

# MIB Testing & Research Directory

## FUNCTIONAL DRUG TESTING

STUDY	CONTACT	DESCRIPTION	Institution		Test Type		Eligibility		Sample Required			Lead Time		Cost						
			Commercial	Research	PDX Mouse Model	Ex Vivo 3D Organoid	Ex Vivo 2D	Open	Physician Order	Patient of Record*	Blood	Saliva	FFPE	Fresh Tissue	Frozen Tissue	≥ 1 month	2-4 months	4-6 months	None	Patient Out of Pocket
<a href="#">Altogen Labs</a> <b>14 Weeks PDX and Chemotherapy Testing (Patient-Derived Xenograft Service)</b>	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.	●	●			●					●						●		
<a href="#">AntiCancer Inc.</a> 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.		●	●		●					●						●		
<a href="#">Champions Oncology</a> 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.	●	●			●					●						●		
<a href="#">UCLA Soragni Lab</a> 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.		●	●			●				●						●		
<a href="#">SEngine Precision Medicine</a> PARIS Test	206-732-2165 connect@senginemedicine.com Seattle, WA	SEngine employs high-throughput screening to test selected drugs and drug combinations on cancer cells extracted from your tumor. We combine the results with advanced bioinformatics to prioritize drugs that match your unique tumor profile. SEngine Precision Medicine's proprietary approach, known as the PARIS® Test, aids in identifying effective and less toxic therapies available for patients with solid cancer tumors. The PARIS® Test starts with a live tissue sample from a patient's unique tumor extracted during a biopsy. SEngine Precision Medicine scientists receive the live tumor biopsy at its CLIA certified lab in Seattle. The PARIS® Test utilizes hundreds of 3D organoids grown by SEngine Precision Medicine scientists from the patient's unique cancer. The 3D organoids are tested against up to 140 cancer fighting drugs and drug combinations.	●		●		●					●						●		
<a href="#">Nagourney Cancer Institute</a> Functional Profiling-Ex-Vivo Analysis of Programmed Cell Death (EVA-PCD) assay	800-542-4357 frontoffice@nagourneyci.com Long Beach, CA	This testing, called functional profiling, exposes living cancer cells from individual patients to chemotherapy drugs, targeted agents and combinations. An analysis of a sample of your living cancer cells shows which drugs kill the cancer cells (these cells are "sensitive" to these drugs) and which ones do NOT (these cancer cells are "resistant" to these drugs). The use of this testing enables the patient's treating physician to prescribe those agents with the highest probability of improving the patient's outcome and minimizing unnecessary toxic therapies. We call it the Ex-Vivo Analysis of Programmed Cell Death (EVA-PCD) assay.	●		●		●					●						●	●	
<a href="#">University of Miami</a> Drug Sensitivity Screening	734-545-9652 ix1180@med.miami.edu Miami, FL	The screen uses small pieces of fresh or viable 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.		●		●	●					●						●		
<a href="#">Weisenthal Cancer Group</a> 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.	●		●	●						●						●		
<a href="#">StoreMyTumor</a>	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.

