# Tumor Angiogenesis & Nanobiotechnology and Drug Delivery

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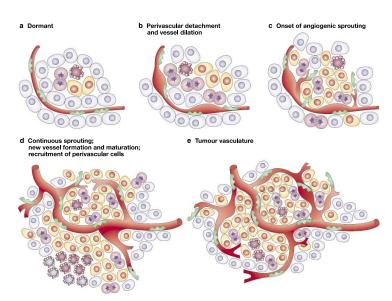
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## **Tumor Angiogenesis**

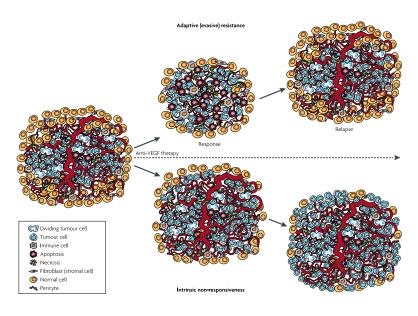
To understand the molecular mechanisms and signaling of cancer progression and angiogenesis

- Solid tumors
- Cancer and endothelial cell biology
- Molecular targets for biomarkers and cancer therapeutics

#### **Blood vessel formation**



#### Modes of resistance



Bergers G & Hanahan D. Nat Rev Cancer. 2008;8(8):592-603.

### **DNA Nanotechnology for Biosensors and Drug Carriers**

To develop nanocarriers for detection and drug delivery

- Aptamers targeting specific cancer cells
- DNA nanoparticles

