### Elsevier Editorial System(tm) for Cryobiology Manuscript Draft

Manuscript Number:

Title: Errata to "Permeation of several cryoprotectants in porcine articular cartilage", Cryobiology 58 (2009) 110-114

Article Type: Letter to the Editor

Keywords: errata

Corresponding Author: Dr. Nadr M Jomha, PhD, MD, FRCS(C)

Corresponding Author's Institution: University of Alberta

First Author: Nadr M Jomha, MD, FRCS(C), PhD

Order of Authors: Nadr M Jomha, MD, FRCS(C), PhD; Garson K Law, MSc; Alireza Abazari, MSc; Janet A W Elliott, PhD; Locksley E McGann, PhD

Abstract: Some minor errors in our published manuscript need to be addressed.

#### Manuscript

## 1 Letter to the Editor

# Errata to "Permeation of several cryoprotectants in porcine articular cartilage", Cryobiology 58 (2009) 110-114

4 We have recently become aware of a few small errors in our recently published paper, which should be 5 corrected as follows.

- 6 The following are corrections of typographical errors on page 112 and 113:
- 7 1. The in-line equation  $J_0(b_n) = 0$  should change to  $J_0(b_n R) = 0$ .
- 8 2. In equation (10), the left hand side should change from  $\frac{c_{A0} \bar{c}_A^*}{c_{A0} c_A^*}$  to  $\frac{\bar{c}_A c_A^*}{c_{A0} c_A^*}$  and the right hand side 9 should change from

$$\left[1 - \frac{8}{\pi^2} \sum_{n=0}^{\infty} \frac{1}{(2n+1)^2} exp\left(\frac{-D(2n+1)^2 \pi^2 t}{4a^2}\right)\right] \times \left[1 - \frac{4}{R^2} \sum_{n=1}^{\infty} \frac{1}{b_n^2} exp(-Db_n^2 t)\right]$$

10

$$\left[\frac{8}{\pi^2} \sum_{n=0}^{\infty} \frac{1}{(2n+1)^2} exp\left(\frac{-D(2n+1)^2 \pi^2 t}{4a^2}\right)\right] \times \left[\frac{4}{R^2} \sum_{n=1}^{\infty} \frac{1}{b_n^2} exp(-Db_n^2 t)\right]$$

11 3. The values of parameter A, the prefactor, were typographical errors. The correct values of

12 prefactors are:  $A_{DMSO} = 2.9895 \times 10^{-7}$ ,  $A_{EG} = 1.833 \times 10^{-7}$ ,  $A_{GLY} = 2.0803 \times 10^{-6}$  and

13  $A_{PG} = 1.6971 \times 10^{-5}$ .

Table 2

to

Also, the data presented in Table 1 was modified during the final submission, while the fit calculation results were based on a less complete version of the data. As a result, some of the calculation results presented in Table 2 have changed slightly. The diffusion coefficient values in Table 2 are updated as

17 follows:

Diffusion coefficients (×10 <sup>-10</sup> m <sup>2</sup> /s or 10 <sup>-6</sup> cm <sup>2</sup> /s)						
	6.5 M boundary condition			24 h conc. boundary condition		
	4°C	22°C	37°C	4°C	22°C	37°C
DMSO	2.4	3.0	4 <del>.5</del> →4.2	2.6	3.1	<del>6.2</del> →5.7
EG	1.7	2.3	3.4	2.0	2.7	4.2
GLY	1.0	1.8	2.4	0.8	1.8	2.3
PG	0.9	1.6	2.2	$0.8 \rightarrow 1.0$	$1.6 \rightarrow 2.1$	$2.7 \rightarrow 3.6$

20

18

19

PG change slightly to  $E_{a,DMSO} = 3.9 \pm 1.6$  kcal/mol and  $E_{a,PG} = 6.63 \pm 0.04$  kcal/mol. Since these values

appear in Fig. 2, an updated Fig. 2 with the new values is given here.

<sup>21</sup> With these changes to the diffusion coefficient values, the calculated activation energies for DMSO and



24 25

26 There are no other changes to the paper. None of the points or conclusions changed as a result of these

27 minor corrections.

## 28 Acknowledgements

- 29 The authors would like to thank Yu Xiaoyi from the Institute of Refrigeration and Cryogenics, Zhejiang
- 30 University, China, for bringing some of these typographical errors to our attention.
- 31 Alireza Abazari<sup>1</sup>
- 32 Nadr M. Jomha<sup>2,\*</sup>
- 33 Garson K. Law<sup>2</sup>
- **34** Janet A. W. Elliott<sup>1</sup>
- **35** Locksley E. McGann<sup>3</sup>
- <sup>1</sup> Department of Chemical and Materials Engineering, University of Alberta, Edmonton, AB, Canada
- 37 <sup>2,\*</sup> Department of Surgery, University of Alberta Hospital, 2D2.32 WMC, University of Alberta, 8440-112St,
- 38 Edmonton, AB, Canada, Fax: +1 780 407 2819, njomha@ualberta.ca
- <sup>3</sup> Department of Laboratory Medicine and Pathology, University of Alberta, Edmonton, AB, Canada