Author's response to reviews

Title: Functional characterization of the complement receptor type 1 and its circulating ligands in patients with schizophrenia

Authors:

Arsen Arakelyan (araekelyan@sci.am)
Roksana Zakharyan (r_zakharyan@mb.sci.am)
Aren Khoyetsyan (akhoyetsyan@mb.sci.am)
David Poghosyan (d_poghosyan@mb.sci.am)
Rouben Aroutiounian (genetik@ysu.am)
Frantisek Mrazek (frantisek.mrazek@fnol.cz)
Martin Petrek (martin.petrek@fnol.cz)
Anna Boyajyan (aboyajyan@sci.am)

Version: 2 Date: 13 August 2011

Author's response to reviews: see over
Dear Dr Norton,

We are submitting a revised manuscript entitled “Functional characterization of the complement receptor type 1 and its circulating ligands in patients with schizophrenia” by Arakelyan et al. for consideration for publication in BMC Clinical Pathology.

We made all changes/additions recommended by reviewers of the previous version of manuscript submitted to BMC Clinical Pathology on June 7, 2011. Please find below the replies to reviewers.

Reply to Reviewer 1: Robert Sim

Dear reviewer, thank you very much for reviewing our manuscript, useful suggestions and critical notes made. We made relevant changes to the new version of the manuscript. In particular:

1) AS replaced with AB on front page and in "Authors' contributions";
2) In Abstract, 1st para: "the" was deleted, "also" was added;
3) "Our study for the first time indicated that schizophrenia is associated with the" repeated text was deleted;
4) Background, "opsonin" was replaced with "opsonic";
5) 2nd para, line 1: "about" is deleted;
6) line 2: "the" aetiopathogenesis was added;
7) line 4: "the complement" was replaced with "complement";
8) line 7: "the state of" was deleted;
9) 3rd para, 2 lines from end: "namely" was added before "C1q and fragments... ";
10) Results, para 1, line 2: "the" after "obtained" was deleted;
11) middle of para, subpopulations of leukocytes (lymphocytes (L), monocytes (M), ....) was not changed because "lymphocytes" were shortened before: background, page 3, line 4;
12) Discussion, line 1: "evidence on" was replaced with "evidence of";
13) para3, line 4: "the" before "immune" was deleted;
14) line 5: "Depending on diseased condition" was changed to "Depending on the disease condition...";
15) line 10: "As it was mentioned in the introduction" was replaced with "As noted in the introduction...";
16) para 5, line 3: since it is our hypothesis on the important role of CR1 in schizophrenia, we changed this phrase to "Therefore, despite the important role of the complement system in the pathogenesis of schizophrenia [15-22], its type 1 receptor gene C5507G polymorphism does not contribute to the genetic susceptibility to this disease";
17) para 5, line 3: "variants" was replaced with "variant";
18) "Limitations of our study", line 1: "relatively small..." was changed to "a relatively small...";
19) Methods, Collection of blood samples: before "morning" "the" was deleted;
20) 8 lines below this: "primers' sequences" was replaced with "primer sequences";  
21) "Measurement of CR1 expression on blood cells", line1: "was incubated" changed to "were incubated";  
22) line 2, "monoclonal antibodies" was replaced with "monoclonal antibody", line 7: "A" was added to "matching isotype";  
23) the name/description of matching isotype control was added;  
24) line 11, "an" was added to "isotype control";  
25) line 12, "(see figure 1): "and was... " was replaced with "which was... ";  
26) 3 lines from end: "expression in marked " was changed to "expression in the marked";  
27) the last sentence was changed as suggested "Measurement of...CIC" last sentence should read: ....concentration of CIC with bound C3 fragments (C3b, ...), which contain the fragment of the C3 alpha;  
28) "Statistical analysis", "demographis" was corrected to "demographic";  
29) Abbreviations: "C3b,...C3dg, "opsonin" was deleted,  
30) C4b, "opsonic fragment of C4" was changed to "opsonic fragment of C4";  
31) Table 1 and 3: "expression on blood cells" was replaced with "expression on type of blood cell".

Reply to Reviewer 2: Hans-Gert Bernstein  
Dear reviewer, we are grateful for useful peer review you’ve made. We accepted all your suggestions/critical notes and made relevant changes in the new version of the manuscript.  
1) The schizophrenic patients were treated with typical antipsychotic haloperidol and phenazepamum;  
2) Among schizophrenic patients there were 63 smokers and 54 non-smokers and in controls there were 50 smokers and 72 non-smokers. None of measured parameters was correlated with nicotine usage;  
3) Abstract; Conclusions: repeated "Our study for the first time indicated that schizophrenia is associated with the" phrase was deleted.

All the authors declare,  
1) that the manuscript has been seen and approved by all authors, it is not under active consideration for publication,  
2) that they provided the consent to publication in BMC Molecular Biology,  
3) that the manuscript has not been accepted for publication, nor has it been published, in full or in part (except in abstract form),  
4) that the manuscript has not been published elsewhere and, if accepted in BMC Clinical Pathology, will not be republished in any other journal in the same or similar form,  
5) no financial or other relationship that might lead to a conflict of interest.  
Also, we declare that it adheres to the editorial policies of BMC Clinical Pathology detailed in the instruction for authors.  
We would like to thank You and also the reviewers for the evaluation of our manuscript.

Yours sincerely,  
Prof. Anna Boyajyan  

Corresponding author  
Institute of Molecular Biology NAS RA  
Address: 7 Hasratyan St., 0014, Yerevan, Armenia  
Telephone: +37410(281626)  
Fax: +37410(282061)  
E-mail: aboyajyan@sci.am  
Web: www.molbiol.sci.am