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# Review of Wikipedia Articles

The review is meant to facilitate further improvement of Wikipedia articles. Suggestions about the quality of a Wikipedia articles can be found at [http://en.wikipedia.org/wiki/Wikipedia:Featured\\_article\\_criteria](http://en.wikipedia.org/wiki/Wikipedia:Featured_article_criteria).

Please send your review in pdf and .doc format to Marta Pucciarelli: [marta.pucciarelli@supsi.ch](mailto:marta.pucciarelli@supsi.ch) and Florence Devouard: [florence.devouard@supsi.ch](mailto:florence.devouard@supsi.ch)

<b>Name of the reviewer</b>	Robert W. Doms, M.D., Ph.D.
<b>Affiliation</b>	The Children's Hospital of Philadelphia and the University of Pennsylvania School of Medicine
<b>Title of the article</b>	HIV
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## 1. Quality of the Summary

*Is the summary of the article a complete, thorough, and concise introduction to the topic? How do you think the summary could be improved? Which meaningful data are missing? Is there something that you find too much detailed for a general overview of the topic?*

***I think the summary is quite good – it is written for a lay audience, and I think it summarizes the key points well. I would consider adding one point – I recognize that the article is about the virus, not about AIDS, but I think it would be important to note two things, perhaps by noting that since its discovery in 1983 (this is when the virus was discovered), HIV has infected more than 70 million individuals, leading to more than 30 million deaths. Thus, in one sentence the reader recognizes that this is a 'new' virus, and that its impact on human health has been significant. In my opinion, both of these points are important.***

## 2. Structure and style of the article

*Is the article properly presenting the topic for a general public? Does the article provide a complete and easy-to-navigate structure? Which paragraph would you add, unify or split into different parts? Please provide a list of suggestions. Is the article well written and understandable at a high school level?*

*Yes, structure is good and it is well written.*

## 3. Content

*Is the article comprehensive of major facts related to the topic? Is the article adequately placing the subject in context? What does it miss? Please provide a list of topics you think should be included in the article (suggestions must be related to bibliography). Do you find that some arguments are not meaningful or representative of the topic for a general public. What should be deleted? Please explain why.*

*Under classification, I would state that HIV-1 causes the vast majority of HIV infections globally. HIV-2 cases are vanishingly small in number relative to HIV-1. Stating that HIV-1 causes the majority of infections is certainly true, but I think it implies a much greater role of HIV-2.*

*Under structure and genome, it states that HIV is large for a virus. Not really true. Its diameter is close to that of most other enveloped viruses.*

*Gp160 is not broken down to make gp120 and gp41; it is cleaved by a cellular protease (cut one time) to generate these two proteins.*

*Something that is missing in structure and replication is the fact that reverse transcriptase lacks proof-reading capability. As a result, HIV mutates very quickly. This is talked about later, under Genetic Variability, but it might be worth mentioning this very important fact earlier.*

*These sentences are, I think, nonsense:*

*How this selective process works is still under investigation, but one model is that spermatozoa may selectively carry R5 HIV as they possess both CCR3 and CCR5 but not CXCR4 on their surface<sup>[36]</sup> and that genital epithelial cells preferentially sequester X4 virus.<sup>[37]</sup>*

*This sentence is very controversial – other studies provide data that refute this:*

*gp120 binds to integrin  $\alpha_4\beta_7$  activating LFA-1 the central integrin involved in the establishment of virological synapses, which facilitate efficient cell-to-cell spreading of HIV-1.<sup>[45]</sup>*

*Minor change in CAPS:*

*Once gp120 is bound with the CD4 protein, the envelope complex undergoes a structural change, exposing the chemokine RECEPTOR binding domains of gp120 and allowing them to interact with the target chemokine receptor.<sup>[43][44]</sup>*

*It is important to add 'receptor', as gp120 does not bind to chemokines, but rather chemokine receptors.*

*This does not belong in the article: 'The presence of FEZ-1, which occurs naturally in neurons, is believed to prevent the infection of cells by HIV.'<sup>[47]</sup>*

*I would shorten this sentence *people can suggest anything best to just stick to the data:**

*HIV-1 entry, as well as entry of many other retroviruses, has long been believed to occur exclusively at the plasma membrane. More recently, however, productive infection by pH-independent, clathrin-dependent endocytosis of HIV-1 has also been reported ~~and was recently suggested to constitute the only route of productive entry.~~<sup>[48][49][50][51][52]</sup>*

#### 4. **International and local dimension**

*Is the article neutral (it presents general and acknowledged views fairly and without bias)? Is the article representative of the international dimension and consolidated research about the topic? If applicable, does the article feature examples from all over the world (no localisms)? Please draft a list of what is missing with related references.*

*I think the article is appropriately neutral.*

**5. References (essential to allow the articles to be improved)**

*Is the list of publications comprehensive and updated? Does it list the fundamental monographs and papers? Please provide primary/generic and secondary/original resources which need to be included and suggest the list of publications which should be removed.*