## Accepted Manuscript

Particulate suspension effect on peristaltically induced unsteady pulsatile flow in a narrow artery: Blood flow model

Sara I. Abdelsalam, Kambiz Vafai

 PII:
 S0025-5564(16)30322-4

 DOI:
 10.1016/j.mbs.2016.11.012

 Reference:
 MBS 7883

To appear in: *Mathematical Biosciences* 

Received date:8 March 2016Revised date:14 November 2016Accepted date:15 November 2016

Please cite this article as: Sara I. Abdelsalam, Kambiz Vafai, Particulate suspension effect on peristaltically induced unsteady pulsatile flow in a narrow artery: Blood flow model, *Mathematical Biosciences* (2016), doi: 10.1016/j.mbs.2016.11.012

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



## Highlights

- Haematocrit cannot pass through the capillary wall due to Segré-Silberberg effect.
- Trapped bolus of large size is formed near the boundary in case of haemodilution.
- The pulsating flow through arteries enhances the velocity components of fluid.
- The peristaltic region increases with an increase in the concentration.
- The peristaltic output is only promoted with an increase in the occlusion.

Ċ NP

Download English Version:

https://daneshyari.com/en/article/5760421

Download Persian Version:

https://daneshyari.com/article/5760421

Daneshyari.com