

Drug	Class/Action	Target	Side Effects	Characteristics
			*Underlined and italicized = in PowerPoint	
<i>Bleomycin</i>	antibiotic	DNA, RNA	<u><i>allergic rxns, skin tox (skin thickening and/or stripes and itching, pulm fibrosis, mucositis, alopecia)</i></u>	Hodgkin's lymphoma Pulm fibrosis can be treated with TNF inhibitors
<i>bortezomib</i>	proteasome inhibitor	26S proteasome	Black/tarry stools, bleeding gums, blood in urine/stool, agitation, back pain, blistering/peeling/loosening of skin	Multiple Myeloma —Bortezomib, lenalidomide, and dexamethasone in combination have 90% response rate
<i>crizotinib</i>	small molecule	Inhibits anaplastic large T-cell lymphoma kinase (ALK)	Edema, nausea, decreased appetite, fatigue, liver changes, constipation, dizziness, blurred vision	Anaplastic large T-cell lymphoma
<i>venetoclax</i>	small molecule	Inhibits BCL2, inc apoptosis	Bladder pain, N/V/D, dizziness, drowsiness, SOB, pancytopenia, URI	Approved for refractory CLL , pts with 17p deletion, pts w/ prior therapy, some patients with ALL
<i>cyclophosphamide</i>	alkylating agents	DNA	<u><i>Toxic to BM, immunosuppression</i></u>	used to prevent organ rejection after transplantation, immune suppression. Newer protocol for Non-Hodgkin Lymphoma : cyclophosphamide, doxorubicin, prednisone, vincristine, and rituximab (R-CHOP)
<i>dacarbazine</i>	alkylating agents	DNA	<u><i>Toxic to BM, immunosuppression</i></u>	used to prevent organ rejection after transplantation, immune suppression (Hodgkin's lymphoma, melanoma, soft tissue sarcoma) PK/PD : modified in the liver through two separate rxns to active form, diazomethane. Enzymes involved are P450 proteins CYP1A1, CYP2E1, and relatively low limit dacarbazine activity in vivo

<i>doxorubicin</i>	anthracycline	topoisomerase II, Effects cells related to G2/S	<u>Cardiac toxicity</u> , fatigue, alopecia, N/V, oral sores	Used for Non-Hodgkin's lymphoma , being in CHOP regimen. Interest in combining with monoAb to receptors
<i>gilteritinib</i>	kinase inhibitor	FLT3 receptor tyrosine kinase	Differentiation syndrome, headache, muscle pain, N/V, diarrhea, effects on liver/pancreas	AML
<i>Ibrutinib</i>	kinase inhibitor	Bruton's tyrosine kinase	<u>Side effects manageable</u> —diarrhea, Upper respiratory infxn, fatigue, and cardiac side effects	Mantle cell lymphoma and for CLL
<i>Imatinib</i>	kinase inhibitor	Bcr-Abl fusion protein	Anxiety, blistering, peeling or loosening of skin, change in vision	Adult CML , causes complete response in ½ of pts, resistance common CML with Abl-T3151 mutation can receive omacetazine and chemo
<i>lenalidomide</i>	immune modulator	unclear	Diarrhea, fatigue, joint pain, fever, cough, body aches, abnormal or decreased touch sensation, bloody, blurry vision	Multiple Myeloma —Bortezomib, lenalidomide, and dexamethasone in combination have 90% response rate
<i>prednisone</i>	corticosteroid	Binds glucocorticoid receptors	<u>Ankles and feet swelling, moon facies, infection, high blood sugar, HTN</u>	Newer protocol for Non-Hodgkin Lymphoma : cyclophosphamide, doxorubicin, prednisone, vincristine, and rituximab (R-CHOP)
<i>rituximab</i>	antibody	Binds CD20, blocking B cell survival	<u>Infection (TB, fungal, bacterial)</u>	Used in combination with CHOP regimen—cyclophosph., doxorubicin, vincristine, and pred. Non-Hodgkin Lymphoma
<i>vinblastine</i>	anti-mitotic	microtubule polymerization	<u>Neuropathy</u> , bone pain, constipation, hair loss, stomach pain, N/V	P450 substrate, consider drug interactions Hodgkin's and Non-Hodgkin's Lymphoma