



One Source for Personalized, Strategic Testing

Saves Time and Money

To move clinicians easily through the testing process, Molecular Pathology Laboratory Network, Inc. (MPLN) offers StrataFLEX™, a strategic reflex testing strategy that provides patient specific testing options in a timely, cost-effective manner.

| Prognostic and Predictive Markers | | |
|--|-----|---|
| Testing Triage | Day | Services |
| Specimen receipt, verification | 1 | Consideration of orders for HOLD status prevents unnecessary costs |
| Perform initial evaluation of specimen(s). Pathology and/or flow cytometry | | Consult with clinician as requested, correlate flow cytometry. with initial pathology review |
| Release flow cytometry report | | Results called and consult with clinician |
| Review IHC markers & release morphology / pathology report | 2 | Pathologist correlates flow cytometry results to Initiate downstream, evidence-based testing |
| Release pathology report | | Consult with clinician and evaluate need for further specimen types |
| Route specimen to department & perform downstream testing | 3-4 | Evaluate historical results; consult internally for patient-centric decisions |
| Release FISH &/or Molecular Dx report | | Interact with clinician on diagnosis and treatment considerations. Determine follow up testing for companion drugs and/or minimal residual disease |
| Release Cytogenetics report | 5-7 | Review and correlation of all results into one summary report |
| Release StrataFLEX Synoptic report | | Review of multidisciplinary results and expand evidence based testing database |
| Perform post analytical concordance | | |

Provides Complete Diagnostic Picture

StrataFLEX™ is a step-by-step approach utilizing evidence based testing guidelines. Coordinating multidisciplinary testing and resulting within one facility ensures specimen integrity, maximizes information and minimizes patient cost.

| Advanced, Complementary Technologies |
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| Anatomic Pathology <ul style="list-style-type: none"> Expertise in hematopathology, breast and GI pathology Provides concise, synoptic report |
| Immunohistochemistry / Molecular Morphology <ul style="list-style-type: none"> Extensive menu with global or technical-only services Morphology supports prognosis considerations Assists with targeted therapy selection |
| Flow Cytometry / Cellular Analysis <ul style="list-style-type: none"> Characterizes cell lineage and maturation Determines treatment efficacy/monitors residual disease |
| Cytogenetics / Chromosomal Analysis <ul style="list-style-type: none"> Assists in a more accurate diagnosis Provides prognostic information |
| Fluorescence in situ Hybridization / Gene Analysis <ul style="list-style-type: none"> Detects disease specific abnormalities Determines diagnosis, prognosis and treatment selection |
| Quantitative Polymerase Chain Reaction (PCR) <ul style="list-style-type: none"> Monitor minimal residual disease (MRD) Assists with selecting targeted therapy |
| Gene Mutation Analysis <ul style="list-style-type: none"> Aids in the selection of appropriate treatment protocols Identifies drug resistance and/or toxicity |
| Gene Rearrangement Analysis <ul style="list-style-type: none"> Determines B-cell or T-cell clonality |
| Circulating Tumor Cell (CTC) Detection <ul style="list-style-type: none"> Counts CTCs in metastatic breast, colon and prostate cancer Monitors treatment efficacy |



ONE SOURCE FOR LABORATORY TESTING
Make the right move.

Contact one of our client service specialists at **800.932.2943**, and visit our website at **www.MPLNET.com**.



Hematopathology StrataFLEX Evaluation

| Investigation | Test |
|---|---|
| Preliminary evaluation to address diagnosis and guide downstream testing | Bone Marrow Morphology with Immunohistochemistry (IHC), Flow Cytometry and Cytogenetics as appropriate |
| Downstream Testing as Indicated by Preliminary Evaluation Bold is NCCN Guideline | |
| ALL diagnose, evaluate prognosis, establish baseline for MRD | FISH BCR/ABL FISH ALL profile Adult t(9;22), 11q23, t(12;21); Pediatric incl. +4, +10,+17 |
| AML de novo with negative cytogenetics risk status | AML mutation profile FLT3, NPM1 with reflex to CEBPA |
| Risk status | FISH AML1/ETO; CBFβ, EGR1; -7/7q31-; trisomy 8; MLL; BCR/ABL |
| risk stratification of AML with t(8;21), inv(16) or t(16;16) | c-kit mutation |
| APL confirm diagnosis for ATRA therapy | FISH PML/RARA |
| establish baseline, monitor MRD | PML/RARA short and long form quantitative PCR |
| CLL prognosis | FISH CLL Profile 13q14 deletion, +12, 11q22 deletion, p53, 6q23 deletion; Flow cytometry including Zap 70 |
| CML confirm diagnosis | FISH BCR/ABL |
| establish baseline, identify major or minor gene, monitor MRD | BCR/ABL quantitative PCR |
| identify tyrosine kinase inhibitor resistance | ABL gene mutation |
| Lymphoma classify | NHL: IGH; BCL2; BCL6; MYC; MALT1; BCL2 gene rearrangement ALCL: ALK 2p23; Mantle cell: BCL1; BCL2; CLL profile MALT lymphoma: BCL1; BCL6; MALT1 FCL: BCL2; BCL6; MYC . DLCL: BCL2; BCL6. BCL2 gene rearrangement. DLCL versus FCL: IGH/MALT1; BCL6 Burkitt's: MYC; BCL2; BCL6; gene rearrangement |
| confirm B-cell clonality | B-cell heavy chain Gene Rearrangement Reflex to B-cell Kappa Light chain if indicated |
| confirm T-cell clonality | T-cell gamma receptor Gene Rearrangement |
| monitor minimal residual disease | BCL2 gene rearrangement |
| MDS suspect myelodysplastic syndrome | FISH MDS profile 5 /5q deletion, -7/ 7q deletion, +8, 20q deletion FLOW PNH, JAK2 V617F mutation |
| MPD confirm diagnosis | FISH MPD profile t(9;22), +8, 13q14 deletion, 20q deletion |
| support diagnosis of PV, EV and PMF | JAK2 V617F mutation |
| clinical suspicion PV and negative JAK2 V617F | JAK2 exon 12 mutation |
| clinical suspicion EV and PMF and negative JAK2 V617F | MPL W515/S505N mutation |
| Myeloma Prognosis | FISH Multiple Myeloma Profile +5, +9, +15, 13q14 deletion, 14q32, P53 . When indicated: BCL1; IGH/FGFR3; IGH/MAF |

Solid Tumor StrataFLEX Evaluation

| Investigation | Test |
|--|--|
| Breast Cancer confirm diagnosis | Morphology |
| determine prognosis | Prognostic profile: ER/PR, HER2 IHC, Ki67, FISH HER2 |
| determine tumor invasiveness | Cytokeratin 5, 8/18, and p63 |
| monitor metastatic breast cancer | CellSearch CTC; Serum CEA, Ca 15-3 |
| Colorectal Cancer (CRC) confirm diagnosis | Morphology |
| suspect/differentiate HNPCC/Lynch syndrome | Microsatellite instability profile MLH1, MSH2, MSH6, PMS2 |
| identify risk for Irinotecan toxicity | UGT1A1 mutation |
| qualify for anti-EGFR monoclonal antibody treatment | KRAS mutation, reflex to BRAF mutation |
| monitor metastatic CRC | CellSearch circulating tumor cells (CTC); Serum CEA |
| NSCL Cancer confirm diagnosis and differentiate | Morphology and IHC: TTF-1, CK-7, CK-20, CK5/6, calretinin, TAG 72; HMW, MOC-31, BER-EP4, WT1, CEA |
| qualify for EGFR-TKI, or crizotinib or bevacizumab | EGFR (exon 18-21) mutation; reflex to EML4-ALK mutation |
| identify resistance to cisplatin | ERCC1 IHC |