GEISINGER IHC

Stains are a good thing ... **Quality** stains are our thing.

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2014 Coding Changes for Anatomic Pathology

In 2014 laboratories performing immunohistochemistry (IHC) stains may see significant changes in reimbursement when billing Medicare and other government payers. While the American Medical Association (AMA) proposed billing stains **per block**, Medicare had its own idea about unit of service for IHC stains, suggesting billing **per specimen**.

AMA Definitions and Changes

The AMA CPT code book for 2014 offers a new code (effective Jan. 1, 2014) for reporting qualitative IHC stains as well as modifications to the existing code. The AMA codes and guidance for their use are:

88342 Immunohistochemistry or immunocytochemistry, each separately identifiable antibody **per block**, **cytologic preparation**, or **hematologic smear**; first separately identifiable antibody per slide

+88343 Each additional separately identifiable antibody **per slide**

The change in description for code 88342 is meant to direct laboratories to bill IHC stains **per block** as opposed to per specimen. The new code 88343 can be used in cases where a pathologist is performing a stain with multiple antibodies on one slide, each requiring a distinct read. The cocktail PIN4 is an example for use of CPT code 88343.

Medicare and government payers are taking a stand against the AMA guidelines. They removed 88342 and 88343 from the Physician Fee Schedule. Medicare and government payers will not pay for the interpretation of multiple antibodies on one slide (88343). Codes 88342 or 88343 are considered invalid for Medicare and will be denied by the payer if billed. Medicare created unique HCPCS Level II codes that must be used when billing Medicare for IHC stains as of Jan. 1, 2014.

HCPCS Definitions and Changes

G0461 Immunohistochemistry or immunocytochemistry, **per specimen**; first single or multiplex antibody stain **per specimen**

+G0462 Each additional single or multiplex antibody stain **per specimen**

Medicare coding is clear that billing is **per specimen**. Code G0461 is to be used for the first single stain, and each additional stain is to be billed using G0462. Reimbursement for G0462 is significantly lower than for G0641. G0462 cannot be used to bill additional distinct reads on a multi-stain cocktail such as PIN4. Medicare allows you to bill only one unit of service using code G0461.

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2014 Coding Changes for Anatomic Pathology *(continued from page 1)*

All billing entities will need to be vigilant about monitoring their payments from Medicare and government payers to make sure they are getting paid as expected. Edits put in place by Medicare may be flawed, and review of payment is essential. One of the most difficult parts of the new payment structure in addition to decreased reimbursement is the fact that the billing entity must develop practices to ensure correct billing. This responsibility falls to the hospital or other providers of lab services. Medicare contractors will surely look to identify billing entities that are billing improperly to avoid the new payment policy.

Contributed by Diane Shulski

Is GATA3 Still a Useful Diagnostic Marker?

GATA3 is one of the most important diagnostic markers introduced to clinical IHC laboratories in the last few years. Many publications have appeared in the literature, and some of the data appeared to be inconsistent. The question to be raised here is, is GATA3 still a useful diagnostic marker?

GATA3 is one of six members of a zinc finger transcription factor family, and it plays an important role in promoting and directing cell proliferation, development, and differentiation in many tissues and cell types. Together with placental S100 (S100P), it has recently been reported to be a useful immunohistochemical marker for the detection of urothelial carcinoma and ovarian Brenner tumors [1, 2]. Our recent study of GATA3 expression showed that 62 of 72 urothelial carcinomas (86%) and 138 of 147 breast carcinomas (94%) were positive for GATA3. All others cases (N=1100) except 2 of 96 endometrial carcinomas were negative for GATA3 [3]. An additional study from our group demonstrated GATA3 expression was seen in 73% of ER-negative breast carcinomas [4]. Similar findings have been reported [5].

More recent studies demonstrated that GATA3 expression was seen in 1) salivary gland tumors (100% of salivary ductal carcinomas and mammary analogue secretory carcinomas, and a much lower percentage of other salivary gland tumors) [6]; 2) 80% of metastatic paragangliomas [7]; 3) 7% of anal squamous cell carcinomas (SCCs) and 19% of uterine cervical SCCs, which tended to be focally positive [7-10]; 4) choriocarcinomas (100% were positive for GATA3) [11]; and 5) normal parathyroid tissue and neoplasm. Our unpublished data showed approximately 10% of pancreatic ductal adenocarcinomas were positive for GATA3 on tissue microarray sections, while all renal cell carcinomas (RCCs: clear cell RCCs, chromophobe RCCs and papillary RCCs) were negative. A recent study from Gonzalez-Roibon, et al. demonstrated a very similar finding [12].

Some recent studies described GATA3 expression in various types of tumors, including a significant percentage of renal cell tumors. Some of these published photomicrographs showed both nuclear and cytoplasmic staining with GATA3, suggesting over-staining with a suboptimal protocol. Caution should be taken to avoid using an over-sensitive staining protocol which will decrease the specificity of GATA3.

In summary, GATA3 is still a useful diagnostic marker for identifying breast and urothelial origin when working on a carcinoma of an unknown primary because the vast majority of carcinomas from the lung, upper and lower GI, pancreatobiliary tract, kidney, prostate, uterus, and ovary are negative for GATA3.

References:

1.Higgins JP, et al. *Am J Surg Pathol*. 2007;31(5):673-680; 2. Esheba GE, et al. *Am J Surg Pathol*. 2009;33(3):347-353; 3. Liu H, et al. *Am J Clin Pathol*. 2012;138(1):57-64; 4. Liu H, et al. *Am J Clin Pathol*. 2014; 141(5):648-655.; 5. Cimino-Mathews A, et al. *Hum Pathol*. 2013;44(7):1341-1349; 6. Schwartz LE, et al. *Head Neck Pathol*. 2013;7(4):311-315; 7. So JS, et al. *Mod Pathol*. 2013;26(10):1365-1370; 8. Chang A, et al. *Hum Pathol*. 2013;44(8):1563-1568; 9. Gruver AM, et al. *Arch Pathol Lab Med*. 2012;136(11):1339-1346; 10. Chang A, et al. *Am J Surg Pathol*. 2012;36(10):1472-1476; 11. Compton LA, et al. *Mod Pathol*. 2014; 27(S2):222A; 12. Gonzalez-Roibon N, et al. *Hum Pathol*. 2014;45(2):244-248.

Select Abstracts from the 2014 USCAP Meeting (Part I)

GATA3

- GATA3 is a highly sensitive and specific marker for cervical mesonephric differentiation, and it can be useful when the differential diagnosis includes endocervical and endometrial adenocarcinomas, as the latter are negative for GATA3. ***(Abstract #1182)***
- GATA3 is strongly and diffusely positive in cytotrophoblasts and syncytiotrophoblasts in the testis and can reliably be used to distinguish choriocarcinoma from other malignant germ cell elements, especially embryonal carcinoma and seminoma. ***(Abstract #910)***
- GATA3 is expressed in the majority of cases of sarcomatoid urothelial carcinoma. Negative expression may, however, be observed in cases composed predominantly of pleomorphic undifferentiated sarcomatoid areas or extensive heterologous elements. ***(Abstract #931)***
- GATA3 demonstrated the highest specificity among all markers to differentiate urothelial carcinoma (UC) from squamous cell carcinoma. It may be useful when diagnosing metastatic urothelial carcinoma to the lung. The combination of GATA3 and p63 has high sensitivity for UC. ***(Abstract #880)***
- While mouse studies suggest that GATA3 activity is essential for normal parathyroid development, GATA3 IHC could aid in the sometimes problematic identification of normal parathyroid tissue in small biopsies. It can also aid in distinguishing parathyroid tissue from thyroid cytologic aspirate smears. ***(Abstract #610)***
- Of the urothelial carcinoma variants, only the micropapillary and sarcomatoid variants exhibited consistent and strong immunostaining for GATA3. Overall, caution should be utilized when interpreting GATA3 staining in the context of possible metastasis from primary bladder neoplasms with variant morphology. ***(Abstract #1100)***

Napsin A

- Napsin A is frequently expressed in ovarian and uterine clear cell carcinomas (CCCs), rarely in ovarian endometrioid carcinoma, and not in high-grade serous carcinoma. ***(Abstract #1188)***
- Napsin A serves as a sensitive and specific marker for distinguishing clear cell carcinoma (positive) from other endometrial carcinoma subtypes and could improve the diagnostic reproducibility of CCC. ***(Abstract #1181)***

Uroplakin II (UPII)

- UPII is a more sensitive urothelial marker than UPIII in urothelial carcinoma. The sensitivity of UPII is also superior to UPIII in micropapillary, plasmacytoid, and sarcomatoid variants. Although both UPII and UPIII are highly specific for urothelial differentiation, UPII is more valuable than UPIII in immunohistochemical analysis for confirming urothelial origin. ***(Abstract #1003)***
- All non-urothelial tumors (N=1845) and normal tissues (N=310) were negative for UPII. The study demonstrated that UPII is a highly specific and relatively sensitive immunomarker for the identification of urothelial origin when working on a tumor of uncertain origin. ***(Abstract #1072)***
- The UPII antibody monotonically outperforms UPIII. UPII is a useful addition to the diagnostic armamentarium to prove urothelial histogenesis in the workup of poorly differentiated carcinomas. ***(Abstract #1079)***

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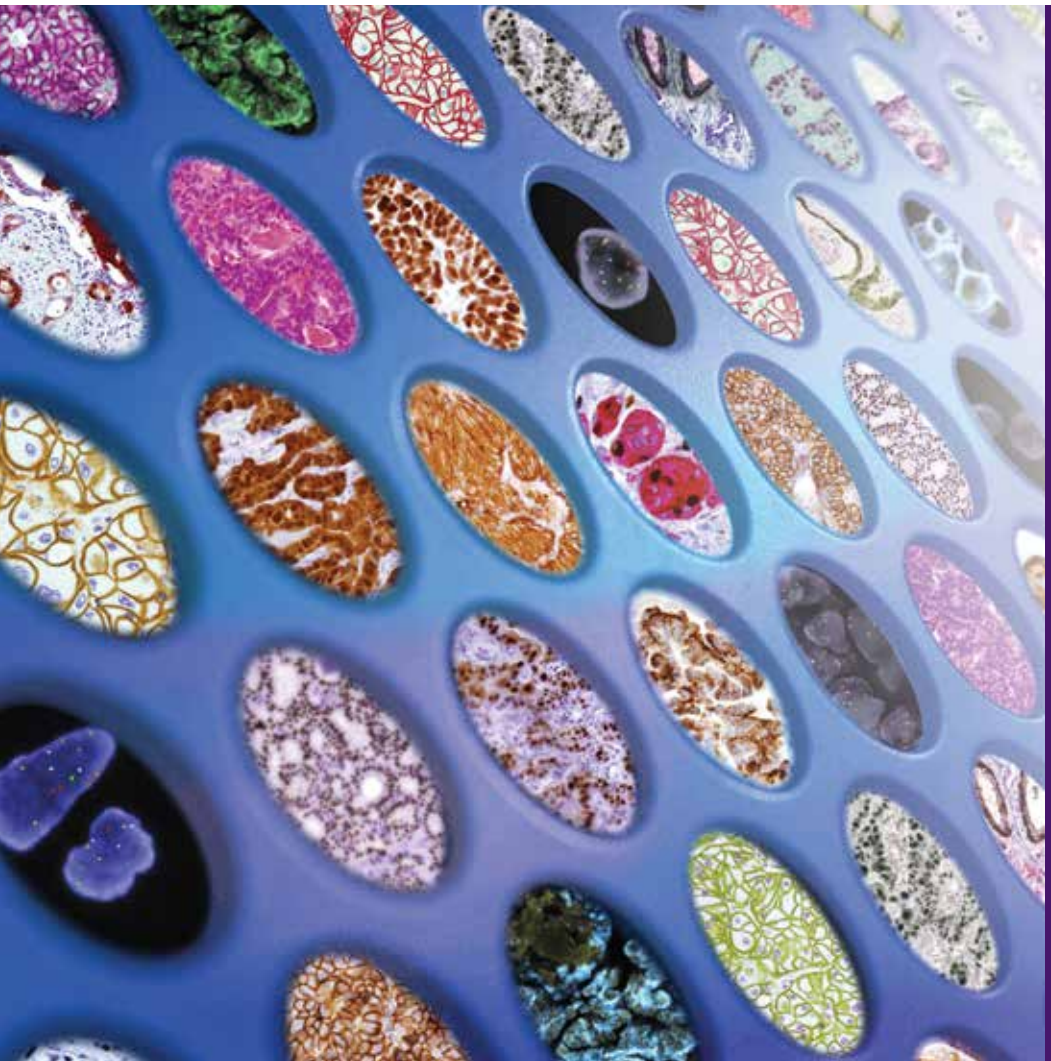

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NEWS

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