Pre-submission review

Assignment Number: **MIKHAW-5**

Paper Title: **Diagram of enzymes, substrates and products in human steroidogenesis**

Total document length: 4 pages
Number of Figures: 5
Number of Tables: 0

Target: Wikiversity
URL:
https://en.wikiversity.org/wiki/Diagram_of_enzymes,_substrates_and_products_in_human_steroidogenesis

This is a peer review of the article "**Diagram of enzymes, substrates and products in human steroidogenesis**", *which as of March 27th 2014 is displayed online at the following URL:*
https://en.wikiversity.org/wiki/Diagram_of_enzymes,_substrates_and_products_in_human_steroidogenesis

Manuscript Development

Section	Comments
Title	The article is not only about the diagram, but is more about how it was created. A more explanatory title might be 'Development of a diagram showing the enzymes, substrates and products in human steroidogenesis' or more succinctly 'Development of a diagram showing the pathways of human steroidogenesis'
Introduction	This is a brief but clear explanation of steroidogenesis with examples of the different classes of steroids, suggesting why a diagram may be needed.
Method	This describes the development of the diagram as a collaborative work – I'm not sure if that is quite accurate since collaboration implies working together with someone, rather than using previously published information and developing it further, as here, where the original creators (in this case Stannered I think?) may not even be aware their work has been used/ improved upon since written permission did not need to be obtained, as is explained in the article. Further, this article implies that the work resulted in a novel presentation of comprehensive information regarding steroidogenesis that was not previously available. Again this may not be strictly accurate since many pathway diagrams have been published in the past, although they may not have included all the information regarding substrates, enzymes, locations, and steroid classes. Certainly this may be a first for publication of this information in Wikipedia. The explanation of how the final diagram was created is clear and gives a step-by-step summary of each stage.
Figures	The figures shown illustrate steps in the process of producing the final diagram, as different information is added to the original chart
Result	This is the final diagram, which brings a large amount of information together in a clear and easy-to-read way. From one small diagram, the synthesis of any particular steroid can be traced from cholesterol through the intermediates, the enzymes involved and their locations, ending with the precise 3-D structure and functional group of the end product.
Discussion	This explains that the process of creating the diagram is an illustration of the way in which many contributors can add value to an original resource. The limitation of the diagram – that not all steroids are included – is explained.
References	The references used in creation of the diagram are provided. Many other references to steroid biochemistry could be added, but since this article focuses mainly on the process of creation of such a diagram from freely-licensed resources, this is not necessary.
Authorship	No conflicts of interest have been declared.

Quality of Article

Rating	Excellent	Good	Fair	Poor	Comments
Clarity of presentation	X				
Organization and Structure		X			
Evidence supports conclusion		X			
Adequacy of literature review		X			
Overall Rating		X			

Next Steps

List the <u>three</u> most important improvements that the author needs to make. Make sure that you have suggested constructive solutions to these problems.

1. Clarify that the article is largely about the process of developing a diagram.
2. Possibly include a short explanation of what a vector image is.
3. Clarify whether the 'other participants in diagram creation' actually worked together to create this diagram, or whether their work was used as a basis for later development.

List the <u>three</u> most important strengths of this paper which the author should not lose in the process of revision.

1. A clear explanation of the step-by-step process of creation.
2. The final diagram which is very visually appealing.
3. References to comprehensive sources.

Conflicts of interest: None declared.