

Antibacterial activity of α -mangostin against vancomycin resistant *Enterococci* (VRE) and synergism with antibiotics

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Abstract

α -Mangostin, isolated from the stem bark of *Garcinia mangostana* L., was found to be active against vancomycin resistant *Enterococci* (VRE) and methicillin resistant *Staphylococcus aureus* (MRSA), with MIC values of 6.25 and 6.25 to 12.5 μ g/ml, respectively. Our studies showed synergism between α -mangostin and gentamicin (GM) against VRE, and α -mangostin and vancomycin hydrochloride (VCM) against MRSA. Further studies showed partial synergism between α -mangostin and commercially available antibiotics such as ampicillin and minocycline. These findings suggested that α -mangostin alone or in combination with GM against VRE and in combination with VCM against MRSA might be useful in controlling VRE and MRSA infections.

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Keywords: Mangostin; *Garcinia mangostana*; Antibacterial activity; Vancomycin resistant *Enterococci*; Synergy effect with antibiotics
