

broad-spectrum antimicrobial that inhibits the enoyl-acyl carrier protein reductase FabI to prevent type II fatty acid synthesis in several bacterial species (Yang et al. 2017b), which has been widely used as disinfectant. Recently, this non-antibiotic triclosan has been shown to potentiate the efficacy of TOB against *P. aeruginosa* biofilms by the eradication of bacterial biofilm. Besides, the combination of triclosan and TOB resulted in a 100-fold reduction of viable persistent cells during 8 hours and complete eradication by 24 hours (Maiden et al. 2018). Eradication of biofilm is another largely unexplored area of how an adjuvant could synergize existing antibiotics (Figure 18.6).

18.13 Outlook and Conclusions

Antibiotic resistance in GNB remains one of the most pressing global health challenges. Our inability to discover novel antibacterial agents with novel modes of action in the past 50 years forces us to look for strategies to enhance the antibacterial activity and prolong the lifespan of our existing antibiotics. Adjuvants employ multiple mechanisms to revive antibiotics. The majority of these strategies are pathogen directed and enhance the intracellular concentration of legacy antibiotics by combating bacterial resistance. In the absence of novel antibiotic classes, this approach appears to be one of the few promising avenues to cope with the global health crises.

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