

# Accepted Manuscript

Short review

Influence and effect of osmolytes in biopharmaceutical formulations

Samarina R. Wlodarczyk, Débora Custódio, Adalberto Pessoa Jr, Gisele Monteiro

PII: S0939-6411(18)30387-4

DOI: <https://doi.org/10.1016/j.ejpb.2018.07.019>

Reference: EJPB 12842

To appear in: *European Journal of Pharmaceutics and Biopharmaceutics*

Received Date: 20 March 2018

Revised Date: 28 June 2018

Accepted Date: 22 July 2018

Please cite this article as: S.R. Wlodarczyk, D. Custódio, A. Pessoa Jr, G. Monteiro, Influence and effect of osmolytes in biopharmaceutical formulations, *European Journal of Pharmaceutics and Biopharmaceutics* (2018), doi: <https://doi.org/10.1016/j.ejpb.2018.07.019>

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.



Influence and effect of osmolytes in biopharmaceutical formulations.

Samarina R. Włodarczyk<sup>1#</sup>; Débora Custódio <sup>1#</sup>; Adalberto Pessoa Jr.<sup>1</sup>, Gisele Monteiro\*<sup>1</sup>

<sup>1</sup> Department of Biochemical and Pharmaceutical Technology, Faculty of Pharmaceutical Sciences, University of São Paulo, São Paulo – SP, 05434-070, Brazil

# these authors contributed equally to this work

- Corresponding author

Gisele Monteiro

smgisele@usp.br, +55 11 3091 3734

Address: Av. Prof. Lineu Prestes, 580, B16, Cidade Universitária - 05508-000, São Paulo/SP, Brazil. Phone: 55-11-3091-3862 - Fax: 55-11-3815-6386.

## Graphical Abstract

## Abstract

Osmolytes are small organic molecules accumulated by cells in response to environmental stresses. They are represented by amino acids, sugars, polyols, tertiary sulphonium and quaternary ammonium compounds. These molecules present a protective behaviour and favour the equilibrium of macromolecules towards the native form, preventing denaturation and promoting the folding of unfolded proteins. Protein formulations due to their biological character require greater care during the manufacturing process, shelf-life and administration of the drug, as variations in these

Download English Version:

<https://daneshyari.com/en/article/8411520>

Download Persian Version:

<https://daneshyari.com/article/8411520>

[Daneshyari.com](https://daneshyari.com)