

Supporting Information

for

Data-adaptive image-denoising for detecting and quantifying nanoparticle entry in mucosal tissues through intravital 2-photon microscopy

Torsten Bölke¹, Lisa Krapf², Regina Orzekowsky-Schroeder³, Tobias Vossmeyer⁴, Jelena Dimitrijevic⁴, Horst Weller⁴, Anna Schüth⁵, Antje Klinger⁵, Gereon Hüttmann² and Andreas Gebert*¹

Address: ¹University Hospital Jena, Friedrich Schiller University Jena, Institute of Anatomy II, Teichgraben 7, 07740 Jena, Germany; ²University of Lübeck, Institute of Biomedical Optics, Peter-Monnik-Weg 4, 23562 Lübeck, Germany; ³Olympus Winter & Ibe GmbH, R&D Optical Design, Kuehnstrasse 61, 22045 Hamburg, Germany; ⁴University of Hamburg, Institute of Physical Chemistry, Grindelallee 117, 20146 Hamburg, Germany and ⁵University of Lübeck, Institute of Anatomy, Ratzeburger Allee 160, 23538 Lübeck, Germany

Email: Andreas Gebert* - andreas.gebert@med.uni-jena.de

* Corresponding author

Additional experimental data

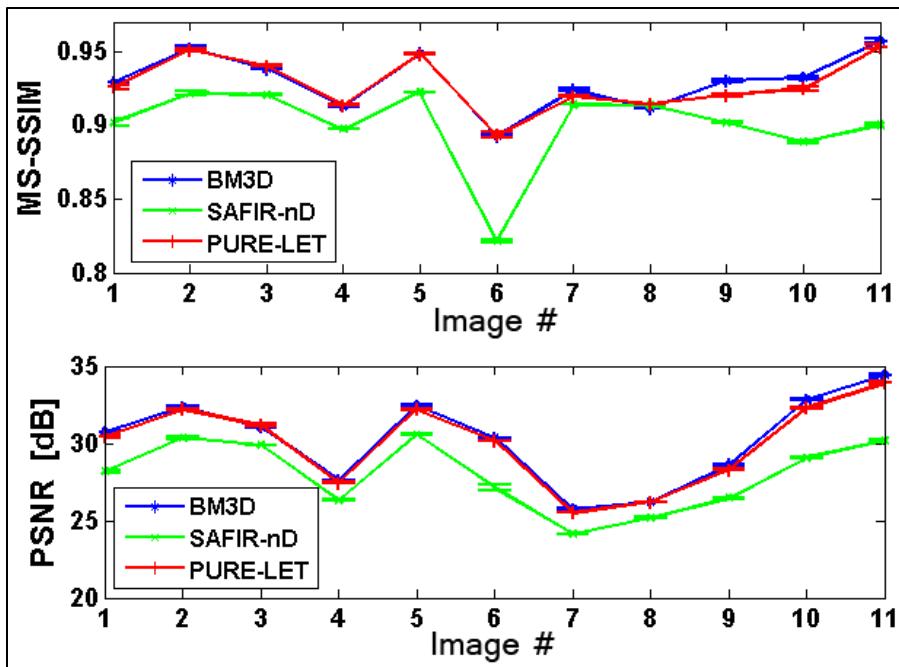


Figure S1: Quantitative evaluation of the denoising power of the BM3D, SAFIR-nD, and PURE-LET algorithms.

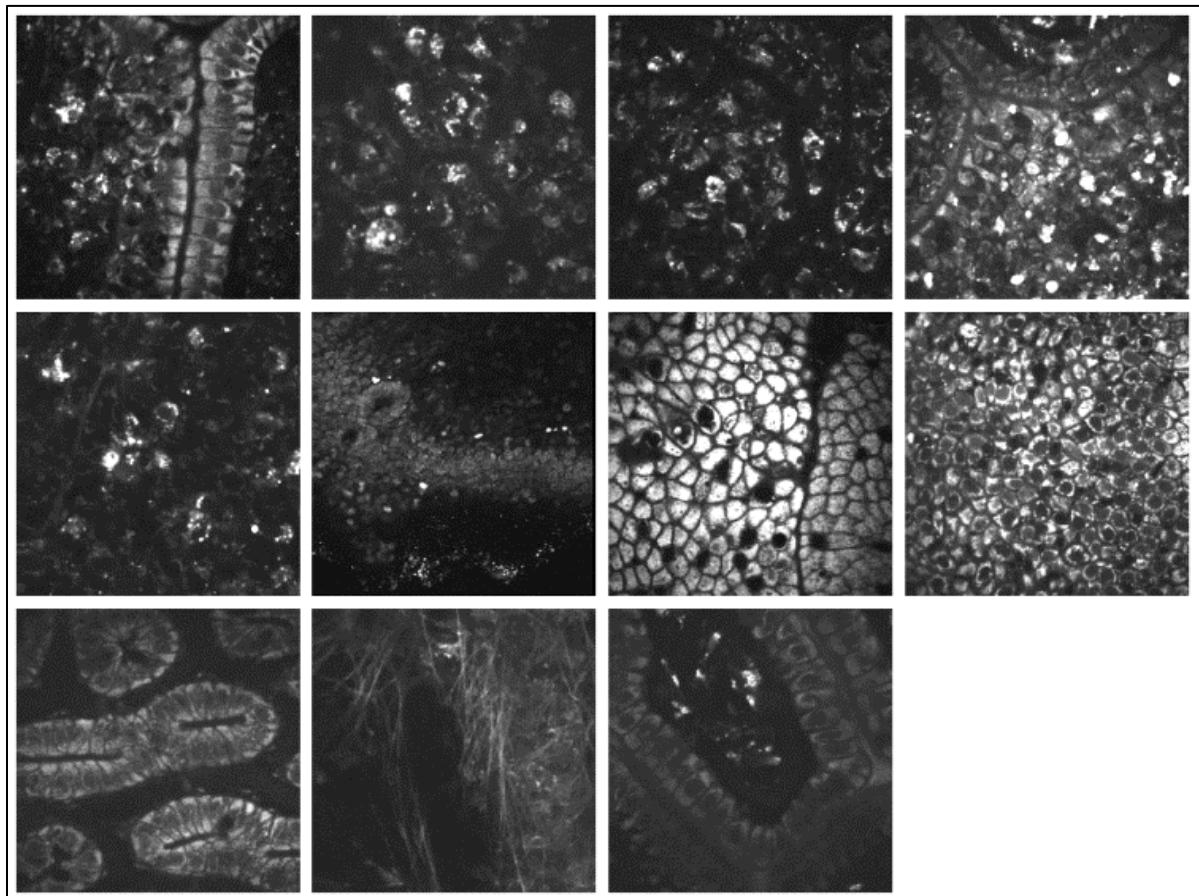


Figure S2: Set of 2PM images used as ground truth signal for quantitative evaluation of the different denoising methods.