



Predictive tests can provide information about how a patient may respond (or be resistant) to treatment. Some DNA variants that lead to [cancer](#) also make the [cancer](#) cells susceptible to the effects of certain drugs. These drugs are called targeted therapies, because they target the genetic changes as a way of fighting the cancer. The targeted therapy is specifically designed for a particular pathway in the [cancer](#) cell making it more likely than other non-targeted treatment options to kill the [cancer](#) cells. Genomic testing of the tumor tissue (also called tumor profiling), which is a predictive test, can involve one specific tumor gene or several tumor genes depending on validated and repeated trials. Targeted therapies are available for colorectal, lung, and breast cancers, and a few others.

Unfortunately, even the most promising targeted therapies that report a highly statistically significant and clinically relevant reduction in the risk of disease events are unlikely to benefit all or even most patients. Large scale studies are needed to understand the incredible variability of [cancer](#) disease expression. The use of predictive genomic testing clearly has enormous clinical potential to help very rare, select individuals, but more information is needed to apply this in a larger population.

The term predictive testing may also refer to predisposition testing which is different because it looks at the inherited (or germline) DNA.

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