

**Supplementary Table S4.** Summary of ancillary tests and suggested diagnoses in 13 fine-needle aspiration samples where cell block analysis contributed to differential diagnosis

FNA sample	Group	Ancillary test performed	Specific stain/antibody/test	Suggested diagnosis
1	1-2	IHC	Synaptophysin, Chromogranin A, CD56, CD10, Beta-catenin, Cytokeratin, and Ki-67	Neuroendocrine tumor
2	1-2	None (cell block histology alone)	Not applicable	Primary pancreatic SqCC or adenoSqCC, or metastatic SqCC
3	1-2	IHC and special stain	p40, CEA, MUC5AC, Mucicarmine, Alcian blue, and PAS	Metastatic SqCC from the esophagus <sup>a</sup>
4	1-2	IHC	Cytokeratin, vimentin, CEA, and p40	Sarcomatoid carcinoma, or undifferentiated carcinoma with osteoclast-like giant cells
5	1-2	IHC and special stain	Cytokeratin, CEA, p40, Alcian blue, mucicarmine, and PAS	Metastatic poorly differentiated carcinoma from the gallbladder <sup>a</sup>
6	1-2	IHC	Synaptophysin, chromogranin A, CD56, CD10, and Ki-67	Neuroendocrine tumor
7	1-2	IHC and molecular test	CD3, CD10, CD20, CD30, CD45, CD56, CD79a, CD138, BCL2, BCL6, MUM1, c-Myc, PAX5, cytokeratin, CEA, and EBER-1 ISH	Malignant lymphoma, B-lineage
8	1-2	IHC	p40, p63, and cytokeratin 19	Primary pancreatic SqCC or adenoSqCC, or metastatic SqCC
9	1-2	IHC	p40, p63, and cytokeratin 19	Primary pancreatic SqCC or adenoSqCC, or metastatic SqCC
10	1-3	IHC and special stain	Cytokeratin, CEA, CD3, CD20, Alcian blue, mucicarmine, and PAS	Adenocarcinoma
11	1-3	IHC	Cytokeratin 7, cytokeratin 20, CDX-2, MUC1, MUC2, MUC5AC, and MUC6	Adenocarcinoma, favoring primary pancreatic origin
12	1-3	IHC and special stain	CEA, Mucicarmine, Alcian blue, and PAS	Adenocarcinoma
13	2-1	Special stain and molecular test	AFS, and MTB & NTM real-time PCR	MTB infection

FNA, fine-needle aspiration; IHC, immunohistochemistry; SqCC, squamous cell carcinoma; CEA, carcinoembryonic antigen; PAS, periodic acid-Schiff; EBER-1, Epstein-Barr virus-encoded RNA 1;

ISH, in situ hybridization; AFS, acid-fast stain; MTB, *Mycobacterium tuberculosis*; NTM, nontuberculous mycobacteria; PCR, polymerase chain reaction.

<sup>a</sup>Considering the histopathological findings of the primary lesion and clinical findings, including imaging studies.