COLLEGE of AMERICAN PATHOLOGISTS Laboratory Quality Solutions

Surveys and Anatomic Pathology Education Programs

Performance Improvement Program in Surgical Pathology PIP/PIPW-C 2024

Participant Summary

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2024 PIP/PIPW-C PARTICIPANT SUMMARY

Program Update This report summarizes the diagnostic responses for set C of the 2024 Performance Improvement Program in Surgical Pathology (PIP & PIPW).

A tabulation of the responses to the supplementary questions is not included since these are intended for educational purposes only.

Slide Donation The CAP Surgical Pathology Committee relies on the donations of tissue blocks to sustain the PIP glass slide Proficiency Testing Survey and greatly appreciates any donated tissue blocks for use in the PIP Surveys. At the end of each year, case donors who submitted cases during the year will be listed in the PIP-D PSR by individual or institution. Due to patient confidentiality, individual cases will not be listed by institution.

The CAP can provide a limited reimbursement for acceptable donated blocks from laboratories. All PIP cases are authored only by Surgical Pathology Committee members. For details, donation forms, and additional information please see:

https://www.cap.org/laboratory-improvement/proficiency-testing/anatomic-pathology-education-programs

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Note: Beginning in 2024 the first two cases of the online version of PIP (PIPW- PIP Web version) will not duplicate the first 2 cases in the PIP (Glass slide) program.

The PIPW/PIPW1 programs offer 10 cases with the benefit of slides being provided in an online, whole slide image format, which allows for each clinical case history and respective slide to be presented in a side-by-side format. This allows for inclusion of smaller tumors and biopsies.

Cases W01 and W02 show results from PIPW/PIPW1 participants. Cases 01 and 02 show results from PIP/PIP1 participants. Case # 2024-W21

Diagnos	sis				
Cryptoco	ccus neoformans				
		PIP Participants		PIPW Participants	
Code	Diagnosis	No.	%	No.	%
	Aspergillus fumigatus			7	1.8
	Blastomyces dermatitidis			106	27.2
	Cryptococcus neoformans			273	70.2
	Mycobacterium_tuberculosis			2	0.5
	Rheumatoid_nodule			0	0.3
	Sarcoidosis			0	0.0

Case # 2024-W22

Diagnos	sis					
Polymor	phous adenocarcinoma					
		PIP Particip	PIP Participants		PIPW Participants	
Code	Diagnosis	No.	%	No.	%	
	Adenoid cystic carcinoma			73	19.1	
	Carcinoma ex pleomorphic adenoma			24	6.3	
	Mucoepidermoid carcinoma			12	3.1	
	Polymorphous adenocarcinoma			263	68.8	
	Secretory carcinoma			10	2.6	

Case # 2024-21

(2081) Adult granulosa cell tumor

Diagnosis

Diagnosis

Code	Diagnosis	PIP Partici	PIP Participants		ipants
		No.	%	No.	%
2081	Adult granulosa cell tumor	5549	98.7		
1886	Juvenile granulosa cell tumor	24	0.4		
5892	Ovarian fibroma	26	0.5		
2205	Sclerosing stromal tumor	15	0.3		
2496	Sertoli-Leydig cell tumor	8	0.1		

Case # 2024-22

(5562) Malignant peripheral nerve sheath tumor **PIP Participants PIPW Participants** Code % Diagnosis No. No. % 1486 Cellular schwannoma 0.2 12 1283 36 0.6 Dedifferentiated liposarcoma 5562 5531 98.4 Malignant peripheral nerve sheath tumor 2009 3 0.1 Monophasic synovial sarcoma 5581 0.7 Undifferentiated pleomorphic sarcoma 41

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Case # 2024-23

		PIP Partici	PIP Participants		PIPW Participants	
Code	Diagnosis	No.	%	No.	%	
1079	Intraductal papillary mucinous neoplasm	18	0.3	3	0.8	
5893	Intrapancreatic splenic epithelial cyst	27	0.5	24	6.4	
2093	Lymphoepithelial cyst	5493	97.7	313	83.2	
1406	Mature cystic teratoma	32	0.6	19	5.1	
1559	Mucinous cystic neoplasm	9	0.2	4	1.1	
5894	Squamoid cyst of the pancreatic duct	42	0.7	13	3.5	

Case # 2024-24

Diagnosis

Code	Diagnosis	PIP Partici	PIP Participants		cipants
		No.	%	No.	%
2795	Inflammatory myofibroblastic tumor	3	0.1	7	1.9
2389	Leiomyosarcoma	6	0.1	1	0.3
5895	Stromal nodule of benign prostatic hyperplasia	1	<0.1	3	0.8
5896	Urothelial carcinoma with sarcomatoid and giant cell features	5595	99.4	352	95.4
5897	Urothelial carcinoma with syncytiotrophoblastic cells	17	0.3	6	1.6

	Diagno						
(5902) Sebaceous carcinoma arising in mature cystic teratoma							
			PIP Particip	PIP Participants		PIPW Participants	
	Code	Diagnosis	No.	%	No.	%	
5							
4-2	5898	Carcinosarcoma with heterologous	15	0.3	8	2.2	
02		differentiation					
# 2	5899	Collision tumor of clear cell carcinoma	57	1.0	15	4.1	
Case # 2024-25		and mature cystic teratoma					
ပိ	5900	Mixed germ cell tumor with dysgerminoma	63	1.1	38	10.5	
		and teratoma					
	5901	Sertoli–Leydig cell tumor with	3	0.1	5	1.4	
		heterologous elements					
	5902	Sebaceous carcinoma arising in mature cystic teratoma	5485	97.5	297	81.8	

Diagnosis (2256) Well-differentiated liposarcoma

(2256) Weil-differentiated liposarcoma						
		PIP Partici	PIP Participants		PIPW Participants	
Code	Diagnosis	No.	%	No.	%	
2387	Angiomyolipoma	19	0.3	17	4.8	
5903	Atypical spindle cell/pleomorphic lipomatous tumor	44	0.8	38	10.7	
5904	High-grade dedifferentiated liposarcoma	46	0.8	28	7.9	
1649	Solitary fibrous tumor	4	0.1	0	0	
2256	Well-differentiated liposarcoma	5510	98.0	272	76.6	

Case # 2024-27

Diagnosis							
(2485) H	epatocellular carcinoma						
		PIP Partici	PIP Participants		cipants		
Code	Diagnosis	No.	%	No.	%		
1004		47	0.0	10	0.7		
1064	Hepatoblastoma	47	0.8	13	3.7		
2485	Hepatocellular carcinoma	5555	98.8	340	95.4		
2465	Metastatic renal cell carcinoma	10	0.2	1	0.3		
5905	Metastatic yolk sac tumor	4	0.1	1	0.3		
2250	Neuroendocrine carcinoma	2	<0.1	1	0.3		

Case # 2024-28

Diagno (1646) L	sis eiomyoma				
		PIP Partici	PIP Participants		cipants
Code	Diagnosis	No.	%	No.	%
2426	Endometrial stromal nodule	9	0.2	5	1.4
1646	Leiomyoma	5530	98.5	326	93.4
2389	Leiomyosarcoma	51	0.9	10	2.9
5786	Low-grade endometrial stromal sarcoma	17	0.3	8	2.3
2316	Perivascular epithelioid cell tumor	4	0.1	0	0.0

Case # 2024-29

		PIP Partici	oants	PIPW Participants	
Code	Diagnosis	No.	%	No.	%
1712	Carcinoid tumor	5	0.1	3	0.9
1519	Epithelioid angiosarcoma	59	1.1	15	4.3
1944	Epithelioid hemangioendothelioma	5460	97.2	294	84.7
2199	Epithelioid hemangioma	67	1.2	12	3.5
5851	Pulmonary chondroma	24	0.4	23	6.6

Case # 2024-30

D

		PIP Partici	PIP Participants		PIPW Participants	
Code	Diagnosis	No.	%	No.	%	
5906	Classic papillary thyroid carcinoma	191	3.4	120	35.0	
5907	Cribriform morular thyroid carcinoma	5289	94.2	166	48.4	
2683	Follicular thyroid carcinoma	44	0.8	21	6.1	
5908	Hyalinizing trabecular tumor	62	1.1	30	8.7	
2048	Medullary thyroid carcinoma	30	0.5	6	1.7	

