

Diagnostic Services Manual



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SPECIMEN HANDLING AND TRANSPORT

Quality laboratory results begin with proper collection, handling and shipping of samples submitted for analysis.

Specimen Labeling Policy

One of the most important details of specimen collection and submission is specimen labeling.

All specimens submitted MUST be labeled with a patient's complete name or identifying number.

This information must match the information on the Test Requisition Form submitted with the specimen.

If the specimen is labeled, but the accompanying Test Requisition Form cannot be matched to the specimen, either by omission or error, clients will be notified of the problem and will be allowed to submit corrected Test Requisition paperwork.

If a specimen is not fully labeled (a partial name, for example), clients will be notified and will be allowed to submit written clarification of the label if the partial label is legible.

The testing and reporting of an unlabeled specimen poses undue risk to the patient. Samples that arrive unlabeled will be returned to the client.

Submission Requirements

Complete the Test Requisition Form for each patient, either by filling out the PDF form in Acrobat, or using a black or blue ballpoint pen. Please print. Record all required patient information:

- Patient name, sex, birth date, social security number, specimen ID#, and medical record or lab reference number.
- Collection date and time.
- Type of specimen submitted.
- If a fixative other than 10% Neutral Buffered Formalin was used, please indicate.
- Biopsy site.
- Presumptive clinical diagnosis and any pertinent medical history.
- Complete billing information (patient address and all insurance information) if patient or insurance is to be billed.
- Copy of both sides of patient insurance card.
- Mark box(es) indicating the test(s) requested.
- Pathology report

Sign the Test Requisition Form and keep a copy for your records. Specimen label used (either name or number) must be noted on the Test Requisition Form for cross referencing the order to the specimen.

Packing and Pickup Procedures

- Place FFPE block or Leica membrane slides into the bioTheranostics Specimen Shipping Kit.
- Place the box into the provided FedEx shipping bag. Several samples can be placed into a single box if more than one patient sample is submitted for analysis.
- Affix the provided FedEx airbill or billable stamp to the appropriate area on the FedEx shipping bag.
- Retain the FedEx airbill copy or billable stamp receipt for your records. The airbill number may be used to track the package during shipping.
- Schedule a pickup online at www.fedex.com. Alternatively, call for pickup at 1-800-GOFEDEX (800-463-3339).

Formalin-fixed tissue does not contain pathogens, therefore this sample type is considered NOT REGULATED by DOT and IATA and does not require special packaging. The packaging provided by bioTheranostics is designed to prevent damage to the sample during transit to our laboratory.

Questions regarding appropriate storage, shipping, and handling conditions of specimens are welcome and may be directed to Client Services at (877) 886-6739.

SPECIMEN SUBMISSION POLICIES AND PROCEDURES

Rejection Criteria

Specimens will be evaluated and a call will be made to the client under the following conditions:

- Unlabeled or incompletely labeled specimens.
- Identifier on specimen does not match the identifier on the Test Requisition Form.
- Broken container or membrane slides.
- Melted paraffin on specimen slides.
- Incorrect specimen submitted for the test ordered.
- Insufficient amount of sample.
- Specimens received without a Test Requisition Form.

Specimen Forwarding Policy

bioTheranostics does not anticipate routinely receiving or accepting samples for tests not performed by the laboratory. If this type of specimen is received, a call will be made to the client to determine whether the client would prefer return of the specimen or forwarding of the specimen to another laboratory.

As a service to our clients, we will forward specimens for tests we do not perform to other laboratories. This is to be considered a handling courtesy only. bioTheranostics will not keep any records of the services performed by other laboratories and will not bill for the services performed by other laboratories.

Health and Safety Precautions

Formalin-fixed tissues are considered NOT to contain infectious agents and are therefore not biohazardous.

The packing and shipping materials provided by bioTheranostics are designed to prevent breakage under normal shipping conditions. If packaging is damaged, do not pack new samples in these boxes. Discard and call Client Services for replacement materials. Care should be taken when handling glass to avoid breaking and possible cuts or punctures.

bioTheranostics has safety policies that adhere to guidelines provided by all applicable regulatory agencies. Written exposure control plans and hazardous materials plans are in place.

Test Requisitions

Submit all laboratory test requests in writing. Verbal requests are not accepted. bioTheranostics provides preprinted, client specific Test Requisition Forms. See examples in Forms and Attachments, Section 6.

BIOETHERANOSTICS TESTING SERVICES**CancerTYPE ID®****Background**

Diagnostic dilemmas occur when the information obtained from biopsy specimens using standard histopathologic procedures is incomplete or equivocal. CancerTYPE ID provides molecular classification of cancers with indeterminate, uncertain, or differential diagnoses.

CancerTYPE ID is a standardized, objective molecular test based on the differential expression of 92 genes that classifies tumors by matching the gene expression pattern of a patient's tumor tissue to a database of known tumor types and histological subtypes.

CancerTYPE ID provides molecular data that a physician may use, in conjunction with other clinical and diagnostic procedures to help identify the site of origin and histological subtype of tumors. Knowledge of the primary tumor site is fundamental to guiding and optimizing treatment selection for patients.

This test may be useful:

1. When addressing a differential diagnosis with two or more choices, each with a different optimal treatment regimen
2. When IHC is equivocal, and standard clinical and diagnostic procedures are unable to conclusively identify a primary site of tumor origin
3. When the clinical presentation is atypical
4. When tumor is poorly differentiated
5. When determining whether a cancer is a distant metastasis from a current or previous cancer vs a new primary
6. When the biopsy tissue sample is limited

Assay Specifics

CancerTYPE ID is a standardized, objective real time RT-PCR test based on the differential expression of 92 genes (87 tumor-associated genes and 5 reference genes). Total RNA is isolated from tumor-enriched portions of formalin-fixed paraffin embedded tissue sections. First strand cDNA synthesis is primed using an oligo-dT primer containing the T7 promoter sequence. Subsequent priming with exogenous random primers yields double-stranded cDNAs that are purified and used as templates in an in-vitro transcription reaction to generate amplified antisense RNA (aRNA). The aRNA product from each sample is then reverse transcribed to generate cDNA for a 92-gene real time PCR.

Gene expression measurements of 87 genes are then normalized to five reference genes, and a sample's gene expression profile is compared to a previously built tumor gene expression data set encompassing 54 tumor types. Our proprietary algorithm generates a report indicating the most likely cancer type and histological subtype. Importantly, the algorithm also assigns a probability for each classification result, which is a measure of the confidence level for the result.

Specimen Makeup

Formalin-fixed, paraffin-embedded (FFPE) tumor tissue blocks are preferred. Using 10% Neutral Buffered Formalin is recommended. If a block is not available, 4 unstained Leica membrane slides 7-10 microns thick, plus one additional H&E stained slide may be submitted for testing. Please contact Client Services at (877) 886-6739 to obtain Leica membrane slides. Sections should be representative of the highest tumor load of the FFPE block. As few as 300 non-necrotic tumor cells are required for testing.

Shipping

Please ship specimens Priority Overnight via FedEx at ambient temperature. See Section 2 for submission requirements.

Turnaround Time

Results will typically be available within one week from specimen receipt.

BIOTHERANOSTICS TESTING SERVICES

Breast Cancer IndexSM**Background**

Accurate assessment of prognosis in patients with early stage breast cancer is essential to guiding adjuvant treatment decisions. Traditionally, evaluation of prognosis and risk of recurrence has been based on clinicopathologic features, such as age, tumor size, and grade which can be subjective. Treating patients identified with features of intermediate risk remain a clinical challenge.

The Breast Cancer Index (BCI) is a multi-gene RT-PCR based assay developed from the combination of two molecular indices, the HOXB13:IL17BR index and Molecular Grade Index (MGI), which independently evaluate the status of endocrine signaling and mitogenic pathways. BCI provides prognostic information regarding a patient's risk for distant metastasis. These two biomarkers, when combined, provide a more complete picture of recurrence risk.

BCI provides quantitative assessment of the likelihood of distant recurrence in patients diagnosed with estrogen receptor-positive, lymph node-negative breast cancer. As a continuous risk model, BCI includes individual and categorized risk (low, intermediate, or high) on each test report.

Assay Specifics

Relative gene expression for HOXB13 and IL17BR (H/I), Estrogen Receptor (ER) and Progesterone Receptor (PR) are evaluated in paraffin-embedded tissue sections of patient breast tumor, through extraction of RNA from the tissues, reverse transcription to cDNA and quantitative measurement of this product using real-time PCR. Four genes with stable and uniform expression in tissues are used as an internal standard against which the expression of the genes of interest is measured.

The molecular grade index (MGI) assay measures the relative expression levels of five cell cycle-regulated genes by real-time RT-PCR and combines these values into a single index. In addition, four genes (with stable and uniform expression within breast cancer tissues) are measured and used to normalize differences in sample input RNA. The test is performed by extracting RNA from formalin-fixed paraffin-embedded tissue sections containing breast cancer cells, reverse transcribing the RNA to cDNA and quantitative measurement of this product using real-time PCR.

Specimen Makeup

Formalin-fixed, paraffin-embedded (FFPE) tumor tissue blocks are preferred. If a block is not available, 3 unstained, 10 micron thick sections on glass slides may be submitted with one H&E stained slide. Sections should be representative of the highest tumor load of the FFPE block.

Shipping

Please ship specimens Priority Overnight via FedEx at ambient temperature. See Section 2 for submission requirements.

Turnaround Time

Results will typically be available within one week from specimen receipt.

BIOTHERANOSTICS TESTING SERVICES

KRAS Gene Mutation Testing**Background**

KRAS mutations are detected in approximately 30-40% of all patients with colorectal cancer (CRC). The KRAS test is a highly sensitive and specific mutational analysis that guides oncologists as they seek to determine whether a patient will respond to drugs that target the Epidermal Growth Factor Receptor (EGFR). Clinical guidelines now recommend that all patients diagnosed with metastatic colorectal cancer have their tumor tested for KRAS before starting anti-EGFR therapy.

The American Society of Clinical Oncology (ASCO) and National Comprehensive Cancer Network (NCCN) Guidelines recommend that a determination of the KRAS gene status of either the primary tumor or site of a metastasis should be part of the pre-treatment work-up for all patients diagnosed with metastatic CRC in which anti-EGFR therapies are being considered.

Assay Specifics

As a quantitative real-time polymerase chain reaction (qPCR) assay combining Scorpions® and ARMS® (allele specific PCR) technologies, the bioTheranostics KRAS test identifies 7 mutations in codons 12 and 13, and detects >95% of all known and clinically relevant mutations. This test technology has been validated in targeted populations to investigate the safety and efficacy of cetuximab (Erbix®) and panitumumab (Vectibix®).

- Specifically detects those mutations in codons 12 and 13 that have been clinically shown to predict a lack of responsiveness to anti-EGFR therapy. Detects these mutations:

Gly12Asp (GGT>GAT)
 Gly12Ala (GGT>GCT)
 Gly12Val (GGT>GTT)
 Gly12Ser (GGT>AGT)
 Gly12Arg (GGT>CGT)
 Gly12Cys (GGT>TGT)
 Gly13Asp (GGC>GAC)

- Provides superior sensitivity, detecting very low levels of mutant in a background of wild-type genomic DNA

Specimen Makeup

- Formalin-fixed, paraffin-embedded (FFPE) tumor tissue block
- Testing can be performed on primary tumor or a site of metastasis

Options

1) FFPE tissue block containing 40-50% tumor (preferred)

OR

2) Four precut unstained slides from paraffin block in 10 micron sections and one H&E reference slide

Shipping

Please ship specimens Priority Overnight via FedEx at ambient temperature. See Section 2 for submission requirements.

Turnaround Time

Results will typically be available within one week from specimen receipt.

BIOETHERANOSTICS TESTING SERVICES

BRAF Gene Mutation Testing

Background

Mutations in the BRAF oncogene are common in a variety of cancers. BRAF mutations are found in 25-80% of melanomas, 30-80% of papillary thyroid cancers, 12-18% of colorectal cancers, and 8% of solid tumors overall. The BRAF test offers critical information that guides oncologists in decisions regarding specific therapeutic options for patients.

The BRAF test is a highly sensitive and specific mutation analysis that guides oncologists as they seek to determine whether a patient will respond to drugs that target the Epidermal Growth Factor Receptor (EGFR). Recent studies suggest that patients who have BRAF mutations do not benefit from anti-EGFR monoclonal antibody therapy.

BRAF mutations are commonly detected in melanoma and papillary thyroid cancers. BRAF mutational analysis may become increasingly important as studies discover links between therapeutic response and BRAF status.

- **Colorectal carcinoma** – Associated with DNA mismatch repair deficiency (MMR)
- **Melanoma** – Selective BRAF inhibitors are in development for the treatment of melanoma in patients with the BRAF V600E mutation

Assay Specifics

bioTheranostics allele specific qPCR assay:

- Identifies the V600E (1799T>A) mutation
- Accounts for more than 90% of all known and clinically relevant mutations
- In combination with KRAS mutation testing, can detect up to 50% of patients who will be non-responsive to the anti-EGFR therapies, cetuximab and panitumumab
- Specifically detects the mutation, V600E, which several studies have shown to predict a lack of responsiveness to anti-EGFR therapy
- Detection level as low as 3% mutant BRAF

Specimen Makeup

- Formalin-fixed, paraffin-embedded (FFPE) tumor tissue block
- Testing can be performed on primary tumor or a site of metastasis

Options

1) FFPE tissue block containing 40-50% tumor (preferred)

OR

2) Four precut unstained slides from paraffin block in 10 micron sections and one H&E reference slide

Shipping

Please ship specimens Priority Overnight via FedEx at ambient temperature. See Section 2 for submission requirements.

Turnaround Time

Results will typically be available within one week from specimen receipt.

BIOETHERANOSTICS TESTING SERVICES

EGFR Gene Mutation Testing

Background

Epidermal growth factor receptor gene (EGFR) mutations are detected in approximately 10% to 20% of non-small cell lung cancer (NSCLC) tumors. EGFR mutations also are found in glioblastoma, breast, colorectal and pancreatic cancers as well as carcinoma of the head and neck. EGFR mutations have been correlated with response to EGFR tyrosine kinase inhibitors (TKIs) erlotinib or gefitinib. National Comprehensive Cancer Network (NCCN) and American Society of Clinical Oncology (ASCO) guidelines recommend erlotinib and gefitinib only in patients with known EGFR mutations.

Assay Specifics

bioTheranostics EGFR Gene Mutation Testing detects 28 mutations found in the tyrosine kinase domain of the EGFR gene. Patients with these mutations are more likely to respond to EGFR TKIs. The testing detects the most commonly found EGFR mutations – deletions in exon 19 (E19del) and a point mutation in exon 21 that results in substitution at codon858 (L858R). These mutations account for ~90% of all EGFR mutations in NSCLC.

bioTheranostics EGFR Gene Mutation Testing:

- Is a real-time PCR assay based on Scorpions® and ARMS® (allele specific PCR) technology. The sensitivity of Scorpions ARMS for detection of EGFR mutations is superior to the sensitivity of direct sequencing when a mixture of wild-type and mutant DNA is used

- Detects 28 mutations in the tyrosine kinase domain of the EGFR gene, including:
 - L858R
 - L861Q
 - S768I
 - G719X
 - G719S (detects, does not distinguish)
 - G719A (detects, does not distinguish)
 - G719C (detects, does not distinguish)
 - 19 deletions of exon 19 (detects, does not distinguish)
 - 3 insertions in exon 20 (detects, does not distinguish)
- Can detect 3% of mutant in a background of wild type genomic DNA

Specimen Makeup

- Formalin-fixed, paraffin-embedded (FFPE) tissue block
- Testing can be performed on primary tumor or a site of metastasis

Options

1) FFPE tissue block containing 40% to 50% tumor (preferred)

OR

2) 3-4 precut unstained slides from paraffin block in 10 micron sections and one H&E reference slide

If there is sufficient residual tumor in an FFPE block submitted for CancerTYPE ID® molecular classification, EGFR Gene Mutation Testing may be performed without the need for additional specimen submission.

Shipping

Please ship specimens Priority Overnight via FedEx at ambient temperature. See Section 2 for submission requirements.

Turnaround Time

Results will typically be available within one week from specimen receipt.

BILLING INFORMATION

Questions regarding billing should be directed to 1 (888) 370-7661 between the hours of 8:30am and 5:00pm Pacific Time, Monday through Friday. bioTheranostics' Federal Tax ID number is 26-0691876.

bioTheranostics accepts formal assignment of benefits whenever possible and submits insurance claims on behalf of insured patients within the United States. We do not expect institutions or healthcare providers to order tests and then bill third-party payers on their own, except where required to comply with federal or state laws, billing regulations or pre-existing contractual arrangements.

Billing Options

Client Billing (hospitals, referring laboratories, group practices, physicians, industrial accounts, and other healthcare providers)

- Clients receive itemized invoices on a monthly basis. They are generated at the close of the first day of the month following the prior month of activity.
- Invoices indicate date of service provided by bioTheranostics, patient name, referring physician, test performed, CPT code(s), accession number, test code and the test price, including discounts that may apply.
- Invoices are considered to be correct unless bioTheranostics is notified of the invoice date of a discrepancy or disputed charges in writing within 30 days.
- Payment terms are net 30 days.
- All information must be provided as outlined on the Test Requisition Form. Missing, incorrect, or outdated information will delay the process.
- To ensure complete information transmission and timely billing, we recommend that a photocopy of the front and back of the patient's insurance card be attached to the Test Requisition Form when the specimen is submitted.

Medicare Billing

- bioTheranostics will bill Medicare for Medicare beneficiaries.

Patient Billing

- Patients will be billed if requested on the Test Requisition Form, or if no billing option is selected and insurance carrier information is not provided.
- Claims filed to the patient's third party carrier that go unpaid for 60 days will be billed back to the patient.
- Patients are responsible for any deductibles, co-payments, and any balance not covered by their insurance company.
- Our Patient Assistance Program is available for patients with special financial needs. Contact Client Services for more information.
- Acceptable forms of payment:
 - Check
 - Money Order
 - Credit Card (Visa, MasterCard, or American Express)

Benefits Investigation/Pre-certification

Upon request, bioTheranostics will conduct an investigation of benefits for testing services. Please indicate whether to proceed with testing prior to receiving investigation results.

(Note: delaying test services until the completion of pre-certification will delay test reporting)

CPT Coding

bioTheranostics will provide clients that are billed directly with the CPT codes that the company uses to bill Medicare and third party carriers for the services provided. It is the responsibility of each institution to review the codes provided and consult the CPT Coding Manual published by the American Medical Association to determine the appropriate use of CPT codes.

BILLING INFORMATION

Credit and Collection

- bioTheranostics reserves the right to review credit reports from reporting agencies prior to accepting a client billing arrangement, and periodically thereafter.
- All invoices are due in full upon receipt and must be paid in full within 30 days of the billing date.
- All claims, requests for adjustments, or notification of errors must be made in writing within 30 days of the invoice date.
- Charges unpaid after 90 days are subject to collection. The client will assume all collection expenses, attorney fees, and court costs.

CLIENT SERVICES OVERVIEW

Trained and qualified personnel staff the Client Services Department. Their primary concern is to respond to telephone inquiries and to contact customers to provide and obtain information. Client Service Representatives answer questions or concerns regarding all aspects of preparing and transporting specimens, testing, reporting, and laboratory service functions. This may include information on specimen requirements, turn around times, patient test results, test change requests, and requests for shipping materials.

Additionally, Client Service Representatives may also answer some technical and scientific questions concerning the services. If they are unable to answer technical questions, inquiries will be directed by the representative to the appropriate scientific or medical expert on staff at bioTheranostics.

Specimen Retrieval Program

bioTheranostics offers a Specimen Retrieval Program (SRP) to assist oncologists in locating and securing paraffin block tissue samples from hospitals and other laboratories.

To use this program, simply check the appropriate box on the top of the Test Requisition Form requesting this service, and fax the information along with a copy of the pathology report, to bioTheranostics Client Services at (858) 587-5874.

Client Services will then coordinate with the laboratory to retrieve and ship the specimen. These services may include:

1. Faxing a block request form along with the signed Test Requisition Form to the laboratory.
2. Coordinating for a patient material release form with the oncology office if laboratory protocol requires it.
3. Sending special membrane slides to the laboratory as required for laser microdissection (if laboratory requirements do not allow blocks to be sent outside of the facility).

Note that cutting these slides requires an RNase-free processing protocol, as well – this protocol is available from bioTheranostics.

4. Sending specimen shipping kits to the laboratory to facilitate shipment of specimen. Please note that these kits are available but are not required; other appropriate materials may be used to facilitate safe transport of the specimen.
5. Other logistical support as required or requested.

The purpose of this program is to facilitate the speedy acquisition and transport of patient material to bioTheranostics for requested testing.

Once testing is completed, remaining block will be shipped directly back to the originating laboratory.

Expedited return block shipping is available upon request should additional testing be required by the originating laboratory.

For questions about this program, please contact Client Services at (877) 886-6739.

Operational Hours

Client Service Representatives are available Monday through Friday from 7:00am to 5:00pm Pacific Time at (877) 886-6739 or via email at molecular@biotheranostics.com.

Supplies

- Specimen Shipping Kits
- Test requisitions
- FedEx airbills
- FedEx bags
- Coolie packs
- Leica membrane slides

FORMS AND ATTACHMENTS

Test Requisition Form

Click on the form or scroll down

Specimen Requirements and Handling Overview

Click on the form or scroll down

Copies of the above forms are included on the following pages. To download a PDF online go to: www.biotheranostics.com and click on **Ordering a Test**.

Test Requisition Form



Toll Free: (877) 886-6739 Fax: (858) 587-5874
www.biotheranostics.com

PATHOLOGY: TIME SENSITIVE - URGENT RESPONSE REQUESTED.

SPECIMEN RETRIEVAL OPTION

I want bioTheragnostics to request the specimen from Pathology (please complete and fax this form to (858) 587-5874)

I will arrange to have the specimen sent (fax this form to Pathology)

1. ONCOLOGIST INFORMATION

Name		NPI
Email		
Practice Name		
Address		
City	State	Zip
Phone (Physician Direct)	Fax	

Entering fax # certifies fax equipment is located in a secure area.

2. PATIENT INFORMATION

Name		
Social Security Number		
DOB	Sex <input type="checkbox"/> M <input type="checkbox"/> F	Medical Record Number
Address		
City	State	Zip
Phone	Alternate Phone	

3. PATHOLOGIST INFORMATION

Name		NPI
Email		
Laboratory Name		
Sending Hospital/Facility		
Address		
City	State	Zip
Phone	Fax	

Entering fax # certifies fax equipment is located in a secure area.

4. SPECIMEN INFORMATION

Block ID Number	Biopsy Site
Date Collected	Date of Discharge (or Outpatient Encounter)
Fixative Type	

6. TESTS REQUESTED

- CancerTYPE ID[®] Test for cancer classification
 Breast Cancer IndexSM Test for risk of distant recurrence
 KRAS BRAF EGFR KRAS and BRAF EGFR and KRAS

5. BILLING INFORMATION

ICD-9 Codes (Required) - List all codes that may apply.

Clinical Diagnosis:

Bill to: Insurance Medicare HMO Other
 Patient Laboratory Account Medicaid

Fill-in Medicare Information below Prior authorization may be required

MEDICARE INFORMATION - Please check box for patient's hospital status when sample was sent.		
<input type="checkbox"/> Hospital Inpatient	<input type="checkbox"/> Hospital Outpatient	<input type="checkbox"/> Non-Hospital Patient
Medicare Number	Date of Discharge	Date of Specimen Collection

PRIMARY INSURANCE INFORMATION - Please attach a copy (front and back) of patient insurance card(s).
Insurance Carrier Name

Policy Number/Member ID	Policy Holder Name	
Group Name	Group Number	
Address		
City	State	Zip
Phone	Fax	
Policy Holder DOB	Relation to Patient	
Policy Holder Phone	Alternate Phone	

SECONDARY INSURANCE: As a courtesy, secondary insurance information may be submitted. Please provide a copy (front and back) of the secondary insurance card in addition to the following information: secondary insurance carrier, policy number, group name and group number; billing address and phone number; policy holder name, ID#, date of birth, relation to patient and phone number.

Block Return Address Information (if different from Section 3)

Name	Phone	Fax	
Address	City	State	Zip

Entering fax # certifies fax equipment is located in a secure area.

7. PHYSICIAN / PRACTITIONER CERTIFICATION

I hereby request and authorize bioTheragnostics, Inc. to utilize the above information to process the tumor specimen for the indicated patient. I certify that the test is medically necessary and the results will be used in the management of the patient. I certify that I am authorized by law to request the test and I agree to provide the necessary information and records needed for billing.

Signature	Date
Print Name	

INCLUDE COMPLETED TEST REQUISITION FORM, PATIENT INSURANCE DOCUMENTS AND PATHOLOGY REPORT WITH SPECIMEN IN SHIPPING KIT. ALL BLOCKS SUBMITTED WILL BE RETURNED FOLLOWING TEST COMPLETION.

SEND SPECIMENS FEDEX "PRIORITY OVERNIGHT" TO:

**BIOOTHERANOSTICS, INC.
9640 TOWNE CENTRE DRIVE, SUITE 200
SAN DIEGO, CA 92121
TOLL FREE (877) 886-6739**

Test Requisition Form

Check A Box Regarding Specimen Retrieval Program



Toll Free: (877) 886-6739 Fax: (858) 587-5874
www.biotheragnostics.com

PATHOLOGY: TIME SENSITIVE - URGENT RESPONSE REQUESTED.

SPECIMEN RETRIEVAL OPTION

I want bioTheragnostics to request the specimen from Pathology (please complete and fax this form to (858) 587-5874) I will arrange to have the specimen sent (fax this form to Pathology)

1. ONCOLOGIST INFORMATION

Name	Bob Smith	NPI	1234567890
Email	bob.smith@oncology.com		
Practice Name	Oncology Practice		
Address	123 Elm Street		
City	Any Town	State	CA Zip 12345
Phone (Physician Direct)	(555) 555-5555	Fax	(555) 555-5555

Entering fax # certifies fax equipment is located in a secure area.

2. PATIENT INFORMATION

Name	Jane Doe				
Social Security Number	987-65-4321				
DOB	1/11/1950	Sex	<input type="checkbox"/> M <input checked="" type="checkbox"/> F	Medical Record Number	123456
Address	456 Maple Avenue				
City	Any Town	State	CA	Zip	12345
Phone	(555) 666-7777	Alternate Phone			

3. PATHOLOGIST INFORMATION

Name	John Johnson	NPI	1234567899
Email	john.johnson@pathology.com		
Laboratory Name	Pathology Group, Inc.		
Sending Hospital/Facility	Hospital Medical Center		
Address	789 Main Drive		
City	Any Town	State	CA Zip 12345
Phone	(555) 222-1111	Fax	(555) 222-3333

Entering fax # certifies fax equipment is located in a secure area.

4. SPECIMEN INFORMATION

Block ID Number	510-1234	Biopsy Site	Liver
Date Collected	3/11/2010	Date of Discharge (or Outpatient Encounter)	
Fixative Type	10% Neutral, Buffered Formalin		

6. TESTS REQUESTED

<input checked="" type="checkbox"/> CancerTYPE ID® Test for cancer classification	<input type="checkbox"/> Breast Cancer Index SM Test for risk of distant recurrence			
<input type="checkbox"/> KRAS	<input type="checkbox"/> BRAF	<input type="checkbox"/> EGFR	<input type="checkbox"/> KRAS and BRAF	<input type="checkbox"/> EGFR and KRAS

5. BILLING INFORMATION

ICD-9 Codes (Required) - List all codes that may apply.	199.1	155.0		
Clinical Diagnosis:				
Bill to:	<input checked="" type="checkbox"/> Insurance	<input type="checkbox"/> Medicare <small>Fill-in Medicare information below</small>	<input type="checkbox"/> HMO <small>Prior authorization may be required</small>	<input type="checkbox"/> Other
	<input type="checkbox"/> Patient	<input type="checkbox"/> Laboratory Account	<input type="checkbox"/> Medicaid	
MEDICARE INFORMATION - Please check box for patient's hospital status when sample was sent.				
<input type="checkbox"/> Hospital Inpatient	<input type="checkbox"/> Hospital Outpatient	<input type="checkbox"/> Non-Hospital Patient		
Medicare Number	Date of Discharge	Date of Specimen Collection		

PRIMARY INSURANCE INFORMATION - Please attach a copy (front and back) of patient insurance card(s).

Insurance Carrier Name	Blue Cross Blue Shield		
Policy Number/Member ID	ABC111222333444	Policy Holder Name	Self
Group Name	PatientABC	Group Number	56789
Address	1000 Insurance Boulevard		
City	Big City	State	CA Zip 98765
Phone	(800) 800-8000	Fax	(800) 800-8888
Policy Holder DOB	1/11/1950	Relation to Patient	Self
Policy Holder Phone	(555) 666-7777	Alternate Phone	

SECONDARY INSURANCE: As a courtesy, secondary insurance information may be submitted. Please provide a copy (front and back) of the secondary insurance card in addition to the following information: secondary insurance carrier, policy number, group name and group number; billing address and phone number; policy holder name, ID#, date of birth, relation to patient and phone number.

Block Return Address Information (if different from Section 3)

Name	Phone	Fax
Address	City	State Zip

Entering fax # certifies fax equipment is located in a secure area.

7. PHYSICIAN / PRACTITIONER CERTIFICATION

I hereby request and authorize bioTheragnostics, Inc. to utilize the above information to process the tumor specimen for the indicated patient. I certify that the test is medically necessary and the results will be used in the management of the patient. I certify that I am authorized by law to request the test and I agree to provide the necessary information and records needed for billing.

Signature		Date	3/24/10
Print Name	Bob Smith		

INCLUDE COMPLETED TEST REQUISITION FORM, PATIENT INSURANCE DOCUMENTS AND PATHOLOGY REPORT WITH SPECIMEN IN SHIPPING KIT. ALL BLOCKS SUBMITTED WILL BE RETURNED FOLLOWING TEST COMPLETION.

SEND SPECIMENS FEDEX "PRIORITY OVERNIGHT" TO:

BIOThERANOSTICS, INC.
9640 TOWNE CENTRE DRIVE, SUITE 200
SAN DIEGO, CA 92121
TOLL FREE (877) 886-6739

Specimen Collection and Handling Procedures

Please Note: Laboratory test result quality is highly dependent upon proper specimen collection and handling procedures. The specimen requirements and handling procedures for tests processed in the bioTheranostics laboratory are listed below. All samples must be labeled with the patient name and date of collection. Unlabeled specimens will not be accepted for testing.

Fixation Method	Formalin-Fixed Paraffin-Embedded (FFPE) tissue. (Recommended fixative: 10% Neutral Buffered Formalin)
Sample Type	FFPE block or slides. (see below for further details)
CancerTYPE ID[®] Specimen Requirements	<p>Blocks (formalin-fixed, paraffin-embedded) are highly recommended for optimal testing. If there are multiple blocks available, please send the block that contains the highest tumor load.</p> <p>If sending a block is not possible, please send an H&E stained slide plus 3-4 unstained, 7 micron sections on Leica membrane slides (laser micro-dissection cannot be performed on regular glass slides). Leica membrane slides may be obtained by calling bioTheranostics Client Services.</p> <p>bioTheranostics accepts FFPE blocks from surgical resections, excisional or core needle biopsies (including bone*), fine needle aspirates (FNA) and biopsy, cell blocks (pleural effusions, ascites and FNAs) and bone marrow*. A minimum of 300-500 viable tumor cells are required for testing.</p> <p>*Recommended decalcifier for bone biopsies is Formic Acid</p>
Breast Cancer IndexSM Specimen Requirements	FFPE blocks are highly recommended for optimal testing. If sending a block is not possible, please send an H&E stained slide plus 3-4 unstained, 10 micron sections on glass slides. Fifty-percent tumor is required in submitted specimen.
KRAS, BRAF and EGFR Specimen Requirements	<ul style="list-style-type: none"> Formalin-fixed, paraffin-embedded (FFPE) tissue block Testing can be performed on primary tumor or a site of metastasis <p>Options</p> <ol style="list-style-type: none"> FFPE tissue block containing 40% to 50% tumor (preferred) <p style="text-align: center;">OR</p> <ol style="list-style-type: none"> 3-4 precut unstained slides from paraffin block in 10 micron sections and one H&E reference slide
Storage Conditions	Room temperature (15 - 30° C).
Stability of Specimen	Recommend shipping within 1 week of preparation. Do not freeze slides.
Transportation Requirements	Ambient kit.
Questions about Specimens	Medical and scientific staff are available to answer questions about specimen and sample viability prior to sending blocks or slides for testing – call Toll Free (877) 886-6739 between 7am and 5pm Pacific Time.
Additional Information	Please enclose a copy of the pathology report with the specimen.

Please label sample blocks or slides with identifiers that are also written on or affixed to the Test Requisition form, such as patient name, case number, and/or sample number. We regret that we cannot accept samples for testing if the identifiers used on the blocks or slides do not match those listed on the Test Requisition form submitted with the samples. We are also unable to accept sample blocks or slides that are not labeled. Blocks will be returned immediately following test completion.

Transportation: Place specimen blocks or slides in a plastic slide cassette. Place the cassette and the completed Test Requisition form in a FedEx envelope or bioTheranostics Specimen Shipping Kit. Send specimens via FedEx **"Priority Overnight"** service. A pickup may be scheduled online at www.fedex.com or by calling (800) 463-3339.

Note: Shipping kits and bioTheranostics' FedEx account information may be obtained from Client Services at Toll Free (877) 886-6739.

bioTheranostics, Inc.
 9640 Towne Centre Drive, Suite 200
 San Diego, CA 92121, USA
 Toll Free: (877) 886-6739
 Fax: (858) 587-5874
www.biotheranostics.com



9640 Towne Centre Drive, Suite 200
San Diego, CA 92121

Toll Free: (877) 886-6739

P: (858) 587-5870

F: (858) 587-5874

For a complete list of references, please contact bioTheragnostics Client Services at (877) 886-6739.

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