

# Review of: "An Optimal Control for Ebola Virus Disease with a Convex Incidence Rate: Imputing from the Outbreak in Uganda"

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Potential competing interests: No potential competing interests to declare.

1. Paragraph 1.1, Line 3: ...section 3 gives a] the computation... should be "...section 3 gives a computation..."
2. Page 4:  $H_2: f(S, I, T, D) > \dots$  Something is missing here,
3. According to the parameters on Table 1, is there any sensitivity analysis result of your model?
4. Based on Figure 2, does this figure describe your own model or has it been improved from another article? If not, please provide the reference.
5. Page 8, the sentence after the first 7 equations: "The effective reproduction number....."Are you computing**the basic Reproduction number or the effective reproduction number?**
6. Paragraph 2.1.3.Line 1:.....atleast...should be at least,
7. Equation (3.3), there is confusion between  $T$  time used for integrating the function and  $T$  used as the treated individuals.
8. Put all the equation used inside the text between parentheses, for Example see Paragraph 3.2 Line 2: Eq 3.2 and Eq 3.3,
9. In simulation part, could you please give the values of  $C_i$  where  $C_i$  is different from 0 that you have used?
10. Many figures in simulation have the same title (See for example fig:11,12,15,16,19,20: fig 9,10,13,14,17,18 ): check very well and fix it.
11. Strategy I: Control with Lockdown ( $C_1 > 0$ ) and in the title of figures 3 and 4, you mention the control ""treatment"" that means  $C_3$  is not equal to 0. Could you be clearer!
12. The titles from the figure5-20 should be improved because you have two cases: first with no controls second without controls!
13. Improve the title of figure 21-22!
14. Table 2. How did you get these costs? Is there any reference for this?

