

Review Group Membership

**MaHTAS Reviewer:**

Dr. Roza Sarimin  
Pn. Noormah Mohd. Darus  
Datin Dr. Rugayah Bakri

**External Reviewers:**

Dr. Ker Hong Bee

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For further information please contact:

Health Technology Assessment  
Section (MaHTAS)  
Medical Development Division  
Ministry of Health Malaysia  
Level 4, Block E1, Precinct 1  
Government Office Complex  
62590 Putrajaya.

Tel: 603 8883 1246

Fax: 603 8883 1230

Available at the following website:  
<http://www.moh.gov.my>

2013

**Introduction**

Sanitizer is a type of antimicrobial that reduces the number of bacterial contaminants to safe level as judged by public health requirements which is commonly applied to inanimate objects (food contact and non-food contact area). Disinfectants destroy many or all pathogenic microorganisms on inanimate objects, except bacterial spores. ■■■■■ antimicrobial treatment was an organosilane biostatic molecule with Quaternary Ammonium compounds as its active ingredient. ■■■■■ antimicrobial treatment has been claimed effective to be applied as surface disinfectant and environmental mould prevention, however its claim remains uncertain. This review was requested by the Senior Principal Assistant Director, Disease Control Division, Ministry of Health Malaysia to review the evidence on ■■■■■ antimicrobial treatment to be used as surface disinfectant in the MOH hospitals and healthcare facilities following proposal from a company to introduce them in the MOH facility.

**Objective/Aim**

To assess the efficacy, safety and cost effectiveness of ■■■■■ antimicrobial treatment to be used as surface disinfectant in the MOH hospitals and healthcare facilities.

**Results and Conclusions**

There was no retrievable published evidence on the efficacy, safety and cost effectiveness of ■■■■■ antimicrobial treatment or self sanitizing technology. Only limited unpublished evidence provided by the manufacturer was available. Nevertheless the microbiological testings provided demonstrated that ■■■■■ antimicrobial treatment seemed to be effective against bacteria, fungi and virus. ■■■■■ antimicrobial treatment was also registered with the USEPA (Registration number: 70871-16-23). Quaternary Ammonium compounds, which is the active ingredient of ■■■■■ antimicrobial treatment is low-level disinfectant which can be used in ordinary environmental sanitation of non-critical surfaces, as classified by USCDC.

**Methods**

Literature were searched through electronic databases which included PubMed, Medline, Cochrane Database of Systematic Reviews, Cochrane Database of Controlled Trial, Health Technology Assessment, National Horizon Scanning, other websites; INAHTA, ASERNIP-S, CADTH, FDA, MHRA and general databases such as Google. Additional articles retrieved from reviewing the bibliographies of retrieved articles or contacting the authors. A critical appraisal of all relevant literature was performed using Critical Appraisal Skills Programme (CASP) checklists and the evidence graded according to the US/Canadian Preventive Services Task Force Level of Evidence (2001). The search was limited to human study. The last searched was conducted on 15 February 2013.