



## **ANATOMICAL PATHOLOGY : A GUIDE TO CODING**

The following guidelines have been agreed by consensus of Anatomical Pathologists who are members of the Anatomical Pathologist's Group and the National Pathology Group of South African Medical Association and Pathologists in full time Academic Practice:

The *guidelines* have been formulated in order to achieve a uniform coding policy applicable to all histo-pathology investigations.

Examination of appropriate tissue sections, special stains or techniques are relevant to establishing a diagnosis or staging a disease process.

The guide does not refer to any value to be ascribed to any procedure as performed by an Anatomical Pathologist but only gives guidance on the utilisation of the correct codes.

This guideline does not stipulate methods of specimen dissection but such methods as are recommended or described in recognized and appropriate surgical pathology text books, including, but not limited to, Ackerman's Surgical Pathology, Surgical Pathology Dissection by William H. Westra, and the Manual for Gross Sample Examination and Sectioning as published by the Anatomical Pathology Department of the University of the Witwatersrand, which may be used.

### **1 DEFINITIONS**

#### **1.1 SPECIMEN**

A specimen is defined as an individual portion of tissue irrespective of its size, submitted as a biopsy or surgical resection which is individually identified by the referring doctor, or is identifiable by macroscopic or microscopic examination by a pathologist.

#### **1.2 SAMPLE**

A sample is the tissue submitted for processing in the laboratory which may either be a specimen or may be portions of a specimen selected in the laboratory for microscopic examination and diagnosis.

#### **1.3 TISSUE SECTION**

A tissue section is a thinly cut portion of a sample that is mounted in a paraffin block contained in a cassette. The tissue section is mounted on a glass slide, appropriately stained, and is examined by a pathologist.

#### **1.4 SERIAL STEP SECTIONS**

This is the process of slide preparation and subsequent examination of multiple tissue sections cut as a ribbon or from deeper levels from a sample, which is mounted in a cassette. Probable tissue sources for such an examination would include tissue from the

gastro-intestinal tract, prostate, skin, uterine cervix, bladder, oral mucosa, kidney and liver, but also other sources where the biopsy material is small.

## 1.5 **SPECIAL STAINS**

Routine examination of a tissue section is by use of a standard Haematoxylin and Eosin stain. Should the disease process require further examination or analysis then different stains may be used to identify tissue component types, pathological processes or organisms. Such stains are termed Special Stains. Special stains are distinct from Immunofluorescent or immunoperoxidase stains.

## 2 **GUIDELINES FOR CODING TO BE USED ON CLAIMS**

- 2.1 When a single tissue section from a sample is mounted on a single slide for examination, the procedural code 4567 is used. If more than one sample has been selected from the specimen then the code 4571 is used for the second and subsequent sections which may be used as a multiple to indicate the number of further samples examined from a single specimen i.e., the first code used is 4567 for a single specimen, and the second code 4571 is for the second and any subsequent samples.
- 2.2 Any specimen that is individually identified by the referring doctor, or is identified as separate, either by macroscopic or microscopic examination, is coded using the process as outlined above in paragraph 2.1.
- 2.3 When a specimen from which a sample is prepared requires examination of multiple tissue sections mounted on a slide, code for serial step sections 4582 is used.
- 2.4 Should several specimens from the same anatomical site be examined and which are mounted on separate glass slides, then code 4584 is used for the second and subsequent samples and may be used as a multiple to indicate the number of such samples examined. i.e., the first code used is 4582 when serial step sections are prepared from a single specimen, and 4584 for the second and any subsequent samples.
- 2.5 When the codes for Serial Step Sections are used, codes 4657 and 4571 cannot be used for the same sample, as code 4582 is inclusive of code 4567 and code 4584 is inclusive of code 4571.
- 2.6 When a biopsy sample is submitted, which contains multiple small tissue fragments, which do not require individual orientation, these multiple tissue fragments should be treated as a single specimen and should be coded according to the number of tissue sections (as defined in paragraph 1.3) examined with the use of progression of coding as is set out in codes 4567 and 4571; or if serial sections have been prepared, then codes 4582 and 4584 should be used, according to the number of tissue sections examined. Such specimens would include endometrial curettings, transurethral prostatic resections or bladder tumour curettings. Such specimens should not be processed or coded as is set out in paragraph 2.7.
- 2.7 If several specimens are submitted in a single specimen container from a single anatomical site require individual detailed orientation and examination, then each of these specimens is separately embedded and coded according to the number of tissue sections examined with the use of progression of coding as is set out in codes 4567 and 4571; or if serial sections have been prepared then codes 4582 and 4584 may be used according to the number of tissue sections examined. Only biopsy samples that require individual orientation and examination of the individual fragments submitted are coded in this way.

- 2.8 Specimens from different organs are treated as individual specimens and coded utilising the primary codes 4567 and 4571, or using codes 4582 and 4584 should serial step sections be prepared.
- 2.9 Lymph node dissections, as part of a surgical resection for malignant disease, are treated as separate specimens. The code to be used for each of this is per the number of samples examined.
- 2.10 When individual (anatomically distinct) organs are resected en bloc, each organ is treated as an individual specimen and coded as per the number of samples examined. Examples include but are not limited to splenectomy as part of gastrectomy, prostatectomy as part of radical cystectomy, ovaries or uterine adnexae as part of hysterectomy.
- 2.11 **FROZEN SECTIONS**
- 2.11.1 Frozen sections that are performed are coded using code 4577 for the first frozen section on a single specimen, and as multiples of code 4578 according to the number of samples examined in theatre.
- 2.11.2 If a further specimen, that is anatomically distinct from the first, is examined the further specimen, in turn, is coded as a separate sample specimen according to the system outlined above in paragraph 2.11.1.
- 2.11.3 In the laboratory frozen section specimens, are submitted for selection of tissue samples for permanent paraffin sections, and are reported separately, and coded as is set out above in paragraphs 2.6 and 2.7.
- 2.12 **SPECIFIC EXAMINATIONS**
- The examinations referred to below are set out in this guideline merely for clarification for coding purposes and for medical schemes to understand the best practice processes used in respect of the examinations referred to in this section. The examinations referred to in this section are those examinations that occur more frequently than any other examination with reference to benefits offered by medical schemes:
- 2.12.1 **Cone biopsy cervix:**
- Complete radial samples should be selected and examined.
- 2.12.2 **Breast lumpectomy:**
- If the specimen is small, all relevant tissue is processed. If large, two thirds of all tissue excluding fat is selected.
- 2.12.3 **Skins:**
- Samples more than 5mm in diameter should be bisected and serial sections cut. Larger specimens may require several samples to be prepared and examined in order to diagnose or to assess resection margins.
- 2.12.4 **Surgical operative excision specimens including major re-re- sections for malignancy:**
- 2.12.4.1 Charges as set out above in paragraph 2.10 apply for the number of samples selected and examined.
- 2.12.4.2 Complete and adequate examination will differ according to pathological processes identified macroscopically and possibly following microscopic examination.

2.12.4.3 In some resections for malignant disease or other pathology, sample selections may vary according to diagnosis and the need to stage the disease process. This may necessitate the preparation and examination of multiple samples, which may differ from guidelines as set out in dissection manuals, according to the pathological process present. The multiple samples will be coded accordingly.

**2.12.5 Prostate needle biopsies:**

Each core should be separately embedded in a cassette and serial sections cut.

**2.12.6 Transurethral Prostatic or Bladder resections:**

2.12.6.1 Where the specimens are submitted to a pathologist are composed of large numbers of tissue fragments, the number samples utilised is dependent on the total weight of tissue submitted. Such samples should be placed in cassettes of 2.0 grams per cassette for up to 8 cassettes and thereafter an additional 1 cassette for each 10 grams *provided* that no abnormality or malignancy is detected.

2.12.6.2 Should any abnormality or malignancy be detected, then all reserve tissue should be embedded, so that the volume of the malignancy in the entire tissue may be established or, in the case of pre-neoplastic conditions, so that the possibility of neoplasia or infiltration may be excluded.

**2.12.7 Special stains, immunoperoxidase and immunofluorescence studies:**

The number of special stains and immunohistochemical studies that are performed is dependent on the pathological diagnosis or differential diagnosis, The type and number of such special procedures will vary according to the tissue type and pathological processes that are observed or diagnosed. Such special investigations are used to diagnose and stage disease processes and also to exclude pathological processes.

**2.12.8 Each special stain is coded using the code 4589**

2.12.8.1 When multiple tissue sections are prepared utilising the same stain, such as for the identification of scanty micro-organisms, these are coded as individual special stains using code 4589.

2.12.8.2 Immunoperoxidase stains are coded using code 4592.

2.12.8.3 When the same immunoperoxidase stain is prepared on several samples then each of these is coded as an individual item, i.e. as multiples of code 4592.

## DESCRIPTORS USED IN THIS DOCUMENT

CODE	DESCRIPTOR
4567	FOR EACH HISTOLOGY PER SAMPLE
4571	HISTOLOGY ADDITIONAL SAMPLE/S FROM INDIVIDUAL SPECIMEN
4575	FROZEN SECTION HISTOLOGY AND MACROSCOPIC EXAMINATION IN LABORATORY
4577	FROZEN SECTION HISTOLOGY AND MACROSCOPIC EXAMINATION IN THEATRE
4578	SECOND AND SUBSEQUENT FROZEN SECTION IN THEATRE
4579	ATTENDANCE IN THEATRE; NO EXAMINATION
4582	HISTOLOGY SERIAL STEP SECTIONS FROM INDIVIDUAL SAMPLE
4584	HISTOLOGY ADDITIONAL SERIAL STEP SECTIONS FROM INDIVIDUAL SPECIMEN
4587	FOR EACH HISTOLOGY CONSULTATION PER SPECIMEN
4589	SPECIAL STAIN PREPARATION FOR IDENTIFICATION OF TISSUE COMPONENT TYPES, PATHOLOGY OR ORGANISMS
4590	SPECIAL PROCEDURES
4591	FOR EACH IMMUNOFLUORESCENCE STUDIES
4592	FOR EACH IMMUNOPEROXIDASE STUDIES
4593	ELECTRON MICROSCOPY
4595	FOETAL AUTOPSY EXCLUDING HISTOLOGY