

Review of: "A Computational Model Assessing Population Impact of a New Tobacco Product"

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Potential competing interests: No potential competing interests to declare.

Overall, the article is well structured, and the presentation made by the authors allows the reader to fully understand the various phases of the modeling, starting from the setup and, subsequently, the steps of the main loop.

A valuable asset is the support file that reports the details of these phases and describes how they are developed scientifically using very detailed databases.

The first reading, the results of which have just been presented, was followed by a second reading to find possible suggestions for improving the work. I give the results of this second reading below.

In scientific work, I put the replicability of the results by other scholars first. When the model involves computer simulations, I think making the code available in open-source mode is necessary. To facilitate the replication of the results, it is also advisable to avoid the source code being written in one of the proprietary languages that require expensive licenses, favoring the nowadays available free platforms. It would also be desirable to accompany the code with a document explaining how to run it step-by-step.

Going to the paper's content, I think some improvement is possible in the introduction and the results section.

The introduction could benefit from a more detailed exposition of the alternatives to the ABM methodology in the current literature.

As regards the results, in my understanding, the paper presents those obtained from a single run of the model. However, since there are stochastic elements, it would be interesting to understand whether different realizations of the random variables involved modify the dynamics (in various runs). In other words, authors could evaluate whether to report the dynamics of what physicists call the "statistical ensemble."

Minor points:

- At the beginning of the introduction NP is defined twice;
- It would be appropriate to specify the meaning of the acronym ALCS.