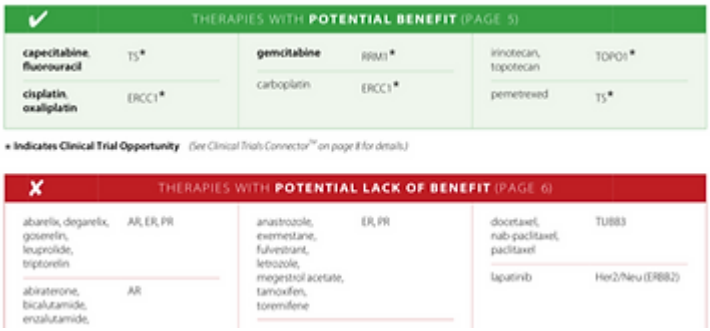
Today, most people with cancer receive a one-size-fits-all approach to treatment meaning they receive the same treatment as others who have the same type and stage of cancer. However, research has now shown that each person's cancer is unique, and each tumor may contain information critical to treating that cancer. Although still in its infancy, precision medicine is beginning to change the way cancer is treated.

Here are 5 facts you need to know about precision medicine and cancer:

1. Precision medicine helps to personalize cancer treatments.

The National Institute of Cancer defines precision medicine (also known as personalized medicine) as "an approach to patient care that allows doctors to select treatments that are most likely to help patients based on a genetic understanding of their disease."[1]

2. No two cancers are exactly alike.



✔ THERAPIES WITH **POTENTIAL BENEFIT** (PAGE 5)					
capecitabine, fluorouracil	TS*	**gemcitabine**	RRM1*	irinotecan, topotecan	TOPO1*
cisplatin, oxaliplatin	ERCC1*	carboplatin	ERCC1*	pemetrexed	TS*

* **Indicates Clinical Trial Opportunity** *(See Clinical Trials Connector™ on page 8 for details.)*

✘ THERAPIES WITH **POTENTIAL LACK OF BENEFIT** (PAGE 6)					
abarelix, degarelix, goserelin, leuprolide, triptorelin	AR, ER, PR	anastrozole, exemestane, fulvestrant, letrozole, megestrol acetate, tamoxifen, toremifene	ER, PR	docetaxel, nab-paclitaxel, paclitaxel	TUBB3
abiraterone, bicalutamide, enzalutamide,	AR			lapatinib	Her2/Neu (ERBB2)

We now know that just as no two people are exactly alike, no two cancers are alike. Using this knowledge, precision medicine aims to treat cancer by targeting mutations that allow cancer to grow and spread. To identify those mutations or genetic changes that drive a particular person's cancer, we test DNA from their tumor(s). This is known as "molecular profiling" and "genetic sequencing". This testing may also help patients avoid treatments that are ineffective, unnecessary and potentially harmful.

3. Precision medicine is transforming the way some cancers are treated TODAY.

Several cancers are already benefiting from precision medicine treatments. Today, oncologists can prescribe targeted

therapies to cancer patients whose tumors have certain genetic mutations. For example, Trastuzumab (Herceptin®) or lapatinib (TYKERB®) may be given to a woman whose lab tests show that her breast tumor has too much HER2. Everolimus (Afinitor) may be used for women who have gone through menopause and have advanced hormone receptor-positive, HER2-negative breast cancer

As a result, patients are experiencing better outcomes with fewer adverse effects compared to standard chemotherapy. *Please note: At this time, not all mutations can be matched with known treatment options*

4. Immunotherapy is already helping to save lives.

One of the most promising areas in cancer research and precision medicine today is "**Immunotherapy"** which uses the body's own immune system to prevent, control and eliminate cancer. Credited as the first therapy ever proven to extend the lives of patients with metastatic melanoma, immunotherapy is changing the way some cancers are treated today. In fact, immunotherapy offers such great promise that one day we may have a new kind of doctor called immuno-oncologists.

5. StoreMyTumor is the first step to personalized medicine.

Your tumors contain critical information needed to personalize your cancer treatments. When live cancer cells and tissue are stored properly, additional and more effective cancer treatment options may become available to you.

Personalization is a process. It starts with having access to the cancer cells, then testing the tumor to identify the best drug(s) that will kill cancer cells.

StoreMyTumor, the leader in tumor collection, processing and storage services, connects you to cutting-edge technologies that are beyond standard treatments.

To learn more about personalizing your cancer treatment, schedule your FREE consultation today with our Patient Advisor!

[1]https://www.cancer.gov/about-cancer/treatment/types/precision-medicine