

# Red Blood Cell Aging as a Homeostatic Response to Exercise-Induced Stress

Joames K. Freitas Leal <sup>1</sup>, Dan Lazari <sup>1</sup>, Coen C.W.G. Bongers <sup>2</sup>, Maria T.E. Hopman <sup>2</sup>, Roland Brock <sup>1</sup> and Giel J.C.G.M. Bosman <sup>1,\*</sup>

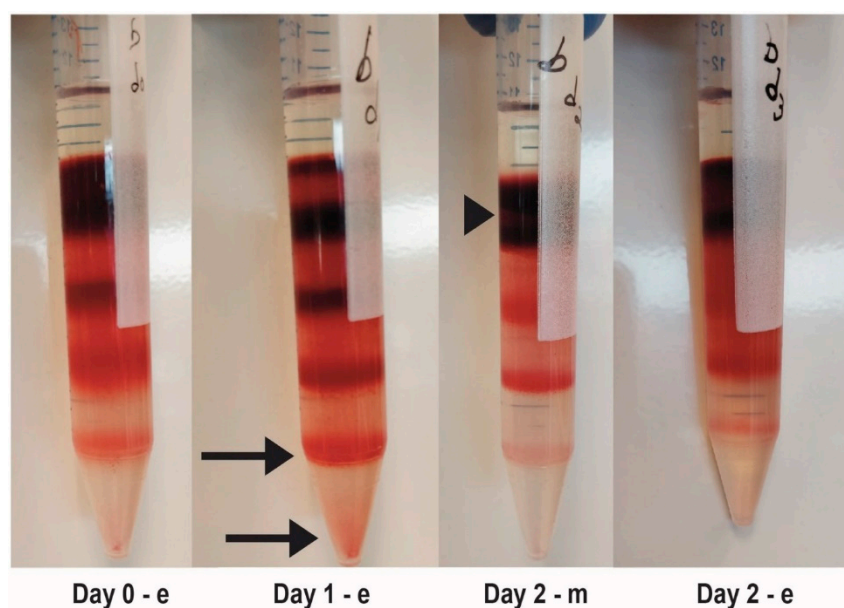
<sup>1</sup> Department of Biochemistry, Radboud University Medical Center, Nijmegen, Netherlands; joames.leal@gmail.com (J.K.F.L.); Dan.Lazari@radboudumc.nl (D.L.); Roland.Brock@radboudumc.nl (R.B.)

<sup>2</sup> Department of Physiology, Radboud Institute for Molecular Life Sciences and Radboud Institute for Health Sciences Coen, Nijmegen, Netherlands; Bongers@radboudumc.nl (C.B.); Maria.Hopman@radboudumc.nl (M.H.)

\* Correspondence: Giel.Bosman@radboudumc.nl

Received: 11 October 2019; Accepted: 8 November 2019; Published: date

## Supplementary Materials



**Figure S1.** Percoll gradients of red blood cells during the first two days of the 2018 edition of the Nijmegen Four Days Marches. Blood was taken at baseline (day 0-e), in the evening of day 2 (day 1-e), in the morning before day 2 (day 2-m), and after day 2 (day 2-e). After removal of plasma, platelets, and white blood cells, RBCs were separated according to density using Percoll gradients, as described in Materials and Methods. The figure shows the representative results of one donor: A shift towards denser RBCs after the first day of marching (arrows) and a shift towards lighter RBCs during the second day (arrow head). Similar patterns were seen in all donors.