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To: Editor-in-Chief of Periodicum Biologorum

Dear editor,

Please find enclosed a manuscript titled **„Biomechanics of fetal membranes – relation with newborn and maternal anthropometric data“** authorized by Antun Šumanovac, Tomislav Baškarić, Tomislav Sorić and Robert Selthofer.

In this manuscript we present the data of the study employing a novel burst test in the study of biomechanics of fetal membranes. The aim of the study was to determine whether there are differences between standard and cyclic burst test and are there any relations between membrane biomechanics and anthropometric data of newborns and mothers. We have found that cyclic burst test produces statistically significantly higher burst pressures of the fetal membranes compared to standard test. We have also confirmed a weak zone overlying the cervix which is in accordance with previous studies. Moderate correlation between maternal BMI and uniaxial force-to-rupture was also established along with weak correlation between newborn length and burst pressures in standard burst test.

We would appreciate if you would consider our manuscript for publication as a full length article in your journal.

All authors have read and approved the submission of the manuscript; the manuscript has not been previously published and is not being considered for publication elsewhere, in whole or in part, in any language.

Sincerely yours,

Robert Selthofer, M.D., PhD

Associate Professor, corresponding author

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