What is **Precision Medicine?**

Precision Medicine is **targeted, individualized care** that is tailored to each patient based on his or her specific **genetic profile** and **medical history**. Unlike in traditional one-size-fits-all medicine, practitioners of precision medicine use **genomic sequencing** tools to interrogate a patient's entire genome to locate the specific genetic alterations that have given rise to and are driving his or her tumor. With this information they can identify small molecule drugs, monoclonal antibodies, vaccines, and other therapies that are most precisely targeted and are therefore most effective and have the fewest side effects.

What is the **Englander Institute?**

The Caryl and Israel Englander Institute for Precision Medicine (IPM) at Weill Cornell Medicine (WCM) and NewYork-Presbyterian Hospital (NYP) is a translational research hub that opened in 2013. The IPM team includes clinicians, basic scientists, pathologists, molecular biologists, and computational biologists who work collaboratively using state-of-the-art tools and techniques to solve complex and/or difficult clinical cases. IPM works closely with the Sandra and Edward Meyer Cancer Center (http://meyercancer.weill.cornell.edu/) to ensure cancer patients are benefitting from our cutting-edge research.

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For more detailed information visit us online
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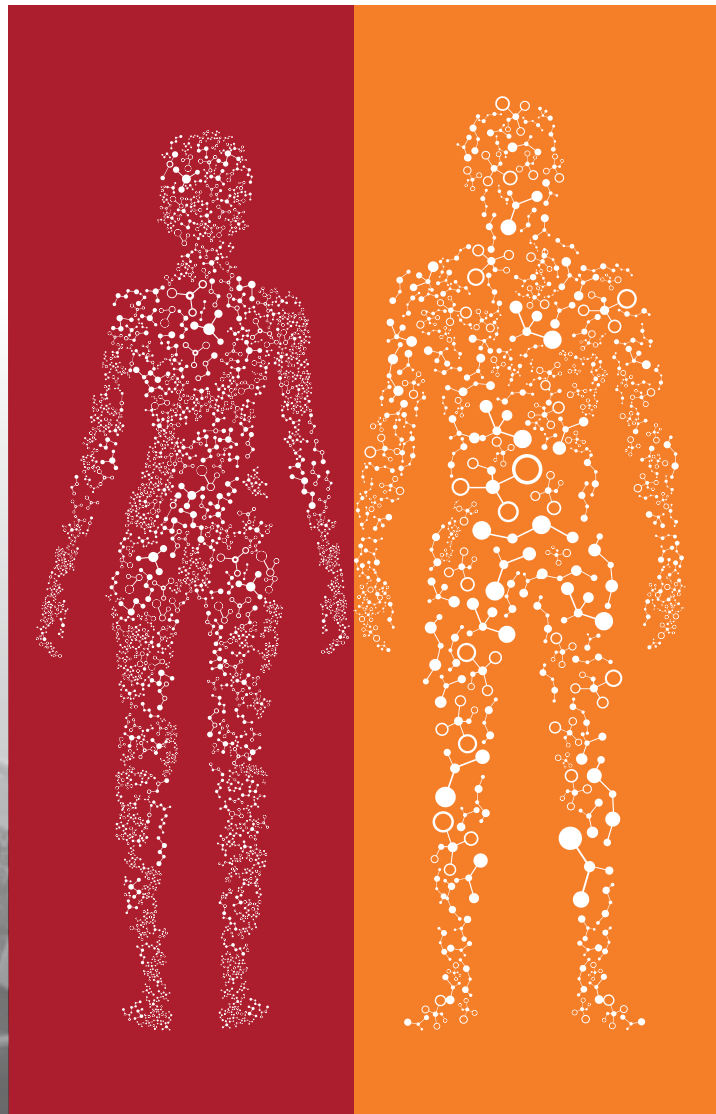
Is **Precision Medicine** Right for You?



What's After **Diagnosis**?

A diagnosis of cancer can be devastating, and traditional cancer treatments, which often cause unpleasant to debilitating side effects, can be challenging, too. At the Englander Institute for Precision Medicine our goal is to identify a tageted therapeutic approach for each patient we see. Because these treatment recommendations are based on targeted therapies, they might not fit the standard, established protocol for a tumor.

What Services **Are Available?**

Currently we see patients with advanced cancer who are referred by their physicians to our Precision Medicine Clinic. We enroll patients through an Institutional Review Board-approved clinical trial, and obtain samples of both their normal and tumor tissue for genomic analysis. We analyze the coding regions of a patient's genes using EXaCT-1, developed at the Englander Institute for Precision Medicine, and the first whole-exome sequencing test approved by New York State for cancer testing. We detect and report the genetic alterations, using confirmation tests to validate the results.

A multi-institutional Precision Medicine Tumor Board, experts in oncology, pathology, computational biology, genetics, and ethics, reviews the results of our genomic analysis, along with the patient's medical history. The Tumor Board will collaboratively develop customized treatment options, then share them with the patient's clinician, who discusses the results with the patient. Physicians at the Precision Medicine Clinic follow patients to see how they are responding to therapy. This information is captured in a clinical database, which will help the IPM team discover and develop therapeutic approaches to benefit many more patients with cancer and other diseases.

If you are a patient who is interested in precision medicine, please make an appointment with one of our referring physicians. Other physicians can learn how to refer patients by visiting our website: **http://ipm.weill.cornell.edu/clinicians**

What Will I Gain From Participation in **Precision Medicine?**

In cancer care, Precision Medicine provides insight into each cancer patient's disease by determining the specific molecular changes that have occurred in the cancer cells to cause disease. Patients benefit from this approach because clinicians can more accurately prescribe targeted therapies to treat their disease.

In patients with advanced disease who no longer respond to available therapies and lack treatment options, genomic analyses of tumor tissue may isolate the causes of drug resistance and highlight therapies with a better likelihood of success. Precision medicine can also allow physicians to identify a patient's risk before diseases develop, and enable them to take steps toward prevention through medical treatment, lifestyle modification or both. Precision medicine is an exciting, emerging field that is transforming the existing paradigm for diagnosing and treating patients with many types of disease.

What Does Participation in **IPM Research Involve?**

When you meet with the precision medicine team for an initial consultation they will inform you about the study goals, potential risks, and the benefits. If you decide to enroll in the study, you will sign a consent form giving a pathologist permission to examine your tumor tissue through biopsy. We also require about 20ml of blood (obtained through a simple blood draw), so that our scientists can examine the normal (non-cancerous) DNA.