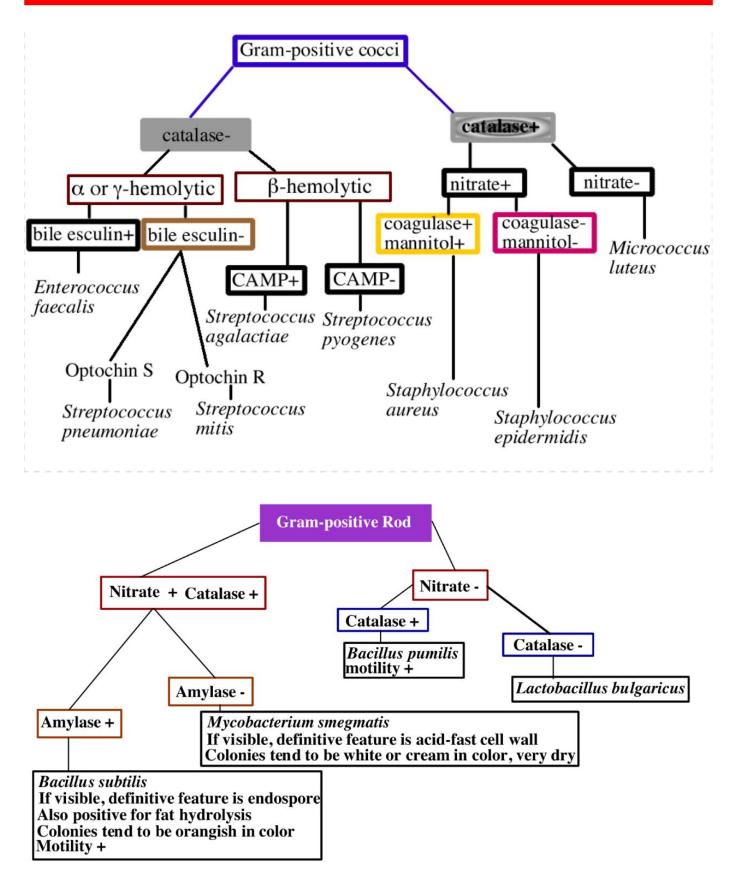# Gram+ Dichotomous Keys

Gram-positive cocci

catalase-

catalase+

α or γ-hemolytic

β-hemolytic

nitrate+

nitrate-

bile esculin+ | bile esculin-

coagulase+ mannitol+

coagulase- mannitol-

Micrococcus luteus

Enterococcus faecalis

CAMP+

CAMP-

Streptococcus agalactiae

Streptococcus pyogenes

Optochin S

Optochin R

Staphylococcus aureus

Streptococcus pneumoniae

Streptococcus mitis

Staphylococcus epidermidis

Gram-positive Rod

Nitrate + Catalase +

Nitrate -

Catalase +

Catalase -

Bacillus pumilis motility +

Lactobacillus bulgaricus

Amylase -

Amylase +

Mycobacterium smegmatis
If visible, definitive feature is acid-fast cell wall
Colonies tend to be white or cream in color, very dry

Bacillus subtilis
If visible, definitive feature is endospore
Also positive for fat hydrolysis
Colonies tend to be orangish in color
Motility +