

**REPORT ON MASK DISINFECTING PROPERTY OF X'BACAFU™
ANTIMICROBIAL SPRAY**

Prepared for

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By

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Mask Disinfecting Experiment (modified from Zhiqing et al., 2018)

Methodology:

1. A volunteer will be given a face mask and required to wear it for 4 hours.
2. After 4 hours, the face mask will be collected into sterile bag and brought to the lab.
3. In a sterile condition, the outer & inner layer of the face mask will be cutted into 6 pieces.
4. 3 pieces will be swab individually onto MH agar forming a replicate and incubated for 24 hours at 37°C.
5. Another 3 pieces will be sprayed 6 times with disinfectant and left for 3-4 hours before swabbed individually onto MH agar then incubated for 24 hours at 37°C.
6. After 24 hours, the viability of bacteria growth will be observed and recorded.

Results:

The results obtained during the experiment are as follows:

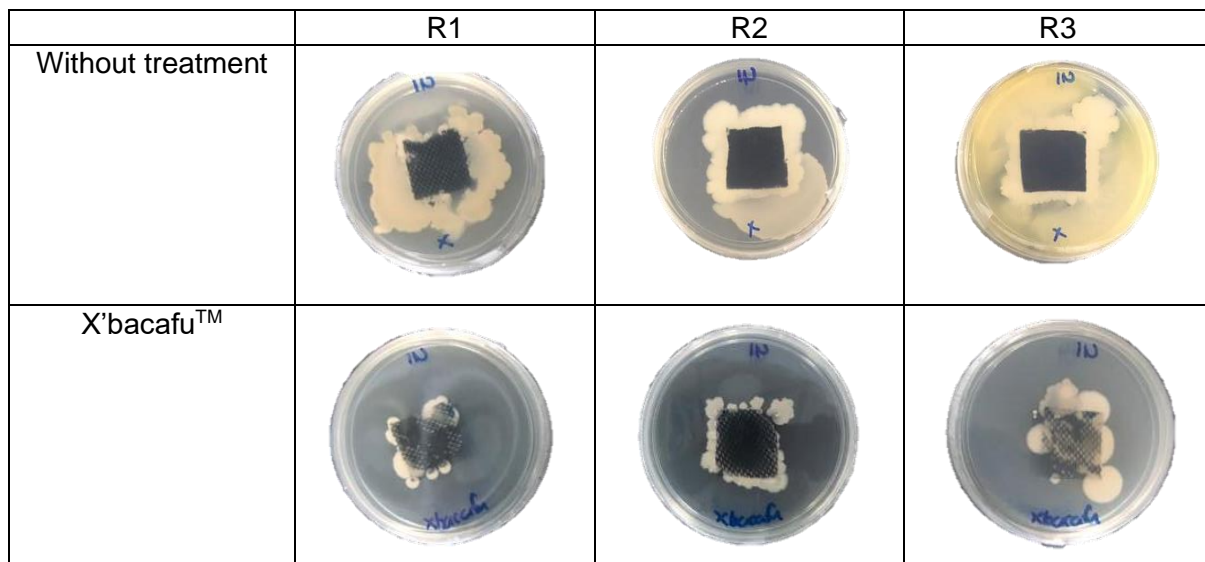


Figure 1: Growth of bacteria after 48 hour incubation of inner layer of mask with no treatment and reduction of bacterial growth after sprayed with X'bacafu™.

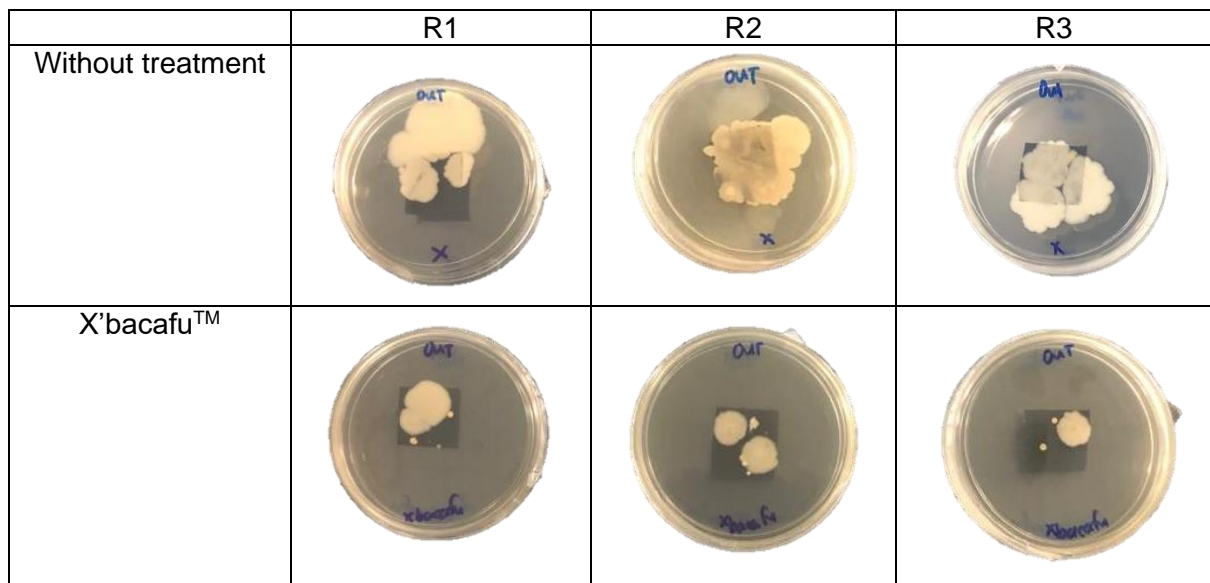


Figure 2: Growth of bacteria after 48 hour incubation of outer layer of mask with no treatment and reduction of bacterial growth after sprayed with X'bacafu™.

Conclusion:

Disinfecting test conducted using X'bacafu™ on worn reusable mask showed that the products exhibited inhibition against some normal bacteria found on human skin. This was observed by looking at the reduced growth of the selected bacteria on mask sprayed with the disinfectant. Hence, it is proven that X'bacafu™ Antimicrobial Spray is effective to be used in daily routine as disinfectant.

References:

Zhiqing, L., Yongun, C., Wenxiang, C., Mengning, Y., Yuanqing, M., Zhenan, Z., Haishan, W., Jie, Z., Kerong, D., Huiwu, L., Fengxiang, L., & Zanjing, Z. (2018). Surgical masks as source of bacterial contamination during operative procedures. *Journal of orthopedic translation*, 14, 57-62.