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Erratum: Rheological Properties and Age-Related Changes of the Human Vitreous Humor

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An Erratum on

Rheological Properties and Age-Related Changes of the Human Vitreous Humor

by Tram, N. K., and Swindle-Reilly, K. E. (2018). *Front. Bioeng. Biotechnol.* 6:199.
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Due to a production error, the value of the Loss Modulus Data Type, for the Human species in the last column of **Table 2**, was erroneously changed.

The publisher apologizes for this mistake. The original article has been updated.

TABLE 2 | Summaries of rheological data of the vitreous humor.

| Species | Paper | Technique | Sample size | Data type | Value |
|----------|------------------------------|-----------------------|-------------|--------------------------|---|
| Human | This study | Shear rheometry | $n = 23$ | Storage modulus | $G' = 6.5 \pm 3.0 \text{ Pa}$ |
| | Shafaie et al., 2018 | Shear rheometry | $n = 3$ | Loss modulus | $G'' = 0.96 \pm 0.47 \text{ Pa}$ |
| | Lee et al., 1992 | Microrheometry | $n = 20$ | Storage modulus | $G' = 1.4 \pm 0.95 \text{ Pa}$ |
| | Weber et al., 1982 | Periodic oscillations | $n = 8$ | Loss modulus | $G'' = 0.7 \pm 0.37 \text{ Pa}$ |
| | Zimmerman, 1980 | Light scattering | $n = 6$ | Internal elastic modulus | 1.2–2.5 Pa |
| | This study | Shear rheometry | $n = 15$ | Spring constant | $D_0/r^2\pi = 76,000 \pm 8,200 \text{ N/m}^3$ |
| | Shafaie et al., 2018 | Shear rheometry | $n = 3$ | Damping factor | $r_2/r^2 = 2,940 \pm 380 \text{ N*s/m}$ |
| | Filas et al., 2014 | Shear rheometry | $n = 8$ | Elastic shear modulus | 0.05 Pa |
| | Sharif-Kashani et al., 2011 | Shear rheometry | $n = 3$ | Storage modulus | $G' = 5.0 \pm 0.58 \text{ Pa}$ |
| | Swindle-Reilly et al., 2009 | Capillary rheometry | $n = 87$ | Loss modulus | $G'' = 0.65 \pm 0.22 \text{ Pa}$ |
| Porcine | Swindle et al., 2008 | Capillary rheometry | $n = 15$ | Storage modulus | $G' = 1.4 \pm 0.14 \text{ Pa}$ |
| | Nickerson et al., 2005, 2008 | Shear rheometry | $n = 3$ | Loss modulus | $G'' = 0.4 \pm 0.14 \text{ Pa}$ |
| | Lee et al., 1994 | Microrheometry | $n = 8$ | Storage modulus | $G' = 4–10 \text{ Pa}$ |
| | Shafaie et al., 2018 | Shear rheometry | $n = 9$ | Loss modulus | $G'' = 1–2 \text{ Pa}$ |
| | Filas et al., 2014 | Shear rheometry | $n = 3$ | Storage modulus | $G' = 1.1 \pm 0.2 \text{ Pa}$ |
| | Zimberlin et al., 2010 | Cavitation rheology | $n = 8$ | Loss modulus | $G'' = 0.3 \pm 0.1 \text{ Pa}$ |
| | Nickerson et al., 2005, 2008 | Shear rheometry | $n = 87$ | Storage modulus | $G' = 0.3–8 \text{ Pa}$ |
| | Lee et al., 1994 | Microrheometry | $n = 15$ | Loss modulus | $G'' = 0.2–3 \text{ Pa}$ |
| | Shafaie et al., 2018 | Shear rheometry | $n = 9$ | Elastic Modulus | $E = 57.3 \pm 5.5 \text{ Pa}$ |
| | Filas et al., 2014 | Shear rheometry | $n = 3$ | Storage modulus | $G' = 2.8 \pm 0.9 \text{ Pa}$ |
| Bovine | Zimberlin et al., 2010 | Cavitation rheology | $n = 8$ | Loss modulus | $G'' = 0.7 \pm 0.4 \text{ Pa}$ |
| | Nickerson et al., 2005, 2008 | Shear rheometry | $n = 5–10$ | Storage modulus | 0.8–1.0 Pa |
| | Lee et al., 1994 | Microrheometry | $n = 17$ | Loss modulus | $G' = 1.7 \pm 0.31 \text{ Pa}$ |
| | Tokita et al., 1984 | Torsion pendulum | $n = 20$ | Storage modulus | $G'' = 0.7 \pm 0.12 \text{ Pa}$ |
| | Weber et al., 1982 | Periodic oscillations | $n = 3$ | Loss modulus | $G' = 10–23 \text{ Pa}$ |
| Leporine | Bettelheim and Wang, 1976 | Compression chucks | $n = 8$ | Storage modulus | $G'' = 5 \text{ Pa}$ |
| | Silva et al., 2017 | Shear rheometry | $n = 5$ | Loss modulus | $G' = 660 \text{ Pa (in vivo)}$ |
| | Watts et al., 2014 | Microrheometry | $n = 17$ | Storage modulus | $G' = 120 \text{ Pa (ex vivo)}$ |
| | Shafaie et al., 2018 | Shear rheometry | $n = 14$ | Loss modulus | $G'' = 7.0 \pm 2.0 \text{ Pa}$ |
| Ovine | Colter et al., 2015 | Shear rheometry | $n = 10$ | Storage modulus | $G'' = 2.2 \pm 0.6 \text{ Pa}$ |
| | Suri and Banerjee, 2006 | Shear rheometry | $n = 3$ | Loss modulus | 1.2–2.7 Pa |
| | Shafaie et al., 2018 | Shear rheometry | $n = 30$ | Storage modulus | $G' = 0.1–1 \text{ Pa}$ |
| Hircine | Colter et al., 2015 | Shear rheometry | $n = 3$ | Loss modulus | $G'' = 0.1–1 \text{ Pa}$ |
| | Suri and Banerjee, 2006 | Shear rheometry | $n = 30$ | Storage modulus | $D_0/r^2\pi = 60,000 \pm 6,000 \text{ N/m}^3$ |
| | Shafaie et al., 2018 | Shear rheometry | $n = 30$ | Loss modulus | $r_2/r^2 = 2,815 \pm 264 \text{ N*s/m}$ |
| | Colter et al., 2015 | Shear rheometry | $n = 14$ | Storage modulus | $G' = 4.2–4.6 \text{ Pa}$ |
| | Suri and Banerjee, 2006 | Shear rheometry | $n = 10$ | Loss modulus | $G'' = 1.9–3.6 \text{ Pa}$ |
| | Shafaie et al., 2018 | Shear rheometry | $n = 3$ | Storage modulus | $G' = 1.86 \pm 1.14 \text{ Pa}$ |
| | Colter et al., 2015 | Shear rheometry | $n = 30$ | Loss modulus | $G'' = 0.61 \pm 0.39 \text{ Pa}$ |
| | Suri and Banerjee, 2006 | Shear rheometry | $n = 10$ | Storage modulus | $G' = 0.014–0.14 \text{ Pa}$ |
| | Shafaie et al., 2018 | Shear rheometry | $n = 3$ | Loss modulus | $G'' = 0.006–0.11 \text{ Pa}$ |
| | Colter et al., 2015 | Shear rheometry | $n = 30$ | Storage modulus | $G' = 4.2 \pm 0.62 \text{ Pa}$ |
| | Suri and Banerjee, 2006 | Shear rheometry | $n = 30$ | Loss modulus | $G'' = 2.3 \pm 0.56 \text{ Pa}$ |
| | Shafaie et al., 2018 | Shear rheometry | $n = 30$ | Storage modulus | $G' = 10–170 \text{ Pa}$ |
| | Colter et al., 2015 | Shear rheometry | $n = 14$ | Loss modulus | $G'' = 10–170.86 \text{ Pa}$ |
| | Suri and Banerjee, 2006 | Shear rheometry | $n = 10$ | Storage modulus | $G' = 1,000 \text{ Pa}$ |
| | Shafaie et al., 2018 | Shear rheometry | $n = 30$ | Loss modulus | $G'' = 400 \text{ Pa}$ |

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