Reviewer's report

Title: Risk of infection due to medical interventions via central venous catheters or implantable venous access port systems at the middle port of a three-way stopcock: luer lock cap vs. luer access split septum (Q-Syte)

Version: 3
Date: 30 October 2013
Reviewer: Jun Oto

Reviewer's report:

The authors addressed my concerns and appropriately considered my suggestions for revision. This paper has been markedly improved from the original submission.

Major Compulsory revisions:

Please make sure to use “TWC” or “three-way cock” consistently and correct the format of quotation marks throughout the paper.

Abstract:
1) Background: “The BD…Devices (BfArM)”. Please delete this part.

Background:
1) The background section seems too long and could be shortened considerably.
2) This article still reads too much like an advertisement for the Q-Syte. The brand name and manufacturer should be listed only in methods section because three-way stopcock, luer lock caps, and split septum system are generic. Are there any specific characteristics in the Q-Syte® compared with other split-septum needleless connectors?
3) Page 5, Please change from “infusion hose set” to “infusion set”.
4) Page 5, line 6, line 11: “y BD”, “split septum. Of the Q-Syte®”: Please correct the grammatical errors.

Results:
1) The figure 5 legend should explain what the boxes and lines denote.
2) Last paragraph, “possible hygienic risk, 65.38%...”: How did you calculate this value?
3) Page 10 last sentence, “Klebsiella oytoca”: Please change to “Klebsiella oxytoca”.

Discussion:
1) Page 14 Lines 1-5 “Another way to reduce…patient safety”: This part should be deleted because you did not evaluate the silver coating catheter.
2) Page 14 Lines 6-9 “Using only one single infection…achieving this goal”: Your data does not support these description because you did not evaluate the rate of catheter-related infection.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.