MIB Testing & Research Directory

FUNCTIONAL DRUG TESTING

STUDY	CONTACT	DESCRIPTION	Institution: Commercial	Institution: Research	Test Type: PDX Mouse Model	Test Type: Ex Vivo 3D Organoid	Test Type: Ex Vivo 2D	Eligibility: Open	Eligibility: Physician Order	Eligibility: Patient of Record*	Sample Required: Blood	Sample Required: Saliva	Sample Required: FFPE	Sample Required: Fresh Tissue	Sample Required: Frozen Tissue	Lead Time: ≤1 month	Lead Time: 2-4 months	Lead Time: 4-6 months	Cost: None	Cost: Patient Out of Pocket	Cost: Insurance Billed**
Altogen Labs 14 Weeks PDX and Chemotherapy Testing (Patient-Derived Xenograft Service)	512-433-6177 info@altogenlabs.com Austin, TX	A personalized oncology xenograft service tests chemotherapy effect outside of the patient. This is performed by xenotransplantation of patient's tumor piece (or biopsy) in an immunocompromised mouse, letting it grow, followed by testing chemotherapy effectiveness on inhibiting the tumor growth. Results from personalized xenograft testing can show which chemotherapies (or combination of chemotherapies) can fight best against patients specific cancer.	●		●			●						●				●		●		
AntiCancer Inc. PDOX	858-654-2555 all@anticancer.com San Diego, CA	In PDOX (patient derived orthotopic xenograft) models, the primary tumor develops in the organ corresponding to its origin and metastasizes to mimic the complexity of tumor behavior in patients. PDOX models are therefore clinically-relevant for drug discovery and evaluation. Expression of fluorescent proteins enables real-time in vivo visualization of tumor growth, metastasis, angiogenesis and gene expression. PDOX models are ideal for discovery and evaluation of antitumor and antimetastatic agents and precision individualized therapy.	●		●			●						●			●		●			
Certis Oncology Individualized Orthotopic PDX Pharmacology Testing (in vivo)	858-228-4110 info@certisoncology.com San Diego, CA	Certis offers an individualized approach to determining the best available treatment for each patient's unique form of cancer. We utilize custom-developed Orthotopic Patient Derived Xenograft (O-PDX) models. By surgically engrafting a small tissue specimen of your patient's tumor into the anatomically correct place in immunocompromised mice, we create mouse "avatars" of the patient's cancer. The resulting O-PDX models enable simultaneous, in vivo functional assays of multiple therapeutic options in the laboratory. A large and expanding body of scientific literature substantiates that tumors in orthotopic PDX models more closely replicate genetic and histological characteristics of their human counterparts, making them highly predictive tools for evaluating drug response. Because disease progression is accelerated in mice, O-PDX models are especially useful in predicting resistance and response to second-line therapy–before these events are observed in the patient.	●		●			●						●	●			●		●		
Champions Oncology Champions TumorGraft®	240-907-2630 clinops@championsoncology.com Hackensack, NJ	Champions TumorGraft® patient-derived xenograft (PDX) model grows your tumor tissue in mice, then treats them with drugs to try to predict which cancer treatment can effectively shrink your tumor. By growing your tumor in a mouse avatar model, your PDX can closely simulate your tumor's response to each of your cancer treatment options. They can predict the likely success of many therapies, including single-agent and combination chemotherapeutic agents and targeted agents.	●		●				●					●				●		●		
UCLA Soragni Lab Personalized PDO	310-267-5567 alices@mednet.ucla.edu Los Angeles, CA	Personalized PDOs (patient derived organoids) provide a high-volume, automated method to quickly study drug responses in tumor organoids grown from patient cells. By studying mini tumors grown on a plate with 96 tiny test tube--like wells, hundreds of compounds can be screened at once and identify promising candidates within a time frame that is therapeutically actionable — one to two weeks from surgery.		●		●				●				●		●			●			
SEngine Precision Medicine PARIS Test	833-736-4163 care@sengineMedicine.com Seattle, WA	The CLIA certified PARIS® Test is based on the capability to propagate patient-specific cancer tissue as organoids ex vivo and is applicable to all solid tumors including colon, breast, lung, ovarian and pancreatic cancer. Organoids are cancer-derived cells grown in 3D outside the body, which maintain the functionality of the original tumor as well as its genomic characteristics. For cancers where the path is not clear, such as many metastatic and recurrent cancers, the PARIS® Test provides crucial information to the treating physicians to match the right drug to the right patient.	●			●			●					●		●				●		
Nagourney Cancer Institute Functional Profiling-Ex-Vivo Analysis of Programmed Cell Death (EVA-PCD) assay	800-542-4357 clientservices@nagourneyci.com Long Beach, CA	Dr. Robert Nagourney the founder and medical director of Nagourney Cancer Institute has over 20 years experience in the study of human tumor cultures for the selection of chemotherapy, targeted agents, metabolic inhibitors and novel combinations. This CLIA licensed laboratory has conducted over 10,000 analyses in virtually all forms of cancer both adult and pediatric. Many treatments originally identified by Dr. Nagourney have become standards of care around the world including the Cisplatin plus Gemcitabine doublet in breast and ovary cancers. Over the past decade the laboratory has focused upon targeted agent combinations and drugs that inhibit cellular metabolism. The study of repurposed drugs has enabled Dr. Nagourney to identify unexpected degrees of activity and combinatorial benefit as reported in the literature. Results of our laboratory have been shown to correlate significantly with response, time to progression and overall survival. Reports are provided within 7-10 days and include recommendations and literature references. As a practicing oncologist, Dr. Nagourney brings a uniquely clinical perspective to the application of the laboratory result.	●			●		●						●		●				●	●	
University of Miami Drug Sensitivity Screening	734-545-9652 ix1180@med.miami.edu Miami, FL	The screen uses small pieces of fresh or viably frozen tumor samples from standard-of-care surgery to evaluate the patient's treatment response towards a panel of 215 FDA-approved anti-cancer agents. The drug sensitivity testing is performed directly from the surgical sample without prior culture. The FDA-approved library includes compounds commonly used in the treatment of sarcoma as well as compounds used in other malignancies. Smaller libraries can be tested when samples size doesn't support full library testing. The treatment responses of the tumor samples are then compared to the response of the corresponding normal tissues in order to evaluate potential for toxicity in healthy tissue (which may cause treatment side effects). Compounds displaying high specificity toward the patient's cancer cells in combination with low potential for toxicity as well as the drug sensitivity profile are communicated to the treating physician within three weeks.		●			●	●						●		●				●		
Weisenthal Cancer Group Personalized Cytometric Cancer Profiling	866-364-0011 mail@weisenthalcancer.com Huntington Beach, CA	The laboratory director (Dr. Weisenthal) is a pioneer in the field of cell culture testing from fresh human tumor biopsies, to identify the most promising drug combinations to be used for treating each patient's individual cancer. His most important contribution to the field was identifying cell death (as opposed to inhibition of cell growth) as the most relevant endpoint for determining drug activity. Since its founding in 1991, the Weisenthal Cancer Group has developed a database on more than 100 different cancer drugs through testing in biopsy specimens from nearly 8,000 patients. Prior to that, Dr. Weisenthal developed and improved his technologies through experience with biopsy specimens from nearly 15,000 patients. Our technology is *not* "high throughput" mass screening, but rather highly labor intensive, hands on, and individualized. We provide actionable information on all classes of drugs, including traditional cytotoxics, the new "targeted" agents, immunomodulators, and anti-angiogenics, alone and in combination. The accuracy of our methodology has been validated in peer review publications involving more than 3,000 patients, where patients treated with test "positive" drugs were 8 fold more likely to benefit (in terms of both tumor shrinkage and patient survival) than patient treated with test "negative" drugs.	●				●	●						●		●				●		
StoreMyTumor	267-702-5501 cs@storemytumor.com Philadelphia, PA	Since 2011, StoreMyTumor has been a trusted tumor preservation service for cancer centers worldwide. StoreMyTumor specializes in collecting, processing, and storing viable tumor for all types of cancers. Having viable tumor helps patients take advantage of the most personalized treatments and leading-edge diagnostics. These diagnostics include: Chemo Sensitivity Testing, Genomic Profiling, Drug Screening, Personalized Vaccines and Adoptive T-Cell Therapy. Every tumor is unique and contains important information critical to the treatment. However, tumors are not preserved alive by hospitals; instead, they are routinely discarded. Patients can store tissue collected from a surgery or biopsies, or fluid from ascites drainage (paracentesis).	●				●				●	●	●	●					●			

*Must be registered patient at that institution

**Note that while the provider may attempt to bill insurance, it is helpful to understand your insurance coverage to avoid unexpected bills as the insurance company may deny coverage and the patient would be responsible for any costs.

IMPORTANT NOTE: *MIB does not independently verify information submitted to the MIB; it relies on submitters to provide information that is accurate and not misleading. MIB makes no endorsements of tests or laboratories listed in the MIB Testing & Data Directory. MIB is not a substitute for medical advice. Patients and families with specific questions about a genetic test should contact a healthcare provider or a genetics professional.*

Revised: 12.02.20