



Created and Reviewed by:

Medical Director: Gregory C. McKeever, MD

Editor-in-Chief: Anthony J. Busti, PharmD, BCPS, FNLA, FAHA

Oncology Clinical Pharmacists:

Jon D. Herrington, PharmD, BCPS, BCOP; Scott & White Hospital; Temple, TX

Jose R. Murillo, Jr., PharmD; The Methodist Hospital; Houston, TX

Sachin Shah, PharmD, BCOP; Texas Tech University Health Sciences Center

School of Pharmacy; Dallas, TX

Legend for FABio: The Monoclonal Antibody Guy
Common Toxicities for the Monoclonal Antibodies Used in Oncology
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	Body Part	Drug Names Represented	Type of IgG Antibody*	Target	Toxicity or Side Effect
a	Knee (bone)	Alemtuzumab (Campath)	Humanized	CD52	Neutropenia & lymphopenia (mainly) from bone marrow suppression.
B	Intestine Wound (arm) Lungs Kidneys	Bevacizumab (Avastin)	Humanized	VEGF	Intestinal perforation; wound dehiscence; hemoptysis (if ever used for squamous cell carcinoma); hypertension ± proteinuria.
C	Cheeks Rash	Cetuximab (Erbix)	Chimeric	EGFR	Acneiform skin rash to face & upper trunk.
G	Liver Pelvis (bone)	Gemtuzumab (Mylotarg)	Humanized	CD33	Hepatotoxicity; veno-occlusive disease; bone marrow suppression.
H	Heart	Trastuzumab (Herceptin)	Humanized	HER-2	Cardiomyopathy.
I	Femur (bone in leg)	Ibritumomab (yttrium-90; Zevalin)	Murine	CD20	Bone marrow suppression.
O	Skin Joints (bone)	Ofatumumab (Arzerra)	Human	CD20	Skin rash; Neutropenia (↑ infection risk)
P	Rash to face/trunk	Panitumumab (Vectibix)	Human	EGFR	Acneiform skin rash to face & upper trunk.
R	Skin Lesions	Rituximab (Rituxan)	Chimeric	CD20	Skin rash (including Steven-Johnson syndrome); tumor lysis syndrome.
T	Thyroid gland Tibia (bone)	Tositumomab (I-131 radioisotope; Bexxar)	Murine	CD20	Hypothyroidism; bone marrow suppression.
	IV Bag	All of the above antibodies			Infusion related reactions mainly with 1 st dose (fever, chills, itching, flushing, headache, shortness of breath & hypotension).

Notes:

- All of these generic names general stem or end in “mab” designating them as “monoclonal antibodies”. They are also all of IgG class of antibodies that vary at antigen binding site and/or percent that is from human or mouse.
- Also the underlined letters in each generic drug name indicates the type of antibody or from where it was derived*: g-mab = murine (100% mouse), u-mab = 100% human, xi-mab = chimeric (67% human in Fc or constant regions + 33% mouse make up the variable regions), zu-mab = humanized (only 5-10% mouse make up the complementarity-determining regions (CDR) within the variable regions).

CH = constant heavy region; CL constant light region; VH = variable heavy region; VL = variable light region; CD20 = cluster designation 20; CD52 = cluster designation 52; CD33 = cluster designation 33; EGFR = epidermal growth factor receptor; HER-2 = human epidermal growth factor; VEGF = vascular endothelial growth factor.

This is not an exhaustive list of all side effects and/or toxicities. It is important to recognize that many chemotherapeutic agents can cause several of these side effects, but some will do it more than others.

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