



Penn Medicine

Hospital of the University of Pennsylvania

3400 Spruce Street, Philadelphia, PA 19104

DIVISION OF PRECISION & COMPUTATIONAL DIAGNOSTICS

Molecular Pathology Laboratory

7 Maloney Bldg

(215) 615-3094

Client Services: 215-662-4808

Label Area

Location

Contact Phone Number

Indication, clinical information, and relevant prior testing:

Date and Time of Collection

Contact FAX Number or email

Name of Ordering Physician

ICD10 code (required)

FOR FURTHER INFORMATION ON TESTS AND SPECIMEN REQUIREMENTS, PLEASE REFER TO <https://www.testmenu.com/UPHS>

SPECIMEN TYPES (see back of form for details)

☐ Peripheral blood (EDTA)

☐ Bone marrow aspirate

☐ Cord blood

☐ Gynecologic specimen (ThinPrep)

☐ Nasopharyngeal swab

☐ Buccal swab/Saliva (for Genetic Testing)

☐ Fine needle aspirate: Site _____

☐ Bronchoalveolar lavage (BAL)

☐ Other (specify): _____

☐ Tissue: Site/Location: _____

TYPE: ☐ Fresh ☐ Frozen ☐ Fixed: Specify fixative _____ ☐ Rolls ☐ Slides

Case # _____

☐ Tissue: Site/Location: _____

TYPE: ☐ Fresh ☐ Frozen ☐ Fixed: Specify fixative _____ ☐ Rolls ☐ Slides

Case # _____

☐ Tissue: Site/Location: _____

TYPE: ☐ Fresh ☐ Frozen ☐ Fixed: Specify fixative _____ ☐ Rolls ☐ Slides

Case # _____

ONCOLOGY TESTING

GENETIC TESTING

IDENTITY TESTING

☐ BCR::ABL1 RT-PCR (Qual to Quant)

☐ BCR::ABL1 RT-PCR (p210 Quantitative)

☐ BCR::ABL1 RT-PCR (p190 Quantitative)

☐ Leukemia Translocation Panel

☐ PML::RARA RT-PCR (Qualitative)

☐ CBFB::MYH11 (Qualitative)

☐ RUNX1::RUNX1T1 (Qualitative)

☐ FLT3 mutation analysis (ITD and D835)

☐ JAK2 p.V617F variant analysis

☐ IDH1 and IDH2 variant analysis

☐ BRAF codon 600 variant analysis

☐ IGH rearrangement for B-cell clonality

☐ TRG rearrangement for T-cell clonality

☐ MGMT methylation analysis

☐ Hematologic Expedited Sequencing (HEXS)

☐ CFTR mutation panel (139 variants)

☐ Factor V Leiden (F5) variant

☐ Prothrombin (F2) G20210A variant

☐ C9orf72 hexanucleotide expansion analysis (FTD and ALS testing)

☐ HTT repeat expansion analysis (Huntington disease testing)

☐ SMN1 and SMN2 copy number analysis (spinal muscular atrophy testing)

☐ APOE genotyping for AD risk

☐ APOE genotyping for hyperlipidemia risk

☐ Pre-transplant evaluation (provide recipient buccal swab and blood, and donor blood)

Recipient name: _____

Donor 1 name/ID: _____

Genetic sex at birth: _____

Donor 2 name/ID: _____

Genetic sex at birth: _____

☐ Post-transplant evaluation

☐ Whole blood ☐ Myeloid, CD33/CD66b

☐ T cell, CD3 ☐ Bone Marrow

☐ Graft versus host disease (contact lab)

☐ Molar pregnancy evaluation (contact lab)

☐ Other identity testing (contact lab)

Specify: _____

INFECTIOUS DISEASE TESTING

OTHER TESTING

☐ Respiratory virus panel (RVP)

☐ Viral load, specify: ☐ BKV ☐ EBV ☐ CMV ☐ HBV ☐ HIV ☐ HCV

☐ HPV high-risk PCR with reflex to Cytology (includes 16/18 genotyping)

☐ Anaplasma and Ehrlichia PCR

☐ Candida auris screening by PCR

☐ Other, specify:

FOR LABORATORY USE ONLY

Resident/Fellow performing triage:

Non-MP accession number (if applicable):

Approved tests and comments:

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FOR LAB USE
ONLY

AFFIX CERNER
LABEL

GENERAL GUIDE TO SPECIMEN TYPES FOR MOLECULAR PATHOLOGY TESTING

Refer to <https://www.testmenu.com/UPHS> for more detailed specimen requirements by test.

Peripheral blood: EDTA containing blood tubes (pink or lavender) are appropriate for all genetic testing and for DNA and RNA-based oncology testing and identity testing where peripheral blood is the specimen of interest. RNA-based testing requires more volume, thus the pink top tube is the preferred tube as one lavender top tube does not provide sufficient volume. Peripheral blood is also appropriate for all viral load testing (pearl white PPT top preferred but pink top is acceptable). For post-transplant chimerism analysis unfractionated blood (pink preferred) will be tested along with specified cellular subsets (requires additional blood tubes for each subset). Lavender and pink top may be used interchangeably provided that sufficient volume is collected.

Tissue that is fresh (in Michel's medium) or frozen may be submitted for genetic testing as well as IGH and TRG rearrangement studies. Tissue fixed in formalin is acceptable for selected oncology testing including IGH and TRG, BRAF mutation analysis and MGMT methylation analysis. Tissue fixed in formalin inhibits PCR and is not adequate for molecular testing.

Bone marrow aspirate in lavender tubes can be used for DNA and RNA-based oncology molecular testing and identity testing.

Cord blood is appropriate for pre-transplant chimerism analysis.

Saliva collected with ORAGene DNA collection kits is appropriate for C9orf72 Hexanucleotide Repeat Expansion, HTT Repeat Expansion testing, and APOE Genotyping (ORAGene Saliva 1ml unassisted – DNA Genotek OG-510; ORAGene Saliva 0.75 ml assisted – DNA Genotek OG-575)

Buccal swabs ORAcollect Dx swabs from DNA GENOTECH INC OCD-100 are appropriate for genetic testing and Recipient/Donor pre-transplant chimerism analysis. Classic buccal swabs can also be used for pre-transplant analysis.

Gynecologic specimens in ThinPrep medium are appropriate for HPV DNA testing.

Fine needle aspirates are appropriate for oncologic molecular tests including *BRAF* mutation analysis.

Nasopharyngeal swabs (using NP flocked swab Lawson# 195443) are appropriate for respiratory virus panel (RVP) testing which includes influenza A/B, RSV A/B, SARS-CoV-2, parainfluenza virus 1/2/3 and 4, adenovirus, human metapneumovirus, human rhinovirus/enterovirus, coronavirus (seasonal strains), chlamydia pneumoniae and mycoplasma pneumoniae.

Bronchial lavage (BAL) specimens can be used for RVP testing and CMV viral load.

Please call the laboratory if in doubt about the acceptability of any specimen or specimen type.

Molecular Pathology Laboratory Main Number: (215) 615-3094