## Supporting material

## What is the impact of plastic deformation on cytocompatibility of biodegradable Zn-Mg alloys?

Daniel Wojtas<sup>1,2,3‡</sup>, Klaudia Trembecka-Wójciga<sup>1,4‡</sup>, Magdalena Gieleciak<sup>1</sup>, Agnieszka Bigos<sup>1</sup>, Kamil Brudecki<sup>5</sup>, Sylwia Przybysz-Gloc<sup>6</sup>, Romana Schirhagl<sup>3</sup>, Aldona Mzyk<sup>3,7\*</sup>, Anna Jarzębska<sup>1\*</sup>

<sup>1</sup>Institute of Metallurgy and Materials Science, Polish Academy of Sciences, Reymonta 25, 30-059 Kraków, Poland

<sup>2</sup>Department of Pathophysiology, Faculty of Medicine, Masaryk University, Kamenice 753/5, 625 00 Brno, Czechia

<sup>3</sup>Department of Biomedical Engineering, University of Groningen, University Medical Center Groningen, Antonius Deusinglaan 1, 9713AW, Groningen, The Netherlands

<sup>4</sup>Faculty of Chemical Engineering and Technology, Cracow University of Technology, Warszawska 24, 31-155 Kraków, Poland

<sup>5</sup>Institute of Nuclear Physics, Polish Academy of Sciences, Radzikowskiego 152, Krakow, 31-342, Poland

<sup>6</sup>Institute of High Pressure Physics, Polish Academy of Sciences, Warszawa, Poland

<sup>7</sup>Department of Health Technology, Danish Technical University, Ørsteds Plads, DK-2800 Kongens Lyngby, Denmark

<sup>‡</sup>These authors contributed equally.

\*Corresponding authors: a.jarzebska@imim.pl, aldonamzyk@googlemail.com

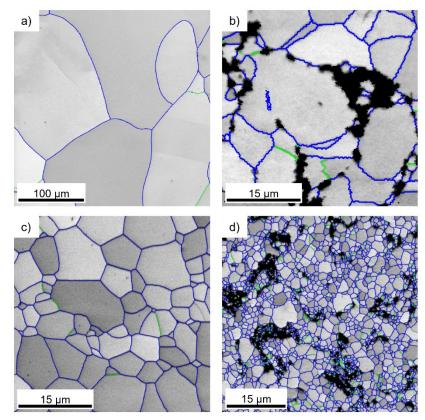


Figure S1. Image quality maps of a) Zn HE, b) ZN-0.8Mg HE, c) Zn HSE and d) Zn-0.8Mg HSE with marked low angle grain boundaries in green and high angle grain boundaries in blue. Data derived based on EBSD measurements.

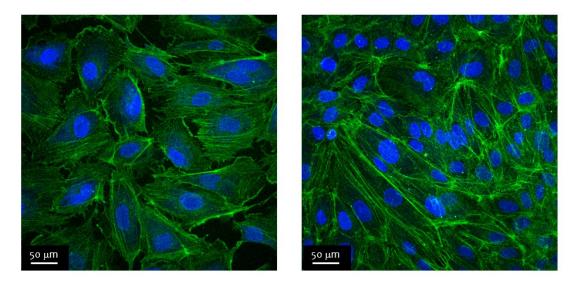


Figure S2. CLSM-derived morphology of endothelial cells treated as the control within the present study.