

A systematic review of DACC-coated dressings* in the prevention and management of wound infection.

Summarized from

Study: Dialkylcarbamoyl chloride (DACC)-coated dressings in the management and prevention of wound infection: a systematic review.

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*Note: DACC-coated dressings are marketed as Leukomed® Sorbact® and Cutimed® Sorbact® by Essity in specified territories.



Key take-outs

- Up to September 2016, 17 studies had been identified and considered valid for inclusion in the review.
- The use of DACC-coated dressings in clean surgical wounds was reported in three RCTs and one case series, representing 3133 patients.
- The use of DACC-coated dressings in infected wounds was reported in one RCT, two cohort studies and ten case series, representing 281 patients.
- There is growing evidence base for the clinical effectiveness of DACC technology in both acute and chronic wound groups.



Objective

The aim of this systematic review was to assess the available evidence supporting the clinical use of DACC-coated dressings in preventing or managing wound infections.



Method

Medline, Embase, CENTRAL and CINAHL databases were searched from 1946 to September 2016 for studies evaluating the role of DACC-coated dressings in preventing or managing wound infections. All studies investigating the role of DACC-coated dressings in wound care, with primary or secondary outcomes related to infection, were considered for inclusion, including both randomised and nonrandomized trials, cohort studies and case series.



Results

A total of 252 articles were identified, of these 252, 34 were considered for inclusion after screening by title and abstract, and the full text sought. After full text reading, 17 were considered to be suitable for inclusion (Figure 1). In general, included studies fell into two types: those investigating DACC-coated dressings in chronic wounds with or without signs of infection (one RCT, two cohort studies and ten case series, with a total of 281 patients) and those investigating the use of DACC-coated dressings in the prevention of infection in clean surgical wounds (three RCTs and one case series, with a total of 3133 patients).



Results

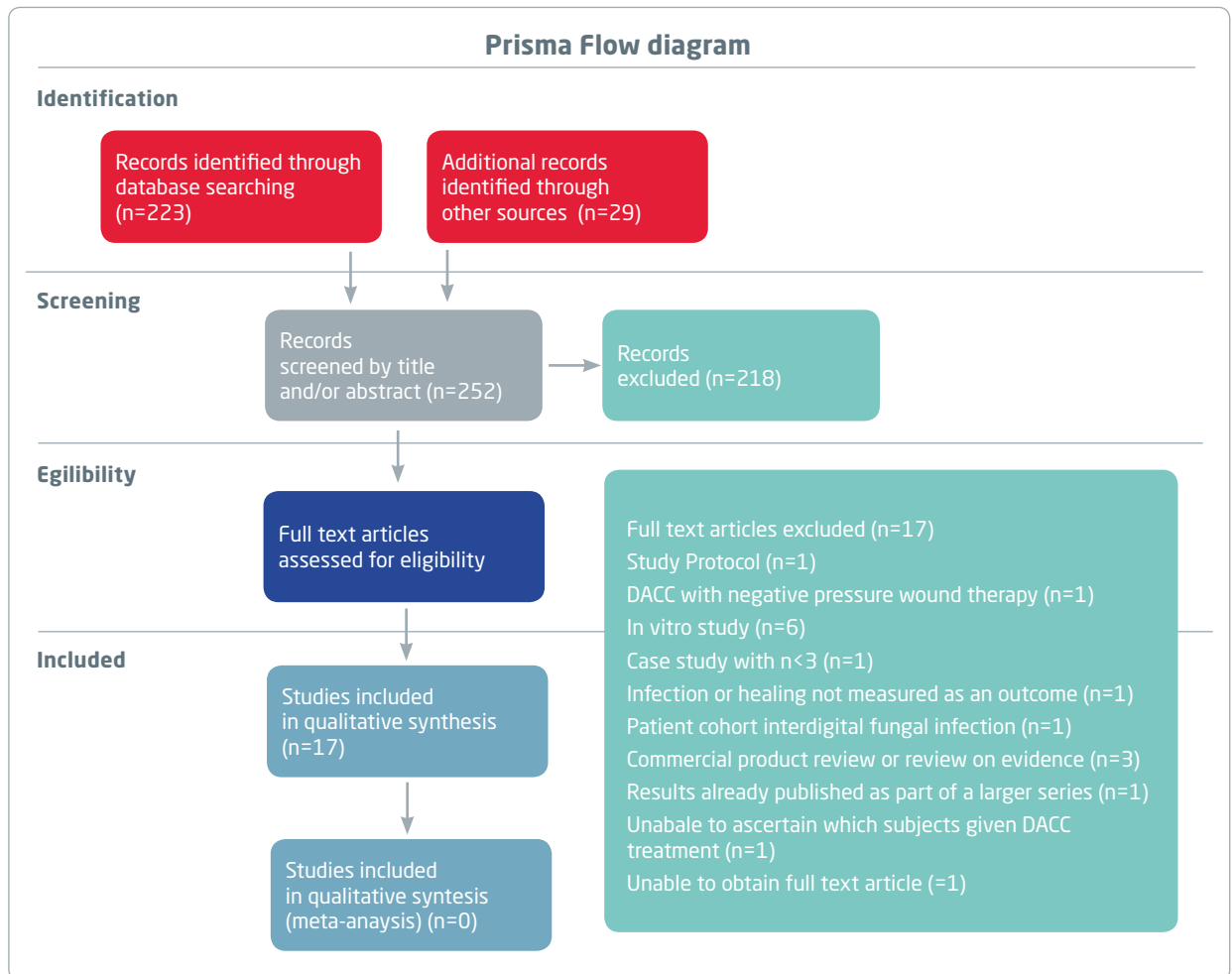


Figure 1: Prisma Flow diagram

The evidence examining DACC-coated dressings in chronic wound management was mainly low level, the outcomes from these studies, however, were positive. The evidence to support DACC-coated dressing use as prophylaxis for SSI in clean surgical wounds was of higher quality, in that it was based on RCTs.

Overall, the use of a DACC-coated dressing was suggested to reduce postoperative surgical site infection rates and result in chronic wounds that subjectively looked cleaner and had less bacterial load on microbiological assessments.



Conclusion

Existing evidence for DACC-coated dressings in managing chronic wounds or as a surgical site infection (SSI) prophylaxis is limited but encouraging with evidence in support of DACC-coated dressings preventing and treating infection without adverse effects.

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