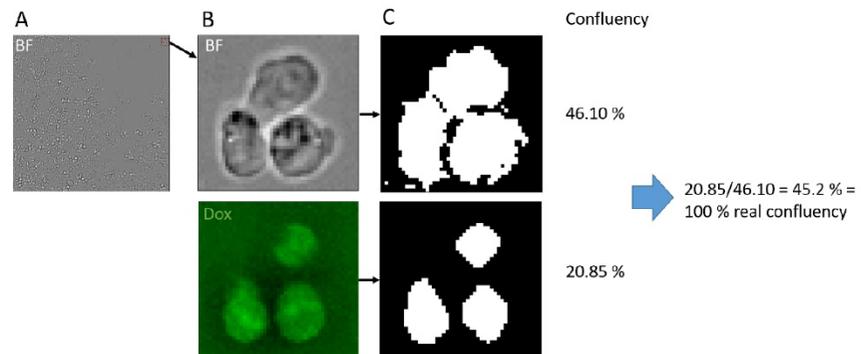


Supplementary Figure S1. Image analysis workflow. Example frames from sample “CEM/ADR5000 cells + 20 μ M doxorubicin + 4 \times IC₅₀ compound 5” Fluorescence channel dox is first processed with local normalization to homogenize the field illumination and subsequently sent to Ilastik pixel classification workflow for segmentation of highly fluorescent cells (dox). Brightfield (BF) channel is directly segmented in Ilastik pixel classification workflow.



Supplementary Figure S2. Correction of fractional confluency analysis. (A) snapshot of brightfield channel of sample “CEM/ADR5000 cells + 20 μ M doxorubicin + 4 \times IC₅₀ compound 5”. (B) Zoomed in region in brightfield and dox channels that contain 3 CEM/ADR5000 cells + 20 μ M doxorubicin + 4 \times IC₅₀ compound 5. (C) The corresponding segmentations and confluency correction.