COLLEGE of AMERICAN PATHOLOGISTS Laboratory Quality Solutions

Surveys and Anatomic Pathology Education Programs

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

Participant Summary

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2024 PIP/PIPW-D PARTICIPANT SUMMARY

Program Update This report summarizes the diagnostic responses for set D 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

SURGICAL PATHOLOGY COMMITTEE

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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. The CAP Surgical Pathology Committee relies on the donations of tissue blocks to sustain the PIP glass slide Proficiency Testing Survey and greatly appreciates and thanks all who have 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 Surgical Pathology Committee would like to thank the following individual or institution for its generous donations of tissue blocks in 2024 for use in PIP Proficiency Testing Surveys:

Raul Gonzalez, MD, FCAP Kossivi Dantey, MD, FCAP Aaron Huber, MD, FCAP Ekene Okoye, MD, FCAP Steven Shen, MD, FCAP Sabrina Sopha, MD, FCAP Sara Wobker, MD, FCAP Cherif Boutros, MD David Richard Elwood, MD Kristen Jensen, MD Monika Nageshwar, MD T Rinda Soong, MD PhD Carl Zapfe, MD Case # 2024-W31

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		PIP Partici	pants	PIPW Participants	
ode	Diagnosis	No.	%	No.	
	Cholangiocarcinoma			6	
	Diffuse large B-cell lymphoma			15	
	Epithelioid hemangioendothelioma			108	2
	Hepatic angiosarcoma			308	6
	Hepatocellular carcinoma			21	

Case # 2024-W32

Diagnos	is				
Cystic ne	utrophilic granulomatous mastitis				
		PIP Partici	oants	PIPW Participants	
Code	Diagnosis	No.	%	No.	%
	Cystic neutrophilic granulomatous mastitis			408	90.1
	Diabetic mastopathy			6	1.3
	Fungal mastitis			5	1.1
	IgG4-related mastitis			13	2.8
	Sarcoidosis			3	0.7
	Tuberculous mastitis			18	4.0

Case # 2024-31

Diagnosis (2237) Mixed aerm cell tumor

		PIP Participants		PIPW Partici	ipants
Code	Diagnosis	No.	%	No.	%
1060	Choriocarcinoma	11	0.2		
1994	Embryonal carcinoma	147	2.6		
2237	Mixed germ cell tumor	5477	96.0		
5784	Teratoma, postpubertal-type	65	1.1		
2467	Yolk sac tumor, postpubertal-type	3	0.1		

Case # 2024-32

Diagnosis (5911) Pulmonary artery intimal sarcoma **PIP Participants PIPW Participants** Code % Diagnosis No. No. % 5909 Acute pulmonary embolism 9 0.2 5910 21 0.4 Cardiac angiosarcoma 2389 29 0.5 Leiomyosarcoma 5911 5627 98.5 Pulmonary artery intimal sarcoma 2068 20 Synovial sarcoma 0.4

Case # 2

Diagnosis (2386) Thymoma

(2000) 1	nymonia				
		PIP Participants		PIPW Participants	
Code	Diagnosis	No.	%	No.	%
2272	Poorly differentiated thyroid carcinoma	9	0.2	4	0.9
1649	Solitary fibrous tumor	8	0.1	2	0.5
5912	Thymic carcinoid/neuroendocrine tumor	5	0.1	6	1.4
2385	Thymic carcinoma	82	1.4	49	11.0
2386	Thymoma	5599	98.2	385	86.3

Case # 2024-34

Case # 2024-33

Diagnosis	
(2081) Adult granulosa cell t	ur

		PIP Participants		PIPW Partic	cipants
Code	Diagnosis	No.	%	No.	%
2081	Adult granulosa cell tumor	5614	98.4	369	84. 0
1711	Brenner tumor	4	0.1	2	0.5
1099	Cellular fibroma	16	0.3	13	3.0
1886	Juvenile granulosa cell tumor	22	0.4	11	2.5
2584	Thecoma	49	0.9	44	10.0

Case # 2024-35

Diagno (5839) P	sis leomorphic dermal sarcoma				
			oants	PIPW Participants	
Code	Diagnosis	No.	%	No.	%
2613	Atypical fibroxanthoma	75	1.3	30	6.9
2499	Dermatofibrosarcoma protuberans	36	0.6	30	6.9
5913	Desmoplastic melanoma	33	0.6	35	8.0
5939	Pleomorphic dermal sarcoma	5548	97.4	335	76.4
1357	Spindle cell squamous cell carcinoma	8	0.1	8	1.8

Diagnosis

(5916) Pulmonary veno-occlusive disease/pulmonary capillary hemangiomatosis

· ·			PIP Participants		cipants
Code	Diagnosis	No.	%	No.	. %
2056	Angiosarcoma	5	0.1	3	0.7
5914	Chronic thromboembolic pulmonary hypertension	56	1.0	21	4.8
5915	Lymphangitic carcinomatosis	4	0.1	7	1.6
2128	Nonspecific interstitial pneumonia	39	0.7	15	3.5
5916	Pulmonary veno-occlusive disease/pulmonary capillary hemangiomatosis	5596	98.2	389	89.4

Case # 2024-37

Case # 2024-36

Diagnosis	
(2965) Myxofibrosarcoma, high grade	Э

		PIP Participants		PIPW Participants	
Code	Diagnosis	No.	%	No.	%
1283	Dedifferentiated liposarcoma	15	0.3	13	3.0
2440	Low-grade fibromyxoid sarcoma	81	1.4	58	13.4
2965	Myxofibrosarcoma, high grade	5412	95.0	286	66.4
3023	Myxoinflammatory fibroblastic sarcoma	98	1.7	27	6.3
5581	Undifferentiated pleomorphic sarcoma	90	1.6	47	10.9

Diagno (1665) C	sis lear cell renal cell carcinoma	_			
		PIP Particip	PIP Participants		cipants
Code	Diagnosis	No.	%	No.	%
1984	Chromophobe renal cell carcinoma	41	0.7	32	7.5
1665	Clear cell renal cell carcinoma	5554	97.6	337	78.7
5756	Eosinophilic solid and cystic renal cell carcinoma	70	1.2	39	9.1
2605	Epithelioid angiomyolipoma	4	0.1	3	0.7
5885	TFE3-rearranged renal cell carcinoma	21	0.4	17	4.0

Case # 2024-38

Case # 2024-39

		PIP Partici	oants	PIPW Participants	
Code	Diagnosis	No.	%	No.	%
5917	Anal adenocarcinoma	5458	95.8	294	69.6
1289	Basal cell carcinoma	16	0.3	7	1.6
2888	Metastatic mammary carcinoma	11	0.2	8	1.9
5918	Primary Paget's disease	104	1.8	69	16.1
5919	Rectal adenocarcinoma	60	1.1	14	3.3
2314	Squamous cell carcinoma	43	0.8	36	8.4

Case # 2024-40

Diagnosis						
(1716) Ewing sarcoma						
		PIP Particip	PIP Participants		PIPW Participants	
Code	Diagnosis	No.	%	No.	%	
10.10		<u>_</u>		-	4.0	
1843	Alveolar rhabdomyosarcoma	9	0.2	5	1.2	
5920	CIC-rearranged sarcoma	13	0.2	11	2.6	
1716	Ewing sarcoma	5652	99.3	398	93.4	
5921	Small cell osteosarcoma	8	0.1	4	0.9	
2068	Synovial sarcoma	13	0.2	8	1.9	

