2018-2019 Mid-Term Credibility Plan Review

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#	Ten Simple Rules	REVIEWER #1		REVIEWER #2	
		Considered in the Credibility Plan?	**Comments**	**Considered in the Credibility Plan?**	**Comments**
1	Define context clearly	insufficient	Overall context of use of the modeling and simulation platform is not reported. Descriptions of individual models and their use are noted. It will be helpful to note the target audiences.	insufficient	The context of each of the model activities or the integrated context is not clearly and concisely specified.
2	Use appropriate data	sufficient	Scientific publications to strengthen the data, on which models are based, property databases, and subsequent dissemination will support traceability and relevance of data.	sufficient	Report explicitly details location and source of data per publication history and available databases
3	Evaluate within context	insufficient	Strategies to understand the quality of the models are not mentioned in the report.	insufficient	The shear number of tests and and publications imply a good deal of validation and uncertainty quantification, but these are not specifically outlined for assessment of credibility
4	List limitations explicitly	insufficient	The means to conveying explicit limitations to user base of models are not described. Yet, aggressive dissemination may be helpful to understand these limitations in an implicit manner.	insufficient	No description of limitations or location where limitations are documented is given. Inference is that such would be available in publications.
5	Use version control	insufficient	There is no mention of strategies to manage versioning. I suspect this is inherent to dissemination strategy.	insufficient	Implementation of version control not defined.
6	Document adequately	sufficient	Documentation is largely based on scholarly publications. Development of workflows and Jupyter notebooks provide additional support.	sufficient	Strongest aspect related to credibility. Much documentation discussion.
7	Disseminate broadly	sufficient	Firm knowledge dissemination through publications. Strong dissemination of data and models through well established repositories, e.g. Physiome.	sufficient	Another strong area of credibility as dissemination is described as a principle aspect of model maturity. Some indication of acquiring and implementing feed back should be added.
8	Get independent reviews	insufficient	It is not clear if the study has third-party reviewers. Nonetheless, dissemination of data and models will support such activities.	insufficient	Implied is that dissemination activity support third party reviews, however, this is not discussed adequately of highlighted
9	Test competing implementations	sufficient	Models are likely to be provided in different platforms, e.g., MATLAB and JSim. It is not clear if different modeling strategies will be employed for simulations of the same phenomenon.	sufficient	Investigators discuss aspects of this factor

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10	Conform to standards	insufficient	It is not clear that any guidance (generally applicable or from the specific domain of investigators) will be adopted. Dissemination on established repositories should somewhat necessitate this.	insufficient	No mention of standards or their implementation. Noted is the use of the Physiome project which does have some standards for model submission.

General Comments

Reviewer 1:
It will be beneficial if the report focuses on aspects of credibility rather than progress in the whole project. The awardees interpretation of how their activities may correspond to Ten Simple Rules will be helpful.

Reviewer 2:
Thanks for providing a submission to this year's mid-term credibility plan update review. The provided information did not conform to the requested format and several inferences about the content with respect to the TSR were made to develop this assessment. Generally the depth and breadth of this work implies a good deal of the TSR credibility factors are addressed as a matter of practice in the investigation. However, these could not be directly evaluated with the provided evidence. We encourage the investigators to review the tabulated comments and consider how their activities map to the TSR credibility factors and how those can be used to communicate the model credibility to potential users considering this model's applications.