

Nama Jurnal : **Russian Open Medical Journal (ROMJ)**

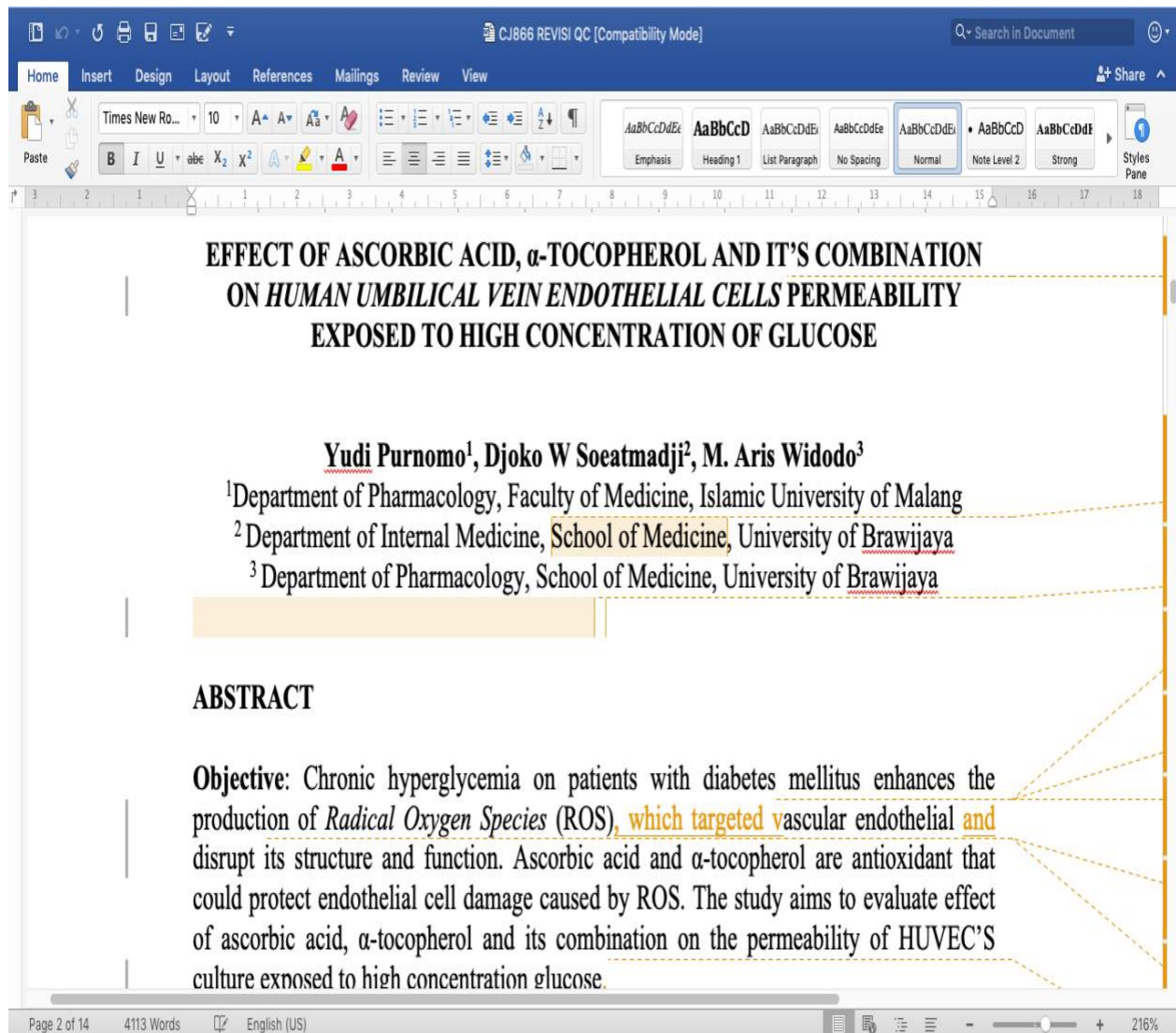
Indeks : **Scopus (Q4), SJR (0.16)**

<https://romj.org/files/pdf/2020/romj-2020-0201.pdf>

Judul Artikel : **Effect of ascorbic acid,  $\alpha$ -tocopherol and its combination on human umbilical vein endothelial cells permeability exposed to high concentration of glucose.**

<b>Tanggal</b>	<b>Activity</b>	<b>Reviewer Comments</b>
28-05-2018	Submission of article	
08-08-2018	Decision	Revision with minor modification
08-08-2018	Revision of article	Comments from reviewer and editor were attached
17-09-2018	Resubmit the revised article	Responses from author and revised article
20-12-2018	Confirmation manuscript progress	
28-12-2018	Editor responses	Resubmit the article file
28-12-2018	Resubmit the article	
28-12-2019	Editor responses	Manuscript under review process
18-02-2020	Accepted	Accepted
23-03-2020	Galley proof sending	Galley proof correction
26-03-2020	Resubmit the revised article	-
01-06-2020	Published	On line published

## Manuscript submission :



The image shows a screenshot of a Microsoft Word document in Compatibility Mode. The title bar indicates the file name is 'CJ866 REVISI QC'. The ribbon is set to 'Home', and the font is 'Times New Roman' size 10. The document content is as follows:

**EFFECT OF ASCORBIC ACID,  $\alpha$ -TOCOPHEROL AND IT'S COMBINATION  
ON *HUMAN UMBILICAL VEIN ENDOTHELIAL CELLS* PERMEABILITY  
EXPOSED TO HIGH CONCENTRATION OF GLUCOSE**

**Yudi Purnomo<sup>1</sup>, Djoko W Soeatmadji<sup>2</sup>, M. Aris Widodo<sup>3</sup>**

<sup>1</sup>Department of Pharmacology, Faculty of Medicine, Islamic University of Malang  
<sup>2</sup>Department of Internal Medicine, School of Medicine, University of Brawijaya  
<sup>3</sup>Department of Pharmacology, School of Medicine, University of Brawijaya

**ABSTRACT**

**Objective:** Chronic hyperglycemia on patients with diabetes mellitus enhances the production of *Radical Oxygen Species* (ROS), which targeted vascular endothelial and disrupt its structure and function. Ascorbic acid and  $\alpha$ -tocopherol are antioxidant that could protect endothelial cell damage caused by ROS. The study aims to evaluate effect of ascorbic acid,  $\alpha$ -tocopherol and its combination on the permeability of HUVEC'S culture exposed to high concentration glucose.

Page 2 of 14    4113 Words    English (US)    216%

## Editor decision :

>>>> On 2019-08-08 04:21, Anton Kiselev wrote:  
>>>> Dear Authors,  
>>>>  
>>>> Thank you for giving the Russian Open Medical Journal editors the  
>>>> opportunity to review your manuscript entitled "Effect of Ascorbic  
>>>> Acid,  $\alpha$ -Tocopherol and It's Combination on Human Umbilical Vein  
>>>> Endothelial Cells Permeability Exposed to High Concentration of  
>>>> Glucose".  
>>>>  
>>>> Your paper has now been reviewed and discussed at an editors'  
>>>> meeting.  
>>>> Based on our review, your manuscript will require minor revision. A  
>>>> decision on its acceptability has been postponed until after we  
>>>> examine a revised version of the paper addressing our concerns which  
>>>> are enumerated below. Although we realize that substantial work will  
>>>> be required to revise the manuscript, this request does not imply  
>>>> any  
>>>> commitment to accept the paper once it has been revised.  
>>>>  
>>>> You are invited to consider our comments and those of the reviewers  
>>>> which appear at the end of this letter and to revise your manuscript  
>>>> accordingly. In the letter accompanying your resubmission, please  
>>>> explain your response to each of the comments. If you agree with a  
>>>> comment, then state where you have incorporated changes into the  
>>>> revision. If you disagree with a comment, then explain why you have  
>>>> not incorporated it into the revision.  
>>>>  
>>>> Because we are trying to facilitate timely publication of  
>>>> manuscripts  
>>>> submitted to Russian Open Medical Journal, your revised manuscript  
>>>> should be submitted by 20 Oct 2019. In the letter, indicate the  
>>>> registration number (#269) of your manuscript.  
>>>>  
>>>> Submit a revision via e-mail: [rusomj@mail.ru](mailto:rusomj@mail.ru).  
>>>>  
>>>> Best regards,  
>>>>  
>>>> Anton Kiselev  
>>>>  
>>>> Editor-in-Chief  
>>>>  
>>>> Russian Open Medical Journal  
>>>>  
>>>>

## Editor comments :

>>>> There are a number of errors in the text. Here are just a few of  
>>>> them:  
>>>>  
>>>> Line 49  
>>>>  
>>>> The culture is an \_in vitro\_ model of vascular endothelium that can  
>>>> be  
>>>> used to evaluate BOTH OF its structure and function. (Or just  
>>>> without  
>>>> OF)  
>>>>  
>>>> Line 114  
>>>>  
>>>> Administration of the second combination of antioxidant decreased  
>>>> endothelial permeability until NO DIFFERENCE TO THE NORMAL GROUP WAS  
>>>> OBSERVED IT IS NOT DIFFERENT COMPARED TO THE NORMAL GROUP ( $p>0.05$ ).  
>>>>  
>>>> Line 153  
>>>>  
>>>> Therefore protects CELLS FROM damage caused by free radicals  
>>>> (впредложении отсутствует подлежащее.  
>>>> "Therefore ascorbic acid? protects"....)  
>>>>  
>>>> Line 160  
>>>>  
>>>> Firstly, it is due to both OF ascorbic acid and ascorbic radical  
>>>> have  
>>>> a low reduction potential, so they could react with all of radical  
>>>> and  
>>>> biology OXIDANTS.  
>>>>  
>>>> Line 163  
>>>>  
>>>> Ascorbic acid is entering the CELL CELLS (CELL OR CELLS??) via two  
>>>> transporter SYSTEMS, which are Na dependent Transporter and Glucose  
>>>> Transporter-1 (GLUT-1).  
>>>>  
>>>> Line 211  
>>>>  
>>>> Effect OF combination of ascorbic acid and  $\alpha$ -tocopherol on HUVECS  
>>>> culture exposed high glucose concentration  
>>>>

## Resubmit revised article :

>>> Dear Anton Kiselev  
>>> Editor-in-Chief of Russian Open Medical Journal,  
>>>  
>>> Thank you for your email.  
>>> I hope this email finds you well. I have made the requested changes  
>>> and uploaded a revised Author Version, as well as noting those  
>>> changes  
>>> in the Response Letter.  
>>> Please kindly find the attached revised file and proceed to further  
>>> process.  
>>>  
>>> Thank you for your kind cooperation.  
>>>  
>>> With best regards,  
>>> Yudi Purnomo  
>>>

The screenshot displays a Microsoft Word document titled "CJ866 REVISI QC [Compatibility Mode]". The document is in "Compatibility Mode" and shows a manuscript with tracked changes. The review pane on the right side of the document is open, showing a list of changes made to the document. The changes are listed as "QC CAPA Deleted" with various reasons for deletion. The document content includes the title, authors, affiliations, and the abstract section.

**EFFECT OF ASCORBIC ACID,  $\alpha$ -TOCOPHEROL AND IT'S COMBINATION ON HUMAN UMBILICAL VEIN ENDOTHELIAL CELLS PERMEABILITY EXPOSED TO HIGH CONCENTRATION OF GLUCOSE**

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**Objective:** Chronic hyperglycemia on patients with diabetes mellitus enhances the production of *Radical Oxygen Species* (ROS), which targeted vascular endothelial and disrupt its structure and function. Ascorbic acid and  $\alpha$ -tocopherol are antioxidant that could protect endothelial cell damage caused by ROS. The study aims to evaluate effect of ascorbic acid,  $\alpha$ -tocopherol and its combination on the permeability of HUVEC'S culture exposed to high concentration glucose.

**Methods:** The study was performed using HUVEC'S culture on transwell polyester filter where ascorbic acid,  $\alpha$ -tocopherol and its combination at a dose of 25-200  $\mu$ M were given concomitantly with glucose 22 mM on culture media. After seven days of treatment, endothelial permeability was observed by measuring the concentration of trypan blue-labelled albumin in a luminal compartment with spectrophotometer  $\lambda = 592$  nm. The morphology of endothelial cell was observed under an inverted microscope. The data was analyzed using ANOVA test continued with Dunnet test ( $p < 0,05$ ).

**Results:** HUVEC'S culture exposed to high concentration glucose increased endothelial permeability compared to those exposed to normal concentration glucose ( $p < 0,05$ ).

**QC CAPA Deleted: (HUVEC'S) CULTURE**

**QC CAPA Deleted: April 30, 2018 Faculty of Medicine? Revisi M1.**

**QC CAPA Deleted: Email korespondensi? Revisi author.**

**QC CAPA Deleted: causing diabetes complications.**

**QC CAPA Deleted: V**

**QC CAPA Deleted: is a prime target of ROS which can**

**QC CAPA Deleted: both**

**QC CAPA Deleted: therefore resulting in endothelial barrier dysfunction**

**QC CAPA Deleted: (22 mM).**

Page 2 of 14 English (US) 151%

**Confirmation to editor about manuscript progress :**

>  
> Dear Editor in Chief,  
> Russian Open Medical Journal  
>  
> Is there any new information related to reviewing process of my  
> revised manuscript entitled "Effect of Ascorbic Acid,  $\alpha$ -Tocopherol and  
> It's Combination on Human Umbilical Vein Endothelial Cells  
> Permeability Exposed to High Concentration of Glucose"?  
>  
> I'm looking forward to hear from you soon.  
>  
> Best regards,  
> Yudi Pumomo

Dear Editor in Chief,  
Russian Open Medical Journal

Please give me information related to reviewing progress of my revised manuscript.

Paper ID: 269

Paper title: Effect of Ascorbic Acid,  $\alpha$ -Tocopherol and It's Combination on Human Umbilical Vein Endothelial Cells Permeability Exposed to High Concentration of Glucose

I've been sent the revision since 2018-09-17 by email.

I hope my manuscript could be considered for publication in the journal.

I'm looking forward to hearing from you soon.

Best Regards,  
Yudi Pumomo

## Editor responses :

----- Forwarded message -----

From: Anton Kiselev <[rusomj@mail.ru](mailto:rusomj@mail.ru)>

Date: Fri, 28 Dec 2018 at 02:55

Subject: Re: Revised Manuscript #269 status query

To: <[capa\\_journal16@klinikjurnal.com](mailto:capa_journal16@klinikjurnal.com)>

Dear Author,

We did not receive the specified revised article.  
Send files again.

Best regards,  
Anton Kiselev  
Editor-in-Chief  
Russian Open Medical Journal  
E-mail: [rusomj@mail.ru](mailto:rusomj@mail.ru)

## Resubmit revised article

The screenshot displays a Microsoft Word document titled "CJ866 REVISI QC [Compatibility Mode]". The document is in "Compatibility Mode" and shows a manuscript with tracked changes and comments. The main text is as follows:

**EFFECT OF ASCORBIC ACID,  $\alpha$ -TOCOPHEROL AND IT'S COMBINATION ON HUMAN UMBILICAL VEIN ENDOTHELIAL CELLS PERMEABILITY EXPOSED TO HIGH CONCENTRATION OF GLUCOSE**

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<sup>1</sup>Department of Pharmacology, Faculty of Medicine, Islamic University of Malang  
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**Results:** HUVEC'S culture exposed to high concentration glucose increased endothelial permeability compared to those exposed to normal concentration glucose ( $p < 0,05$ ).

The document also features several comments on the right side, all marked as "Deleted":

- QC CAPA Deleted: (HUVEC'S) CULTURE
- QC CAPA Deleted: April 30, 2018 [Faculty of Medicine? Revisi M1.]
- QC CAPA Deleted: Email korespondensi? Revisi author.
- QC CAPA Deleted: causing diabetes complications.
- QC CAPA Deleted: V
- QC CAPA Deleted: is a prime target of ROS which can
- QC CAPA Deleted: both
- QC CAPA Deleted: therefore resulting in endothelial barrier dysfunction
- QC CAPA Deleted: (22 mM).

The status bar at the bottom indicates "Page 2 of 14", "English (US)", and "151%" zoom.



## Editor Comments :

----- Forwarded message -----  
From: Anton Kiselev <[rusomj@mail.ru](mailto:rusomj@mail.ru)>  
Date: Sat, 28 Dec 2019 at 03:26  
Subject: Re[2]: from RusOMJ\_decision-3  
To: <[capa.journal16@klinikjurnal.com](mailto:capa.journal16@klinikjurnal.com)>

Dear Authors,

Your article is on the English language quality and technical design test. We will inform you of the results as soon as we receive our expert opinion.

Best regards,  
Anton Kiselev  
Editor-in-Chief  
Russian Open Medical Journal  
E-mail: [rusomj@mail.ru](mailto:rusomj@mail.ru)

## Editor Responses (Acceptance) :

[noreply@unverified.beget.ru](mailto:noreply@unverified.beget.ru) <[noreply@unverified.beget.ru](mailto:noreply@unverified.beget.ru)> 18 February 2020 at 03:11  
Reply-To: Anton Kiselev <[rusomj@mail.ru](mailto:rusomj@mail.ru)>  
To: Yudi Purnomo <[capa.journal16@klinikjurnal.com](mailto:capa.journal16@klinikjurnal.com)>  
Cc: Djoko Soeatmadji <[soeatmadji.dws@yahoo.com](mailto:soeatmadji.dws@yahoo.com)>, "M. Widodo" <[widodo.maw@yahoo.com](mailto:widodo.maw@yahoo.com)>

from Russian Open Medical Journal

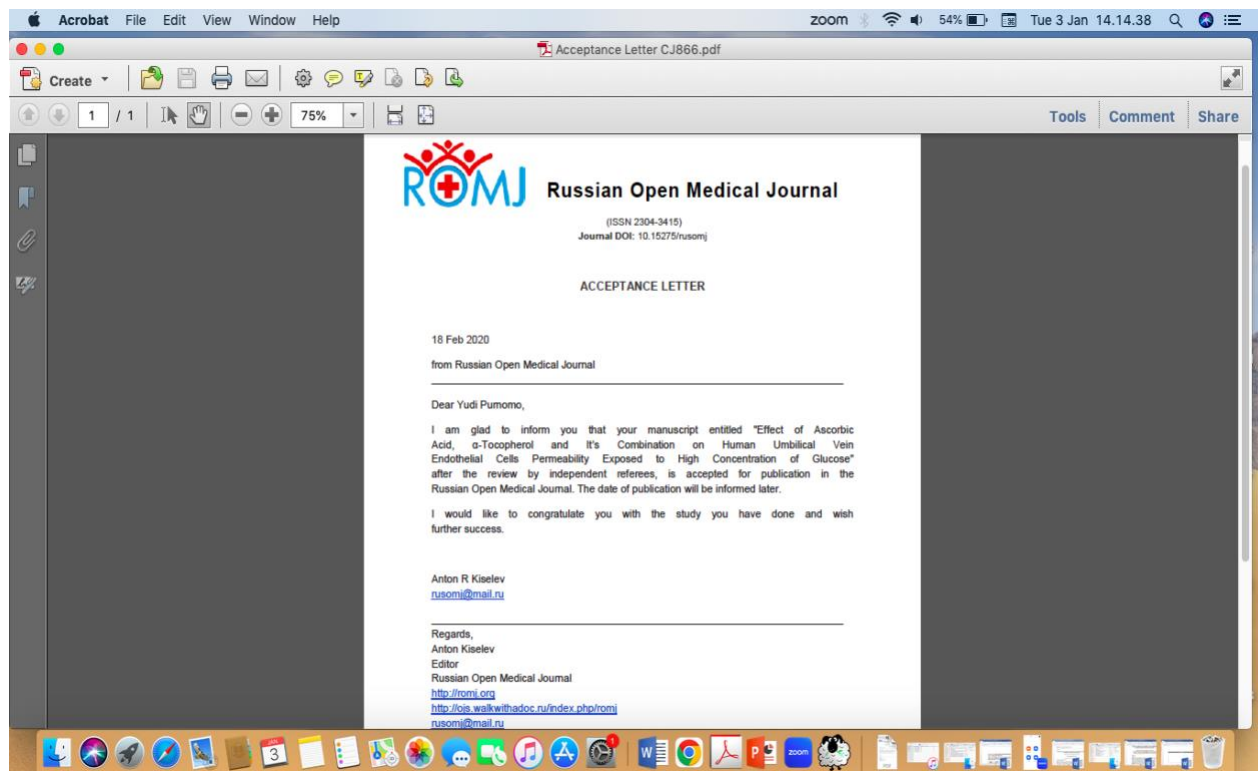
Dear Yudi Purnomo,

I am glad to inform you that your manuscript entitled "Effect of Ascorbic Acid,  $\alpha$ -Tocopherol and It's Combination on Human Umbilical Vein Endothelial Cells Permeability Exposed to High Concentration of Glucose" after the review by independent referees, is accepted for publication in the Russian Open Medical Journal.  
The date of publication will be informed later.

I would like to congratulate you with the study you have done and wish further success.

Anton R Kiselev  
[rusomj@mail.ru](mailto:rusomj@mail.ru)

Regards,  
Anton Kiselev  
Editor  
Russian Open Medical Journal  
<http://romj.org>  
<http://ojs.walkwithadoc.ru/index.php/romj>  
[rusomj@mail.ru](mailto:rusomj@mail.ru)







## Editor responses :

Anton Kiselev <rusomj@mail.ru>  
Reply-To: Anton Kiselev <rusomj@mail.ru>  
To: capa\_journal16@klinikjurnal.com

26 March 2020 at 17:48

Dear Author,

We're waiting for the article you approved.  
We hope we can include it in the current issue.

Best regards,  
Anton Kiselev  
Editor-in-Chief  
Russian Open Medical Journal  
E-mail: [rusomj@mail.ru](mailto:rusomj@mail.ru)

Четверг, 26 марта 2020, 10:23 +04:00 от [capa\\_journal16@klinikjurnal.com](mailto:capa_journal16@klinikjurnal.com):

[Quoted text hidden]  
Dear Chief of Editor,

I hope this email finds you well.  
Thank you for your email.  
If you do not mind, please give me an extended time to revise my manuscript since I am unaware that there is a message from you.  
I will send the revised manuscript soon once it is completed.  
I am looking forward to your response.

Thank you for your concern

## Resubmit of galley proof correction :

and therapeutic opportunities. Stuttgart: Schattauer, 1997; 391 p.

- Alexander JS. Rho, Tyrosine kinase,  $Ca^{2+}$ , and junctions in endothelial hyperpermeability. *Circ Res* 2000; 87: 268-271. <https://doi.org/10.1161/01.RES.87.4.268>.
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**Yudi Purnomo** – Doctor, Magister of Health, Lecturer, Department of Pharmacology, Faculty of Medicine, Islamic University of Malang, Malang, East Java. <https://orcid.org/0000-0002-2435-4976>.  
**Djoko W. Soeatmadji** – Professor, MD, Lecturer, Department of Internal Medicine, School of Medicine, Brawijaya University, Malang, East Java. <https://orcid.org/0000-0003-3475-5172>.  
**M. Aris Widodo** – Professor, MD, PhD, Pharmacologist, Head of Doctoral Post Graduate Study in Medicine, Department of Pharmacology, School of Medicine, Brawijaya University, Malang, East Java. <https://orcid.org/0000-0002-5444-7989>.

## Published on line

romj-2020-0103-draft [Compatibility Mode] Search in Document

Home Insert Design Layout References Mailings Review View Share

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ISSN 2304-3415, Russian Open Medical Journal 1 of 5  
2020, Volume 9, Issue 1 (March), Article CID e0103  
DOI: 10.15275/romj.2020.0103 Pharmacology

Original article

**Effect of ascorbic acid, α-tocopherol and its combination on human umbilical vein endothelial cells permeability exposed to high concentration of glucose**

Yudi Purnomo<sup>1</sup>, Djoko W. Soeatmadji<sup>2</sup>, M. Aris Widodo<sup>2</sup>

<sup>1</sup> Islamic University of Malang, Malang, East Java  
<sup>2</sup> Brawijaya University, Malang, East Java

Received 28 May 2018, Revised 16 August 2019, Accepted 18 February 2020

© 2018, Purnomo Y., Soeatmadji D.W, Widodo M.A.  
© 2018, Russian Open Medical Journal

**Abstract:** *Aim* — To evaluate the effect of ascorbic acid, α-tocopherol, and its combination on the permeability of human umbilical vein endothelial cells (HUVEC'S) culture after high glucose concentration exposure.  
*Material and Methods* — The study was performed using HUVEC'S culture on transwell polyester filter. The ascorbic acid, α-tocopherol, and its combination (25-200 μM) were concomitantly given with glucose 22 μM to the culture media. After seven days of treatment, endothelial permeability was observed by measuring the concentration of trypan blue-labeled albumin in a luminal compartment with a spectrophotometer (λ=592 nm). The morphology of the cells was observed under an inverted microscope. The data was analyzed using ANOVA test followed by Dunnet test (p<0.05).  
*Results* — HUVEC'S culture exposed to high concentration glucose increased endothelial permeability better than those which exposed to normal concentration (p<0.05). The treatment of ascorbic acid 200 μM, α-tocopherol 100 μM and 200 μM were capable to inhibit the increase HUVEC'S permeability exposed to high concentration glucose better than control group (p<0.05). Moreover, two combinations of ascorbic acid and α-tocopherol, respectively 50 and 100 μM, could prevent the increased permeability of HUVEC'S culture better than control (p<0.05).  
*Conclusion* — Ascorbic acid, α-tocopherol, and its combination could inhibit the increase of endothelial permeability exposed to a high concentration of glucose.

Page 1 of 5 4343 Words English (US) 152%