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Preparing for the American Board
of Pathology (ABPath)
Examination of Fundamental
Knowledge and Skills

Cytopathology

Content Specifications



Overview:

Cytopathology Content Specifications

This guide outlines the content that may appear on the American Board of Pathology Cytopathology Subspecialty exam. It provides a framework based on the knowledge and skills typically covered in Fellow-level training, along with applicable Core and Advanced Resident topics from residency training that the trainee is expected to know or be able to perform.

Key to Designations:

C = Core/Foundational Knowledge

AR = Advanced Resident Knowledge

F = Fellow/Advanced Practitioner Knowledge

The exam assesses the knowledge, judgment, skills, and abilities necessary to identify specific entities, properly process specimens, and diagnose and monitor diseases using methods common in the practice of Cytopathology. The specific diseases, tests, and concepts listed in this document are important for candidates to know, but it is not possible to create a fully comprehensive list of all the material needed for certification and effective practice. Candidates should use this guide as a reference for preparing for certification and professional practice.

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51	1. Cervical/Vaginal Cytology	
52	a. Screening, Indications, and Techniques	
53	i. Screening Guidelines – Resources	AR
54	ii. Ancillary Testing Techniques (e.g., HPV, p16)	AR
55	iii. Screening Guidelines – Specifics	F
56	iv. Specific Sampling Techniques	F
57	v. Liquid Cytology Techniques for Cervical / Vaginal	F
58	b. Specimen Adequacy	
59	i. Unsatisfactory	C
60	c. Normal, NILM, Including Hormonal Changes and Normal Microbiota	C
61	i. Contaminants, Starch, etc.	AR
62	d. Infections	
63	i. Bacterial (e.g., Vaginosis, Actinomyces)	C
64	ii. Fungi (e.g., Candida)	C
65	iii. Parasitic (e.g., Trichomonas)	AR
66	iv. Viral (e.g., Herpes)	
67	e. Reactive/Reparative	
68	i. Atrophic Vaginitis & Atrophy	AR
69	ii. Metaplastic Processes (Transitional)	AR
70	iii. Lymphocytic / Follicular Cervicitis	AR
71	iv. Reactive Glandular Processes	AR
72	v. Tubal Metaplasia	AR

73	vi. IUD Changes	F
74	vii. Radiation and Chemotherapy Changes	F
75	f. Endometrial Cells	
76	i. Shed Endometrial Cells	AR
77	ii. Directly Sampled Lower Uterine Segment	F
78	iii. Endometriosis	F
79	g. HPV Biology and Cancer Pathogenesis	
80	i. HPV Vaccine	F
81	h. Atypical Squamous Cells	
82	i. ASC-US	AR
83	ii. ASC-H	AR
84	i. Squamous Intraepithelial Lesions (SIL)	
85	i. LSIL (i.e., Low Grade Squamous Intraepithelial Lesion)	C
86	ii. HSIL (i.e., High Grade Squamous Intraepithelial Lesion)	AR
87	j. Squamous Carcinoma	AR
88	k. Adenocarcinoma: Endometrial & Endocervical	AR
89	l. Reporting Guidelines	AR
90	m. Endocervical AIS	AR
91	n. Atypical Glandular Cells	F
92	o. Metastatic & Rare Malignancies	F
93	p. Patient Management Guidelines	F
94	2. Other Lower Anogenital Tract, Men & Women (e.g., Anal, Vulvar)	
95	a. Specimen Adequacy	AR
96	b. Normal, NILM	AR
97	c. Infections (i.e., Bacterial, Fungal, Parasitic, and Viral)	AR
98	d. Reactive/Reparative	AR
99	e. Atypical Squamous Cells	
100	i. ASC-US	AR
101	ii. ASC-H	AR
102	f. SIL	
103	iii. LSIL	AR
104	iv. HSIL	AR
105	g. Squamous Carcinoma	AR
106	h. Reporting Guidelines	AR
107	i. Contaminants	AR
108	j. Screening, Indications and Techniques	
109	i. Screening Guidelines	F
110	ii. Specific Sampling Techniques	F
111	iii. Liquid Cytology Techniques	F
112	iv. Ancillary Testing Techniques (e.g., HPV, p16)	F
113	k. Adenocarcinoma	F
114	l. Metastatic and Other Malignancies (e.g., Melanoma)	F
115	m. Management of Abnormalities	F

116		
117	3. Upper Female Genital Tract (e.g., Endometrium, Upper Tract Genital Tract)	
118	a. Ovarian Cysts	
119	i. Benign (e.g., Corpus luteal, Endometriotic)	F
120	ii. Malignant	F
121		
122	4. Pleural and Pericardial Effusions	
123	a. Processing / Techniques	
124	i. Ancillary Studies	
125	(e.g., IHC, Stains, Flow Cytometry, Molecular Studies)	AR
126	ii. Storage / Preservation	F
127	iii. Preparation Techniques	
128	(e.g., Cytospin, Liquid-Based Preparations, Cell Blocks)	F
129	iv. Cultures and Microorganism Stains	F
130	b. Specimen Adequacy	F
131	c. Normal Cytology	
132	i. Non-Neoplastic Mesothelial Cells	AR
133	ii. White Cells and Macrophages	AR
134	iii. Contaminants	AR
135	d. Reactive	
136	i. Inflammatory	F
137	ii. Effusions (e.g., Metabolic: Cirrhosis and Renal Failure-Associated)	F
138	iii. Autoimmune (e.g., Rheumatoid, Lupus)	F
139	e. Malignancies	
140	i. Primary Pleural (e.g., Mesothelioma)	AR
141	ii. Metastatic Adenocarcinoma	
142	(e.g., Breast, Lung, GI, and Ovarian/Endometrial Primaries)	AR
143	iii. Squamous Cell Carcinoma	F
144	iv. Small Cell Carcinoma	F
145	v. Hematopoietic including Primary Effusion Lymphoma	F
146	vi. Other Metastatic Malignancies (e.g., Sarcomas, Germ Cell Tumors)	F
147	f. Reporting	F
148		
149	5. Peritoneal Effusions	
150	a. Processing / Techniques	
151	i. Ancillary Testing	
152	(e.g., IHC, Cytochemical Stains, Flow Cytometry, Molecular Studies)	AR
153	ii. Storage / Preservation	F
154	iii. Preparation Techniques	
155	(e.g., Cytospin, Liquid-Based Preparations, Cell Blocks)	F
156	iv. Cultures and Microorganism Stains	F

157	b. Specimen Adequacy	F
158	c. Normal Cytology	
159	i. Non-Neoplastic Mesothelial Cells	AR
160	ii. Leukocytes and Macrophages	AR
161	iii. Contaminants	AR
162	d. Reactive	
163	i. Inflammatory Cells	F
164	ii. Effusions (e.g., Metabolic: Cirrhosis and Renal Failure-Associated)	F
165	iii. Autoimmune (e.g., Rheumatoid, Lupus)	F
166	iv. Endometriosis and Endosalpingiosis	F
167	e. Malignant	
168	i. Primary Pleural (e.g., Mesothelioma)	AR
169	ii. Metastatic Adenocarcinoma	
170	1. Breast Primary	AR
171	2. Lung Primary	AR
172	3. GI Primary	AR
173	4. Gynecologic Primary	AR
174	5. Pseudomyxoma Peritonei	F
175	iii. Squamous Cell Carcinoma	F
176	iv. Small Cell Carcinoma	F
177	v. Hematopoietic including Primary Effusion Lymphoma	F
178	vi. Other Metastatic Malignancies (e.g., Sarcomas, Germ Cell Tumors)	F
179	f. Reporting	F

180

181 6. Pelvic Washings

182	a. Processing / Techniques	
183	i. Ancillary Testing	
184	(e.g., IHC, Cytochemical Stains, Flow Cytometry, Molecular Studies)	AR
185	ii. Storage / Preservation	F
186	iii. Preparation Techniques	
187	(e.g., Cytospin, Liquid-Based Preparations, Cell Blocks)	F
188	iv. Cultures and Microorganism Stains	F
189	b. Specimen Adequacy	F
190	c. Normal Cytology	
191	i. Non-Neoplastic Mesothelial Cells	AR
192	ii. Leukocytes and Macrophages	AR
193	iii. Collagen Balls	AR
194	iv. Contaminants	AR
195	d. Reactive	
196	i. Inflammatory Cells	F
197	ii. Endometriosis	F
198	iii. Endosalpingiosis	F
199	e. Malignant	

200	i.	Metastatic Adenocarcinoma	
201		1. Endometrial Primary	AR
202		2. Ovarian / Müllerian/Tubal Primary	AR
203		3. Pseudomyxoma Peritonei	F
204	f.	Reporting	F

205

206 7. Synovial Fluid

207	a.	Processing / Techniques / Indication (e.g., Crystal Analysis)	F
208	b.	Normal Cytology	AR
209	c.	Non-Neoplastic and Inflammatory Conditions	
210	i.	Infectious	AR
211	ii.	Gout	AR
212	iii.	Pseudogout	F
213	iv.	Villonodular Synovitis	F
214	v.	Trauma Associated	F
215	vi.	Rheumatoid Arthritis	F

216

217 8. Cerebrospinal Fluid (CSF)

218	a.	Normal Constituents and Contaminants	
219	i.	Leukocytes (e.g., Lymphocytes and Macrophages)	AR
220	ii.	Bone Marrow Contamination	AR
221	iii.	Choroid Plexus and Ependymal Cells	F
222	iv.	Neural and Germinal Matrix Elements	F
223	v.	Other Elements (e.g., Cartilage, Starch)	F
224	b.	Infections	
225	i.	Bacterial & Mycobacterial	AR
226	ii.	Fungal (e.g., Cryptococcus, Candida)	AR
227	iii.	Parasitic (e.g., Toxoplasma, Trypanosomiasis)	F
228	c.	Hematopoietic Malignancies	
229	i.	Precursor Lymphoid (e.g., ALL, Lymphoblastic)	AR
230	ii.	Large Cell Lymphoma	AR
231	iii.	Plasma Cell Neoplasms	AR
232	iv.	Other Lymphomas	F
233	v.	Myeloid Neoplasms	F
234	d.	Metastatic Malignancies, Other than Hematopoietic	
235	i.	Carcinomas	AR
236	ii.	Melanoma	AR
237	e.	Indications / Techniques	
238	i.	Sampling (e.g., Lumbar Puncture, Ventricular-Peritoneal (VP) Shunt)	F
239	ii.	Prion Disease Handling	F
240	iii.	Other Ancillary Testing (e.g., Flow Cytometry, Molecular Diagnostics)	F
241	f.	Reactive / Reparative	

242	i.	Drug and Therapy Changes	F
243	ii.	Shunt and Foreign Body Reactions	F
244	iii.	Reactive Pleocytosis (e.g., Mollaret)	F
245	g.	Ependymoma	F
246	h.	Glioblastoma	F
247	i.	Neural Tumors (e.g., Medulloblastoma, Neuroblastoma, Retinoblastoma)	F
248			
249		9. CNS and Eye (i.e., Other Than CSF)	
250	a.	Normal Elements	F
251	b.	Meningioma & Hemangiopericytoma	F
252	c.	Glioblastoma	F
253	d.	Hematopoietic Malignancies	
254	i.	CNS Large Cell Lymphoma	F
255	ii.	Vitreous Hematopoietic Neoplasms	F
256	e.	Melanoma	
257	i.	CNS	F
258	ii.	Eye	F
259	f.	Metastatic Carcinomas	F
260		10. The Urinary Tract	
261	a.	Normal Cytology & Contamination Elements	
262	i.	Urothelial Cells	C
263	ii.	Normal Voided Urine	C
264	iii.	Normal Bladder Wash	C
265	iv.	Normal Upper Urinary Tract	C
266	v.	Squamous Cell Contamination	C
267	vi.	Intestinal Epithelium (e.g., Ileal Bladder)	AR
268	vii.	Contaminants	AR
269	b.	Indications / Techniques	
270	i.	Indications for Evaluation	AR
271	ii.	Other Ancillary Testing Techniques	
272		(e.g., Flow Cytometry, FISH, Molecular Studies)	AR
273	iii.	Sampling (e.g., void, instrumentation, ileal conduit)	F
274	c.	Specimen Adequacy	AR
275	d.	Infections	
276	i.	Fungal (e.g., Candida)	C
277	ii.	Parasitic (e.g., Schistosoma)	AR
278	iii.	Viral (e.g., Polyoma)	AR
279	iv.	Drug and Therapy Changes	AR
280	v.	Cast and Crystals	AR
281	vi.	Cystitis Cystica and Metaplasia	AR
282	e.	Primary Malignancy of the Urinary Tract (Paris System)	
283	i.	Negative for High Grade Urothelial Carcinoma (NHGUC)	AR
284	ii.	Atypical Urothelial Cells (AUC)	AR

285	iii.	Suspicious for High Grade Urothelial Carcinoma (SHGUC)	AR
286	iv.	High Grade Urothelial Carcinoma	AR
287	v.	Squamous Cell Carcinoma	AR
288	vi.	Low Grade Urothelial Neoplasm (LGUN)	F
289	vii.	Adenocarcinoma	F
290	viii.	Small Cell Carcinoma	F
291	f.	Metastatic Tumors	
292	i.	Carcinoma	F
293	ii.	Melanoma	F
294	g.	Reporting and Management Guidelines	AR

295

296 11. Respiratory Exfoliative (Sputum, Brushing, Washing)

297	a.	Normal / Negative / Contamination Elements	
298	i.	Bronchial (e.g., Ciliated Cells, Goblet Cells)	C
299	ii.	Alveolar Macrophages	C
300	iii.	Squamous Cells	C
301	iv.	Other Elements	
302		(e.g., Food, Plant Cells, Ferruginous Bodies, Starch/Talc)	AR
303	b.	Specimen Adequacy	AR
304	c.	Infections	
305	i.	Bacterial / Mycobacterial	AR
306	ii.	Fungal (e.g., Pneumocystis, Histoplasma, Aspergillus)	AR
307	iii.	Parasitic	AR
308	iv.	Viral (e.g., CMV, Herpes)	AR
309	d.	Reactive / Reparative	
310	i.	Squamous Metaplasia	AR
311	ii.	Reserve Cell Hyperplasia	AR
312	iii.	Radiation and Chemotherapy Effects	F
313	e.	Benign Pulmonary Disease	
314	i.	Asthma Changes (e.g., Creola Bodies)	AR
315	ii.	Lipoid Pneumonia	AR
316	iii.	Pulmonary Alveolar Proteinosis	AR
317	iv.	Pneumoconioses (e.g., Asbestosis)	F
318	v.	Storage Diseases (e.g., Gaucher)	F
319	f.	Malignancies	
320	i.	Adenocarcinoma	AR
321	ii.	Squamous Cell Carcinoma	AR
322	iii.	Small Cell Carcinoma	AR
323	iv.	Carcinoid Tumor	AR
324	v.	Large Cell Neuroendocrine Carcinoma	AR
325	vi.	Salivary Gland-Type Carcinoma	
326		(e.g., Adenoid Cystic, Mucoepidermoid)	F
327	g.	Indications / Techniques	

328	i.	Indications for Evaluation	F
329	ii.	Specific Sampling Techniques	F
330	iii.	Preparatory Techniques (e.g., Liquid-Based Preparations)	F
331			
332		12. Lung FNA	
333	a.	Normal / Negative / Contamination Elements	
334	i.	Bronchial (e.g., Ciliated Cells, Goblet Cells)	C
335	ii.	Alveolar Macrophages	C
336	iii.	Other (e.g., Mesothelial Cells, Cartilage)	AR
337	b.	Indications / Techniques	
338	i.	Indications for Evaluation and Complications	AR
339	ii.	Specific Sampling Techniques (e.g. Transthoracic, Transbronchial, EBUS, ENB)	
340	iii.	Microorganism Stains	AR
341	iv.	IHC and Flow Cytometry	AR
342	v.	Molecular Studies (e.g., FISH testing)	AR
343	c.	Specimen Adequacy (e.g., Immediate Evaluation Techniques)	AR
344	d.	Infections	
345	i.	Bacterial (e.g., abscess) and Mycobacterial	AR
346	ii.	Fungal (e.g., Histoplasma, Aspergillus, Mucor, Cryptococcus)	AR
347	iii.	Viral (e.g., CMV, Herpes)	AR
348	iv.	Parasitic	F
349	e.	Benign Lung Diseases, Reactive/Reparative/Inflammatory	
350	i.	Granulomas (e.g., Sarcoid)	AR
351	ii.	Radiation and Chemotherapy Effects	F
352	iii.	Pneumoconiosis	F
353	iv.	Amyloidosis	F
354	f.	Benign Neoplasms	
355	i.	Hamartoma	AR
356	ii.	Inflammatory Pseudotumor	F
357	iii.	Benign Mixed Tumor	F
358	g.	Malignancies	
359	i.	Epithelial	
360		1. Adenocarcinoma	AR
361		2. Squamous Cell Carcinoma	AR
362		3. Small Cell Carcinoma	AR
363		4. Carcinoid Tumor	AR
364		5. Large Cell Neuroendocrine Carcinoma	AR
365		6. Mixed Carcinomas	F
366		7. Salivary Gland-Type Carcinomas	
367		(e.g., Adenoid Cystic, Mucoepidermoid)	F
368	ii.	Hematopoietic	
369		1. Non-Hodgkin Lymphoma	AR
370		2. Myeloid Neoplasms	AR

371	3. Plasma Cell Neoplasms	AR
372	4. Langerhans Cell Histiocytosis	F
373	iii. Metastatic	
374	1. Carcinoma	AR
375	2. Lymphoma	AR
376	3. Melanoma	AR
377	4. Sarcoma	F
378	iv. Mesothelioma	AR
379	v. Sarcomas	
380	1. Epithelioid Hemangioendothelioma	F
381	2. Angiosarcoma	F
382	3. Synovial Sarcoma	F
383	h. Reporting and Management Guidelines	F

384

385 13. Esophageal Cytopathology

386	a. Indications / Techniques	
387	i. Endoscopic Brushings	AR
388	ii. Endoscopic FNA	AR
389	b. Infections	
390	i. Fungal (e.g., Candida)	AR
391	ii. Viral (e.g., Herpes, CMV)	AR
392	c. Primary Neoplasms	
393	i. Squamous Cell Carcinoma	AR
394	ii. Adenocarcinoma	AR
395	iii. Smooth Muscle Tumors	AR
396	d. Metaplastic and Preneoplastic Changes (e.g., Dysplasia, Barrett Esophagus)	F

397

398 14. Gastric Cytopathology

399	a. Normal Cytology	AR
400	b. Indications	AR
401	i. Endoscopic -FNA	AR
402	ii. Ancillary Testing (e.g., IHC, Molecular, Flow Cytometry)	AR
403	c. Primary Neoplasms	
404	i. Adenocarcinoma	AR
405	1. Intestinal Type	AR
406	2. Diffuse (e.g., Signet Ring, Linitis Plastica)	AR
407	ii. Gastrointestinal Stromal Tumor	AR
408	iii. Smooth Muscle Tumors	AR
409	iv. Lymphoma	AR

410

411	15. Liver Cytopathology	
412	a. Normal Cytology	C
413	b. Indications / Techniques	AR
414	i. Indications for Evaluation	AR
415	ii. Sampling Techniques (e.g., FNA)	AR
416	iii. Ancillary Testing (e.g., IHC, Molecular Studies, Stains)	AR
417	c. Infections	AR
418	i. Abscess	AR
419	ii. Fungal Infections	AR
420	iii. Parasitic Infections (e.g., Amoeba and Echinococcus)	AR
421	d. Liver Neoplasms	
422	i. Hepatic Adenoma	F
423	ii. Hemangioma	F
424	iii. Primary Liver Carcinomas	
425	1. Hepatocellular Carcinoma	AR
426	2. Cholangiocarcinoma	AR
427	3. Fibrolamellar Carcinoma	F
428	iv. Hepatoblastoma	F
429	v. Angiosarcoma	F
430	e. Hematopoietic Neoplasms and Lymphoma	AR
431	f. Metastatic Neoplasms	AR
432	vi. Carcinoma	AR
433	vii. Melanoma	AR
434	viii. Sarcoma	AR
435	g. Reactive and Non-Neoplastic Disorders	F

436

437	16. Biliary Cytopathology	
438	a. Normal Cytology	C
439	b. Infections (e.g., Bacterial, Fungal)	AR
440	c. Indications / Techniques	F
441	i. Indications for Evaluation	F
442	ii. Ancillary Testing (e.g., IHC, Molecular Studies, FISH)	F
443	d. Reactive Changes	F
444	e. Malignancy	
445	i. Adenocarcinoma	AR

446

447	17. Pancreatic Cytopathology	
448	a. Normal Cytology	C
449	b. Indications / Techniques	AR
450	i. Indications for Evaluation	AR
451	ii. Sampling Techniques	AR
452	iii. Cyst Fluid Chemical Analysis	AR

453	iv. Ancillary Testing (e.g., Stains, IHC, Molecular Studies)	AR
454	c. Specimen Adequacy	F
455	d. Reactive and Non-Neoplastic Cysts	
456	i. Pseudocyst	AR
457	ii. Acute Pancreatitis	F
458	iii. Chronic Pancreatitis, including Autoimmune	F
459	iv. Lymphoepithelial Cyst	F
460	v. Splenule / Accessory Spleen	F
461	e. Benign / Borderline Neoplasms	
462	i. Pancreatic Neuroendocrine Tumors (PanNet), Well and Poorly	
463	Differentiated	AR
464	ii. Solid Pseudopapillary Neoplasms	AR
465	iii. Mucin-Producing Neoplasms	
466	1. Mucinous Cystic Neoplasm (MCN)	AR
467	2. Intraductal Papillary Mucinous Neoplasm (IPMN)	AR
468	iv. Serous Cystadenoma	F
469	f. Malignant Neoplasms	
470	i. Pancreatic Ductal Adenocarcinoma	AR
471	ii. Acinar Cell Carcinoma	AR
472	g. Hematopoietic Neoplasms and Lymphoma	AR
473	h. Metastatic Neoplasms	AR
474	i. Reporting and Management Guidelines	F
475		
476	18. Salivary Gland FNA	
477	a. Normal Cytology	C
478	b. Indications / Techniques	AR
479	i. Indications for Evaluation	AR
480	ii. Specific FNA Techniques	AR
481	iii. Ancillary Testing (e.g., Stains, IHC, Flow Cytometry, Molecular)	AR
482	c. Specimen Adequacy	F
483	d. Reactive and/or Inflammatory Diseases	
484	i. Acute and Chronic Sialadenitis, Sialolithiasis	AR
485	ii. Granulomatous	AR
486	iii. Sialadenosis	F
487	e. Non-Neoplastic Tumor-Like Conditions	
488	i. Intraparotid Lymph Node	AR
489	ii. Lymphoepithelial Cyst	F
490	f. Primary Epithelial/Myoepithelial Tumors XXX	
491	i. Adenoid Cystic Carcinoma	AR
492	ii. Mucoepidermoid Carcinoma	AR
493	iii. Onchocytoma / Onchocytosis	AR
494	iv. Pleomorphic Adenoma	AR
495	v. Squamous Cell Carcinoma	AR

496	vi.	Warthin Tumor	AR
497	vii.	Acinic Cell Carcinoma	F
498	viii.	Basal Cell Adenoma/ Basal Cell Adenocarcinoma	F
499	ix.	Epithelial Myoepithelial Carcinoma	F
500	x.	Myoepithelioma/ Myoepithelial Carcinoma	F
501	xi.	Carcinoma Ex Pleomorphic Adenoma	F
502	xii.	Salivary Duct Carcinoma	F
503	xiii.	Secretory Carcinoma	F
504	g.	Hematopoietic Diseases and Lymphoma	AR
505	h.	Metastatic Neoplasms (e.g., Carcinoma, Melanoma)	AR
506	i.	Reporting Guidelines	AR
507	j.	Mesenchymal Tumors (e.g., Angiosarcoma, Nerve Sheath Tumors)	F
508	k.	Management	F
509			
510		19. Thyroid & Parathyroid FNA	
511	a.	Specimen Adequacy	C
512	b.	Normal Cytology and Needle Contaminants	
513	i.	Benign Thyroid	C
514	ii.	Benign Parathyroid	F
515	c.	Indications / Techniques	
516	i.	Indications for Evaluation, including Imaging Findings	AR
517	ii.	Ancillary Studies (e.g., IHC, Stains, Flow Cytometry, Molecular)	AR
518	iii.	Developmental Anomaly (e.g., Thyroglossal Duct Cyst)	AR
519	d.	Reactive and Non-Neoplastic	
520	i.	Follicular Nodular Disease	AR
521	ii.	Chronic Lymphocytic Thyroiditis/Hashimoto Thyroiditis	AR
522	iii.	Amyloidoma	F
523	iv.	Black/Pigmented Thyroid	F
524	v.	Parathyroid Lesions	F
525	vi.	Riedel Thyroiditis	F
526	vii.	Subacute Granulomatous Thyroiditis (de Quervain)	F
527	e.	Primary Epithelial Tumors	
528	i.	Anaplastic / Undifferentiated Carcinoma	AR
529	ii.	Follicular Neoplasm	AR
530	iii.	Oncocytic Neoplasm	AR
531	iv.	Medullary Carcinoma	AR
532	v.	Papillary Thyroid Carcinoma and Variants	AR
533	vi.	Hyalinizing Trabecular Tumor	F
534	vii.	Parathyroid Neoplasm	F
535	viii.	Poorly Differentiated Thyroid Carcinoma	F
536	f.	Hematopoietic and Lymphoma	AR
537	g.	Metastatic Neoplasms	
538	i.	Carcinomas	AR

539	ii. Melanoma	F
540	h. The Bethesda System Reporting and Management Guidelines	AR

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542 20. Lymph Node FNA

543	a. Normal Cytology	C
544	b. Indications / Techniques	
545	i. Indications for Evaluation	AR
546	ii. Ancillary Studies (Stains, IHC, Flow Cytometry, Molecular)	AR
547	c. Infections, Reactive Changes, Inflammatory	
548	i. Bacterial and Mycobacterial	AR
549	ii. Fungal	AR
550	iii. Granulomatous	AR
551	d. Hodgkin Lymphoma	AR
552	e. Non-Hodgkin Lymphoma	AR
553	i. Burkitt Lymphoma	AR
554	ii. Follicular Lymphoma	AR
555	iii. Large Cell (i.e., Diffuse Large B-Cell)	AR
556	iv. Lymphoplasmacytic	AR
557	v. Marginal Zone Lymphoma	AR
558	vi. Mantle Cell Lymphoma	AR
559	vii. Precursor Lymphoid (i.e., Lymphoblastic), Both T- and B-Cell	AR
560	viii. Small Lymphocytic/Chronic Lymphocytic	AR
561	ix. T-Cell and NK Cell	AR
562	f. Metastatic Neoplasms	
563	i. Carcinomas	AR
564	ii. Melanoma	AR
565	iii. Sarcomas	F
566	g. Histiocytic and Dendritic Cells (e.g., Rosai-Dorfman Disease)	F
567	h. Myeloid Neoplasms (e.g., Myeloid Sarcoma)	F
568	i. Vascular Neoplasms (e.g., Kaposi Sarcoma)	F

569

570 21. Head & Neck, Intraoral (Also See Other Categories)

571	a. Normal Cytology	C
572	b. Indications / Techniques	AR
573	i. Indications for Evaluation	AR
574	ii. Ancillary Testing (e.g., Stains, IHC, Flow Cytometry, Molecular)	AR
575	c. Infections	
576	i. Bacterial	AR
577	ii. Fungal	AR
578	d. Developmental Anomalies	
579	i. Branchial Cleft Cyst	AR
580	ii. Thyroglossal Duct Cyst	AR

581	iii.	Ectopic Tissue (e.g., Thyroid, Parathyroid, Thymus)	F
582	e.	Epithelial Tumors	
583	i.	Squamous Cell Carcinoma and Variants	AR
584	1.	HPV-Related	AR
585	2.	Non-HPV Related	AR
586	ii.	Nasopharyngeal Carcinoma	F
587	f.	Mesenchymal Tumors (Also See Soft Tissue Section)	
588	i.	Granular Cell Tumor	AR
589	ii.	Nerve Sheath Tumor	AR
590	iii.	Ameloblastoma	F
591	iv.	Meningioma	F
592	v.	Paraganglioma	F
593	g.	Metastatic Neoplasms (e.g., Carcinomas, Melanoma)	AR

594

595 22. Breast and Nipple

596	a.	Normal Cytology	C
597	i.	Pregnancy and Lactational Changes	AR
598	b.	Indications and Sampling	
599	ii.	Ancillary Testing (e.g., IHC, ER/PR, Her2, Molecular)	AR
600	iii.	FNA Sampling	F
601	iv.	Nipple Fluids and Smears	F
602	v.	Sentinel Node Sampling	F
603	c.	Inflammatory and Reactive Changes	
604	i.	Acute Mastitis and Abscesses	AR
605	ii.	Fat Necrosis	AR
606	iii.	Granulomatous Inflammation	AR
607	iv.	Gynecomastia	F
608	v.	Foreign Body Reaction (e.g., Silicone)	F
609	d.	Fibroepithelial Lesions	
610	i.	Fibroadenomas	AR
611	ii.	Phyllodes Tumors	F
612	e.	Adenocarcinomas	
613	i.	Ductal Carcinoma	AR
614	ii.	Lobular Carcinoma	F
615	f.	Fibrocystic Changes, Cysts and Adenomas	F
616	g.	Papillary Lesions	F
617	h.	Mesenchymal Neoplasms	F
618	i.	Metastatic Neoplasms	F
619	j.	Hematopoietic Neoplasms	F
620	k.	Reporting and Management Guidelines	F

621

622	23. Mediastinum and Retroperitoneum	
623	a. Normal Cytology	C
624	i. Ectopic Tissue (e.g., Thyroid, Thymus, Ganglion Cells)	AR
625	b. Indications / Techniques	AR
626	ii. Indications for Evaluation	AR
627	iii. Ancillary Studies (e.g., Stains, IHC, Flow Cytometry, Molecular)	AR
628	c. Infections	
629	iv. Bacterial and Mycobacterial	AR
630	v. Fungal	AR
631	d. Cysts, including Developmental Cysts	F
632	e. Thymic Neoplasms	F
633	i. Thymoma	F
634	ii. Thymic Carcinoma	F
635	f. Neural Tumors	F
636	i. Neuroblastoma and Ganglioneuroma	F
637	ii. Nerve Sheath Tumors (e.g., Schwannoma, Neurofibroma)	F
638	g. Paraganglioma	F
639	h. Germ Cell Tumors	
640	i. Seminomas	AR
641	ii. Teratomas	F
642	iii. Mixed and Other Germ Cell Tumors	F
643	i. Metastatic Tumors	
644	i. Carcinomas	AR
645	ii. Melanoma	AR
646	iii. Sarcomas	F

647

648 24. Kidneys

649	a. Normal Cytology	AR
650	b. Indications / Techniques	
651	i. Ancillary Studies (e.g., Stains, IHC, Flow Cytometry, Molecular)	AR
652	ii. Indications for Evaluation	F
653	c. Infections	
654	i. Bacterial (e.g., Renal Abscess, Malakoplakia)	AR
655	ii. Mycobacterial	AR
656	d. Non-Neoplastic Inflammatory Lesions (e.g., Xanthogranulomatous pyelonephritis)	F
658	e. Benign Neoplasms	
659	i. Oncocytoma	F
660	ii. Angiomyolipoma	F
661	f. Malignant Tumors of the Renal Parenchyma	
662	i. Clear Cell Renal Cell Carcinoma	AR
663	ii. Papillary Renal Cell Carcinoma	F
664	iii. Chromophobe Renal Cell Carcinoma	F

665	iv. Medullary Carcinoma	F
666	g. Urothelial Carcinoma of the Renal Pelvis	AR
667	h. Metastatic Tumors (e.g., Carcinomas, Melanoma)	AR
668	i. Hematopoietic Neoplasms	AR
669	j. Malignant Pediatric Renal Tumors (e.g., Wilms Tumor [Nephroblastoma])	F

670

671 25. Adrenal Glands

672	a. Normal Cytology	C
673	b. Myelolipoma	AR
674	c. Hematopoietic Neoplasms and Lymphoma	AR
675	d. Metastatic Tumors (e.g., Carcinomas, Melanoma)	AR
676	e. Indications / Techniques	
677	i. Indications for Evaluation	F
678	ii. Ancillary Testing (Stains, IHC, Flow Cytometry, Molecular)	F
679	f. Benign Adrenal Cortical Processes	F
680	g. Adrenal Cortical Carcinoma	F
681	h. Tumors of the Adrenal Medulla	
682	i. Pheochromocytoma	F
683	ii. Neuroblastoma	F
684	iii. Ganglioneuroma	F

685

686 26. Soft Tissue, Subcutaneous, and Skin

687	a. Normal Cytology	C
688	b. Indications / Techniques	
689	i. Ancillary Testing (e.g., Stains, IHC, Flow Cytometry, Molecular)	AR
690	ii. Indications for Evaluation	F
691	c. Infections	
692	i. Bacterial and Mycobacterial	AR
693	ii. Fungal	AR
694	d. Reactive / Inflammatory (Non-Infectious)	
695	i. Abscess	AR
696	ii. Fat Necrosis	AR
697	iii. Foreign-Body Reaction	AR
698	iv. Epidermal Inclusion Cysts	AR
699	v. Ganglion Cyst	F
700	vi. Endometriosis	F
701	vii. Neuroma	F
702	viii. Myositis Ossificans	F
703	ix. Amyloidoma	F
704	x. Nodular Fasciitis	F
705	xi. Tumoral Calcinosis	F
706	xii. Extramedullary Hematopoiesis	F

707	e. Benign Neoplasms	
708	i. Granular Cell Tumor	AR
709	ii. Lipomas	AR
710	iii. Pilomatrixoma	AR
711	iv. Schwannoma	AR
712	v. Solitary Fibrous Tumor	AR
713	vi. Intramuscular Myxoma	F
714	vii. Giant Cell Tumor of Tendon Sheath	F
715	viii. Neurofibroma	F
716	ix. Ganglioneuroma	F
717	x. Leiomyoma	F
718	xi. Rhabdomyoma	F
719	f. Malignant and Atypical/Borderline Neoplasms	
720	i. Melanoma	AR
721	ii. Merkel Cell Carcinoma	AR
722	iii. Liposarcomas	
723	1. Well-Differentiated / Atypical Lipomatous Tumors	AR
724	2. Myxoid Liposarcoma	AR
725	3. Round Cell Liposarcoma	F
726	4. Pleomorphic Liposarcoma	F
727	iv. Rhabdomyosarcoma	AR
728	v. Undifferentiated Sarcoma	AR
729	vi. Synovial Sarcoma	F
730	vii. Extraskeletal Myxoid Chondrosarcoma	F
731	viii. Hematopoietic Neoplasms and Lymphoma	AR
732	ix. Metastatic Carcinoma	AR
733		
734	27. Bone	
735	a. Normal Cytology	C
736	b. Indications / Techniques	
737	i. Indications for Evaluation, including Imaging Findings	F
738	ii. Ancillary Testing (e.g., Stains, IHC, Flow Cytometry, Molecular)	F
739	c. Benign Neoplasms	
740	i. Giant Cell Tumor	F
741	ii. Aneurysmal Bone Cyst	F
742	d. Malignant Neoplasms	
743	i. Chordoma	AR
744	ii. Chondrosarcoma	F
745	iii. Ewings/PNET	F
746	iv. Osteosarcoma	F
747	e. Hematopoietic Neoplasms	
748	i. Non-Hodgkin Lymphoma	AR
749	ii. Plasma Cell Neoplasm	AR

750	iii. Langerhans Cell Histiocytosis / Eosinophilic Granuloma	F
751	iv. Myeloid Neoplasms	F
752	f. Metastases	AR
753		
754	28. Cytopathology Laboratory Administration, Management, and Procedures	
755	a. Safety	AR
756	i. FNA Performance-Related Safety Measures	AR
757	b. Specimen Collection and Processing	
758	i. Specimen Requisition, Collection, and Acceptance	AR
759	ii. Specimen Processing	
760	1. Fixation	AR
761	2. Slide Preparation	AR
762	3. FNA Indications and Techniques	AR
763	4. Immediate Evaluation Techniques	AR
764	c. Cytopathology Billing and Coding	AR
765	d. Cytopathology QC/QA, CLIA, Regulatory	
766	i. Cytologic-Histologic Correlation and Discrepancies	AR
767	ii. Record and Slide Retention	AR
768	iii. Proficiency Testing	AR
769	iv. Five-Year Retrospective Review (i.e. Look Back)	AR
770	v. Rescreening, Prospective and Retrospective	F
771	vi. Workload Limits	F
772	vii. Reporting Rates	F
773	viii. Quality Statistics	F
774	e. Test Development and Validation	AR
775	f. Instrumentation, Computers, Capital Equipment	
776	i. Acquisition	F
777	ii. Automated Processing (Also See Screening)	F
778	iii. Processing Methods (Also See Screening)	F
779	g. Technical Aspects and Test Utilization	
780	i. Routine and Histo/Cytochemistry	F
781	ii. Immunohistochemistry	F
782	iii. Molecular Testing	F
783	iv. Flow Cytometry	F
784	h. Screening and Review Methods	
785	i. Automated Screening	F
786	ii. Digital Cytology/Pathology	F
787	iii. Telecytology	F
788	i. Cytopathology Laboratory Accreditation	F
789	j. Cytopathology Personnel Qualifications and Management	F
790	k. Risk Management / Medical-Legal Issues	F
791		