**Cancer therapy**

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| **Cancer type** | **Hallmarks** | **Drug** | **Mechanism of drug** |
| Breast cancer | Uncontrolled growth of breast cells, formation of tumors, potential metastasis. | Tamoxifen, Herceptin (trastuzumab) | Tamoxifen is a selective estrogen receptor modulator (SERM) that blocks estrogen receptors, inhibiting the growth-promoting effects of estrogen. Herceptin is a monoclonal antibody that targets the HER2 protein, which is overexpressed in some breast cancers, inhibiting cell signaling and growth. |
| Lung cancer | Abnormal cell growth in the lungs, formation of tumors, potential metastasis. | Erlotinib, Pembrolizumab. | Erlotinib is a tyrosine kinase inhibitor that targets the EGFR (epidermal growth factor receptor), inhibiting its signaling pathway involved in cell growth and division. Pembrolizumab is an immune checkpoint inhibitor that blocks the PD-1 receptor, allowing the immune system to recognize and attack cancer cells. |
| Colorectal cancer | Uncontrolled cell growth in the colon or rectum, formation of tumors, potential metastasis. | 5-Fluorouracil (5-FU), Bevacizumab. | 5-Fluorouracil is a chemotherapy drug that interferes with DNA synthesis, leading to cell death. Bevacizumab is a monoclonal antibody that targets vascular endothelial growth factor (VEGF), inhibiting the growth of blood vessels that supply nutrients to tumors. |
| Prostate cancer | Uncontrolled growth of prostate cells, formation of tumors, potential metastasis. | Leuprolide, Enzalutamide | Leuprolide is a hormone therapy drug that reduces the production of testosterone, which fuels the growth of prostate cancer cells. Enzalutamide is an androgen receptor inhibitor that blocks the binding of androgens (including testosterone) to the androgen receptor, inhibiting the growth of prostate cancer cells. |
| Pancreatic cancer | Abnormal cell growth in the pancreas, formation of tumors, potential metastasis. | Gemcitabine, Nab-paclitaxel. | Gemcitabine is a chemotherapy drug that interferes with DNA synthesis, leading to cell death. Nab-paclitaxel is a chemotherapy drug that disrupts the microtubule structures in cancer cells, preventing cell division and promoting cell death. |