

TEST CHANGE

Products of Conception, Ploidy by Flow Cytometry

2006178, DNA HYDAT

Specimen Requirements:

Patient Preparation:

Collect: Products of conception in paraffin tissue block.

Specimen Preparation: Formalin fix and paraffin embed products of conception in a tissue block. Tissue transport kit (ARUP Supply #47808) recommended, available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at ~~(800-)~~522-2787.

Transport Temperature: Refrigerated

Unacceptable Conditions:

Remarks: Include H&E-stained slide if only submitting tissue shavings (no block submitted). Also include a copy of the surgical pathology report, if available. If multiple specimens (blocks or slides) are sent to ARUP, they must be accompanied by one of the following: an order comment indicating that the ARUP pathologist should choose the specimen most appropriate for testing (e.g., "Choose best block"), or individual orders for each sample submitted. A Pathologist Block Selection Fee (ARUP test code 3002076) will be added to orders that utilize the first option. If multiple specimens are sent to ARUP without a request for pathologist block/slide selection or individual orders, they will be held until clarification is provided.

Stability: Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

Methodology: Quantitative Flow Cytometry

Performed: ~~Sun~~, Tue, Thu

Reported: 3-9 days

Note: A thin section of each tissue submitted is stained with H&E. The DNA content is classified as diploid, triploid, tetraploid, or aneuploid. The DNA index is the ratio of the DNA content of abnormal cells compared to normal cells.

CPT Codes: 88182

New York DOH Approval Status: Specimens from New York clients will be sent out to a New York DOH approved laboratory, if possible.

Interpretive Data:

Diagnostic Data: Flow cytometry can be used to help identify partial hydatidiform moles. Partial moles are usually triploid while complete moles are diploid, tetraploid, or aneuploid [Clinical Medicine: Pathology, 2008;1:61-67; Gynecol Oncol, 2001;81:67-70]. However, most products of conception are diploid, so a diploid histogram does not suggest a complete mole unless supported clinically and microscopically.

Prognostic Data: Persistent trophoblastic disease occurs in about 20% of diploid and tetraploid complete moles. Aneuploid complete moles may be associated with less risk for persistent disease [Gynecol Oncol, 2001;81:67-70]. The risk of persistent trophoblastic disease after a triploid mole is very low (0 out of 105 cases) [Obstet Gynecol, 2006;107:1006-1011]. In rare cases, a triploid result can also be due to nonmolar triploidy (digynic triploidy) where the extra haploid set of chromosomes are maternal. Nonmolar digynic triploid pregnancies are not associated with gestational trophoblastic disease and do not lead to an increased risk of recurrent molar pregnancy. Differentiating between a triploid partial mole and nonmolar triploid pregnancy requires clinical, microscopic, and molecular genetic testing correlation. [Clin Case Rep. [2020;8\(5\):785-789](#), [2020-Feb-11;8\(5\):785-789](#)].

~~This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.~~

Reference Interval: