

§493.1276 Standard: Clinical Cytogenetics

(a) The laboratory must have policies and procedures for ensuring accurate and reliable patient specimen identification during the process of accessioning, cell preparation, photographing or other image reproduction technique, photographic printing, and reporting and storage of results, karyotypes, and photographs.

Interpretive Guidelines §493.1276(a)

When condition level deficiencies in Clinical Cytogenetics are in any or all phases of testing, use D5034.

Determine which of the following services may be provided:

- Tissue Cultures (e.g., skin, lung, product of conception);
- Bone Marrow Cultures;
- Solid Tumors;
- Lymph Nodes;
- Chorionic Villus Samples (CVS);
- Peripheral Lymphocyte Cultures;
- Amniotic Fluid Cultures;
- High resolution chromosome analysis;

- Special techniques (e.g., Fragile “X” Studies, Chromosome Breakage analysis);
- Karyotype analysis (photographic and/or computer methods);
- Transplant studies;
- Chromosome staining (banding techniques) such as:
 - Quinacrine fluorescence (Q Banding);
 - Giesma/trypsin (G Banding);
 - Sodium phosphate/acridine or giesma/heat (R Banding);
 - Barium hydroxide/heat (C Banding);
 - Nuclear Organizing Region - Silver Stain (NOR);
 - Distamycin A/4-6-diamidino-2-phenylindole (DA/DAPI); or
 - Giemsa 11 (pH 11.0 for heterochromatin) (G 11).

NOTE: The above listing is not intended to be all-inclusive.

Review a sample of patient case files to determine if it is possible to go from the accession number to the patient’s file with karyotypes, report and observation records, the microscope slide, photographs or requisition forms.

Probes §493.1276(a)

When photographs are taken, are the coordinates of the microscope noted for each cell selected? If not, how does the laboratory identify the cell for future reference?

What system does the laboratory use to ensure that records reflect accurate patient identification when:

- Photographing chromosome spreads;
- Using computer systems to assist in karyotyping; or
- Storing photographic images of chromosomes and chromosomes spreads?