



# 2018-2019 Mid-Term Credibility Plan Review

PI: Thomas Dick

#	Ten Simple Rules	REVIEWER #1		REVIEWER #2	
		Considered in the Credibility Plan?	Comments	Considered in the Credibility Plan?	Comments
1	Define context clearly	sufficient	Utilizes existing models and combines them for a different application.	sufficient	The context is reasonably stated. However, it would be beneficial for the investigators to refine the current context to include scope the model will be used, and the end goal. For example, stating if the model will be used strictly for research and what end-user base it will benefit most.
2	Use appropriate data	sufficient		sufficient	Although there is a clear statement regarding the use of animal and human models, it is not clear if the investigators will be running their own experiments or if they are using pre-existing data. If the latter, they should state how they will vet the data to ensure it is appropriate for the stated context of use.
3	Evaluate within context	insufficient	Credibility has been narrowly defined as replicating the course of observed data. Should also consider other aspects including sensitivity and uncertainty in the predictions and data matching.	sufficient	Further clarification is needed on whether the experimental data referred to is the same as Rule #2. If so, measures to be take to ensure data used to develop the model and validate the model are not intermingled.
4	List limitations explicitly	sufficient		sufficient	
5	Use version control	insufficient	Are the versions added only when publicly available, or also used to track internally? Not clear.	insufficient	Too general statement regarding version control. The investigators should be more specific on what best practices will be used.
6	Document adequately	insufficient	Manuals are mentioned. Is there information on what was tried and what worked and what did not retained in some way that can be useful/helpful/insightful to others?	sufficient	The intention to document is there. However, the investigators should lay out a clearer idea on how documentation will be carried out. Simply stating that documentation best practices will be used is too general.
7	Disseminate broadly	sufficient		insufficient	The IMAG community has many platforms available to share models (e.g. SimTK, GitHub, Journals that allow model publishing). As such, the investigators need to be more explicit about how they plan to widely disseminate.
8	Get independent	sufficient	What will the independent reviewers	sufficient	Peer review has been proposed.



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	reviews		test? Re-implementation? Or code execution? etc.		
9	Test competing implementations	insufficient	Are models developed with alternative assumptions/formulations? etc.	sufficient	
10	Conform to standards	insufficient	What standards are being followed at present?	insufficient	The goal to follow best practices is in place. But the investigators need to identify and state which best practices they will follow.

## General Comments

### Reviewer 1:

None Provided

### Reviewer 2:

It is greatly encouraging to see the investigators thinking about the Ten Simple Rules to demonstrate credibility. Given that the project is just starting, the general nature of the credibility plan is understandable. However, there are a number of areas where a little more information could have been provided. More specifically responses to Rules 5, 7 and 10 could have had more details as noted in the comments above.

Once the project has been running for a year, we hope to see more specific details on how you're working to satisfy the ten areas of credibility.