

Table 2. New Agents for the Management of Gram Positive Infections

Agent	Adult Dose & Frequency	In Vitro Activity	FDA-Approved Indications	Side Effect Profile/Comments
Linezolid (Zyvox)	600 mg IV or PO Q12h No dose adjustments for renal or hepatic dysfunction	<ul style="list-style-type: none"> - S. aureus (MSSA and MRSA) - Streptococcus spp - Enterococcus spp (including VRE) 	<ul style="list-style-type: none"> - Vancomycin-resistant Enterococcus faecium infections - Nosocomial pneumonia - Complicated & uncomplicated skin and soft-tissue infection - Community-acquired pneumonia 	<ul style="list-style-type: none"> - Bone marrow suppression, especially thrombocytopenia <ul style="list-style-type: none"> - Prolonged use (>14 days) - Overdoses - GI intolerance - Rare events include serotonin syndrome when administered with concomitant serotonergic agents, optic neuritis and peripheral neuropathy
Daptomycin (Cubicin)	Superficial infections: 4 mg/kg IV Q24h Severe or systemic infections: 6 mg/kg IV Q24h Dose adjustment for renal dysfunction (CrCl <30 including HD): 4 to 6 mg/kg Q48h	<ul style="list-style-type: none"> - S. aureus (MSSA and MRSA) - Streptococcus spp - Enterococcus spp (including VRE) 	<ul style="list-style-type: none"> - Complicated skin and soft-tissue infection - Staphylococcus bacteremia - Right-sided native valve endocarditis due to Staphylococcus 	<ul style="list-style-type: none"> - Elevations in CK that may cause rhabdomyolysis - Inactivated by surfactant and should not be used for treatment of pneumonia
Tigecycline (Tygacil)	100 mg IV Loading dose followed 12 hours after by 50 mg IV Q12h Dose adjustment for severe hepatic dysfunction: 100 mg IV Loading dose followed 12 hours after by 25 mg IV Q12h	<p>Gram Positive</p> <ul style="list-style-type: none"> - S. aureus (MSSA and MRSA) - Streptococcus spp - Enterococcus spp (including VRE) <p>Gram Negative</p> <ul style="list-style-type: none"> - Acinetobacter spp - E. coli - Klebsiella spp. - Enterobacter spp. - Citrobacter spp - S. maltophilia - Serratia spp 	<ul style="list-style-type: none"> - Complicated intra abdominal infections - Complicated skin and soft-tissue infection - New Drug Application (NDA) submitted for hospital-acquired pneumonia 	<ul style="list-style-type: none"> - Nausea and vomiting (15-25%); usually diminishes after 2-3 days of therapy - Does not concentrate in serum or urine; should not be routinely used for bacteremias and/or urinary tract infections
Quinupristin/ Dalbapristin (Synercid)	7.5 mg/kg IV Q8-12h No dose adjustment is needed for hepatic or renal dysfunction needed for hepatic or renal dysfunction	<p>Anaerobes</p> <ul style="list-style-type: none"> - S. aureus (MSSA and MRSA) - Streptococcus spp - Enterococcus faecium (including VRE) 	<ul style="list-style-type: none"> - Vancomycin-resistant Enterococcus faecium infections including bacteremia - Complicated skin and soft-tissue infection 	<ul style="list-style-type: none"> - Arthralgias and/or myalgias - Thrombophlebitis - Inflammation and/or pain at infusion site - Drug interactions may occur as inhibits CYP3A4, a major metabolic pathway for certain medications