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## Surveys and Anatomic Pathology Education Programs

### Performance Improvement Program in Surgical Pathology

#### PIP/PIPW-D 2025

Participant Summary

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**2025 PIP/PIPW-D  
PARTICIPANT SUMMARY**

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**Program Update** This report summarizes the diagnostic responses for set D of the 2025 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.

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**Note:** The first two cases of the online version of PIP (PIPW- PIP Web version) do 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.

**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>

Diagnosis					
Polymorphous adenocarcinoma					
Code	Diagnosis	PIP Participants		PIPW Participants	
		No.	%	No.	%
	Adenoid cystic carcinoma			71	14.5
	Basal cell adenocarcinoma			11	2.2
	Basal cell adenoma			9	1.8
	Cellular pleomorphic adenoma			111	22.8
	<b>Polymorphous adenocarcinoma</b>			<b>286</b>	<b>58.7</b>

Diagnosis					
Malakoplakia					
Code	Diagnosis	PIP Participants		PIPW Participants	
		No.	%	No.	%
	Atypical mycobacterium infection			6	1.3
	<b>Malakoplakia</b>			<b>419</b>	<b>89.5</b>
	Renal cell carcinoma			3	0.6
	Whipple disease			6	1.3
	Xanthogranulomatous pyelonephritis			34	7.3

Diagnosis					
(5922) Goblet cell adenocarcinoma					
Code	Diagnosis	PIP Participants		PIPW Participants	
		No.	%	No.	%
5986	Acute appendicitis	3	0.1		
5922	<b>Goblet cell adenocarcinoma</b>	<b>5469</b>	<b>98.0</b>		
5987	Mixed neuroendocrine–non-neuroendocrine neoplasm	92	1.6		
1819	Mucinous adenocarcinoma	11	0.2		
1539	Poorly differentiated neuroendocrine carcinoma	8	0.1		

Diagnosis					
(2389) Leiomyosarcoma					
Code	Diagnosis	PIP Participants		PIPW Participants	
		No.	%	No.	%
2387	Angiomyolipoma, fat-poor	25	0.4		
1283	Dedifferentiated liposarcoma	4	0.1		
1646	Leiomyoma	73	1.3		
2389	<b>Leiomyosarcoma</b>	<b>5469</b>	<b>98.0</b>		
2392	Sarcomatoid renal cell carcinoma	12	0.2		

<b>Diagnosis</b>					
(5690) Metastatic teratoma					
<b>Code</b>	<b>Diagnosis</b>	<b>PIP Participants</b>		<b>PIPW Participants</b>	
		<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
1188	Mesenchymal hamartoma	102	1.8	80	17.2
1715	Mucinous cystadenoma	15	0.3	7	1.5
1812	Pleomorphic adenoma	4	0.1	1	0.2
1819	Mucinous adenocarcinoma	3	0.1	4	0.8
5690	<b>Metastatic teratoma</b>	<b>5457</b>	<b>97.8</b>	<b>374</b>	<b>80.3</b>

<b>Diagnosis</b>					
(2446) Pheochromocytoma					
<b>Code</b>	<b>Diagnosis</b>	<b>PIP Participants</b>		<b>PIPW Participants</b>	
		<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
1891	Adrenal cortical adenoma	11	0.2	19	4.2
1632	Adrenal cortical carcinoma	9	0.2	13	2.8
1674	Metastatic melanoma	0	0.0	2	4.4
2465	Metastatic renal cell carcinoma	1	<0.1	0	0.0
2446	<b>Pheochromocytoma</b>	<b>5560</b>	<b>99.5</b>	<b>423</b>	<b>92.6</b>

<b>Diagnosis</b>					
(2732) Malignant peritoneal mesothelioma, epithelioid type					
<b>Code</b>	<b>Diagnosis</b>	<b>PIP Participants</b>		<b>PIPW Participants</b>	
		<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
1992	Alveolar soft part sarcoma	3	0.1	2	0.4
1901	Gastrointestinal stromal tumor, epithelioid type	11	0.2	6	1.3
2732	<b>Malignant peritoneal mesothelioma, epithelioid type</b>	<b>5561</b>	<b>99.7</b>	<b>447</b>	<b>98.1</b>
2476	Metastatic carcinoma	2	<0.1	1	0.2
1674	Metastatic melanoma	2	0.1	0	0.0

<b>Diagnosis</b>					
(2056) Angiosarcoma					
<b>Code</b>	<b>Diagnosis</b>	<b>PIP Participants</b>		<b>PIPW Participants</b>	
		<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
5988	Adenocarcinoma, poorly differentiated	12	0.2	5	1.1
2056	<b>Angiosarcoma</b>	<b>5476</b>	<b>98.2</b>	<b>365</b>	<b>81.5</b>
1283	Dedifferentiated liposarcoma	4	0.1	6	1.3
1944	Epithelioid hemangioendothelioma	79	1.4	67	15.0
1966	Kaposi sarcoma	7	0.1	5	1.1

<b>Diagnosis</b>					
(5989) GLI1-altered mesenchymal tumor					
<b>Code</b>	<b>Diagnosis</b>	<b>PIP Participants</b>		<b>PIPW Participants</b>	
		<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
2743	Clear cell sarcoma	17	0.3	27	6.0
5989	<b>GLI1-altered mesenchymal tumor</b>	<b>5498</b>	<b>98.7</b>	<b>373</b>	<b>83.3</b>
2728	Glomus tumor	20	0.4	22	4.9
5990	Myoepithelial neoplasm	15	0.2	5	1.1
5991	Pseudoendocrine sarcoma	21	0.4	21	4.7

<b>Diagnosis</b>					
(5862) Conventional chordoma					
<b>Code</b>	<b>Diagnosis</b>	<b>PIP Participants</b>		<b>PIPW Participants</b>	
		<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
1047	Chondrosarcoma	33	0.6	11	2.5
5862	<b>Conventional chordoma</b>	<b>5507</b>	<b>98.8</b>	<b>394</b>	<b>88.8</b>
2636	Metastatic clear cell renal cell carcinoma	2	<0.1	3	0.7
5992	Myoepithelial tumor	1	<0.1	6	1.3
2319	Myxopapillary ependymoma	25	0.4	30	6.7

<b>Diagnosis</b>					
(2377) Serous borderline tumor					
<b>Code</b>	<b>Diagnosis</b>	<b>PIP Participants</b>		<b>PIPW Participants</b>	
		<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
2216	Clear cell carcinoma	8	0.1	5	1.1
2615	High-grade serous carcinoma	24	0.4	25	5.6
2331	Low-grade serous carcinoma	79	1.4	65	14.7
5993	Seromucinous borderline tumor	381	6.8	93	21.0
2377	<b>Serous borderline tumor</b>	<b>5081</b>	<b>91.3</b>	<b>255</b>	<b>57.6</b>

<b>Diagnosis</b>					
(2141) Granular cell tumor					
<b>Code</b>	<b>Diagnosis</b>	<b>PIP Participants</b>		<b>PIPW Participants</b>	
		<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
1691	Adult rhabdomyoma	7	0.1	1	0.2
1992	Alveolar soft part sarcoma	5	0.1	4	0.9
2141	<b>Granular cell tumor</b>	<b>5556</b>	<b>99.7</b>	<b>435</b>	<b>98.5</b>
1510	Invasive squamous cell carcinoma	2	<0.1	0	0.0
5994	Paraganglioma	1	<0.1	2	0.4

This concludes the report.



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