# Personalized Medicine: A Tailor Made Medicine

In the past, disease diagnosis was based on symptoms that might be indicative of several diseases. Nowadays, diagnosis of some diseases has become more accurate because we are able to test for genes known to be associated with the disease. This method not only clearly identifies the presence of a particular disease; it can also precisely determine the subtype of the disease. Throughout history, the practice of medicine has largely been reactive. Even now days, we have to wait until the onset of diseases and then try to treat or cure them. As we don't fully understand the genetic and environmental factors that cause major diseases such as cancer, Alzheimer's and diabetes, our efforts to treat them are often imprecise, unpredictable and ineffective. In addition, the drugs and treatments we devise are tested on broad populations and are prescribed using statistical averages. For example, on average, any given prescription drug now on the market only works for half of those who take it. Anti-depressants are effective in only about 60 percent of those who take them [1-6]. Personalized medicine is beginning to transform the practice of medicine. Personalized medicine is the tailoring of medical treatment to the individual characteristics of each patient. The approach relies on scientific breakthroughs in our understanding of how a person's unique molecular and genetic profile makes them susceptible to certain diseases. This same research is increasing our ability to predict which medical treatments will be safe and effective for each patient, and which ones will not be. Personalized medicine may be considered an extension of traditional approaches to understanding and treating disease. Personalized medicine has the potential to change the way we think about, identify and manage health problems. It is already having an exciting impact on both clinical research and patient care, and this impact will grow as our understanding and technologies improve.

## References

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