Angiogenic refers to the process of angiogenesis, which is the formation of new blood vessels from existing ones. Angiogenesis plays a crucial role in various physiological and pathological processes, including development, wound healing, and tumor growth.

Under normal circumstances, angiogenesis is tightly regulated and occurs in response to specific signals and needs in the body. It involves a series of complex cellular and molecular events that result in the sprouting and elongation of blood vessels.

In angiogenesis, endothelial cells, which line the inner surface of blood vessels, undergo proliferation, migration, and organization to form new blood vessels. This process is mediated by a balance of pro-angiogenic and anti-angiogenic factors.

Pro-angiogenic factors, such as vascular endothelial growth factor (VEGF), fibroblast growth factor (FGF), and platelet-derived growth factor (PDGF), stimulate the growth and migration of endothelial cells, promoting angiogenesis. On the other hand, anti-angiogenic factors, such as thrombospondin and angiostatin, inhibit angiogenesis and help maintain the balance.

Angiogenesis is crucial for the growth and development of tissues, especially during embryonic development and wound healing. However, it can also contribute to various pathological conditions. Excessive or uncontrolled angiogenesis is associated with diseases such as cancer, diabetic retinopathy, rheumatoid arthritis, and certain cardiovascular disorders.

In the context of cancer, angiogenesis is a hallmark of tumor growth and progression. Tumors require a blood supply to obtain nutrients and oxygen, and they release pro-angiogenic factors to stimulate the formation of new blood vessels, a process known as tumor angiogenesis. Inhibiting angiogenesis is a therapeutic strategy used in cancer treatment to starve tumors of their blood supply and limit their growth.

Angiogenic therapies, such as the use of angiogenesis inhibitors or pro-angiogenic factors, are being investigated for various medical conditions. Angiogenesis inhibitors aim to suppress excessive angiogenesis in diseases like cancer, while pro-angiogenic factors may be used to promote blood vessel formation and tissue repair in certain cases.

It's important to note that while I strive to provide accurate and up-to-date information, the field of medicine is constantly evolving.