

Review of: "[Review] Dr Jekyll and Mr Hyde: From Two Branches of Immune Response to Three Types of Interferon Response"

Aislan de Carvalho Vivarini¹

¹ Universidade Federal do Rio de Janeiro

Potential competing interests: No potential competing interests to declare.

With the work entitled "Dr Jekyll and Mr Hyde: From Two Branches of Immune Response to Three Types of Interferon Response" the author sought to describe the main functions of the three types of Interferon.

In general, the review fulfills its role in providing information, however there are some flaws, described below:

1. It would be very important to describe at least the gene structure, such as regulatory regions (promoters), number of exons, alternative splicing and size, as well as proteins domains. This would make the article more complete information and bring in a greater number of readers.
2. Items 2.2 and 3.3 could be together.
3. In figure 2, type II and III IFN must be highlighted in bold.
4. On page 8, first line, the statement that IFN-I inactivates the action of PKR is wrong! There are no references in this part. If so, the concept should be reviewed, as PKR is a gene regulated by IFN.
5. Item 3.3 is very confusing with all the pathways, targets, and mechanisms in a busy text. The author should better separate all the targets and, perhaps, make a table.
6. Why are there only descriptions in item 3.4 related to viral infections? There are so many important works on the action of IFN in fungal, bacterial, and protozoal infections. The author didn't even bother to mention them, much less describe them.
7. Items 3.5 and 3.6 could be merged, as they deal with disorder and errors.
8. Item number 4.0 should be at the beginning of the article.

A review article that deals generally with the basic functions, differences and updates regarding this gene family could be better written. Selecting the most important points is fundamental and demonstrates the direction of reading, both for the author and for the readers. I recommend rethinking this direction, subdividing it into more items, or changing the title of the work.

