

Dalbavancin

A Viewpoint by Peggy L. Carver

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The recent development of novel therapeutic options for the treatment of meticillin resistant *Staphylococcus aureus* (MRSA), including linezolid, daptomycin, tigecycline and dalbavancin, is welcome, given emerging antibacterial resistance among staphylococci and streptococci, which are common causes of complicated skin and skin structure infections (cSSSIs).^[1] Several additional agents (ceftibiprole, ceftaroline fosamil, telavancin and oritavancin) are in the later stages of development. Clinical trials with telavancin, oritavancin and ceftibiprole suggest that they are likely to provide once-daily administration options for the therapy of cSSSIs. Linezolid, while approved for this use, has been associated with haematological and neurological effects with long-term use.

As follow-up therapy to an initial course of intravenous antibacterial therapy in the hospital, once-weekly administration of dalbavancin would alleviate the need for indwelling catheters, potentially translating into fewer local or blood stream infections. There would also be economic savings on the skilled personnel performing drug administration and monitoring.^[2]

However, the most common use of dalbavancin is likely to be as empirical therapy of cSSSIs in the

emergency room, where increased rates of community-associated MRSA (CA-MRSA) are observed. Although cotrimoxazole and doxycycline have (thus far) proved successful in the treatment of CA-MRSA infections, failures are occasionally noted.^[1]

Although the weekly cost of dalbavancin therapy may prove similar to that of other MRSA-active agents, loss of potential savings from de-escalation of therapy, once culture results are available, to less costly oral antibacterials for meticillin susceptible staphylococci, or linezolid or ceftibiprole for MRSA, may temper its widespread empirical use.

Whether the unusually long half-life of dalbavancin, which permits once weekly administration, will prove to be a double-edged sword, remains to be seen. Although adverse effects have been minimal in cSSSI trials, patients with glycopeptide hypersensitivity generally were excluded. The potential for prolonged reactions with the use of this long-acting agent in glycopeptide-sensitive patients remains a concern.^[2] ▲

References

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2. Lin SW, Carver PL, DePestel DD. Dalbavancin: a new option for the treatment of gram-positive infections. Ann Pharmacother 2006 Mar; 40 (3): 449-60