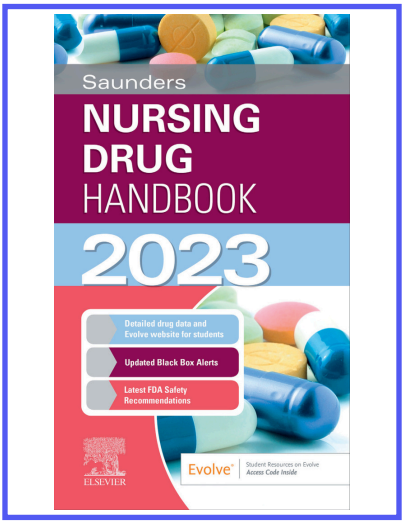


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NURSING DRUG HANDBOOK 2023

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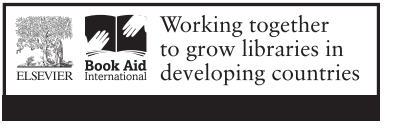
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obert (Bob) J. Kizior, BS, RPh

b graduated from the University of Illinois School of Pharmacy and is licensed t actice in the state of Illinois. He has worked as a hospital pharmacist for more tha years at Alexian Brothers Medical Center in Elk Grove Village, Illinois—a suburb o icago. Bob is the Pharmacy Surgery Coordinator for the Department of Pharmac here he participates in educational programs for pharmacists, nurses, physicians d patients. He plays a major role in coordinating pharmacy services in the OR satel e. Bob is a former adjunct faculty member at William Rainey Harper Communit llege in Palatine, Illinois.

An avid sports fan, Bob also has eclectic tastes in music that range from classical, bi nd, rock 'n' roll, and jazz to country and western. Bob spends much of his free tim viewing the professional literature to stay current on new drug information.

eith J. Hodgson, RN, BSN, CCRN

ith was born into a loving family in Chicago, Illinois. His mother, Barbara B. Hodg n, was an author and publisher of several medication products, and her work ha en a part of his life since he was a child. By the time he was 4 years old, Keith wa ready helping his mother with drug cards by stacking the draft pages that were pile throughout their home.

Because of his mother's influence, Keith contemplated becoming a nurse in college t his mind was fully made up after he shadowed his sister in the Emergency Depart ent. Keith received his Associates Degree in Nursing from Hillsborough Communit llege and his Bachelor of Science in Nursing from the University of South Florida i mpa, Florida. Keith started his career in the Emergency Department and now work the Trauma/Neurological/Surgical Intensive Care Unit at St. Joseph's Hospital i mpa, Florida.

Keith's favorite interests include music, reading, Kentucky basketball, and, if he get e chance, watching every minute of the Olympic Games.

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ould be possible.

Keith J. Hodgson, RN, BSN, CCR

EDICATION

dedicate my work to the practicing nurse, those aspiring to become nurses, and to
ealth care professionals who are dedicated to the art and science of healing.

Bob Kizior, BS, R

dedicate this work to my wife, Jen Hodgson, the love of my life; my sister, Laure
foundation for our family; my sister, Kathryn, for her love and support; my fath
avid Hodgson, the best father a son could have; my brothers-in-law, Andy and Nic
reat additions to the family; the grandchildren, Paige Olivia, Logan James, Ryan Jam
nd Dylan Boyd; and to my band of brothers, Peter, Jamie, Miguel, Ritch, George, Jo
omingo, Ben, Craig, Pat, and Shay.

e also make a special dedication to Barbara B. Hodgson, RN, OCN. She truly was
iece of something wonderful. Barbara often gave her love and support without nee
ng any in return and would do anything for a smile. Not only was she a colleague a
friend, she was also a small business owner, an artist, a dreamer, and an innovat
e hope the pride we offer in her honor comes close to what she always gave us. H
edication and perseverance lives on.

Keith J. Hodgson, RN, BSN, CCR

IBLIOGRAPHY

exi-Comp's Adult Drug Information Handbook, ed 30, Hudson, OH, 2021–202
Lexi-Comp.
edical Letter on Drugs and Therapeutics: 2020, 2021, *Pharmacists Letter*: 2021
akemoto CK, Hodding JH, Kraus DM: *Lexi-Comp's Pediatric Dosage Handbook*,
27, Hudson, OH, Lexi-Comp.
rissel LA: *Handbook of Injectable Drugs*, ed 19, Bethesda, MD, 2016, Americ
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LLUSTRATION CREDITS

ee JL, Hayes ER, McCuiston LE, editors: *Pharmacology: A Nursing Process Approac*
ed 7, Philadelphia, 2012, Saunders.

EWLY APPROVED MEDICATION

mivantamab (Rybrevant)	A bispecific EGF receptor and MET antibody for treatment of adults with locally advanced or metastatic non–small-cell lung cancer (NSCLC)
elantamab mafodotin-blmf (Blenrep)	A monoclonal antibody for multiple myeloma
olutegravir (Tivicay)	Treatment of the infection caused by human immunodeficiency virus (HIV)
ostarlimab-gxly (Jemperli)	A monoclonal antibody for endometrial cancer
mtricitabine	Treatment of the infection caused by HIV.
vinacumab-dgnb (Evkeeza)	A monoclonal antibody for homozygous familial hypercholesterolemia
decabtagene (Abecma)	A B-cell maturation antigen (BCMA)–directed, genetically modified, autologous chimeric antigen receptor (CAR) T-cell immunotherapy for treatment of adults with relapsed or refractory multiple myeloma
amivudine	Treatment of the infection caused by HIV
oncastuximab (Zynlonta)	A monoclonal antibody for relapsed or refractory large B-cell lymphoma
urbinectedin (Zepzelca)	An alkylating drug for metastatic small-cell lung cancer
argetuximab-cmkb (Margenza)	An intravenous HER2/neu receptor antagonist for metastatic HER2-positive breast cancer
axitamab-gqgk (Danyelza)	A monoclonal antibody for relapsed or refractory neuroblastoma in the bone or bone marrow
ertuzumab/trastuzumab hyaluronidase-zzxf (Phesgo)	Monoclonal antibodies for HER2-positive breast cancer
onesimod (Ponvory)	A selective sphingosine-1-phosphate receptor 1 modulator for treatment of relapsing forms of multiple sclerosis
ralsetinib (Gavreto)	A kinase inhibitor for non–small-cell lung cancer, RET-mutant medullary thyroid cancer, and RET fusion-positive thyroid cancer
elugolix (Orgovyx)	An oral gonadotropin-releasing hormone receptor antagonist for advanced prostate cancer
erdexmethylphenidate/ dexmethylphenidate (Azstarys)	A CNS stimulant for ADHD
afasitamab-cxix (Monjuvi)	A monoclonal antibody for diffuse large B-cell lymphoma
enecteplase (TNKase)	Thrombolytic agent
enofovir	Treatment of the infection caused by HIV

Tepotinib (Tepmetko)	A kinase inhibitor for metastatic non–small-cell lung cancer
Tivozanib (Fotivda)	A kinase inhibitor for renal cell carcinoma
Umbralisib (Ukoniq)	A kinase inhibitor for marginal zone lymphoma and follicular lymphoma
Vibegron (Gemtesa)	An oral beta-3 agonist for overactive bladder
Viloxazine (Qelbree)	A serotonin norepinephrine modulating agent (SNMA) for treatment of ADHD in pts 6 to 17 yrs of age