

## INDEX

- ablation, endometrial, 106  
 abnormal uterine bleeding, 85–6  
*Actinomyces israelii*/actinomycosis, 73, 104  
 adenocarcinoma  
   adenocarcinoma NOS (not otherwise specified) peritoneal wash cytology, 345  
   cervical, *See* cervical adenocarcinoma  
   endometrioid, *See* endometrioid adenocarcinoma  
 adenofibroma, 205, 206, 209–13, 267  
 adenoid basal carcinoma, 62–4  
 adenoid basal hyperplasia (adenoid basal epithelioma), 51  
 adenoid cystic carcinoma, cervical, 64–5  
 adenoma malignum (minimal deviation adenocarcinoma), 48, 57–8  
 adenoma malignum invasion pattern, 140, 142–3  
 adenomatoid tumor, 282  
 adenomyosis, 79, 101–2, 141, 258  
 adenosarcoma  
   classification, 205, 207–8  
   clinical characteristics, 205–6  
   differential diagnosis, 209–18, 235, 267  
   morphology, 206–9  
 adenosquamous carcinoma, cervical, 61  
 adolescents  
   cervical cytology, 2, 3, 4  
   cervical squamous cell carcinoma management and treatment, 20, 21  
 ALK1 expression, 235, 272  
 alveolar soft part sarcoma, 157–8, 278  
 Amplicor, 10  
 Amsterdam criteria, 331  
 amyloid, carcinoma with, 191  
 amyloidosis, 76, 191  
 angiosarcoma, 273  
 appendiceal tumors, uterine metastases, 289  
 Arias-Stella reaction, 40, 70, 84, 178, 321–3  
 aromatase inhibitors, 130  
 arteriovenous malformations (AVMs), 271–2  
 arthritis, cervical, 74  
 atrophy  
   cervical, 12–13, 26, 29  
   endometrial, 78–83, 120  
 atypical endocervical cells, 6–7  
 atypical endometrial cells, 7  
 atypical glandular cells (AGC), 2, 4, 7  
 atypical leiomyoma, 224–5  
 atypical oxyphilic metaplasia, 43  
 atypical polypoid adenomyoma (APA), 99–101  
   differential diagnosis, 123, 149–50, 208, 214  
 atypical squamous cells of undetermined significance (ASCUS), 3, 4–5, 9  
 atypical squamous cells, cannot exclude HSIL (ASC-H), 2, 3, 5  
 basaloid squamous cell carcinoma, 25, 65  
 BD FocalPoint GS Imaging System, 11  
 BD FocalPoint Slide Profiler, 11  
 benign metastasizing leiomyoma (BML), 241, 242–3  
 BER-EP4, 347  
 biopsy  
   cone, 45, 46  
   endometrial specimen artifact summary, 78  
   endometrioid adenocarcinoma diagnosis, 128  
 bladder carcinoma, uterine metastases, 189, 289  
 blue nevus, 269  
 Blue Rubber Bleb Nevus Syndrome, 272  
 brachytherapy, 22, 130  
 breast carcinoma, uterine metastases, 9, 260, 290, 345  
 calretinin expression, 284, 347  
 carcinoembryonic antigen (CEA) expression, 54, 57, 171  
 carcinoid tumors, 66–7, 284, 289  
 carcinosarcoma (CaSarc)  
   ancillary diagnostic tests, 199  
   clinical characteristics, 196–7  
   differential diagnosis, 155–6, 199–203, 216, 235  
   morphology, 197–9  
   peritoneal wash cytology, 347  
 Carney's syndrome, 270  
 CD10 expression  
   adenosarcoma, 209  
   endometrial stromal neoplasms, 228, 253–6, 261  
   mesonephric remnants/hyperplasia, 51  
   uterine smooth muscle tumors, 227, 228, 261  
 CD117 expression, 237, 272, 294  
 CD31 expression, 141  
 CD34 expression, 141, 256, 275–6, 279  
 CDX2 expression, 292  
 cellular leiomyoma, 226, 229  
 Cervarix, 19  
 cervical adenocarcinoma, *See also* endocervical adenocarcinoma  
 adenocarcinoma in situ (AIS), 34–43  
 adenoid basal carcinoma, 62–4  
 adenoid cystic carcinoma, 64–5  
 adenosquamous carcinoma, 61  
 cervical invasion assessment and 'early' invasive, 47  
 clear cell, 61–2, 180  
 endocervical adenocarcinoma subtype summary, 57  
 endometrioid carcinoma, 59–60  
 gastric-type, 58  
 glassy cell carcinoma, 61  
 incidence, 34  
 intestinal-type, 60  
 invasive mucinous endocervical type, 46–56  
 mesonephric carcinoma, 62  
 minimal deviation adenocarcinoma (adenoma malignum), 48, 57–8  
 neuroendocrine tumors, 65–7  
 overview of diagnostic issues, 34  
 serous adenocarcinoma, 62  
 villoglandular carcinoma, 58–9  
 cervical cytology  
   age-related recommendations, 1  
   ancillary diagnostic tests, 9–11  
   Bethesda system, 1  
   differential diagnosis, 11–16  
   false negative rate, 2  
   management and treatment, 2–4  
   morphology, 4–9  
   overview of methods, 1–2  
   prognosis, 2  
 cervical involvement, endometrioid adenocarcinoma, 141–4  
 cervical leiomyosarcoma, 230  
 cervical microglandular hyperplasia, 152, 185–6  
 cervical squamous cell carcinoma, *See also specific types*  
   ancillary diagnostic tests, 26  
   cervical cytology, 6, 12–14  
   clinical characteristics, 19  
   differential diagnosis, 28–31, 65, 187  
   HPV (human papillomavirus) association, 19  
   incidence, 19  
   management and treatment, 20–2  
   morphology, 22–6  
   preoperative assessment, 20  
   prognosis, 20  
   staging, 21, 26

## INDEX

- cervical squamous intraepithelial lesions  
 adenocarcinoma in situ (AIS) association, 34  
 high-grade, *See* high-grade squamous  
 intraepithelial lesion (HSIL)  
 low-grade, *See* low-grade squamous  
 intraepithelial lesion (LSIL)  
 prognosis, 2, 20
- cervicitis, 72  
 follicular, 14  
 liginous, 76
- Cervista, 9–10
- Chaga's disease, 73
- chemotherapy  
 cervical squamous cell carcinoma, 22  
 endometrioid adenocarcinoma, 130  
 gestational trophoblastic disease, 307,  
 308, 310
- chlamydia, 72, 73, 85, 104
- chondrosarcoma, 276
- choriocarcinoma, 308–10, 315–16, 317,  
 318, 324  
 atypical, 309
- ciliated (tubal) metaplasia, 93, 95  
 differential diagnosis, 15, 38  
 disordered proliferative endometrium and, 85  
 endometrioid adenocarcinoma and, 132
- CK20 expression, 292
- CK7 expression, 292
- clear cell carcinoma (uterine corpus)  
 ancillary diagnostic tests, 177–8  
 cervical involvement, 141  
 clinical characteristics, 174  
 differential diagnosis, 97, 151–2, 169,  
 178–81, 323  
 morphology, 174–7
- clear cell carcinoma, cervical, 61–2, 141, 180, 323
- clear cell metaplasia, 93, 180
- clear cell sarcoma, 248
- clomid, 92
- collagen balls, 344
- colorectal carcinoma  
 Lynch syndrome-associated, *See* Lynch  
 syndrome  
 uterine metastases, 157, 292
- colposcopy, abnormal cervical cytology  
 management, 2–4, 20–1
- condyloma, 22, 30
- cone biopsy, 45, 46
- congenital abnormalities, 108–9
- cotyledonoid dissecting leiomyoma, 220, 223
- curettage  
 artifacts, 78, 118–19  
 endometrial and endocervical  
 adenocarcinoma differentiation, 52  
 endometrioid adenocarcinoma diagnosis, 128  
 indications and contraindications for  
 endocervical, 3, 4  
 post-curettage changes, 72, 79, 105–6  
 cytokeratin expression, 237–8, 266, 279, 284  
 cytomegalovirus (CMV), 73, 104
- Dako GenPoint, 27
- danazol, 92
- decidual reaction, 70, 90, 241, 323–4
- dedifferentiated endometrial carcinoma, 190,  
 202–3
- deep endocervical glands, 48
- DES (diethylstilbestrol), in utero exposure,  
 39, 61, 180
- desmin expression, 228, 247, 253–6, 261
- desmoplasia, 138, 139
- diffuse laminar endocervical glandular  
 hyperplasia, 49
- diffuse leiomyomatosis, 226
- Digene Hybrid Capture 2 (HC2), 9
- disordered proliferative endometrium,  
 84–5, 119
- displaced epithelium, 30
- disseminated peritoneal leiomyomatosis (DPL),  
 239–42, 245
- DNA MMR immunohistochemistry, 333–5, 337–9
- dysfunctional uterine bleeding (DUB), 86–9, 104
- ectopic decidua, *See* decidual reaction
- endocervical adenocarcinoma, *See also specific  
 subtypes*  
 cervical cytology, 6–8  
 endocervical adenocarcinoma in situ (AIS),  
 14–16  
 endometrial mucinous carcinoma  
 differentiation, 184–5  
 endometrioid adenocarcinoma  
 differentiation, 158  
 invasive mucinous (usual) type, 46–56  
 serous carcinoma differentiation, 170–1  
 subtype summary, 57
- endocervical curettage, 3, 4, *See also* curettage;  
 endocervical sampling
- endocervical glands, deep, 48
- endocervical glandular hyperplasia, 48–52
- endocervical polyps, 70, 214
- endocervical sampling, 3–4, 20, *See also specific  
 techniques*
- endocervicosis, 41
- endometrial carcinoma precursors  
 classification systems, 110–11, 118  
 diagnostic approach, 117–18  
 differential diagnosis, 118–24  
 morphology, 111–17  
 progestin therapy evaluation, 124–5
- endometrial cells, cervical cytology, 4, 7, 14
- endometrial hyperplasia  
 classification systems, 110–11, 118  
 diagnostic approach, 117–18  
 differential diagnosis, 118–24, 148–9, 208  
 existence of focal, 117  
 morphology, 111–16  
 progestin therapy evaluation, 124–5
- endometrial intraepithelial neoplasia (EIN)  
 classification systems, 110–11, 118  
 diagnostic approach, 117–18  
 diagnostic criteria, 117  
 differential diagnosis, 118–24  
 morphology, 116–17  
 progestin therapy evaluation, 124–5
- endometrial metaplasia, 92–7, *See also specific  
 types*  
 adenosarcoma and, 207  
 differential diagnosis, 121–2, 171  
 endometrial hyperplasia and, 113–14  
 endometrioid adenocarcinoma and,  
 130–3, 136
- progestin therapy and, 118  
 tamoxifen therapy and, 91–2
- endometrial sampling, 4, 15, *See also specific  
 techniques*
- endometrial sarcoma, high-grade, 235
- endometrial squamous cell carcinoma  
 ancillary diagnostic tests, 187  
 clinical characteristics, 186  
 differential diagnosis, 154, 187–9  
 morphology, 186–7
- endometrial stromal breakdown, 259
- endometrial stromal nodule, 228, 251, 252,  
 253–8, 266–7
- endometrial stromal sarcoma (ESS)  
 ancillary diagnostic tests, 253–7  
 clinical characteristics, 251  
 diagnostic challenges' overview, 251  
 differential diagnosis, 217, 228, 244, 257–63,  
 266–7, 290–2  
 morphology, 251–3
- endometrioid adenocarcinoma  
 adenosarcoma differentiation, 215–16  
 ancillary diagnostic tests, 146–7  
 assessment, 128–9  
 carcinosarcoma (CaSarc) differentiation,  
 155–6, 202  
 cervical adenocarcinoma differentiation,  
 52–6, 158  
 cervical cytology, 8  
 cervical involvement, 141–4  
 clinical characteristics, 127–8  
 combined neuroendocrine tumor  
 and, 203  
 diagnostic challenges' overview, 127  
 differential diagnosis overview, 147–59  
 gross and microscopic pathology, 130–3  
 lymph node examination, 146  
 lymphovascular invasion, 141  
 myometrial invasion, 137–41  
 prognosis, 129–30  
 serous carcinoma differentiation, 151, 164,  
 168–9  
 squamous cell carcinoma differentiation,  
 154, 188  
 synchronous and metastatic  
 carcinomas, 144–6  
 therapy-related changes, 133–4  
 treatment, 130  
 tumor grading, 128, 134–7  
 tumor staging, 128, 137  
 uterine metastases differentiation,  
 157, 292  
 UTROSCT differentiation, 156, 267  
 with spindle cell elements, 202
- endometrioid carcinoma, cervical, 59–60
- endometrioid carcinoma, mixed, 176, 189–90,  
 202–3
- endometrioid metaplasia, 38
- endometriosis  
 cervical, 40–1, 76  
 differential diagnosis, 15, 40–1  
 in disseminated peritoneal leiomyomatosis  
 (DPL), 240–1  
 peritoneal wash cytology, 343–4  
 polypoid, 214–15  
 endometritis, 102–5, 328–9

- endometrium (nonneoplastic)  
 ablation, 106  
 abnormal uterine bleeding, 85–6  
 adenomyosis, 79, 101–2  
 atrophy, 78–83, 120  
 atypical polypoid adenomyoma, *See* atypical polypoid adenomyoma (APA)  
 common diagnostic difficulties  
 congenital abnormalities, 108–9  
 dysfunctional uterine bleeding (DUB), 86–8  
 endometrial biopsy/curettage specimen  
 artifact summary, 78  
 endometrial glandular and stromal  
 breakdown, 88–90  
 endometritis, 102–5, 328–9  
 exogenous hormone effects, 90–2  
 extramedullary hematopoiesis, 108, 287  
 focal gland atypia, 93  
 gestational complications, 86,  
*See also* pregnancy  
 heterotopias, 107–8  
 hysterectomy specimen artifact summary, 79  
 metaplasia, *See* endometrial metaplasia  
 myometrial xanthomatosis, 107  
 polypoid adenomyoma (PA), 99, 214  
 polyps, 97–9, 119–20, 122, 213  
 post-curettage changes, 79, 105–6  
 radiation changes, 107, 134, 171  
 stromal decidual reaction, 90  
 endosalpingiosis, 41, 47, 343  
*Entamoeba histolytica*, 73  
 eosinophilic metaplasia, 91–2, 93, 95, 96, 97, 122  
 epithelial-mesenchymal transition, 203  
 epithelioid leiomyoma, 227, 267–8  
 epithelioid leiomyosarcoma, 230, 234, 237, 248,  
 316–17  
 epithelioid plexiform tumorlet, 229  
 epithelioid sarcoma, 278–80  
 epithelioid trophoblastic tumor (ETT), 30–1,  
 237, 310, 312–18, 319  
 Epstein-Barr virus (EBV), 25  
 estrogen receptor (ER) expression  
 adenocarcinoma, 209  
 endocervical adenocarcinoma, 54, 57  
 endometrial stromal neoplasms, 256  
 endometrioid adenocarcinoma, 54  
 hybrid tumors, 173  
 mucinous carcinoma, 183  
 uterine smooth muscle tumors, 228  
 estrogen therapy, 91, 92  
 estrogen-related DUB, 87–8, 89  
 Ewing sarcoma, 280  
 exaggerated placental site reaction, 314–15, 319  
 extramedullary hematopoiesis, 108, 287  
 extramedullary myeloid tumor, 287
- fallopian tubes, synchronous and metastatic  
 carcinomas, 144–6  
 fibroepithelial polyp, 73–5  
 focal endocervical glandular hyperplasia  
 (tunnel clusters), 49–50  
 follicular cervicitis, 14  
 formalin-fixed paraffin-embedded (FFPE)  
 block, 347  
 frozen section evaluation, endometrioid  
 adenocarcinoma, 128–9
- gallbladder carcinoma, uterine metastases, 292–4  
 Gardasil, 19  
 gastric-type adenocarcinoma, 58  
 gastrointestinal stromal tumor (GIST), 237, 241,  
 243, 272, 294  
 gene sequencing, Lynch syndrome, 332  
 gestational trophoblastic disease  
 ancillary diagnostic tests, 317–19  
 choriocarcinoma, 308–10, 315–16, 317, 318,  
 324  
 classification, 298  
 epithelioid trophoblastic tumor (ETT), 30–1,  
 237, 310, 312–18, 319  
 exaggerated placental site reaction, 314–15,  
 319  
 invasive mole, 307  
 molar gestations, 298–307, 310, 314–15, 318  
 placental site nodule, 30, 313–14, 319, 324  
 placental site trophoblastic tumor (PSTT),  
 237–8, 310–12, 313–18  
 prognostic scoring index, 299  
 recurrent, 307–8  
 staging system, 298  
 giant cell arteritis, 74  
 giant cell carcinoma, 190–1  
 glandular dysplasia, 37  
 glassy cell carcinoma, 61, 191  
 glioma, 284  
 glomus tumor, 270  
 glycogenation, 11, 28  
 gonadotropin therapy, 92  
 gonadotropin-releasing hormone therapy, 92, 221  
 gonorrhea, 85
- h-caldesmon expression, 228, 247, 253–6, 261  
 hemangiomas, 271  
 hemangiopericytoma, 262–3  
 hepatoid carcinoma, 191  
 hereditary leiomyomatosis, 246  
 hereditary nonpolyposis colorectal cancer  
 syndrome (HNPCC), *See* Lynch  
 syndrome  
 herpes, 73, 104  
 heterologous elements, carcinoma with  
 benign, 191  
 heterotopias, 107–8  
 high-grade squamous intraepithelial lesion  
 (HSIL)  
 differential diagnosis, 12–14, 15–16, 28–9  
 management and treatment, 3–4, 20–1  
 morphology, 5, 22–3  
 p16 immunohistochemistry, 26  
 prognosis, 2, 20  
 histiocytes, 13–14, 78, 347  
 histiocytoma, 277  
 histiocytosis, 287  
 HMB-45 expression, 245, 248  
 hMLH1 promoter methylation, 333  
 HNF-1 $\beta$  expression, 177–8  
 hobnail metaplasia, 93, 96, 97, 132  
 hPL expression, 237–8  
 HPV (human papillomavirus)  
 cervical squamous cell carcinoma  
 association, 19, 22, 23, 25  
 endometrial squamous cell carcinoma  
 association, 187  
 testing for, *See* HPV (human papillomavirus)  
 testing  
 vaccines, 19  
 HPV (human papillomavirus) testing  
 cervical cytology and, 1, 2–4, 20–1  
 cervical squamous cell carcinoma  
 diagnosis, 27–8  
 endocervical and endometrial  
 adenocarcinoma differentiation, 55  
 methods, 9–10  
 hybrid tumors, 172–3  
 hydropic abortus, 305  
 hydropic leiomyoma, 226, 244  
 hypercellular myometrium, 229  
 hyperplasia, endocervical gland, 48–52  
 hysterectomy  
 cervical squamous cell carcinoma, 21  
 endometrioid adenocarcinoma, 130, 144  
 gestational trophoblastic disease, 307  
 Lynch syndrome, 339  
 specimen examination, 46, 79
- ichthyosis uteri, *See* squamous metaplasia  
 imaging, cervical cytology, 10–11  
 immature teratoma, 191, 283  
 immunosuppression, abnormal cervical cytology  
 management and treatment, 3  
 implantation site reaction, 324  
 implantation site subinvolution, 328  
 infection  
 cervical, 73  
 endometrial, 85, 104–5, 328  
 inflammatory changes  
 cervical, 12, 28, 42, *See also* cervicitis  
 endometrial, 105, *See also* endometritis  
 inflammatory myofibroblastic tumor, 229, 236,  
 272  
 inhibin expression, 266  
 INI1 expression, 279–80  
 intermediate trophoblast  
 intestinal metaplasia, 43  
 intestinal-type adenocarcinoma, cervical, 60  
 intraepithelial serous carcinoma (serous  
 carcinoma in situ), 164–6, 169,  
*See also* serous carcinoma  
 intravenous leiomyomatosis (IVL), 229, 243–4,  
 261  
 invasive mole, 307  
 invasive squamous cell carcinoma, cervical,  
 21–2, 24–5, 29–31  
 inverted transitional cell papilloma, 72
- JAZF1-JJAZ1* translocation, 256, 266
- keratin deposition, peritoneal, 146  
 keratin stains, 146  
 keratinizing squamous cell carcinoma,  
 cervical, 24  
 Ki-67 immunohistochemistry  
 cervical adenocarcinoma, 38, 39, 41  
 cervical squamous cell carcinoma, 27  
 choriocarcinoma, 316  
 endometrioid adenocarcinoma, 168  
 endometriosis, 41  
 exaggerated placental site reaction, 318–19  
 serous adenocarcinoma, 166, 167

## INDEX

- Ki-67 immunohistochemistry (cont.)  
 uterine smooth muscle tumors, 225, 228, 235  
 koilocytes, 22
- Langerhans histiocytosis, 287
- LEEP (loop electrosurgical excision procedure), 3–4
- leiomyoma  
 ancillary diagnostic tests, 227–8  
 clinical characteristics, 219  
 diagnostic challenges' overview, 219  
 differential diagnosis, 82, 261  
 iatrogenic pelvic, 245–6  
 leiomyosarcoma arising in, 238  
 morphology, 219–27  
 parasitic, 241  
 pelvic retroperitoneal, 246
- leiomyosarcoma  
 arising in leiomyoma, 238  
 clinical characteristics, 230  
 diagnostic challenges' overview, 219  
 differential diagnosis, 228–30, 234–8, 241, 243, 261  
 morphology, 230–4  
 pelvic retroperitoneal, 246
- leukemia, 287, 294
- ligeneous cervicitis, 76
- LinearArray, 10
- lipoleiomyoma, 222
- lipoma, 270
- liposarcoma, 276
- lobular endocervical glandular hyperplasia, 50–1
- low-grade squamous intraepithelial lesion (LSIL)  
 differential diagnosis, 12, 14, 28, 30  
 management and treatment, 3, 20  
 morphology, 4–5, 22, 23, 28  
 P16 immunohistochemistry, 26  
 prognosis, 2, 20
- lymph node involvement/examination  
 cervical adenocarcinoma, 46  
 cervical squamous cell carcinoma, 26  
 endometrioid adenocarcinoma, 128–9, 141, 146  
 sentinel lymph node mapping, 129
- lymphangioliomyomatosis (LAM), 243, 244–5
- lymphangioma, 272
- lymphoepithelioma-like carcinoma, 25, 190
- lymphoma, 285–7, 294–5
- lymphoma-like lesions, 73, 103, 286
- lymphovascular invasion, endometrioid adenocarcinoma, 141
- Lynch syndrome  
 associated endometrial carcinoma and colorectal carcinoma comparison, 330  
 associated endometrial carcinoma and spontaneous endometrial carcinoma comparison, 330  
 clinical characteristics, 330–1  
 diagnosis, 331–5  
 risk reducing hysterectomy, 339  
 screening endometrial carcinoma for, 337–9  
 significance of, 331  
 tumor morphology and topography, 335–7
- malakoplakia, 105
- malignant mixed mullerian tumor (MMMT),  
*See* carcinosarcoma (CaSarc)
- megace, 133
- melanoma, 229, 236, 248, 273, 296
- MELF (microcystic, elongated and fragmented) invasion, 140–1
- mesenchymal dysplasia, 307
- mesenteric fibromatosis, 241
- mesonephric carcinoma, 38, 62, 156, 192
- mesonephric hyperplasia, 51–2
- mesonephric remnants, 51
- mesothelial cells, peritoneal wash cytology of  
 benign, 341–2
- metaplasia, endometrial, *See* endometrial metaplasia
- microglandular hyperplasia, cervical, 48–9, 152, 185–6
- microinvasive squamous cell carcinoma, cervical, 20, 21, 23–4
- microsatellite instability (MSI), 331, 332–3
- minimal deviation adenocarcinoma (adenoma malignum), 48, 57–8
- mitotic activity  
 adenofibroma and adenosarcoma differentiation, 211  
 endocervical cells, 42–3  
 endometrial stromal tumors, 259  
 undifferentiated endometrial sarcoma, 259  
 uterine smooth muscle tumors, 223–4, 228, 231, 233–4, 238, 247
- mixed tumors, 137, 171–2, 189–90, 239  
 MOC-31, 347
- molar gestations, 298–307, 310, 314–15, 318
- morular metaplasia, 93, 94, 95, 122  
 atypical polypoid adenomyoma (APA) and, 100  
 endometrial hyperplasia and, 114  
 endometrioid adenocarcinoma and, 131, 136
- mucinous carcinoma  
 ancillary diagnostic tests, 183  
 clinical characteristics, 182  
 definition, 181  
 differential diagnosis, 184–6  
 invasive endocervical, 46–56  
 metastatic, 185  
 mixed, 190  
 morphology, 182–3  
 peritoneal wash cytology, 346
- mucinous metaplasia, 91–2, 93, 96, 97  
 atypical, 184  
 differential diagnosis, 122  
 endometrioid adenocarcinoma and, 132  
 progestin therapy and, 118
- mucosal melanosis, 269
- mullerian adenosarcoma, 201–2, 262
- mullerian cyst, 108–9
- mullerian papilloma, 71
- multinucleated stromal giant cells, 73
- Mycoplasma*, 104
- myogenin, 217
- myometrial invasion  
 adenosarcoma, 205  
 endometrial stromal nodule, 257–8  
 endometrioid adenocarcinoma, 137–41  
 invasive mole, 307
- mucinous carcinoma, 183  
 placental site trophoblastic tumor (PSTT), 311  
 serous adenocarcinoma, 162, 164
- myometrial xanthomatosis, 107
- myxoid change, benign, 238
- myxoid leiomyoma, 226–7, 229, 235
- myxoid leiomyosarcoma, 229, 230, 233–4, 235
- myxoma, 270
- neurilemmoma, 229
- neurilemmoma-like leiomyoma, 222
- neuroendocrine tumors, 65–7, 154–5, 192–3, 203
- neurofibroma, 229, 270
- neurofibrosarcoma, 273–6
- nomograms, 129
- nongestational choriocarcinoma, 192
- non-keratinizing squamous cell carcinoma, cervical, 24
- oral contraceptives, endometrial effect
- osteosarcoma, 276
- ovarian adenofibroma, adenosarcoma differentiation, 212
- ovarian endometriosis, 215
- ovarian synchronous and metastatic carcinomas, 144–6
- oxyphilic metaplasia, 93, 95  
 atypical, 43
- p16 immunohistochemistry  
 cervical adenocarcinoma diagnosis, 38, 39–40, 41, 43, 55  
 cervical squamous cell carcinoma, 26–7  
 clear cell carcinoma, 177  
 endometrioid adenocarcinoma, 55, 168  
 endometriosis, 41  
 serous adenocarcinoma, 166, 167, 168, 171  
 uterine smooth muscle tumors, 225, 228, 232, 235
- p53 immunohistochemistry  
 carcinosarcoma (CaSarc), 199  
 clear cell carcinoma, 177  
 endometrioid adenocarcinoma, 168  
 metaplasia/reactive change, 171  
 serous adenocarcinoma, 166–8, 171, 173  
 uterine smooth muscle tumors, 235
- p57 immunohistochemistry, molar gestations, 302–3
- pancreatic carcinoma, uterine metastases, 294
- papillary endocervicitis, 72
- papillary metaplasia, 96, 97, 133, 180
- papillary squamous cell carcinoma, cervical, 25
- papillary syncytial metaplasia, 93, 95, 97, 122
- paraganglioma, 272
- parasitic leiomyoma, 241
- PAX2 expression, 38, 39, 57, 181
- PAX8 expression, 290
- pelvic (extra-uterine) serous carcinoma, 169–70
- pelvic (extra-uterine) smooth muscle tumors, 245
- perimenarchal/perimenopausal endometrial physiology, 84–5
- peritoneal wash cytology  
 ancillary diagnostic tests, 347–8

- benign conditions, 341–4  
 malignant conditions, 344–7  
 overview of procedure and problems, 341  
 updated recommendations, 341
- perivascular epithelioid cell tumor (PEComa), 229, 238, 246–8
- pigmented neuroectodermal tumor of infancy, 284
- placenta creta, 326–7
- placental site nodule, 30, 313–14, 319, 324
- placental site trophoblastic tumor (PSTT), 237–8, 310–12, 313–18
- plasmacytoma, 287
- pleomorphic rhabdomyosarcoma, 235
- plexiform tumorlet, 229, 269
- podoplanin, 141
- polyarteritis nodosa, 74
- polymerase chain reaction (PCR), HPV, 10
- polypoid adenomyoma (PA), 71, 99, 214  
 atypical, *See* atypical polypoid adenomyoma (APA)
- polypoid endometriosis, 214–15
- polyps  
 endocervical, 70, 214  
 endometrial, 97–9, 119–20, 122, 213  
 fibroepithelial, 73–5
- poorly differentiated carcinoma, 203
- post-abortion villous trophoblast, 310
- post-menopause  
 cervical cytology, 2, 3, 13  
 endometrial physiology, 78–83
- postpartum endometritis, 328–9
- postpartum hemorrhage, 325–9
- pregnancy  
 abnormal cervical cytology, 3, 4  
 abnormal pregnancy-related changes, 325–9  
 cervical squamous cell carcinoma  
 management and treatment, 20, 21  
 gestational trophoblastic disease,  
*See* gestational trophoblastic disease  
 intermediate trophoblast/squamous cell carcinoma differentiation  
 physiologic pregnancy-related change, 83–4, 321–5  
 pregnancy loss terminology, 86  
 secretory/gestational endometrium differentiation
- pre-menarchal endometrium, 78–83
- primitive neuroectodermal tumor (PNET), 158–9, 280
- ProEx C immunohistochemistry, 27, 55
- progesterone receptor (PR) expression  
 adenocarcinoma, 209  
 endocervical adenocarcinoma, 54, 57  
 endometrial stromal neoplasms, 256  
 endometrioid adenocarcinoma, 54  
 hybrid tumors, 173  
 mucinous carcinoma, 183  
 serous carcinoma, 166  
 uterine smooth muscle tumors, 228
- progesterone receptor modulators, 92
- progesterone-related DUB, 88
- progestin therapy  
 endometrial hyperplasia, 124–5  
 endometrioid adenocarcinoma, 130, 134  
 therapy-related changes, 90, 91, 92, 134
- psammoma bodies, 346
- psammomatous calcifications, 73
- PTEN expression, 116–17
- pushing invasion pattern, 141
- pyomyoma, 220
- radiation therapy  
 brachytherapy, 22, 130  
 cervical squamous cell carcinoma, 22  
 endometrioid adenocarcinoma, 130  
 therapy-related changes, 13, 42, 107, 134, 171, 344
- raloxifene, 92
- reactive changes  
 cervical, 12, 28, 42  
 serous adenocarcinoma differentiation, 171
- renal cell carcinoma, metastatic, 180–1
- repair, cervical, 13
- retained products of conception, 328
- retinal anlage tumor, 284
- retroperitoneal smooth muscle tumors, 245
- rhabdomyoma, 270
- rhabdomyosarcoma, 201, 218, 235, 276–7
- Rosai-Dorfman histiocytosis, 287
- S100 expression, 269, 275–6
- salpingo-oophorectomy, endometrioid adenocarcinoma, 130
- sarcoma  
 adenocarcinoma, *See* adenocarcinoma  
 alveolar soft part, 278  
 benign gland entrapment, 216  
 clear cell, 248  
 endometrial stromal, *See* endometrial stromal sarcoma (ESS)  
 epithelioid, 278–80  
 Ewing sarcoma, 280  
 granulocytic, 287  
 heterologous, 272, 276–8  
 high grade endometrial (undifferentiated), 235  
 homologous, 272, 273–6  
 rhabdomyosarcoma, 201, 218, 235, 276–7  
 sarcoma botryoides, 217  
 undifferentiated, 235, 259–60, 277–8
- schistosomiasis, 73
- schwannoma, 270
- secretory endometrial carcinoma, 179
- secretory metaplasia, 131
- sentinel lymph node mapping, 129
- serous carcinoma  
 ancillary diagnostic tests, 166–8  
 clinical characteristics, 161–2  
 differential diagnosis, 62, 151, 172–3, 178–9  
 mixed, 190  
 morphology, 162–6  
 pelvic (non-uterine), 169–70  
 peritoneal wash cytology, 345–6  
 serous carcinoma in situ (intraepithelial serous carcinoma), 164–6, 169  
 synchronous vs. metastatic, 170  
 uterine metastasis, 290
- serous dysplasia, 165
- serous LMP (low malignant potential) tumors, 346
- slide-based assays, HPV testing, 10
- small cell carcinoma, 31, 154–5, 203, 347
- smooth muscle tumors of uncertain malignant potential (STUMPs), 234, 238
- solitary fibrous tumor, 262–3, 270
- squamotransitional cell carcinoma, cervical, 25
- squamous cell carcinoma  
 bladder, 189  
 cervical, *See* cervical squamous intraepithelial lesion; cervical squamous cell carcinoma  
 endometrial, *See* endometrial squamous cell carcinoma  
 peritoneal wash cytology, 346–7
- squamous dysplasia, 316
- squamous metaplasia (cervical), 12, 26, 29, 76
- squamous metaplasia (endometrial), 93, 94, 95, 122  
 atypical polypoid adenomyoma (APA) and, 100  
 differential diagnosis, 188–9  
 endometrial hyperplasia and, 113–14  
 endometrioid adenocarcinoma and, 131  
 squamous cell carcinoma and, 187
- squamous metaplasia (endometrial) adenocarcinoma and, 136
- Sternberg tumor, *See* cotyledonoid dissecting leiomyoma
- stratified endocervical cells, 42–3
- stromal foam cells, 52
- subinvolution, implantation site, 328
- superficial cervico-vaginal myofibroblastoma, 229
- SurePath, 1, 10, 11
- syncytiotrophoblast
- syphilis, 73
- tamoxifen, 91, 92
- teratoma, 191, 283
- TFE3 expression, 158
- ThinPrep, 1
- ThinPrep Imaging System, 10–11
- trachelectomy, 21, 45
- transitional cell carcinoma, 154, 189, 289
- trisomies, 305
- trophoblastic cells, 191
- Trypanosoma cruzi*, 73
- tubal metaplasia, *See* ciliary (tubal) metaplasia
- tuberculosis, 73, 85, 104
- tuboendometrioid metaplasia (TEM), 40
- tubulosquamous polyp, 70
- tumor cell displacement, artifactual, 141
- tumor cell necrosis, 228, 232, 233–4
- tumor infiltrating lymphocytes (TILs), 337
- tumorlet, plexiform, 229, 269
- tunnel clusters, 49–50
- undifferentiated carcinoma, 152–3, 191, 229, 237, 248, 260  
 mixed, 190, 202–3
- undifferentiated sarcoma, 235, 259–60, 277–8
- uterine atony, 325–6
- uterine metastases  
 appendiceal carcinoma, 289  
 bladder carcinoma, 289  
 breast carcinoma, 9, 260, 290  
 colorectal carcinoma, 157, 290–2

---

**INDEX**


---

- uterine metastases (cont.)
  - endocervical adenocarcinoma
    - differentiation, 56
  - gall bladder carcinoma, 292–4
  - gastrointestinal stromal tumor (GIST), 294
  - lobular carcinoma, 229, 260
  - lymphoma/leukemia, 294–5
  - melanoma, 229, 296
  - mucinous carcinoma, 185
  - other primary genital tract tumors, 145, 289
  - pancreatic carcinoma, 294
  - renal cell carcinoma, 180–1
  - serous carcinoma, 145
  - synchronous vs. metastatic serous carcinoma, 170
- uterine rupture, 78, 329
- uterine smooth muscle tumors
  - benign metastasizing leiomyoma (BML), 242–3
  - diagnostic challenges, 219
  - disseminated peritoneal leiomyomatosis (DPL), 239–42
  - hereditary leiomyomatosis, 246
  - iatrogenic pelvic leiomyoma, 245–6
  - intravenous leiomyomatosis (IVL), 243–4
  - leiomyoma, *See* leiomyoma
  - leiomyosarcoma, *See* leiomyosarcoma
  - lymphangioleiomyomatosis (LAM), 244–5
  - mixed stromal and smooth muscle tumors, 239
  - pelvic (extra-uterine)/retroperitoneal smooth muscle tumor differentiation, 245
  - perivascular epithelioid cell tumor (PEComa), 246–8
  - smooth muscle tumors of uncertain malignant potential (STUMPs), 234, 238
  - uterine tumor resembling ovarian sex cord tumor (UTROSCT), 156, 229, 262, 264–8
  - vascular tumors, 270–2
  - Ventana INFORM, 27
  - verrucous carcinoma, cervical, 25
  - villoglandular carcinoma, 58–9, 132, 133
  - vimentin, 54, 55
  - warty squamous cell carcinoma, cervical, 25, 30
  - well-differentiated adenocarcinoma, 123–4
  - well-differentiated neuroendocrine tumors, 66–7
  - Wilms tumor, extrarenal, 285
  - WT1 expression, 168, 170, 209, 289, 347
  - xanthogranulomatous endometritis, 105
  - yolk sac tumor, 191, 283