

## Qualitative vs. Quantitative Immunohistochemistry

APS performs regular audits of client report documentation, CPT®/ICD-10 code assignment and their possible relation to carrier edits. One area that APS auditors see as problematic, is proper CPT code assignment on Immunohistochemistry stains. Following is a breakdown of this area.

### Immunohistochemistry – Qualitative Results

There are three CPT (*Current Procedural Terminology*) codes for reporting a **qualitative** IHC stain: 88342, 88341 and 88344. Results are stated in qualitative terms such as positive or negative. For example, “the tissue stains negatively for cytokeratin” expresses a qualitative result.

- **88342** Immunohistochemistry or immunocytochemistry, **per specimen**; initial single antibody stain procedure
- **+88341** each additional single antibody stain procedure
- **88344** each multiplex antibody stain procedure

CPT code 88342 is charged for the initial single antibody IHC stain performed on a specimen. Assign 88341 for each additional single antibody IHC stain performed on the same specimen.

Code 88344 is reported for each multiplex antibody IHC stain (e.g., PIN-4, ADH-5, Uro-3 Triple stain) performed on a specimen. 88344 can only be reported when two or three different antibodies used show precisely which are staining positively and which are not. Use one unit of 88344 when multiple separately-identifiable antibodies are applied to the same specimen (i.e., multiplex antibody stain procedure).

CPT directs not to use more than one unit of 88342, 88341 or 88344 for the same separately-identifiable antibody, per specimen. The notes also state not to use more than one unit of 88341, 88342, 88344 in conjunction with 88360, 88361 unless each procedure is for a different antibody. Lastly, when multiple antibodies are applied to the same slide that are not separately-identifiable (e.g. antibody cocktails), CPT directs using 88342 unless an additional separately-identifiable antibody is also used. In that case, report 88344.

### Examples:

1. One Specimen
  - IHC S100 on block A1 and A2 – 88342
  - IHC Melan-A - 88341
2. One Specimen
  - IHC primary stain CK5 – 88342
  - IHC primary stain p53 – 88341
  - IHC primary stain SMMC - 88341
3. Two Specimens
  - Specimen 1
    - i. IHC primary stain E-Cadherin – 88342
    - ii. IHC primary stain HMWCK - 88341
  - Specimen 2
    - i. IHC primary stain ADH-5 – 88344

#### 4. Six Prostate Specimens

- Specimen B-IHC PIN-4 – 88344
- Specimen E-IHC PIN-4 – 88344
- Specimen F-IHC PIN-4 – 88344

### **Immunohistochemistry – Quantitative or Semi-Quantitative Results**

CPT has two codes that describe morphometric analysis of IHC stained slides with a **quantitative or semi-quantitative** result: 88360 and 88361.

- 88360 Morphometric analysis, tumor immunohistochemistry (eg., Her-2/neu, estrogen receptor/progesterone receptor), quantitative/semi-quantitative, **per specimen; manual**
- 88361..... using computer assisted technology

To assign the correct IHC code of either 88360 or 88361 you will have a quantitative or semi-quantitative result differentiated by the immunohistochemistry staining technique. Quantitative/semi-quantitative results are derived by counting the number of positive cells and expressing the outcome as a percent of total cells. Today a common method of “scoring” Her-2/neu IHC involves counting positive cells to a threshold number like 10%, combined with a subjective assessment of staining intensity: the 0 to 3+ score is deemed to be a semi-quantitative result. {*CAP Today*, Feb. 2005} You will report code 88361 for the IHC test if the counting is computer-assisted, but, for manual counting method, report code 88360.

It is often wondered whether a literal counting of positive and total cells is required to report manual semi-quantitative IHC code 88360. This question is reasonable and highly relevant, because quite frequently pathologists base their interpretation of a semi-quantitative IHC stain on a visual approximation of the percentage of positive cells instead of actually counting cells. Practice guidance published by the College of American Pathologists confirms that, regarding the evaluation of IHC stains, the term “semi-quantitative” covers a determination made by visual approximation as well as one made by literally counting positive cells.

IHC slides are also first analyzed against reference positive and negative samples to determine if the slide warrants further quantitative or semi-quantitative exam. If so, code 88342, 88341 and/or 88344 cannot be reported in addition to 88360 or 88361 unless each stain is for a different antibody. CPT codes 88360 and 88361 include the IHC staining and the initial qualitative slide exam.

Should you have questions, please contact your Practice Manager.