

CLINICAL SPECIMEN INFORMATION

Hosp/Inst where specimen collected: _____
Collection Date _____ Collection Time _____
Specimen ID _____ Block # / Sublabel _____ Tissue Source(s) _____

- Paraffin blocks: Tissue block(s) _____ Cell block(s) _____
 Formalin Bouin's B5 Prefer Michel's (skin IF TM) Other
 Slides: Unstained _____ Stained _____
 Smears: Air-dried _____ Fixed _____ Stained _____

Multiple specimens submitted: Test all Select best block

CLINICAL HX / DX UNDER CONSIDERATION / REQUEST

- Perform & interpret tests determined medically necessary by PhenoPath MDs
 Perform & interpret only test(s) as requested

BREAST MARKER STUDIES

- ER/PR ER PR p53 MIB-1

HER2 TESTING (if equivocal by IHC or FISH, we reflex to other method)

- HER2 by IHC HER2 by FISH (FISH0001)
 Reflex to Topoisomerase II α (TOP2A/CEP17 FISH0017) if HER2 +
 Alternative chrom17 normalization probes for HER2 eval:
SMS/RARA (FISH0022); TP53/CEP17 (FISH0024)

- Myoepithelial markers to r/o invasive carcinoma
 If invasive CA, run the above selected markers
 E-cadherin to differentiate ductal from lobular CA
 R/O basal-like breast CA

BREAST MARKER STUDIES FIXATION (ASCO/CAP REQUIREMENT)

Fixative: Formalin Other _____

Fixation duration: > 6 & < 48 hours Yes No Unknown

IMMUNOHISTOCHEMISTRY PANELS

- Pituitary panel Other _____
 Amyloid analysis/typing _____
 Microsatellite instability (MMR) by IHC

FLUORESCENCE IN SITU HYBRIDIZATION (FISH) & CISH

- HER2/CEP17 (PathVysionTM) _____ # FISH0001
 TOP2A/CEP17 _____ # FISH0017
 TP53/CEP17 _____ # FISH0024
 SMS/RARA _____ # FISH0022
 EGFR/CEP7 _____ # FISH0016
 EWSR1 (22q12) translocations (breakapart) _____ # FISH0004
 SS18 (SYT) translocations (breakapart) _____ # FISH0006
 MDM-2/SE12 _____ # FISH0023
 1p36/19q13 - Oligodendroglioma panel _____ # FISH0013
 CEP-X/CEP-Y _____ # FISH0012
 Hydatid. Mole Panel (CEP-17 FISH + p57 IHC + MIB IHC) # PANL9105
 EBV (EBER1 mRNA BY ISH) _____ # CISH0001

PCR MUTATION ANALYSES

- KRAS & BRAF _____ # PANL9105 EGFR _____ # PCR0007
 BRAF _____ # PCR0004 JAK2 _____ # PCR0003
 KRAS _____ # PCR0005

PATHOLOGY REQUISITION FORM

THIS SECTION FOR PHENOPATH USE ONLY

PATH

REQUESTING INSTITUTION NAME & ADDRESS

Phone _____ FAX _____

Ordering Pathologist/Physician

Name _____ NPI # _____

PATIENT INFORMATION

Name (Last, First, MI) _____

SSN # _____ DOB _____ Male Female

- Inpatient Outpatient Non-Hospital Patient

Address _____

_____ Phone _____

Medical Record # _____ Pt # _____

TREATING PHYSICIAN

Name _____ NPI # _____

- Mail/Fax add'l copy of report to treating physician
Complete information REQUIRED BELOW

Phone _____ Fax _____

Institution _____

Address _____

City, State Zip _____

**BILLING INFO (Must be provided or Institution will be billed)
Please complete or attach copy of insurance card**

BILL: Ins Medicare Medicaid (WA DSHS only) Institution Pt

Referral/Authorization # _____ ICD-9 # _____

Medicare # _____

Advance Beneficiary Notice Yes (provide copy) No

Healthplan _____

Address _____

Policy/Cert # _____ Group/Plan # _____

Name of Insured _____ Relationship _____

Secondary Insurance Yes (Please attach separate sheet) No

REQUIRED

Person completing form _____

Date _____ Phone _____

Send: REQS: DERM HEME HEMEONC MOL PATH PhenoBoxes Flow Media (RPMI)

DO NOT ORDER TESTS ON THIS SIDE – ORDER TESTS ON FRONT SIDE

<p>Carcinoma bcl-10 CD10 (CALLA) CD30 (embryonal) CDX-2 CEA (CD66E) CEA family (CD66) Chorionic gonadotropin Chromogranin A Cytokeratins 1/10 (34βB4) Cytokeratins 5/6 Cytokeratin 7 Cytokeratin 8 Cytokeratin 17 Cytokeratin 19 Cytokeratin 20 Cytokeratin, high MW (34βE12) Cytokeratins (pan) EMA * EpCAM Estrogen receptor (ER) Galectin-3 GCDFP-15 (Brst2) Glypican-3 (GPC3) HBME-1 HepPar1 Inhibin-alpha Mammaglobin p63 p504s (AMACR) PAX-2 PAX-8 Progesterone receptor (PR) Prostate specific antigen Prostatic acid phosphatase Smoothelin Surfactant ApoA1 Synaptophysin TFE3 Thyroglobulin TTF-1 Uroplakin Villin Vimentin WT-1</p> <p>Hormones ACTH Calcitonin FSH Gastrin Glucagon Growth hormone Insulin Leutinizing hormone Pancreatic polypeptide Parathormone (PTH) Prolactin Serotonin Somatostatin Thyroid stimulating hormone VIP</p> <p>Spindle cell & SBRCT lesions /Undifferentiated neoplasms Actin, muscle specific (HHF-35) Actin, smooth muscle alpha Beta-catenin Caldesmon c-kit (CD117) CD31 CD34 CD35 CD99 CD117 (c-kit) Collagen, type IV D2-40 (podoplanin)</p>	<p>Spindle cell & SBRCT lesions/Undifferentiated neoplasms (continued) Desmin DOG1 EMA FLI-1 gp100 (HMB-45) INI-1 Ki-67 antigen MyoD1 Myogenin Myoglobin NB84 antigen p75NTR Podoplanin (D2-40) S100 TFE3 TLE-1 WT-1</p> <p>Prognostic markers Androgen receptor Cyclo-oxygenase-2 (COX2) EGFR (31G7) by IHC EGFR by FISH Estrogen receptor (ER) HER2 by FISH HER2 by IHC HER2HercepTest™ by IHC Ki-67 antigen p53 Progesterone receptor (PR) Thymidylate synthase Topoisomerase II α by FISH Topoisomerase II α by IHC VEGF</p> <p>Hematolymphoid +ALK protein (p80) bcl-2 +bcl-6 +Bob-1 c-kit (CD117) CD1a CD2 CD3 CD4 CD5 CD7 CD8 * CD9 CD10 (CALLA) * CD11c * CD13 * CD14 CD15 * CD16 * CD19 CD20 +CD21 CD22 CD23 CD25 (IL-2 R β) CD30 (Ki-1 antigen) +CD31 * CD33 CD34 +CD35 * CD38 * CD41 +CD43 CD45 (LCA) CD52 (CAMPATH 1H) CD56 (NCAM) +CD57 * CD59</p>	<p>Hematolymphoid (continued) * CD61 * CD64 * CD66b +CD68 * CD71 CD79a * CD90 CD99 * CD103 CD117 CD123 * CD133 +CD138 * CD158a * CD158b * CD158e + CD163 + CXCL13 + Cyclin D1 +DBA.44 (Hairy Cell) +Fascin * FMC7 + FOXP1 + GCET +Glycophorin A +Hemoglobin A * HLA-DR +IgA +IgD +IgG +IgG4 +IgM Kappa light chains +Ki-67 antigen Lambda light chains +Lysozyme +MUM1 Myeloperoxidase +Oct-2 +Pan-TCR-β +PAX-5 * TCR-α/β * TCR-β isoforms (24 antibodies) * TCR-γ/δ TdT +TIA-1 +TRAcP +Tryptase +vWF ZAP-70</p> <p>Breast Androgen receptor Calponin E-cadherin Estrogen receptor (ER) HER2 by FISH HER2 by IHC HER2 HercepTest™ Ki-67 Maspin p63 Progesterone receptor (PR) SMMHC Topoisomerase II α by FISH Topoisomerase II α by IHC</p> <p>Germ Cell Markers AFP βHCG CD30 Cytokeratins (pan) Inhibin-alpha Oct-3/4</p>	<p>Germ Cell Markers (cont) Placental lactogen PLAP</p> <p>Organisms Adenovirus BK virus Chlamydia Cytomegalovirus EBV (EBER1 ISH) EBV-LMP1 Helicobacter pylori Hepatitis B core Ag Hepatitis B surface Ag Herpes virus HHV8 (human Herpes virus 8 - KSHV) JC virus Legionella p16 (surrogate marker for high-risk HPV) Parvovirus Pneumocystis Polyomavirus Respiratory syncytial virus SV-40 virus Toxoplasma Varicella zoster</p> <p>Microsatellite Instability MLH1 MSH2 MSH6 PMS2</p> <p>Melanoma gp100 (HMB-45) MART-1 antigen Microphthalmia transcription factor (MTF) S100 Tyrosinase</p> <p>Amyloid Subtyping @ Amyloid A (AA) @ Amyloid Beta @ Amyloid P (P component) @ Beta-2 microglobulin Congo Red (sp. stain) @ Kappa @ Lamda @ Transthyretin (prealbumin)</p> <p>Adenocarcinoma versus mesothelioma Ber-Ep4 Bg8 Calretinin Cytokeratins 5/6 D2-40 (podoplanin) HBME-1 Mesothelin MOC-31 Thrombomodulin WT-1</p> <p>Miscellaneous Alpha-1 antitrypsin Androgen receptor Caspase 3 fragment GFAP (glial fibrillary acidic protein) Mitochondria Neurofilaments p16 p21-WAF1 p53 p57 Vimentin</p>	<p>Floater/tissue Contaminant Blood group A Blood group B CEP-X/CEP-Y (FISH0012)</p> <p>Direct Immunofluorescence (DIF) (skin...) Complement (C3) IgA IgG IgM</p> <p>Indirect Immunofluorescence (IIF) (serum required)</p> <p>Salt-Split Skin Immunofluorescence from serum from skin/mucosa bx</p> <p>FISH Tests & Panels</p> <table border="0"> <tr><td>1p36/19q13-Oligodendroglioma</td><td>FISH0013</td></tr> <tr><td>EGFR/CEP7</td><td>FISH0016</td></tr> <tr><td>EWSR1 (22q12) trans (BAP)</td><td>FISH0004</td></tr> <tr><td>HER2/CEP17 (PathVysion™)</td><td>FISH0001</td></tr> <tr><td>MDM-2/SE12</td><td>FISH0023</td></tr> <tr><td>TP53/CEP17</td><td>FISH0024</td></tr> <tr><td>SMS/RARA</td><td>FISH0022</td></tr> <tr><td>SS18(SYT)-translocations (BAP)</td><td>FISH0006</td></tr> <tr><td>TOP2A/CEP17</td><td>FISH0017</td></tr> <tr><td>BCL6 translocations (BAP)</td><td>FISH0018</td></tr> <tr><td>§ IgH (14q32) translocations (BAP)</td><td>FISH0015</td></tr> <tr><td>MALT1(18q21)translocations (BAP)</td><td>FISH0007</td></tr> <tr><td>§ MYC (8q24) translocations (BAP)</td><td>FISH0009</td></tr> <tr><td>§ t(4;14) FGFR3/IGH</td><td>FISH0020</td></tr> <tr><td>§ t(11;14) CCND1/IGH</td><td>FISH0002</td></tr> <tr><td>t(14;18) IGH/MALT1</td><td>FISH0008</td></tr> <tr><td>t(14;16) IGH/MAF</td><td>FISH0027</td></tr> <tr><td>t(11;18) MALT1/API2</td><td>FISH0003</td></tr> <tr><td>§ t(14;18) IGH/BCL2</td><td>FISH0005</td></tr> <tr><td>§ t(9;22) BCR/ABL</td><td>FISH0010</td></tr> <tr><td>√ MLL (11q23) translocations (BAP)</td><td>FISH0014</td></tr> <tr><td>√ t(15;17) PML/RARA</td><td>FISH0011</td></tr> <tr><td>§ RARA(17q21) translocations (BAP)</td><td>FISH0019</td></tr> <tr><td>CEP-X / CEP-Y</td><td>FISH0012</td></tr> <tr><td><u>Hydatidiform Mole Panel</u></td><td><u>PANL9104</u></td></tr> <tr><td>(CEP17FISH, p57IHC, MIB1IHC)</td><td></td></tr> <tr><td>§ <u>MYC Panel (FISH0009, FISH0015)</u></td><td><u>PANL9101</u></td></tr> <tr><td>√ <u>CLL Panel</u></td><td><u>PANL9102</u></td></tr> <tr><td>√ <u>APL Panel (FISH0011, FISH0019)</u></td><td><u>PANL9103</u></td></tr> </table> <p>CISH Tests EBV (EBER1 mRNA) CISH0001</p> <p>PCR</p> <p>GENE REARRANGEMENT: B cell (IGH) PCR0001 T cell (TCR-γ) PCR0002</p> <p>MUTATIONAL ANALYSIS BRAF PCR0004 EGFR PCR0007 JAK2 PCR0003 KRAS PCR0005 KRAS/BRAF Panel PANL9105</p>	1p36/19q13-Oligodendroglioma	FISH0013	EGFR/CEP7	FISH0016	EWSR1 (22q12) trans (BAP)	FISH0004	HER2/CEP17 (PathVysion™)	FISH0001	MDM-2/SE12	FISH0023	TP53/CEP17	FISH0024	SMS/RARA	FISH0022	SS18(SYT)-translocations (BAP)	FISH0006	TOP2A/CEP17	FISH0017	BCL6 translocations (BAP)	FISH0018	§ IgH (14q32) translocations (BAP)	FISH0015	MALT1(18q21)translocations (BAP)	FISH0007	§ MYC (8q24) translocations (BAP)	FISH0009	§ t(4;14) FGFR3/IGH	FISH0020	§ t(11;14) CCND1/IGH	FISH0002	t(14;18) IGH/MALT1	FISH0008	t(14;16) IGH/MAF	FISH0027	t(11;18) MALT1/API2	FISH0003	§ t(14;18) IGH/BCL2	FISH0005	§ t(9;22) BCR/ABL	FISH0010	√ MLL (11q23) translocations (BAP)	FISH0014	√ t(15;17) PML/RARA	FISH0011	§ RARA(17q21) translocations (BAP)	FISH0019	CEP-X / CEP-Y	FISH0012	<u>Hydatidiform Mole Panel</u>	<u>PANL9104</u>	(CEP17FISH, p57IHC, MIB1IHC)		§ <u>MYC Panel (FISH0009, FISH0015)</u>	<u>PANL9101</u>	√ <u>CLL Panel</u>	<u>PANL9102</u>	√ <u>APL Panel (FISH0011, FISH0019)</u>	<u>PANL9103</u>
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For the most up-to-date listing of tests, see our website: www.phenopath.com

All of the above listed tests can be performed on paraffin-embedded tissue sections, with the following exceptions:

1. CD52 testing requires fresh tissue specimens.
2. Hematolymphoid tests – can be run by either IHC or flow, except as follows:
 * = Performed by flow cytometry only and requires fresh specimens
 + = Performed by IHC only and can be performed on paraffin-embedded tissue sections
 @ Please also submit 8 μm section for correlative Congo Red stain
3. DIF testing requires tissue in Michel's, and IIF testing requires serum.
4. FISH tests are run on formalin-fixed, paraffin-embedded sections, except as follows:
 √ = Requires fresh specimens
 § = Can be performed on either fresh or formalin-fixed, paraffin-embedded tissues
 BAP = breakapart probe