Drug	Group	Mechanism of action	Indications	Special Toxicity
Arsenic trioxide	Natural product, differentiating agent	Differentiation of APL cells	APL, refractory to ATRA	Prolonged QT interval, APL differentiation syndrome
Altretamine	Alkylating agent (non-classic)	DNA cross-link formation	Ca ovary (2nd line)	
L-Asparaginase	Enzyme (derived from E Coli)	Hydrolyses L-Asparagine & thereby prevents protein synthesis in tumor cells	ALL	Hypersensitivity, Bleeding diathesis & hypercoagubility, Acute pancreatitis
Bexarotene	Retinoid, differentiating agent	Cellular differentiation	CTCL	Hyperlipidemia, hypothyroidism
Busulfan	Alkylating agent	DNA cross-link formation	CML, BMT	Lung fibrosis
Chlorambucil	Alkylating agent	DNA cross-link formation	CLL, HD, NHL	Lung fibrosis
Dacarbazine	Atypical alkylating agent		Malignant melanoma, HD	
Dactinomycin	Antitumor antibiotic	Alkylating agent	STS, WT	
Denileukin diftitox	Immunotherapy	IL-2 + diphtheria toxin	Recurrent/ refractory CTCL	Capillary-leak syndrome, Flu-like syndrome
Estramustine	Anti-microtubule agent	Estradiol + nornitrogen mustard	Hormone-refractory metastatic prostate cancer	
FUDR	Anti-metabolite	Prevention of DNA synthesis	Liver metastasis (from CRC/ gastric ca)	Hepatitis, Peptic ulcer
Hydroxyurea	Anti-metabolite	Inhibition of DNA synthesis	CML, other myeloproliferative disorders	
Mitotane	Adrenolytic agent (derived from	Inhibition of adrenal steroid production	Adrenal cortical carcinoma	

	inseciticide DDD)			
Procarbazine	Alkylating agent (MAO inhibitor)	Inhibits DNA, RNA & protein synthesis	HD, NHL, Brain tumors	
Streptozocin	Alkylating agent (Nitrosourea)	DNA cross-link formation	Pancreatic islet cell cancer, Carcinoid tumor	
Tretinoin/ATRA	Retinoid, differentiating agent	Differentiation of APL cells	APL	Retinoic acid syndrome