Test Requisition

Oncology Testing

Toll Free: (888) 400-6640, Phone: (406) 238-6360

FAX: (406) 238-6361

Yellowstone Pathology Institute
interactive diagnostics

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707 Sheridan Avenue Cody, WY 82414
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Client Information

Bozeman Health Deaconess Hospital Lab
937 Highland Blvd.
Bozeman, MT 59715
(406) 414-1010

Requisition completed by: _____

Ordering Physician (please print): _____

Please release requested patient specimen materials to Yellowstone Pathology Institute for additional testing. Please call the phone number listed in the Client Information section with any questions. Thank you in advance for your prompt attention in this matter.

Ordering Physician Signature: _____

Collection Date: _____ / _____ / _____ Collection Time: _____ ☐ AM ☐ PM

Specimen Information

☐ Bone Marrow ☐ Peripheral Blood ☐ FFPE Tissue ☐ Frozen Tissue ☐ Other _____

Location of Specimen: _____

City: _____ State: _____

Phone: _____

Patient Information (Place patient information label here or complete section)

Patient Name (Last, First): _____

Date of Birth: MM _____ / DD _____ / YY _____ Sex: ☐ Male ☐ Female

Medical Record #: _____

Social Security #: _____

Patient History/Treatment: _____

(Please attach all relevant clinical history)

☐ New Diagnosis ☐ Relapse ☐ In Remission

☐ See Attached Face Sheet for Patient Address Information

Coding Information

Diagnosis Code/ICD-9 Code (required): _____

Billing Information

Bill to: ☐ Insurance ☐ Patient ☐ Physician Office ☐ Hospital/Client

*Please attach face sheet and front/back of patient coverage card(s)

Patient Status (Choose 1): ☐ In-Patient ☐ Out-Patient ☐ Non-Hospital Patient

Medicare Patient (Choose 1): ☐ Yes ☐ No

Additional Comments: _____

Consultation Request

☐ Comprehensive Consult (YPI pathologists will assess clinical information and laboratory data and select appropriate ancillary tests) ☐ Bone Marrow ☐ Peripheral Blood

☐ Consultation on prepared slides/blocks. **Referring institution case number** _____

Hematology Test Menu

Histomorphology

☐ Morphologic Analysis (please include CBC with requisition)

Flow Cytometry

☐ Leukemia/Lymphoma Phenotyping (please include CBC with requisition)
☐ Platelet Antibodies (For Thrombocytopenia Profile, See Below)
☐ PNH
☐ Reticulated Platelet
☐ Stem Cell Enumeration
☐ Thrombocytopenia Profile (Platelet Antibody & Reticulated Platelet)

☐ **HOLD FOR FLOW CYTOMETRY**

Blood Disorders

☐ HgF ☐ Other: _____

Cytogenetics

☐ Oncology Chromosome Analysis
☐ Reflex to FISH if cytogenetics is normal (reflex FISH panel must be marked)
☐ Reflex to AML Prognostic Profile when cytogenetics is intermediate risk
☐ Other: _____

Specimen Hold Options: ☐ Culture and Hold

Myeloproliferative Neoplasm Panels

☐ Polycythemia Vera (PV) - JAK2 V617F, reflex to JAK2 Exons 12-14
☐ Essential Thrombocythemia (ET) - JAK2 V617F, reflex to CALR, reflex to MPL
☐ Primary Myelofibrosis (PMF) - JAK 2 V617F, reflex to CALR, reflex to MPL

FISH - Hematologic FISH Panels

☐ ALL Adult
☐ ALL Pediatric
☐ AML Extended
☐ AML Standard
☐ AML Favorable-Risk
☐ CLL
☐ Eosinophilia
☐ High-Grade/Large B-Cell Lymphoma
☐ MDS Extended
☐ MDS Standard
☐ MPN
☐ NHL
☐ XY

☐ High Risk MM - ☐ With Plasma Cell Enrichment
☐ MM IgH Complex - ☐ With Plasma Cell Enrichment
☐ MM/MGUS - ☐ Reflex to MM IgH Complex if IgH positive. (Only available with global panel. Tech-Only clients must use the test add-on process.)
☐ With Plasma Cell Enrichment
☐ Plasma Cell Myeloma Risk Stratification (IMWG) - ☐ With Plasma Cell Enrichment

Individual Probes

☐ ALK / Lymphoma (2p23)
☐ API2/MALT1 t(11;18)
☐ BCR/ABL1/ASS1 t(9;22)
☐ IgH/MAFB t(14;20)
☐ MYC/IgH/CEN8 t(8;14)
☐ PML / RARA t(15;17)
☐ Other: _____
☐ Other: _____
☐ Other: _____

Molecular Genetics

☐ Prothrombin G20210A
☐ Factor V Leiden R506Q
☐ ABL1 (Gleevec® resistance)
☐ B-Cell
☐ B-Cell & T-Cell
☐ BCL1, t(11;14)
☐ BCL2, t(14;18)
☐ BCR-ABL1, t(9;22) ☐ Reflex to ABL1
☐ BRAF
☐ CEBPA
☐ Chimerism/DNA Fingerprinting
☐ ETV6-RUNX1 (TEL-AML1) t(12;21)
☐ FLT3
☐ IgVH Mutation
☐ inv(16) CBFB-MYH11
☐ JAK2 Exon 12-14
☐ JAK2 V617F ☐ Reflex to JAK2 Exon 12-14
☐ MPL
☐ MPN Standard Reflex Panel
☐ NPM1
☐ PML-RARA, t(15;17)
☐ RUNX1-RUNX1T1 (AML1-ETO) , t(8;21)
☐ T-Cell
☐ Other _____

Solid Tumor Test Menu

Breast Carcinoma

☐ Basic Breast Panel (ER, PR, HER2 ISH)
☐ Extended Breast Panel (ER, PR, HER2 ISH, p53, Ki-67)
☐ HER2 (ISH)
☐ Reflex to HER2 (IHC) if results is ☐ Non-Amplified ☐ Equivocal.
☐ ER/PR
☐ Breast Tumor Profile (BRAF, c-KIT, EGFR, PIK3CA, TP53, HER2 ISH)

Colorectal Carcinoma

☐ MSI Evaluation (Comprehensive Guideline Based Algorithm)
☐ KRAS Mutation Analysis
☐ Reflex to BRAF if KRAS is negative
☐ BRAF Mutation Analysis
☐ Mismatch Repair/MMR (IHC)
☐ Reflex to MSI (PCR) if any marker in panel is not expressed
☐ Reflex to BRAF if MLH-1 is not expressed
☐ Reflex to MLH-1 methylation (PCR) if MLH-1 is not expressed
☐ MSI (PCR)
☐ MLH1-Methylation (PCR)
☐ Colorectal Tumor Profile (BRAF, c-KIT, DNMT3A, EGFR, IDH1, IDH2, KRAS, NRAS, PIK3CA, TP53, MSI)

Gastric Carcinoma

☐ HER2 (ISH)
☐ Reflex to HER2 (IHC) if results is ☐ Non-Amplified ☐ Equivocal.
☐ Gastric Tumor Profile (BRAF, c-KIT, DNMT3A, EGFR, IDH1, IDH2, KRAS, NRAS, PIK3CA, TP53, HER2 ISH)

Melanoma And Thyroid

☐ BRAF Mutation V600E for Melanoma
☐ Melanoma FISH Panel
☐ BRAF Mutation V617F for Thyroid Carcinoma

Ewing's Sarcoma

☐ t(11;22)
☐ t(21;22)

Lung Cancer

☐ Lung Tumor Reflex Profile (KRAS with reflex to EGFR and ALK, if indicated)
☐ EGFR Mutation (PCR)
☐ Reflex to ALK (FISH) if KRAS is negative
☐ ALK (FISH)
☐ Reflex to ROS1 (FISH) if ALK is negative
☐ ROS1 (FISH)
☐ Extended Lung Tumor Profile (BRAF, c-KIT, DNMT3A, EGFR, IDH1, IDH2, KRAS, NRAS, PIK3CA, TP53, ALK ISH)

All Cancer Types:

☐ NeoARRAY™ SNP/Cytogenetic Profile
☐ NeoTYPE™ Solid Tumor (Other) Profile
☐ BRAF ☐ c-KIT ☐ EGFR ☐ KRAS ☐ NRAS ☐ PIK3CA ☐ TP53 ☐ Other Tests (please specify) _____

YPI Accssion Number

Global testing will be performed unless otherwise noted

Specimen Requirements

Keep specimen at ambient temperature and ship with cool pack. Please call Yellowstone Pathology Institute with any questions regarding specimen requirements or shipping instructions. 888-400-6640.

Histomorphology

- Bone Marrow Core / 1-2 cm Minimum core length in 10% Neutral Buffered Formalin or FFPE Block Cassette.
- Bone Marrow Aspirate Clot / place in 10% Neutral Buffered Formalin or FFPE Block Cassette.

Flow Cytometry (Please provide recent CBC)

- Bone Marrow Aspirate / 1-2 mL minimum in EDTA (purple top) tube preferred. 1-2mL minimum in Sodium Heparin tube (green top) or ACDA (pale yellow / no gel separator) is acceptable. Please provide recent CBC report.
- Peripheral Blood / 1-2 mL minimum in EDTA tube (purple top) preferred. 1-2 mL minimum in Sodium Heparin tube (green top) or ACDA (pale yellow / no gel separator) is acceptable. Please provide recent CBC report.
- Bone Marrow Core / 1-2 cm minimum core length in RPMI.
- Fresh Tissue / Two pieces tissue 0.2 cm3 minimum in RPMI.
- Fluids & FNAs / Equal parts RPMI and specimen volume.

Cytogenetics

- Bone Marrow Aspirate / 1-2 mL Minimum in Sodium Heparin tube (green top).
  Must provide EDTA tube (purple top) in addition to Sodium Heparin tube (green top) when ordering AML Reflex.*
- Peripheral Blood / 2-5 mL Minimum in Sodium Heparin tube (green top).
- Bone Marrow Core / 1-2 cm Minimum core length in RPMI.
- Fresh Tissue / Two pieces tissue 0.2 cm^3 Minimum in RPMI.
- Fluids / Equal parts of RPMI and specimen volume; FNAs / Minimum 5 mL RPMI with specimen.

FISH

- Bone Marrow Aspirate / 1-2 mL minimum in Sodium Heparin (green top) tube preferred. 1-2mL minimum in EDTA tube (purple top) is acceptable.
- Peripheral Blood / 2-5 mL minimum in Sodium Heparin (green top) tube preferred. 2-5 mL minimum in EDTA tube (purple top) is acceptable.
- Bone Marrow Core / 1-2 cm minimum core length in RPMI.
- Fresh Tissue / Two pieces tissue 0.2 cm3 minimum in RPMI.
- Fluids & FNAs / Equal parts RPMI and specimen volume.
- FFPE lymph node in block: Please provide block cassette plus 1 H&E cut at 4-5 microns. Area of interest must be circled on H&E when ordering tech-only FISH
- FFPE lymph node cut slides: 12 positively charged unstained slides plus 1 H&E cut at 4-5 microns. Area of interest must be circled on H&E when ordering tech-only FISH.

Molecular

- Bone Marrow Aspirate / 2mL in EDTA (purple top) tube.
- Peripheral Blood / 5mL in EDTA (purple top) tube.
- Fresh Tissue / Two pieces tissue 0.2cm^3 minimum in RPMI. Frozen tissue acceptable.
- FFPE lymph node in block: 1 H&E slide (required) plus block.
- FFPE lymph node cut slides: 1 H&E slide (required) plus 5-10 positively-charged unstained slides cut at 5 or more microns. Do not use zinc fixatives.

Test Descriptions and Notations

Flow Cytometry

- YPI offers an adaptive and inclusive menu of markers which are selected for use depending on the sample type, sample volume, and clinical information provided.
- Our list includes but is not limited to: CD2, CD3, CD4, CD5, CD7, CD8, CD10, CD11b, CD11c, CD13, CD14, CD15, CD16, CD19, CD20, CD23, CD25, CD33, CD34, CD38, CD41, CD45, CD52, CD56, CD64, CD71, CD79a, CD79b, CD103, CD117, CD138, FMC-7, Glycophorin A, HLA-DR, Kappa, Lambda, TdT, MPO, alpha-beta, gamma-delta, lysozyme, and cytokeratin.
- ZAP-70 performed by IHC (soon to be performed by flow cytometry)

Cytogenetics

- Reflex to NeoTYPE Concise AML Prognostic Profile: Intermediate risk cytogenetics in AML, defined by SWOG/ECOG criteria as normal cytogenetics, +6, +8, -Y, or del(12p), will automatically reflex to molecular testing. Must provide EDTA tube (purple top) in addition to Sodium Heparin tube (green top) when ordering AML Reflex.
- **NeoTYPE AML Prognostic:** Concise Profile includes: CEBPA, DNMT3A, FLT3, IDH1, IDH2, NPM1, NRAS, interpretation. .

FISH

- MM/MGUS & High Risk MM Panels: May include plasma cell enrichment on specimens of sufficient cellularity. Sample should be received at NeoGenomics Laboratories within 48 hours of collection.

Disease State/Panel	FISH Probe(s)
ALL	BCR/ABL1/ASS1 t(9;22), MLL (11q23)
AML Extended	5q-/-5/+5, 7q-/-7, +8, MLL (11q23), RPN1/MECOM (3q), DEK/CAN t(6;9), ETV6 (12p13), 17p-
AML Favorable Risk	CBFB (16q22), RUNX1/RUX1T1 (ETO/AML1) t(8;21), PML/RARA t(15;17)
AML M2	RUNX1/RUX1T1 (ETO/AML1) t(8;21)
AML M3 (APL)	PML/RARA t(15;17)
AML M4	CBFB (16q22), MLL (11q23)
AML Standard	5q-/-5/+5, 7q-/-7, +8/20q-/-20, MLL (11q23), RUNX1/RUX1T1 (ETO/AML1) t(8;21), PML/RARA t(15;17), CBFB (16q22)
Anaplastic Large Cell Lymphoma	ALK for Lymphoma (2p23)
Burkitt Lymphoma	MYC/IgH/Cen 8 t(8;14), MYC (8q24)
CLL	6q- [SEC63 (6q21), MYB (6q23)], ATM (11q-); Trisomy 12 (Cen 12); 13q- (13q14, 13q34); CCND1/IgH t(11;14); p53 (17p-)
CML	BCR/ABL1/ASS1 t(9;22)
Eosinophilia	PDGFRa (4q12), PDGFRb (5q33), FGFR1 (8p12), CBFB (16q22)
Follicular Lymphoma	IgH/BCL2 t(14;18)
High-Grade/Large B-Cell Lymphoma	BCL6 (3q27), MYC (8q24), IgH/BCL2 t(14;18)
High Risk MM	FGFR3/IgH t (4;14), IgH/MAF t(14;16), 13q-/-13, p53 (17p13.1)
Mantle Cell Lymphoma	CCND1/IgH t(11;14)
Marginal Zone B-Cell Lymphoma/ MALT Lymphoma	MALT1 (18q21), API2/MALT1 t(11;18)
MDS Extended	5q-/-5/+5, 7q-/-7, +8/20q-/-20, MLL (11q23), RPN1/MECOM (3q), ETV6 (12p13), 17p-, +19
MDS Standard	5q-/-5/+5, 7q-/-7, +8/20q-/-20, MLL (11q23)
MM IgH Complex	CCND1/IgH t(11;14), FGFR3/IgH t(4;14), IgH/MAF t(14;16). Available separately: IgH/MAFB t(14/20).
MM-MGUS	1q+, +3, +9, +5, 13q-/-13, IgH (14q32), p53 (17p13.1)
NHL	ALK for Lymphoma (2p23), BCL6 (3q27), MYC (8q24), CCND1/IgH t(11;14), IgH (14q32), IgH/BCL2 t(14;18), MALT1 (18q21)
Plasma Cell Myeloma Risk Stratification (IMWG)	FGFR3/IgH t(4;14), IgH/MAF t(14;16), IgH/MAFB t(14;20), 17p- (TP53, CEN 17), Chromosome 1
XY	Cen X, DYZ1

Panel configurations are updated periodically. Please check the NeoGenomics website for the most up-to-date information

Molecular Genetics

- BCR-ABL1 Reflex to ABL1: ABL1 Kinase Domain Mutation will be run when BCR-ABL1 is positive.
- JAK2 V617 Reflex to JAK2 Exon 12-14: Exon 12-14 will be run when V617F result is negative.
- MPN Standard Reflex Panel: JAK2 V617F is run first. JAK2 Exon 12-14 will be run when V617F is negative. MPL will be run when JAK2 Exon 12-14 is negative.

NeoTYPE™ Profiles

- NeoTYPE™ AML Prognostic Profile: CEBPA, DNMT3A, FLT3, IDH1 & IDH2, NPM1, RUNX1, WT1
- NeoTYPE™ Breast Tumor Profile: BRAF, c-KIT, EGFR, PIK3CA, PTEN FISH, PTEN Molecular, TP53, HER2 FISH)
- NeoTYPE™ CLL Prognostic Profile: CLL FISH Panel, IgVH, NOTCH1, SF3B1, ZAP-70 (FLOW)
- NeoTYPE™ Colorectal Tumor Profile: BRAF, c-KIT, DNMT3A, EGFR, IDH1, IDH2, KRAS, NRAS, PIK3CA, PTEN FISH, PTEN Molecular, TP53, MSI
- NeoTYPE™ Gastric Tumor Profile: BRAF, c-KIT, DNMT3A, EGFR, IDH1,IDH2, KRAS, NRAS, PIK3CA, PTEN FISH, PTEN Molecular, TP53, HER2 FISH
- NeoTYPE™ Lung Tumor Profile: BRAF, c-KIT, DNMT3A, EGFR, IDH1, IDH2, KRAS, NRAS, PIK3CA, PTEN FISH, PTEN Molecular, TP53, ALK FISH
- NeoTYPE™ Lymphoma Profile: BCL1, BCL2, CARD11, CD79B, MYD88, TP53
- NeoTYPE™ MDS/CMML Profile: ASXL1, CBL, EZH2, IDH1, IDH2, NRAS, PTPN11, RUNX1, SF3B1, SRSF2, TET2, TP53, U2AF1, ZRSR2
- NeoTYPE™ Spliceosome Mutation Profile: SF3B1, SRSF2, U2AF1, ZRSR2
- NeoTYPE™ Solid Tumor (Other) Profile: BRAF, DNMT3A, EGFR, IDH1, IDH2, KIT, KRAS, NRAS, PIK3CA, PTEN FISH, PTEN Mutation, TP53

* All tests may be ordered separately

- NeoARRAY™ SNP/Cytogenetic Profile - For detection of copy number variants and loss of heterozygosity or uniparental disomy

Additional Billing Information

Any organization referring specimens for testing services pursuant to this Requisition form ("Client") expressly agrees to the following terms and conditions.

- Third Party Billing by NeoGenomics and Yellowstone Pathology Institute, Inc. for Tests. NeoGenomics and Yellowstone Pathology Institute, Inc. shall, whenever possible and permitted by law, directly bill and collect from all insurers, health care service plans (e.g., health maintenance organizations), federal or state health care payment programs (including Medicare and Medicaid), and other third party payers (collectively, the "Third Party Payers"), for all testing services ordered from NeoGenomics and Yellowstone Pathology Institute, Inc pursuant to this Requisition Form ("Services"). Client agrees that NeoGenomics and Yellowstone Pathology Institute, Inc shall be responsible for billing (i) the professional component of all Services to Medicare, and (ii) global Services to any and all commercial insurance payers unless NeoGenomics and Yellowstone Pathology Institute, Inc and Client agree otherwise for certain insurance payers due to contractual limitations or in other mutually agreed upon special situations. Client further agrees that, except for those tests or portions of tests which should be billed back to Client as described below (Client Billing for Certain Tests), Client will indicate on the Requisition Form that NeoGenomics and Yellowstone Pathology Institute, Inc should bill the appropriate Third Party Payer directly for any such tests or portions of tests, and will provide NeoGenomics and Yellowstone Pathology Institute, Inc all Billing Information necessary to bill Third Party Payers for the professional component Services ordered even if the technical component Services are to be billed back to the Client.

- Right to Bill Client in the Event that Billing Information is Not Provided or in the Case of Uninsured Patients. In the event NeoGenomics does not receive the Billing Information required for it to bill any Third Party-Billed Tests within ten (10) days of the date that any such test is reported by NeoGenomics or the tests were performed for patients that have no Third Party Payer coverage arrangements, NeoGenomics shall have the right to bill such tests to Client. In the event that Client subsequently provides NeoGenomics with Billing Information for such tests before paying the related invoice, then Client may pay the invoiced amount less any amounts for tests in which Billing Information was subsequently provided.

Common ICD-9 Codes

201.90	Hodgkin's Disease, Unspecified
202.80	Non-Hodgkin's Lymphoma
203.00	Multiple Myeloma
203.10	Plasma Cell Leukemia
204.00	Acute Lymphoid Leukemia (ALL)
204.10	Chronic Lymphocytic Leukemia (CLL)
205.00	Acute Myeloid Leukemia (AML)
205.10	Chronic Myeloid Leukemia (CML)
205.80	Other Myeloid Leukemia
208.00	Leukemia, Acute NEC
208.10	Leukemia, Chronic NEC
238.71	Thrombocythemia
238.75	Myelodysplastic Syndrome, Unspecified
273.1	Monoclonal Gammopathy
284.1	Pancytopenia
285.9	Anemia
287.5	Thrombocytopenia
288.00	Neutropenia, Unspecified
288.50	Leukopenia
288.60	Leukocytosis
511.9	Pleural Effusion
784.2	Swelling of Mass in Head or Neck