

bacteria, and for bacterial vaginosis, pelvic inflammatory disease, and anaerobic infections, such as those due to *Bacteroides*, *Fusobacterium*, and *Prevotella* species. This drug is an alternative agent for treatment of mild to moderate *C. difficile*–associated diarrhea. Metronidazole is bactericidal against anaerobic bacteria and exhibits concentration-dependent killing. It has high oral bioavailability and tissue penetration, including penetration of the blood-brain barrier. The majority of *Actinomyces*, *Propionibacterium*, and *Lactobacillus* species are intrinsically resistant to metronidazole. The major adverse effects include nausea, diarrhea, and a metallic taste. Concomitant ingestion of alcohol may result in a disulfiram-like reaction, and patients are usually instructed to avoid alcohol during treatment. Long-term treatment carries the risk of leukopenia, neutropenia, peripheral neuropathy, and CNS toxicity manifesting as confusion, dysarthria, ataxia, nystagmus, and ophthalmoparesis. Through metronidazole's effect on the CYP2C9 drug-metabolizing enzyme, its coadministration with warfarin can result in decreased metabolism and enhanced anticoagulant effects that require close monitoring. Concomitant administration of metronidazole with lithium can result in increased serum levels of lithium and associated toxicity; coadministration with phenytoin can result in phenytoin toxicity and possibly decreased levels of metronidazole.

■ OXAZOLIDINONES

Linezolid is a bacteriostatic agent and is indicated for serious infections due to resistant gram-positive bacteria, such as MRSA and VRE. The intrinsic resistance of gram-negative bacteria is mediated primarily by endogenous efflux pumps. Linezolid has excellent oral bioavailability. Adverse effects include myelosuppression and ocular and peripheral neuropathy with prolonged therapy. Peripheral neuropathy may be irreversible. Linezolid is a weak, reversible monoamine oxidase inhibitor, and coadministration with sympathomimetics and foods rich in tyramine should be avoided. Linezolid has been associated with serotonin syndrome when coadministered with selective serotonin reuptake inhibitors. Tedizolid has properties similar to those of linezolid, but