Appendix 1. This high-power photomicrograph of placental site trophoblastic tumor demonstrates polygonal cells invading along a vascular wall. Aneuploidy and scattered multinucleate cells are present, but syncytiotrophoblast element is not demonstrated. Hematoxylin-eosin stain, x40 magnification. Image courtesy of Dr. Siobahn M, O’Connor. Used with permission.
Appendix 2. This high-power photomicrograph of epithelioid trophoblastic tumor demonstrates nests of polygonal intermediate trophoblastic cells with occasional cytoplasmic clearing and extensive hyaline-like matrix. Hematoxylin-eosin stain, x40 magnification. Image courtesy of Dr. Siobahn M, O’Connor. Used with permission.
Appendix 3. Phantom hCG

Occasionally, women presenting with persistently elevated hCG levels are found to have a false-positive hCG assay result. “Phantom” hCG results, even above 700 milli-international units/mL, have been reported with a wide variety of monoclonal immunometric assays (1, 2). The “Phantom” (false positive) hCG values result from interference with the hCG immunometric assays, most often caused by nonspecific heterophile antibodies in the patients’ sera. Phantom hCG should be immediately suspected if an hCG value is elevated in a postmenopausal woman or someone with no known, or a remote preceding pregnancy. Alternatively, an hCG plateauing at relatively low levels does not respond to therapeutic maneuvers such as methotrexate given for a presumed ectopic pregnancy (1, 2). Work-up should include evaluation of a urinary hCG level if the serum level is above threshold for the urinary assay. Heterophile antibodies are not secreted in the urine and urinary hCG tests will be negative (1, 2).

False-positive hCG assays usually will not be affected by serial dilution of patient serum. Serum hCG values may have marked variability using different assay techniques (2). It is important to exclude the possibility of phantom hCG before subjecting patients with low persistent levels of hCG to hysterectomy or chemotherapy for presumed gestational trophoblastic neoplasia (2).

References
