



SDI Review Form 1.6

PART 1:

Journal Name:	British Microbiology Research Journal
Manuscript Number:	MS: 2012 BMRJ 2761
Title of the Manuscript:	Persistent bactericidal action by a silver disinfectant on surfaces of hospital furniture

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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PART 2: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	Review of Persistent bactericidal action by a silver disinfectant on surfaces of hospital furniture by De Lorenzi, Barrai, Finzi, Cugini and Salvatorelli. Many pathogenic bacteria, fungi and viruses are spread through inanimate objects and many species can remain viable for months on dry inanimate surfaces. The present study is a small but interesting study of the use of a silver acetate containing aerosol spray in reducing reservoirs or viable bacteria and fungi on hospital surfaces. Published information about the use of silver to disinfect surfaces is sparse. I do have several questions about the paper and its experimental format follows: 1. SURFACES. Were all of the surfaces sampled composed of plastic laminate? 2. CULTURE MEDIA AND TEMPERATURE. Samples were collected on Tryptic Soy Agar incubated at 36 oC for a relatively short incubation time of 24 and 48 hours. Were any samples collected with a different media or cultured at different temperature? Use of such media and temperature would favor growth of bacteria over	Yes. Corrected



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	fungi (molds) and would tend to favor growth of warm- body temperature bacteria and fungi over room temperature bacteria and fungi. You might want to add a statement something like this in the discussion section “One limitation of this study was that the use of Tryptic Soy Agar would tend to favor growth over bacteria and discourage growth of many fungi. The high temperature and short incubation time would also favor growth of fast growing, thermophilic (heat loving) organisms.” I think you should add a statement somewhat like this. 3. TESTS FOR SPECIFIC ORGANISMS. Did you test for specific organisms in your samples? 4. P VALUE- TABLES 1 AND 2. Minor point- in tables 1 and 2- you listed p value as >0- meaning perhaps approaching zero. Would stating p value as $P < 0.001$ perhaps be a better way of expressing this? 5. MINOR SPELLING ERRORS- There are a few minor spelling errors- please recheck manuscript- In Title- “furniture” should be “furniture”, in Tables 1 and 2 “minuts” should be “minutes” etc. 6. CHEN PAPER ON NANOSILVER. In the introduction section of your paper- perhaps you want to say more about nanoparticle silver and its use as a disinfectant and possible adverse effects of silver. A good paper to read and cite might be the 2008 paper on this topic by Chen and Schluesener- please see abstract below.	No. Corrected Corrected Corrected
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	Although this study is small, I feel it could be a useful addition to the literature with some minor revisions. Toxicol Lett. 2008 Jan 4;176(1):1-12. Epub 2007 Oct 16. Nanosilver: a nanoproduct in medical application. Chen X, Schluesener HJ. Source Institute of Brain Research, University of Tuebingen Calwer Str. 3, D-72076 Tuebingen, Germany. mornsmile@yahoo.com Abstract Nanotechnology is a most promising field for generating new applications in medicine. However, only few nanoproducts are currently in use for medical purposes. A most prominent nanoproduct is nanosilver. Nanosilver particles are generally smaller than 100nm and contain 20-15,000 silver atoms. At nanoscale, silver exhibits remarkably	
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	unusual physical, chemical and biological properties. Due to its strong antibacterial activity, nanosilver coatings are used on various textiles but as well as coatings on certain implants. Further, nanosilver is used for treatment of wounds and burns or as a contraceptive and marketed as a water disinfectant and room spray. Thus, use of nanosilver is becoming more and more widespread in medicine and related applications and due to increasing exposure toxicological and environmental issues need to be raised. In sharp contrast to the attention paid to new applications of nanosilver, few studies provide only scant insights into the interaction of nanosilver particle with the human body after entering via different portals. Biodistribution, organ accumulation, degradation, possible adverse effects and toxicity are only slowly recognized and this review is focusing on major questions associated with the increased medical use of nanosilver and related nanomaterials. PMID:18022772[PubMed - indexed for MEDLINE]	
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Minor REVISION comments	Please see above	
Optional/General comments	Please see above	