

CLASSIFICATION OF ANTI NEOPLASTIC DRUG

S. No.	CLASS	DRUGS
1.	Alkylating Agents	
(a)	Mustards	Mechlorethamine, Mephalan, Cyclophosphamide and Chlorambucil.
(b)	Methanesulphonates	Busalfan
(c)	Ethylenimines	Triethylenemelamine, Triethylenethio Phosphoramide (Thiotepa)
(d)	Nitrosoureas	Carmustine and Lomustine
(e)	Triazines	Procarbazine, dacarbazine, temozolomide
2.	Antimetabolites	
(a)	Antifolic acid compounds	Methotrexate, pemetrexed
(b)	Analogues of Purines	Mercaptopurine, Azathiopurine, pentostatin, cladribine
(c)	Analogues of Pyrimidines	Fluorouracil and Cytarabine
(d)	Amino acid antagonists	Azaserine
3.	Antibiotics	Dactinomycine, Daunorubicin, Doxorubicin, Bleomycin
4.	Plant products	
(a)	Imides and Amides	Colchicine, Narciclasine
(b)	Tertiary Amines	Vinblastine ; Vincristine, Cryptoleurine, Thalicapine, Thalidasine
(c)	Heterocyclic Amines	Camptothecin, Hydroxycamptothecin and Methoxy Camptothecin
(d)	Lactones	Podophyllotoxin and deoxypodophyllotoxin
(e)	Glycosides	Mithramycin (Aureolic Acid) and β -Solamarine
(f)	Enzymes	L-asparaginase
5.	Hormones	
(a)	Corticosteroids	Prednisolone, prednisone
(b)	Antiestrogens	SERMs (tamoxifen, doloxifen) aromatase inhibitors (aminoglutethimide, formestane, exemestane, anastrozole, vorozole, letrozole)
(c)	Progesterins	Medroxyprogesterone acetate
(d)	Estrogens	Diethylstilbestrol, ethinyl estradiol
(e)	Androgens:	Testosterone
(f)	Antiandrogens:	Flutamide
(g)	GnRH analogs:	Leuprorelin, goserelin, nafarelin, busuprelin, histrelin

(h)	GnRH antagonists:	Cetorelix, ganirelix, abarelix
6.	Immunotherapy	Interferon Alfa
7.	Platinum compounds	Cisplatin, carboplatin, oxaliplatin.
8.	Miscellaneous Agents	
(a)	Biological response modifiers	Recombinant IL-2 (aldesleukin), GM-CSF (sargramostim), G-CSF (filgrastim), monoclonal antibodies (rituximab, trastuzumab etc.)
(b)	Substituted urea	Hydroxyurea
(c)	Adrenal cortex suppressant	Mitotane
(d)	Tyrosine kinase inhibitors	Imatinib, gefitinib, erlotinib
(e)	Retinoids:	Isotretinoin
(f)	Arsenic compounds	As ₂ O ₃
(g)	Adenosine deaminase inhibitor	Pentostatin

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