

CLINICAL PATHOLOGY CONTENT SPECIFICATIONS MOLECULAR GENETIC PATHOLOGY

I. Inherited diseases

Newborn screening

II. Infectious Diseases

HPV testing and cervical cancer

GC and Chlamydia screening

HIV measurements—bDNA vs. PCR

HCV genotyping

III. Molecular Oncology

Gleevec resistance

Gene expression profiling and applications in tumor classification and determination of prognosis

Hemato-lymphoid neoplasms, Myelodysplastic Syndromes, Chronic Myeloproliferative Disorders

IV. HLA/Transplantation

V. Pharmacogenetics

General principles (e.g. P450 testing and warfarin therapy)

VI. Molecular Techniques

CGI

Multiplex analysis

Real-time PCR

Basic techniques of genetic testing (e.g., PCR, restriction endonuclease cutting of DNA at specific sites, etc.)

Nucleic acid detection methods for infectious agents (e.g. chlamydia, gonococcus, hepatitis C, HIV, etc.)

Methods and method interferences

PCR/RT-PCR

FISH

VII. Management/Quality Improvement

Rules and regulations for molecular genetic testing (e.g. informed consent)