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## **Personalized and Targeted Therapies** [1]

This section provides information on the following topics:

### **What is Personalized Cancer Medicine?** [2]

Personalized medicine involves selecting treatments based on a person's unique genetic makeup and the genetic makeup of the tumor. By performing more genetic tests and analysis, doctors may customize treatment to each patient's needs.

### **Targeted Treatments** [3]

Until recently, cancer treatment was largely based on the location in the body where the tumor began, such as the lung or breast. Now, cancer treatment increasingly depends on specific factors of a person's tumor, such as gene mutations (changes) or proteins that are often characteristic of cancer cells, regardless of the original location of the cancer.

### **Angiogenesis and Angiogenesis Inhibitors to Treat Cancer** [5]

Angiogenesis is the formation of new blood vessels. This process regularly occurs during growth and development in children but happens less often in adults. For example, angiogenesis occurs during the healing of a deep cut or after menstruation. Otherwise, angiogenesis in adults is usually part of a disease process such as cancer.

## **Pharmacogenomics [6]**

The field of pharmacogenomics (also called pharmacogenetics) studies how our inherited genes affect the way our bodies process and respond to drugs, which can make these drugs more or less effective and safe. A drug may act differently in one person than in another person taking the same drug for the same condition. For instance, some people may experience severe side effects from a drug, while others may not, even when given comparable doses of the drug.

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### **Links:**

[1] <http://www.cancer.net/navigating-cancer-care/how-cancer-treated/personalized-and-targeted-therapies>

[2] <http://www.cancer.net/navigating-cancer-care/how-cancer-treated/personalized-and-targeted-therapies/what-personalized-cancer-medicine>

[3] <http://www.cancer.net/navigating-cancer-care/how-cancer-treated/personalized-and-targeted-therapies/targeted-treatments>

[4] <http://www.cancer.net/es/desplazarse-por-atenci%C3%B3n-del-c%C3%A1ncer/c%C3%B3mo-se-trata-el-c%C3%A1ncer/tratamientos-dirigidos>

[5] <http://www.cancer.net/navigating-cancer-care/how-cancer-treated/personalized-and-targeted-therapies/angiogenesis-and-angiogenesis-inhibitors-treat-cancer>

[6] <http://www.cancer.net/navigating-cancer-care/how-cancer-treated/personalized-and-targeted-therapies/pharmacogenomics>