to the carina; invades the visceral pleura; associated with atelectasis or obstructive pneumonia that extends to the hilar region but does not involve the entire lung

___ pT3: Tumor greater than 7 cm in greatest dimension; or

___ pT4: Tumor of any size that directly invades any of the following: chest wall (including superior sulcus tumors), diaphragm, phrenic nerve, mediastinal pleura, parietal pericardium; or involvement of the carina; or

___ pT5: Tumor of any size with separate tumor nodule(s) in same lobe

___ pT6: Tumor of any size with separate tumor nodule(s) in a different lobe of ipsilateral lung (Note A)

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Metastasis in ipsilateral peribronchovascular and/or ipsilateral hilar lymph nodes, and intrapulmonary nodes, including involvement by direct extension

___ pN2: Metastasis in ipsilateral mediastinal and/or subcarinal lymph node(s)

___ pN3: Metastasis in contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene, or supraclavicular lymph node(s)

Specify:

Number examined

Number involved

Number cannot be determined

If lymph node(s) involved, specify involved nodal station(s):

Distant Metastasis (pM)

___ Not applicable

___ pM1a: Separate tumor nodule(s) in contralateral lung; tumor with pleural nodules or malignant pleural (or pericardial) effusion (Note A)

___ pM1b: Distant metastases outside the lung/pleura

*Specify site(s), if known:

Pathologic Staging (pTNM [FIGO])

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX [--]: Cannot be assessed

___ pT1 [I]: Cervical carcinoma confined to uterus (extension to corpus should be disregarded)

___ pT1a [IA]: Invasive carcinoma diagnosed by microscopy only. All macroscopically visible lesions (even with superficial invasion) are pT1b/IB.

___ pT1a1 [IA1]: Stromal invasion ≤ 3.0 mm in depth and horizontal spread ≤ 7.0 mm

___ pT1a2 [IA2]: Stromal invasion > 3.0 mm but not more than 5.0 mm in depth and horizontal spread ≤ 7.0 mm

___ pT1b [IB]: Clinically visible lesion confined to the cervix or microscopic lesion greater than T1a2/IA2

___ pT1b1 [IB1]: Clinically visible lesion ≤ 4.0 cm in greatest dimension

___ pT1b2 [IB2]: Clinically visible lesion > 4.0 cm in greatest dimension

___ pT2 [II]: Tumor invades beyond the uterus but not to pelvic wall or to lower third of vagina

___ pT2a [IIA]: Tumor without parametrial invasion

___ pT2a1 [IIA1]: Clinically visible lesion ≤ 4.0 cm in greatest dimension

___ pT2a2 [IIA2]: Clinically visible lesion > 4.0 cm in greatest dimension

___ pT2b [IIB]: Tumor with parametrial invasion

___ pT3 [III]: Tumor extends to the pelvic wall and/or involves the lower third of the vagina and/or causes hydronephrosis or non-functioning kidney

___ pT3a [IIIA]: Tumor involves lower third of vagina, but not pelvic wall

___ pT3b [IIIB]: Tumor extends to pelvic wall and/or causes hydronephrosis or non-functioning kidney

___ pT4 [IVA]: Tumor invades the mucosa of bladder or rectum and/or extends beyond true pelvis (bulbous edema is not sufficient evidence to classify a tumor as pT4)

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Regional lymph node metastasis

Specify: Number examined: ___

Number involved: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1 [IVB]: Distant metastasis

*Specify site(s), if known: _____

Gynecologic • Endometrium

Pathologic Staging (pTNM [FIGO])

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX [--]: Primary tumor cannot be assessed

___ pT0 [--]: No evidence of primary tumor

___ pT1a [IA]: Tumor limited to endometrium or invades less than one-half of the

myometrium

___ pT1b [IB]: Tumor invades greater than or equal to one-half of the myometrium

___ pT2 [II]: Tumor invades stromal connective tissue of the cervix, but does not

extend beyond uterus

___ pT3a [IIIA]: Tumor involves serosa and/or adnexa (direct extension or metastasis)

___ pT3b [IIIB]: Vaginal involvement (direct extension or metastasis) or parametrial

involvement

___ pT4 [IVA]: Tumor invades bladder mucosa and/or bowel mucosa (bullous edema is not sufficient to classify a tumor as T4)

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1 [IIC1]: Regional lymph node metastasis to pelvic lymph nodes

___ pN2 [IIC2]: Regional lymph node metastasis to para-aortic lymph nodes, with or without positive pelvic lymph nodes

Pelvic lymph nodes:

Number examined: ___

Number involved: ___

Para-aortic lymph nodes:

Number examined: ___

Number involved: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1 [IVB]: Distant metastasis (includes metastasis to inguinal lymph nodes, intraperitoneal disease, or lung, liver, or bone metastasis. It excludes

metastasis to para-aortic lymph nodes, vagina, pelvic serosa, or adnexa) *Specify site(s), if known: _____

Ovary

Pathologic Staging (PTNM [FIGO])

TNM Descriptors (required only if applicable) (select all that apply)

m (multiple primary tumors)

r (recurrent)

y (posttreatment)

Primary Tumor (PT)

PTX [--]: Cannot be assessed

PT0 [--]: No evidence of primary tumor

PT1 [I]: Tumor limited to ovaries (one or both)

PT1a [IA]: Tumor limited to one ovary; capsule intact, no tumor on ovarian surface. No

malignant cells in ascites or peritoneal washings

PT1b [IB]: Tumor limited to both ovaries; capsule intact, no tumor on ovarian surface. No

malignant cells in ascites or peritoneal washings

PT1c [IC]: Tumor limited to one or both ovaries with any of the following: capsule ruptured,

tumor on ovarian surface, malignant cells in ascites or peritoneal washings

PT2 [II]: Tumor involves one or both ovaries with pelvic extension and/or implants

Extension and/or implants on uterus and/or tube(s). No malignant cells in ascites or

peritoneal washings

PT2b [IIB]: Extension to other pelvic tissues. No malignant cells in ascites or peritoneal

washings

PT2c [IIC]: Pelvic extension and/or implants (T2a or T2b / IIa or IIb) with malignant cells in

ascites or peritoneal washings

PT3 and/or N1 [III]: Tumor involves one or both ovaries with confirmed peritoneal metastasis outside the

pelvis (including liver capsule metastasis and/or regional lymph node metastasis

[N1])

PT3a [IIIA]: Microscopic peritoneal metastasis beyond pelvis (no macroscopic tumor)

PT3b [IIIB]: Macroscopic peritoneal metastasis beyond pelvis ≤2 cm in greatest dimension

PT3c and/or N1 [IIIC]: Peritoneal metastasis beyond pelvis >2 cm in greatest dimension and/or

regional lymph node metastasis

* Nonmalignant ascites is not classified. The presence of ascites does not affect staging unless malignant

cells are present.

Regional Lymph Nodes (pN)

pNX: Cannot be assessed

pN0: No regional lymph node metastasis

pN1 [IIIC]: Regional lymph node metastasis

Specify: Number examined: _____

Number involved: _____

Distant Metastasis (pM)

Not applicable

pM1 [IV]: Distant metastases (excludes peritoneal metastasis)

* Specify site(s), if known: _____

Note: If pleural effusion is present, there must be a positive cytology for a stage IV designation. Parenchymal liver metastasis is classified as stage IV disease, whereas liver capsule metastasis is classified as stage III disease.

* Additional Pathologic Findings (select all that apply) (Note L)

* None identified

* Endometriosis

* Ovarian

* Extravarian

* Endosalpingiosis

* Other(s)

* Specify site(s) and type(s): _____

Gastrointestinal • Colon and Rectum

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTx: Cannot be assessed

___ pT0: No evidence of primary tumor

___ pTis: Carcinoma in situ, intraepithelial (no invasion)

___ pTis: Carcinoma in situ, invasion of lamina propria

___ pT1: Tumor invades submucosa

___ pT2: Tumor invades muscularis propria

___ pT3: Tumor invades through the muscularis propria into pericolorectal tissues

___ pT4a: Tumor penetrates the visceral peritoneum

___ pT4b: Tumor directly invades or is adherent to other organs or structures

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1a: Metastasis in 1 regional lymph node

___ pN1b: Metastasis in 2 to 3 regional lymph nodes

___ pN1c: Tumor deposit(s) in the subserosa, or non-peritonealized pericolic or

perirectal tissues without regional lymph node metastasis

___ pN2a: Metastasis in 4 to 6 regional lymph nodes

___ pN2b: Metastasis in 7 or more regional lymph nodes

Specify: Number examined: ___

Number involved: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

*Specify site(s):

___ pM1a: Metastasis to single organ or site (eg, liver, lung, ovary, nonregional lymph

node)

___ pM1b: Metastasis to more than one organ/site or to the peritoneum

Head and Neck • Thyroid Gland

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Cannot be assessed

___ pT0: No evidence of primary tumor

___ pT1: Tumor size 2 cm or less, limited to thyroid

___ pT1a: Tumor 1 cm or less in greatest dimension limited to the thyroid.

___ pT1b: Tumor more than 1 cm but not more than 2 cm in greatest dimension, limited to the thyroid

___ pT2: Tumor more than 2 cm, but not more than 4 cm, limited to thyroid

___ pT3: Tumor more than 4 cm limited to thyroid or any tumor with minimal extrathyroid

extension (eg, extension to sternothyroid muscle or perithyroid soft tissues)

___ pT4a: Moderately advanced disease. Tumor of any size extending beyond the thyroid capsule to invade subcutaneous soft tissues, larynx, trachea, esophagus or recurrent

laryngeal nerve

___ pT4b: Very advanced disease. Tumor invades prevertebral fascia or encases carotid artery or mediastinal vessels

Note: There is no category of carcinoma in situ (pTis) relative to carcinomas of thyroid gland.

Anaplastic Carcinoma

___ pT4a: Intrathyroidal anaplastic carcinoma—surgically resectable

___ pT4b: Extrathyroidal anaplastic carcinoma—surgically unresectable

Regional Lymph Nodes (pN) (Note L)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1a: Nodal metastases to Level VI (pretracheal, paratracheal and prelaryngeal/Delphian)

___ pN1b: Metastases to unilateral, bilateral or contralateral cervical (Levels I, II, III, IV, V) or lymph nodes

Specify: ___ Number examined: ___

___ Number involved: ___

Superior mediastinal lymph nodes are considered regional lymph nodes (level VII).

Midline nodes are considered ipsilateral nodes.

* Lymph Node, Extranodal Extension (Note L)

___ Not identified

___ Present

___ Indeterminate

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

* Specify site(s), if known: _____

* Source of pathologic metastatic specimen (specify): _____

Genitourinary • Testis

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Cannot be assessed

___ pT0: No evidence of primary tumor

___ pTis: Intratubular germ cell neoplasia (carcinoma in situ)

___ pT1: Tumor limited to the testis and epididymis without vascular/lymphatic

invasion; tumor may invade tunica albuginea but not tunica vaginalis

___ pT2: Tumor limited to the testis and epididymis with vascular/lymphatic invasion, or

tumor extending through the tunica albuginea with involvement of the tunica

vaginalis

___ pT3: Tumor invades the spermatic cord with or without vascular/lymphatic

invasion

___ pT4: Tumor invades the scrotum with or without vascular/lymphatic invasion

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Metastasis with a lymph node mass 2 cm or less in greatest dimension, or 5 or

fewer positive nodes, none more than 2 cm in greatest dimension

___ pN2: Metastasis with a lymph node mass greater than 2 cm but not more than 5 cm

in greatest dimension; or more than 5 nodes positive, none greater than 5 cm;

or evidence of extranodal extension of tumor

___ pN3: Metastasis with a lymph node mass greater than 5 cm in greatest dimension

Specify: ___

Number examined: ___

Number involved: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis present

___ pM1a: Nonregional nodal or pulmonary metastasis

___ pM1b: Distant metastasis other than to nonregional lymph nodes and lung

*Specify site(s), if known: _____

Gastrointestinal • Stomach

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

☐ m (multiple primary tumors)

☐ r (recurrent)

☐ y (post-treatment)

Primary Tumor (pT)

☐ pTX: Cannot be assessed

☐ pT0: No evidence of primary tumor

☐ pTis: Carcinoma in situ

☐ pT1: Tumor invades lamina propria, muscularis mucosae, or submucosa

☐ pT1a: Tumor invades lamina propria or muscularis mucosae

☐ pT1b: Tumor invades submucosa

☐ pT2: Tumor invades muscularis propria

☐ pT3: Tumor invades subserosal connective tissue, without involvement of visceral peritoneum or adjacent structures

☐ pT4: Tumor involves serosa (visceral peritoneum) or adjacent structures

☐ pT4a: Tumor invades serosa (visceral peritoneum)

☐ pT4b: Tumor invades adjacent structures

Regional Lymph Nodes (pN) (Note J)

☐ pNX: Cannot be assessed

☐ pN0: No regional lymph node metastasis

☐ pN1: Metastasis in 1 to 2 perigastric lymph nodes

☐ pN2: Metastasis in 3 to 6 perigastric lymph nodes

☐ pN3: Metastasis in 7 or more perigastric lymph nodes

☐ pN3a: Metastasis in 7 to 15 perigastric lymph nodes

☐ pN3b: Metastasis in 16 or more perigastric lymph nodes

Specify: Number examined:

Number involved:

Distant Metastasis (pM)

☐ Not applicable

☐ pM1: Distant metastasis

*Specify site(s), if known: _____

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (posttreatment)

Primary Tumor (pT)

___ pTX: Cannot be assessed

___ pT0: No evidence of primary tumor

___ pTis: High-grade dysplasia

___ pT1: Tumor invades lamina propria, muscularis mucosae, or submucosa

___ pT1a: Tumor invades lamina propria or muscularis mucosae

___ pT1b: Tumor invades submucosa

___ pT2: Tumor invades muscularis propria

___ pT3: Tumor invades adventitia

___ pT4: Tumor invades adjacent structures (specify): _____

___ pT4a: Resectable tumor invading pleura, pericardium, or diaphragm

___ pT4b: Unresectable tumor invading other adjacent structures, such as aorta, vertebral body, trachea, etc

Regional Lymph Nodes (pN) (Note 1)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Regional lymph node metastasis involving 1 to 2 nodes

___ pN2: 3 to 6 nodes involved

___ pN3: 7 or more nodes involved

Specify: Number examined: _____

Number involved: _____

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

Specify site(s), if known: _____

Pathologic Staging (pTNM [FIGO])

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pTis: Carcinoma in situ (preinvasive carcinoma)

___ pT1a [FIGO IA]: Lesions 2 cm or less in size, confined to the vulva or perineum, and with stromal invasion 1.0 mm or less

___ pT1b [FIGO IB]: Lesions more than 2 cm in size or any size with stromal invasion more than 1.0 mm, confined to the vulva or perineum

___ pT2 [FIGO II]: Tumor of any size with extension to adjacent perineal structures (lower/distal 1/3 urethra, lower/distal 1/3 vagina, anal involvement)

___ pT3 [FIGO IVA]: Tumor of any size with extension to any of the following: upper/proximal 2/3 of urethra, upper/proximal 2/3 vagina, bladder mucosa, rectal mucosa, or fixed to pelvic bone

Regional Lymph Nodes (pN) (select all that apply)

___ pNX: Regional lymph nodes cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: One or two regional lymph nodes with the following features

___ pN1a [FIGO IIIA]: One or two lymph node metastases each 5 mm or less

___ pN1b [FIGO IIIB]: One lymph node metastasis 5 mm or greater

___ pN2 [FIGO IIIB]: Regional lymph node metastasis with the following features

___ pN2a [FIGO IIIB]: Three or more lymph node metastases each less than 5 mm

___ pN2b [FIGO IIIB]: Two or more lymph node metastases 5 mm or greater

___ pN2c [FIGO IIIC]: Lymph node metastasis with extracapsular spread

___ pN3 [FIGO IVA]: Fixed or ulcerated regional lymph node metastasis

Distant Metastasis (pM)

___ M0: No distant metastasis

___ pM1 [FIGO IVB]: Distant metastasis (including pelvic lymph node metastasis)

*Specify site(s), if known:

Other • Bone

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pT1: Tumor 8 cm or less in greatest dimension

___ pT2: Tumor more than 8 cm in greatest dimension

___ pT3: Discontinuous tumors in the primary bone site (*not including skip metastases*)

Regional Lymph Nodes (pN)

___ pNX: Regional lymph nodes cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Regional lymph node metastasis

Specify: Number examined: ___

Number involved: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1a: Lung

___ pM1b: Metastasis involving distant sites other than lung (*including skip metastases*)

*Specify site(s), if known: _____

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (posttreatment)

Primary Tumor (pT)

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pT1: Tumor 7 cm or less in greatest dimension, limited to the kidney

___ pT1a: Tumor 4 cm or less in greatest dimension, limited to the kidney

___ pT1b: Tumor more than 4 cm but not more than 7 cm in greatest dimension, limited to the kidney

___ pT2: Tumor more than 7 cm in greatest dimension, limited to the kidney

___ pT2a: Tumor more than 7 cm but less than or equal to 10 cm in greatest dimension, limited to the kidney

___ pT2b: Tumor more than 10 cm, limited to the kidney

___ pT3: Tumor extends into major veins or perinephric tissues but not into the ipsilateral adrenal gland and not beyond Gerota's fascia

___ pT3a: Tumor grossly extends into the renal vein or its segmental (muscle containing) branches, or tumor invades perirenal and/or renal sinus fat but not beyond Gerota's fascia

___ pT3b: Tumor grossly extends into the vena cava below the diaphragm

___ pT3c: Tumor grossly extends into vena cava above diaphragm or invades the wall of the vena cava

___ pT4: Tumor invades beyond Gerota's fascia (including contiguous extension into the ipsilateral adrenal gland)

Regional Lymph Nodes (pN)

___ pNX: Regional lymph nodes cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Metastasis in regional lymph node(s)

Specify: Number examined: ___

Number positive: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

Genitourinary • Ureter, Renal Pelvis

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Cannot be assessed

___ pT0: No evidence of primary tumor

___ pTa: Papillary noninvasive carcinoma

___ pTis: Flat carcinoma in situ

___ pT1: Tumor invades subepithelial connective tissue (lamina propria)

___ pT2: Tumor invades muscularis propria

___ pT3: Tumor invades beyond muscularis into peripelvic fat or the renal parenchyma

___ pT4: Tumor invades adjacent organs, or through the kidney into the perinephric fat

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Metastasis in a single regional lymph node, 2 cm or less in greatest dimension

___ pN2: Metastasis in a single regional lymph node, more than 2 cm but not more than 5 cm in greatest dimension, or multiple lymph nodes, none more than 5 cm in greatest dimension

___ pN3: Metastasis in a regional lymph node more than 5 cm in greatest dimension

Specify: Number examined: ___

Number involved (any size): ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

Specify site(s), if known: _____

Genitourinary • Urinary Bladder

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pTa: Noninvasive papillary carcinoma

___ pTis: Carcinoma in situ: "flat tumor"

___ pT1: Tumor invades subepithelial connective tissue (lamina propria)

___ pT2: Tumor invades muscularis propria (detrusor muscle)

___ pT2a: Tumor invades superficial muscularis propria (inner half)

___ pT2b: Tumor invades deep muscularis propria (outer half)

___ pT3: Tumor invades perivesical tissue

___ pT3a: Microscopically

___ pT3b: Macroscopically (extravesicular mass)

___ pT4: Tumor invades any of the following: prostatic stroma, seminal vesicles, uterus,

vagina, pelvic wall, abdominal wall

___ pT4a: Tumor invades prostatic stroma or uterus or vagina

___ pT4b: Tumor invades pelvic wall or abdominal wall

Regional Lymph Nodes (pN)

___ pNX: Lymph nodes cannot be assessed

___ pN0: No lymph node metastasis

___ pN1: Single regional lymph node metastasis in the true pelvis (hypogastric,

obturator, external iliac or presacral lymph node)

___ pN2: Multiple regional lymph node metastasis in the true pelvis (hypogastric,

obturator, external iliac or presacral lymph node metastasis)

___ pN3: Lymph node metastasis to the common iliac lymph nodes

Specify: Number examined: ___

Number involved (any size): ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

*Specify site(s), if known: _____

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

- ☐ m (multiple)
- ☐ r (recurrent)
- ☐ y (posttreatment)

Primary Tumor (pT)

pTX: Primary tumor cannot be assessed (eg, shave biopsy or regressed melanoma) (see "Comment")

pT0: No evidence of primary tumor

pTis: Melanoma in situ (ie, not an invasive tumor; anatomic level I)

pT1: Melanoma 1.0 mm or less in thickness, with or without ulceration (see Note D)

pT1a: Melanoma 1.0 mm or less in thickness, no ulceration, < 1 mitoses/mm²

pT1b: Melanoma 1.0 mm or less in thickness with ulceration and/or 1 or more mitoses/mm²

pT2: Melanoma 1.01 to 2.0 mm in thickness, with or without ulceration

pT2a: Melanoma 1.01 to 2.0 mm in thickness, no ulceration

pT2b: Melanoma 1.01 to 2.0 mm in thickness, with ulceration

pT3: Melanoma 2.01 to 4.0 mm in thickness, with or without ulceration

pT3a: Melanoma 2.01 to 4.0 mm in thickness, no ulceration

pT3b: Melanoma 2.01 to 4.0 mm in thickness, with ulceration

pT4: Melanoma greater than 4.0 mm in thickness, with or without ulceration

pT4a: Melanoma greater than 4.0 mm in thickness, no ulceration

pT4b: Melanoma greater than 4.0 mm in thickness, with ulceration

Regional Lymph Nodes (pN)

pNX: Regional lymph nodes cannot be assessed

pN0: No regional lymph node metastasis

pN1: Metastasis in 1 regional lymph node

pN1a: Clinically occult (microscopic) metastasis

pN1b: Clinically apparent (macroscopic) metastasis

pN2: Metastasis in 2 to 3 regional nodes or intralymphatic regional metastasis without nodal metastasis

pN2a: Clinically occult (microscopic) metastasis

pN2b: Clinically apparent (macroscopic) metastasis

pN2c: Satellite or in-transit metastasis without nodal metastasis

pN3: Metastasis in 4 or more regional lymph nodes, or matted metastatic nodes, or in-transit metastasis or satellites(s) with metastasis in regional node(s)

Number of lymph nodes identified: _____

Number containing metastases identified macroscopically: _____

Matted nodes: _____

Present

Not identified

Distant Metastasis (pM)

Not applicable

pM1: Distant metastasis (documented in this specimen)

pM1a: Metastasis in skin, subcutaneous tissues, or distant lymph nodes

pM1b: Metastasis to lung

pM1c: Metastasis to all other visceral sites or distant metastasis at any site associated with an

elevated serum lactic dehydrogenase (LDH)

*Specify site, if known:

Pathologic Staging (pTNM) (Note K)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ Not identified

___ pT2: Organ confined

* ___ pT2a: Unilateral, involving one-half of 1 side or less

* ___ pT2b: Unilateral, involving more than one-half of 1 side but not both sides

* ___ pT2c: Bilateral disease

___ pT3: Extraprostatic extension

___ pT3a: Extraprostatic extension or microscopic invasion of bladder neck

___ pT3b: Seminal vesicle invasion

___ pT4: Invasion of rectum, levator muscles and/or pelvic wall (Note J)

Note: There is no pathologic T1 classification. Subdivision of pT2 disease is problematic and has not proven to be of prognostic significance.

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Metastasis in regional lymph node or nodes

Specify: Number examined: ___

Number involved: ___

Diameter of largest lymph node metastasis: ___ (mm)

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

___ pM1a: Nonregional lymph nodes(s)

___ pM1b: Bone(s)

___ pM1c: Other site(s) with or without bone disease

Note: When more than 1 site of metastasis is present, the most advanced category is used. pM1c is most advanced.

Gastrointestinal • Pancreas (Exocrine)

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Cannot be assessed

___ pT0: No evidence of primary tumor

___ pTis: Carcinoma in situ

___ pT1: Tumor limited to the pancreas, 2 cm or less in greatest dimension

___ pT2: Tumor limited to the pancreas, more than 2 cm in greatest dimension

___ pT3: Tumor extends beyond the pancreas but without involvement of the celiac axis or the superior mesenteric artery

___ pT4: Tumor involves the celiac axis or the superior mesenteric artery

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Regional lymph node metastasis

Specify: Number examined: ___

Number involved: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

*Specify site(s), if known: _____

Gastrointestinal • Ampulla of Vater

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Cannot be assessed

___ pT0: No evidence of primary tumor

___ pTis: Carcinoma in situ

___ pT1: Tumor limited to ampulla of Vater or sphincter of Oddi

___ pT2: Tumor invades duodenal wall

___ pT3: Tumor invades pancreas

___ pT4: Tumor invades peripancreatic soft tissues or other adjacent organs or structures

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Regional lymph node metastasis

Specify: Number examined: ___

Number involved: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

___ Specify site(s), if known: _____

Other • Adrenal Gland

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Cannot be determined

___ pT0: No evidence of primary tumor

___ pT1: Tumor 5 cm or less in greatest dimension, no extra-adrenal invasion

___ pT2: Tumor greater than 5 cm, no extra-adrenal invasion

___ pT3: Tumor of any size with local invasion, but not invading adjacent organs[#]

___ pT4: Tumor of any size with invasion of adjacent organs[#]

[#] Adjacent organs include kidney, diaphragm, great vessels, pancreas, and liver.

Note: There is no category of carcinoma in situ (pTis) relative to carcinomas of the adrenal gland.

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Regional lymph node metastasis

Specify: Number examined: ___

Number involved: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

*Specify site(s), if known: _____

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pTis: Carcinoma in situ: intraepithelial or invasion of lamina propria

___ pT1: Tumor invades submucosa

___ pT2: Tumor invades muscularis propria

___ pT3: Tumor invades through the muscularis propria into the subserosa or mesoappendix

___ pT4: Tumor penetrates visceral peritoneum, including mucinous peritoneal tumor within the right lower quadrant and/or directly invades other organs or structures

___ pT4a: Tumor penetrates visceral peritoneum, including mucinous peritoneal tumor within the right lower quadrant

___ pT4b: Tumor directly invades other organs or structures

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Metastasis in 1 to 3 regional lymph nodes

___ pN2: Metastases in 4 or more regional lymph nodes

Specify: ___

Number examined: ___

Number involved: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

___ pM1a: Intraperitoneal metastasis beyond the right lower quadrant, including pseudomyxoma peritonei

___ pM1b: Nonperitoneal metastasis

*Specify site(s), if known: _____

Gastrointestinal • Distal Extrahepatic Bile Ducts

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (posttreatment)

Primary Tumor (pT)

___ pTX: Cannot be assessed

___ pT0: No evidence of primary tumor

___ pTis: Carcinoma in situ

___ pT1: Tumor confined to the bile duct histologically

___ pT2: Tumor invades beyond the wall of the bile duct

___ pT3: Tumor invades the gallbladder, pancreas, duodenum, or other adjacent organs

___ pT4: Tumor involves the celiac axis or the superior mesenteric artery

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Regional lymph node metastasis

Specify: Number examined ___

Number involved ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

Specify site(s), if known: _____

Pathologic Staging (pTNM [FIGO]) (Note G)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pTis: Tubal intraepithelial carcinoma (limited to tubal mucosa)

___ pT1 [I]: Tumor limited to fallopian tube(s)

* ___ pT1a [IA]: Tumor limited to 1 tube without penetrating the serosal surface;

no ascites

* ___ pT1b [IB]: Tumor limited to both tubes without penetrating the serosal surface;

no ascites

* ___ pT1c [IC]: Tumor limited to 1 or both tube(s) with extension into or through the

tubal serosa; or with malignant cells in ascites or peritoneal washings

___ pT2 [II]: Tumor involves 1 or both tube(s) with pelvic extension

___ pT2a [IIA]: Extension and/or metastasis to the uterus and/or ovaries

___ pT2b [IIB]: Extension to other pelvic structures

* ___ pT2c [IIC]: Pelvic extension (T2a or T2b/IIA or IIB) with malignant cells in

ascites or peritoneal washings

___ pT3 and/or N1 [III]: Tumor involves 1 or both tube(s) with peritoneal implants

outside the pelvis and/or regional lymph node metastasis

___ pT3a [IIIA]: Microscopic peritoneal metastasis beyond pelvis

___ pT3b [IIIB]: Macroscopic peritoneal metastasis beyond pelvis 2 cm or less in

greatest dimension

___ pT3c/N1 [IIIC]: Peritoneal metastasis beyond pelvis more than 2 cm in greatest

dimension and/or regional lymph node metastasis

___ Any T/Any N and M1 [IV]: Distant metastasis including presence of malignant cells

in pleural fluid or parenchymal hepatic metastasis

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1 [IIIC]: Regional lymph node metastasis

Specify: Number examined: ___

Number involved: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1 [IV]: Distant metastasis

*Specify site(s), if known: _____

Pathologic Staging (pTNM) (Note G)

TNM Descriptors (required only if applicable) (select all that apply)

☐ m (multiple primary tumors)

☐ r (recurrent)

☐ y (post-treatment)

Primary Tumor (pT)

☐ pTX: Cannot be assessed

☐ pT0: No evidence of primary tumor

☐ pTis: Carcinoma in situ

☐ pT1: Tumor invades lamina propria or muscular layer

☐ pT1a: Tumor invades lamina propria

☐ pT1b: Tumor invades muscle layer

☐ pT2: Tumor invades perimuscular connective tissue; no extension beyond serosa or

into liver

☐ pT3: Tumor perforates serosa (visceral peritoneum) and/or directly invades the

liver and/or one other adjacent organ or structure, such as the stomach,

duodenum, colon, pancreas, omentum, or extrahepatic bile ducts

☐ pT4: Tumor invades main portal vein or hepatic artery or invades 2 or more

extrahepatic organs or structures

Regional Lymph Nodes (pN)

☐ pNX: Cannot be assessed

☐ pN0: No regional lymph node metastasis

☐ pN1: Metastases to nodes along the cystic duct, common bile duct, hepatic artery,

and/or portal vein

☐ pN2: Metastases to periaortic, pericaval, superior mesenteric artery, and/or celiac

artery lymph nodes

Specify: ☐ Number examined ☐

☐ Number involved ☐

Distant Metastasis (pM)

☐ Not applicable

☐ pM1: Distant metastasis

*Specify site(s), if known: _____

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Cannot be assessed

___ pT0: No evidence of primary tumor

___ pT1: Solitary tumor without vascular invasion

___ pT2: Solitary tumor with vascular invasion or multiple tumors none more than 5 cm

___ pT3a: Multiple tumors more than 5 cm

___ pT3b: Single tumor or multiple tumors of any size involving a major branch of the

portal vein or hepatic veins

___ pT4: Tumor(s) with direct invasion of adjacent organs other than the gallbladder or with perforation of visceral peritoneum

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Regional lymph node metastasis

Specify: Number examined: ___

Number involved: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

*Specify site(s), if known: _____

Pathologic Staging (PTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (PT)

___ PTX: Primary tumor cannot be assessed

___ PT0: No evidence of primary tumor

___ PT1a: Tumor limited to ipsilateral parietal pleura with or without mediastinal or

diaphragmatic pleural involvement. No involvement of the visceral pleura

___ PT1b: Tumor involves ipsilateral parietal pleura with or without mediastinal or

diaphragmatic pleural involvement. Tumor also involving the visceral pleura

___ PT2: Tumor involves each of the ipsilateral parietal, diaphragmatic, mediastinal,

diaphragmatic, and visceral pleura) with at least 1 of the following features:

involvement of diaphragmatic muscle, extension of tumor from visceral pleura into

the underlying pulmonary parenchyma

___ PT3: Locally advanced but potentially resectable tumor that involves all of the ipsilateral

pleural surfaces (parietal, mediastinal, diaphragmatic, and visceral pleura), with at

least 1 of the following features: involvement of the endothoracic fascia, extension

into mediastinal fat, solitary completely resectable focus of tumor extending into the

soft tissues of the chest wall, nontransmural involvement of the pericardium

___ PT4: Locally advanced technically unresectable tumor involving all of the ipsilateral

pleural surfaces (parietal, mediastinal, diaphragmatic, and visceral pleura), with at

least 1 of the following features: diffuse extension or multifocal masses of tumor in

the chest wall with or without associated rib destruction, direct transdiaphragmatic

extension to the peritoneum, direct extension to the contralateral pleura, direct

extension to mediastinal organs, direct extension into the spine, extension through the

internal surface of the pericardium with or without a pericardial effusion, tumor

involving the myocardium

Regional Lymph Nodes (pN)

___ pNX: Regional lymph nodes cannot be assessed

___ pN0: No regional lymph node metastases

___ pN1: Metastases in the ipsilateral bronchopulmonary or hilar lymph nodes

___ pN2: Metastases in the subcarinal or the ipsilateral mediastinal lymph nodes including the

ipsilateral internal mammary and peridiaphragmatic nodes

___ pN3: Metastases in the contralateral mediastinal, contralateral internal mammary,

ipsilateral or contralateral supraclavicular lymph nodes

Specify:

___ Number examined: ___

___ Number involved: ___

___ Number cannot be determined

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

___ Specify site(s), if known: _____

Ophthalmic • Uveal Melanoma

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

Iris

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pT1: Tumor limited to the iris

___ pT1a: Tumor limited to the iris not more than 3 clock hours in size

___ pT1b: Tumor limited to the iris more than 3 clock hours in size

___ pT1c: Tumor limited to the iris with secondary glaucoma

___ pT2: Tumor confluent with or extending into the ciliary body, choroid, or both

___ pT2a: Tumor confluent with or extending into the ciliary body, choroid, or both, with secondary glaucoma

___ pT3: Tumor confluent with or extending into the ciliary body, choroid, or both, with scleral extension

___ pT3a: Tumor confluent with or extending into the ciliary body, choroid, or both, with scleral extension and secondary glaucoma

___ pT4: Tumor with extrascleral extension

___ pT4a: Tumor with extrascleral extension less than or equal to 5 mm in diameter

___ pT4b: Tumor with extrascleral extension more than 5 mm in diameter

Ciliary Body and Choroid

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pT1: Tumor size category 1

___ pT1a: Tumor size category 1 without ciliary body involvement and extraocular extension

___ pT1b: Tumor size category 1 with ciliary body involvement

___ pT1c: Tumor size category 1 without ciliary body involvement but with extraocular extension less than or equal to 5 mm in diameter

___ pT1d: Tumor size category 1 with ciliary body involvement and extraocular extension less than or equal to 5 mm in diameter

___ pT2: Tumor size category 2

___ pT2a: Tumor size category 2 without ciliary body involvement and extraocular extension

___ pT2b: Tumor size category 2 with ciliary body involvement

___ pT2c: Tumor size category 2 without ciliary body involvement but with extraocular extension less than or equal to 5 mm in diameter

Ophthalmic • Uveal Melanoma

- ___ pT2d: Tumor size category 2 with ciliary body involvement and extraocular extension less than or equal to 5 mm in diameter
- ___ pT3: Tumor size category 3
- ___ pT3a: Tumor size category 3 without ciliary body involvement and extraocular extension
- ___ pT3b: Tumor size category 3 with ciliary body involvement
- ___ pT3c: Tumor size category 3 without ciliary body involvement but with extraocular extension less than or equal to 5 mm in diameter
- ___ pT3d: Tumor size category 3 with ciliary body involvement and extraocular extension less than or equal to 5 mm in diameter
- ___ pT4: Tumor size category 4
- ___ pT4a: Tumor size category 4 without ciliary body involvement and extraocular extension
- ___ pT4b: Tumor size category 4 with ciliary body involvement
- ___ pT4c: Tumor size category 4 without ciliary body involvement but with extraocular extension less than or equal to 5 mm in diameter
- ___ pT4d: Tumor size category 4 with ciliary body involvement and extraocular extension less than or equal to 5 mm in diameter
- ___ pT4e: Any tumor size category with extraocular extension more than 5 mm in diameter

Regional Lymph Nodes (pN)

- ___ pNX: Regional lymph nodes cannot be assessed
- ___ pN0: No regional lymph node metastasis
- ___ pN1: Regional lymph node metastasis

Distant Metastasis (pM)

- ___ Not applicable
- ___ pM1: Distant metastasis
- ___ pM1a: Largest diameter of the largest metastasis 3 cm or less
- ___ pM1b: Largest diameter of the largest metastasis 3.1-8.0 cm
- ___ pM1c: Largest diameter of the largest metastasis 8 cm or more

Ophthalmic • Retinoblastoma

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pT1: Tumor confined to the eye with no optic nerve or choroidal invasion

___ pT2: Tumor with minimal optic nerve and/or choroidal invasion:

___ pT2a: Tumor superficially invades optic nerve head but does not extend past lamina

___ pT2b: Tumor superficially invades optic nerve head but does not extend past lamina

___ pT2c: Tumor superficially invades optic nerve head but does not extend past lamina

___ pT3: Tumor with significant optic nerve and/or choroidal invasion:

___ pT3a: Tumor invades optic nerve past lamina cribrosa but not to surgical resection

___ pT3b: Tumor invades optic nerve past lamina cribrosa but not to surgical resection

___ pT3c: Tumor invades optic nerve past lamina cribrosa but not to surgical resection

___ pT4: Tumor invades optic nerve to resection line or exhibits extra-ocular extension

___ elsewhere:

___ pT4a: Tumor invades optic nerve to resection line but no extra-ocular extension

___ identified

___ pT4b: Tumor invades optic nerve to resection line and extra-ocular extension

___ identified

Regional Lymph Nodes (pN)

___ pNX: Regional lymph nodes cannot be assessed

___ pN0: No regional lymph node involvement

___ pN1: Regional lymph node involvement (preauricular, cervical, submandibular)

___ pN2: Distant lymph node involvement

Distant Metastasis (pM)

___ Not applicable

___ pM1: Metastasis to sites other than CNS

___ pM1a: Single lesion

___ pM1b: Multiple lesions

___ pM1c: CNS metastasis

___ pM1d: Discrete mass(es) without leptomeningeal and/or CSF involvement

___ pM1e: Leptomeningeal and/or CSF involvement

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

For Primary Osseous Tumors

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pT1: Tumor 8 cm or less in greatest dimension

___ pT2: Tumor more than 8 cm in greatest dimension

___ pT3: Discontinuous tumors in the primary bone site (not including skip metastases)

For Primary Extracranial Osseous Tumors

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pT1a: Tumor 5 cm or less in greatest dimension, superficial tumor

___ pT1b: Tumor 5 cm or less in greatest dimension, deep tumor

___ pT2a: Tumor more than 5 cm in greatest dimension, superficial tumor

___ pT2b: Tumor more than 5 cm in greatest dimension, deep tumor

Lymph Nodes

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Regional lymph node metastasis

Specify: Number of lymph nodes examined: ___

Number of lymph nodes involved: ___

Nonregional Lymph Nodes

___ Cannot be assessed

___ No nonregional lymph node metastasis

___ Nonregional lymph node metastasis

Specify: Number of lymph nodes examined: ___

Number of lymph nodes involved: ___

Distant Metastasis (pM)

For Primary Osseous Tumors

___ Not applicable

___ pM1a: Lung

___ pM1b: Metastasis involving distant sites other than lung (including skip metastases)

*Specify site(s), if known: _____

For Primary Extracranial Osseous Tumors

___ Not applicable

___ pM1: Distant metastasis

*Specify site(s), if known: _____

Pathologic Staging (pTNM)

Note: The phrases in italics include clinical findings required for AJCC staging. This clinical information may be unknown to the pathologist. It is included here only for the sake of completeness.

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Cannot be assessed

___ pT0: No evidence of primary tumor

___ pT1: Tumor 2 cm or less in greatest dimension without extraparenchymal extension

___ pT2: Tumor more than 2 cm but not more than 4 cm in greatest dimension without extraparenchymal extension

___ pT3: Tumor more than 4 cm and/or tumor having extraparenchymal extension (Note 1)

___ pT4a: Moderately advanced disease. Tumor invades skin, mandible, ear canal, and/or facial nerve.

___ pT4b: Very advanced local disease. Tumor invades skull base and/or pterygoid plates and/or encases carotid artery

Note: There is no category of carcinoma in situ (pTis) relative to carcinomas of salivary glands (major, minor).

Regional Lymph Nodes (pN)[#]

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Metastasis in a single ipsilateral lymph node, 3 cm or less in greatest dimension

___ pN2a: Metastasis in a single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension

___ pN2b: Metastasis in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension

___ pN2c: Metastasis in bilateral or contralateral lymph nodes, none more than 6 cm in greatest dimension

___ pN3: Metastasis in a lymph node, more than 6 cm in greatest dimension

Specify: Number examined: ___

Number involved: ___

*Size (greatest dimension) of the largest positive lymph node: ___

[#]Superior mediastinal lymph nodes are considered regional lymph nodes (level VII).
Midline nodes are considered ipsilateral nodes.

Distant Metastasis (pM)

___ Not Applicable

___ pM1: Distant metastasis

*Specify site(s), if known: _____

Skin • Squamous Cell Carcinoma of the Skin

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple)
 ___ r (recurrent)
 ___ y (posttreatment)

Primary Tumor (pT)

___ pTX: Primary tumor cannot be assessed
 ___ pT0: No evidence of primary tumor
 ___ pTis: Carcinoma in situ
 ___ pT1: Tumor 2 cm or less in greatest dimension with less than two high risk features
 ___ pT2: Tumor greater than 2 cm in greatest dimension with or without one additional high risk feature, or any size with two or more high risk features
 ___ pT3: Tumor with invasion of maxilla, mandible, orbit, or temporal bone
 ___ pT4: Tumor with direct or perineural invasion of skull base or axial skeleton

Regional Lymph Nodes (pN)

___ pNX: Regional lymph nodes cannot be assessed
 ___ pN0: No regional lymph node metastasis
 ___ pN1: Metastasis in a single ipsilateral lymph node, 3 cm or less in greatest dimension
 ___ pN2: Metastasis in a single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension; or in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension; or in bilateral or contralateral lymph nodes, none more than 6 cm in greatest dimension
 ___ pN2a: Metastasis in a single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension
 ___ pN2b: Metastasis in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension
 ___ pN2c: Metastasis in bilateral or contralateral lymph nodes, none more than 6 cm in greatest dimension
 ___ pN3: Metastasis in a lymph node, more than 6 cm in greatest dimension

Distant Metastasis (pM)

___ Not applicable
 ___ pM1: Distant metastasis

*Specify site(s), if known:

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Cannot be assessed

___ pT0: No evidence of primary tumor

___ pTis: Carcinoma in situ

___ pT1a: Tumor invades lamina propria

___ pT1b: Tumor invades submucosa

___ pT2: Tumor invades muscularis propria

___ pT3: Tumor invades through the muscularis propria into the subserosa or into the nonperitonealized perimuscular tissue (mesentery or retroperitoneum) with extension 2 cm or less

___ pT4a: Tumor penetrates the visceral peritoneum

___ pT4b: Tumor directly invades other organs or structures

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Metastasis in 1 to 3 regional lymph nodes

___ pN2: Metastasis in 4 or more regional lymph nodes

Specify: Number examined: ___

Number involved: ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

___ *Specify site(s), if known: _____

Other • Soft Tissue

Pathologic Staging (pTNM) (Note J)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pT1a: Tumor 5 cm or less in greatest dimension, superficial tumor

___ pT1b: Tumor 5 cm or less in greatest dimension, deep tumor

___ pT2a: Tumor more than 5 cm in greatest dimension, superficial tumor

___ pT2b: Tumor more than 5 cm in greatest dimension, deep tumor

Regional Lymph Nodes (pN) (Notes J and K)

___ pNX: Regional lymph nodes cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Regional lymph node metastasis

Specify: Number examined: ___

Number positive: ___

Distant Metastasis (pM) (Note J)

___ Not applicable

___ pM1: Distant metastasis

___ Specify site(s), if known: _____

Thorax • Thyroid and Thyroid Carcinoma

Pathologic Staging for Thyroid Carcinomas (pTNM) (does not apply to thymomas)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple primary tumors)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Primary tumor cannot be assessed

___ pT0: No evidence of primary tumor

___ pT1: Tumor completely encapsulated

___ pT2: Tumor invades pericapsular connective tissue

___ pT3: Tumor invades neighboring structures, such as pericardium, mediastinal

___ pT4: Tumor with pleural or pericardial dissemination

Regional Lymph Nodes (pN)

___ pNX: Regional lymph nodes cannot be assessed

___ pN0: No regional lymph node metastases

___ pN1: Metastasis in anterior mediastinal lymph nodes

___ pN2: Metastasis in other intrathoracic lymph nodes, excluding anterior mediastinal

___ pN3: Metastasis in scalene and/or supraclavicular lymph nodes

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

*Specify site(s), if known:

Genitourinary • Ureter, Renal Pelvis

Pathologic Staging (pTNM)

TNM Descriptors (required only if applicable) (select all that apply)

___ m (multiple)

___ r (recurrent)

___ y (post-treatment)

Primary Tumor (pT)

___ pTX: Cannot be assessed

___ pT0: No evidence of primary tumor

___ pTa: Papillary noninvasive carcinoma

___ pTis: Flat carcinoma in situ

___ pT1: Tumor invades subepithelial connective tissue (lamina propria)

___ pT2: Tumor invades muscularis propria

___ pT3: Tumor invades beyond muscularis into peripelvic fat or the renal parenchyma

___ pT4: Tumor invades adjacent organs, or through the kidney into the perinephric fat

Regional Lymph Nodes (pN)

___ pNX: Cannot be assessed

___ pN0: No regional lymph node metastasis

___ pN1: Metastasis in a single regional lymph node, 2 cm or less in greatest dimension

___ pN2: Metastasis in a single regional lymph node, more than 2 cm but not more than 5 cm in greatest dimension, or multiple lymph nodes, none more than 5 cm in greatest dimension

___ pN3: Metastasis in a regional lymph node more than 5 cm in greatest dimension

Specify: Number examined: ___

Number involved (any size): ___

Distant Metastasis (pM)

___ Not applicable

___ pM1: Distant metastasis

*Specify site(s), if known: _____

Staff Pathologists
 Pathologist Assistants
 All-Reza Armin, M.D.
 Mark Kolins, M.D.
 George Williams, M.D.
 Robert Folberg, M.D.
 Alissa Allar
 n Scalise

Distribution:

- 1) All such specimens, including eyelid and orbital specimens, submitted by a Beaumont ophthalmologist are to be assigned to Dr. Folberg, unless a frozen section is performed. In the latter instance, the case stays with the frozen section pathologist.
- 2) The outreach eyelid biopsy specimens originating from the Millennium Clinic will continue to be assigned to the dermatopathologists. The dermatopathologists should show any interesting or unusual lid lesions (e.g., sebaceous carcinoma) to Dr. Folberg, so that he can maintain his interest and expertise in this area.
- 3) All eyelid specimens not subjected to frozen section or originating from the Millennium Clinic should be assigned directly to Dr. Folberg. If such a case is assigned incorrectly to one of our surgical pathologists, that case should be transferred over to Dr. Folberg.

This memo will clarify how ophthalmic pathology specimens are to be assigned.

Subject: Ophthalmic Pathology Specimens

To: Distribution
 From: John C. Watts, M.D.
 Date: February 25, 2010
 Department: Anatomical Pathology
 Department:

Beaumont
 William Beaumont Hospital
 POSTED
 3-9-10
 Date / Initials
 Inter-department communication