

Review Form 1.7

Journal Name:	Journal of Advances in Medical and Pharmaceutical Sciences
Manuscript Number:	Ms_JAMPS_97221
Title of the Manuscript:	siRNA: A comprehensive review of marketed products till August 2022
Type of the Article	Review Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journaljamps.com/index.php/JAMPS/editorial-policy>)

Review Form 1.7

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>1. The manuscript describes the development of drugs based on siRNA that have been approved for human treatment up to August 2022. The authors describe the historical discovery of RNA interference and the mechanism of action. Then, they explain in detail the four siRNA approved explaining the target, the chemical modification, mechanism of action, the administration route, doses and some pharmacological data. The text is clear and there is a Table summarizing the data. I believe the text is important for scientific community due to the relevance of these new drugs in the treatment of diseases with no cure.</p> <p>2. The title is appropriate</p> <p>3. The abstract is appropriate</p> <p>4. The subsections are well structured</p> <p>5. The manuscript is scientifically correct</p> <p>6. The references are sufficient and recent</p> <p>There are a few comments for minor revision:</p> <p>1) In the design of siRNA for targeting human cells subheading : there is no mention of 2'-F-RNA and this modification is used in siRNA therapeutics. 2'-MOE is mentioned but not so much used in siRNA. Phosphonate can be modified... is not right. It should be phosphate or phosphate diester.</p> <p>2) Givosiran subheading: -To achieve the in vivo efficacy phosphodiester bonds are replaced with phosphorothioate (PS). This is only a few of them not all. I will say "-To achieve the in vivo efficacy a few terminal phosphodiester bonds are replaced.."The phosphorothioate linkages at terminal positions are present in most the therapeutic siRNAs.</p> <p>3) Inclisiran has been also approved by USFDA in December 2021</p> <p>4) Vutrisiran has been approved by USFDA in June 2022 and in September 2022 in EU</p> <p>5) Tivanisiran is being developed by Sylentis and it is not mentioned</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>Yes, the language is appropriate. Although there is some word usage that seems colloquial.. For example the use of "&" instead of "and".</p> <p>In summary and conclusions subheading:" Lamisiran" should be "Lumasiran "</p> <p>Table 2: Modification in siRNA strand: "nucleotides" should be "nucleotides" Lumasiran have also phosphorothioate linkages</p>	
<p>Optional/General comments</p>		

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

Name:	Ramon Eritja
Department, University & Country	Institute for Advanced Chemistry of Catalonia, Spain