# Antineoplastics/Anticancer Drugs

### Antimetabolites

- Inhibitors of Thymidylate Synthase
  - 5-Fluorouracil
  - Capecitabine
  - Pemetrexed
- Inhibitors of Purine Metabolism
  - o 6-Mercaptopurine
  - Azathioprine
  - o Pentostatin
- Inhibitors of Ribonucleotide Reductase
  - Hydroxyurea
- Purine & Pyrimidine Analogues Incorporated into DNA
  - o 6-Thioguanine
  - o Fludarabine phosphate
  - Cladribine
  - Cytarabine (araC)
  - Azacytidine
  - Gemcitabine
- Inhibitor of Folic Acid
  - Methotrexate

# Alkylating Agents

- Altretamine
- Busulfan
- Carmustine
- Chlorambucil
- Cyclophosphamide
- Dacarbazine
- Estramustine
- Ifosfamide
- Lomustine
- Mechlorethamine
- Melphalan
- Procarbazine
- Semustine
- Streptozocin
- Temozolomide
- Platinum Complexes
  - Cisplatin
  - Carboplatin
  - Oxaliplatin

### Microtubule Inhibitors

- Agents that Inhibit Microtubule Polymerization
  - Vinblastine
  - Vincristine
  - Vinorelbine
- Agents that Inhibit Microtubule Depolymerization
  - Docetaxel
  - o Paclitaxel

### Monoclonal Antibodies

- Tumor-specific Monoclonal Antibodies & Other Recombinant Proteins
  - o Rituximab (α-CD20)
  - Tositumomab ( $\alpha$ -CD20  $I^{131}$ )
  - o Ibritumomab (α-CD20 In<sup>111</sup>)
  - o Alemtuzumab (α-CD52)
  - Denileukin diftitox (α-CD25)
  - Gemtuzumab (α-CD33)
- Epidermal Growth Factor Receptor (EGFR) Antagonist
  - Cetuximab (α-EGFR1)
  - o Trastuzumab (α-EGFR2)
- Angiogenesis Inhibitors
  - Bevacizumab (α-VEGF)

# **Tyrosine Kinase Inhibitors**

- BRC-ABL/C-KIT/PDGFR Inhibitors
  - Imatinib mesylate
  - Dasatinib
  - Nilotinib
- Inhibitors of RAS/MAP Kinase Pathways
  - Sorafenib
- Epidermal Growth Factor Receptor (EGFR) Antagonists
  - o Gefinitib
  - o Erlotinib
  - Lapatinib
- Angiogenesis Inhibitors
  - o Sunitinib

### Others

- Differentiating Agents
  - o Tretinoin
- Biological Response Modifiers
  - o Interferons
- Toxin Conjugates
- Proteasome Inhibitors
  - Bortezomib
- Angiogenesis Inhibitors/Immunomodulatory Drugs
  - Thalidomide
  - Lenalidomide
- mTOR inhibitors
  - o Rapamycin (sirolimus)
  - Temsirolimus
  - o Everolimus (investigational)
- Antibiotics
  - Agents that Directly Modify DNA Structure
    - Bleomycin
  - Topoisomerase Inhibitors
    - Dactinomycin
    - Daunorubicin
    - Doxorubicin (Adriamycin)
    - Epirubicin
    - Idarubicin
    - Irinotecan
    - Topotecan
    - Etoposide
    - Teniposide
    - Amsacrin
- Steroid Hormones & Their Antagonists
  - o Aminoglutethimide
  - Anastrozole
  - o Bicalutamide
  - Estrogens
  - Exemestane
  - o Flutamide
  - Goserelin
  - o Letrozole
  - o Leuprolide
  - Megestrol Acetate
  - Nilutamide
  - o Prednisone
  - o Raloxifene
  - Tamoxifen
  - Toremifene
- Asparaginase