

with lower dosing due to greater potency, it may be less likely to cause adverse hematologic and neuropathic effects.

■ PLEUROMUTILINS

Lefamulin is the only member of the pleuromutilin class approved for systemic use; it is available in IV and oral formulations. Lefamulin has in vitro activity against *S. aureus* (including MRSA), *S. pneumoniae*, *H. influenzae*, and atypical respiratory pathogens, including *L. pneumophila*, *M. pneumoniae*, and *C. pneumoniae*, and has been approved for treatment of community-acquired bacterial pneumonia. Adverse effects are most commonly gastrointestinal, including diarrhea (12%), nausea (5%), and vomiting (3%). Prolongation of QT_c interval and hepatic transaminase elevations occur in some patients. There can be interactions with drugs that are either inducers or inhibitors of CYP3A4 or P-glycoprotein transporter.

■ NITROFURANTOIN

Nitrofurantoin's antibacterial activity results from the drug's conversion to highly reactive intermediates that can damage bacterial DNA and other macromolecules. Nitrofurantoin is bactericidal, and its action is concentration dependent. It displays activity against a range of gram-positive bacteria, including *S. aureus*, *Staphylococcus epidermidis*, *Staphylococcus saprophyticus*, *E. faecalis*, *Streptococcus agalactiae*, group D streptococci, viridans streptococci, and corynebacteria, as well as gram-negative organisms, including *E. coli*, *Enterobacter*, *Salmonella*, and *Shigella* species. Nitrofurantoin is used primarily in the treatment of urinary tract infections and is preferred in the treatment of such infections in pregnancy. It may be used for the prevention of recurrent cystitis. Recently, there has been interest in the use of nitrofurantoin for treatment of urinary tract infections caused by ESBL-producing Enterobacterales such as *E. coli*, although resistance has been growing in Latin America and parts of Europe. Coadministration with magnesium should be avoided because of decreased absorption, and patients should be encouraged to take the drug with food to increase its bioavailability and decrease the risk of adverse effects,