Supporting information for

Acoustically detonated microbubbles coupled with low frequency insonation: Multiparameter evaluation of low energy mechanical ablation

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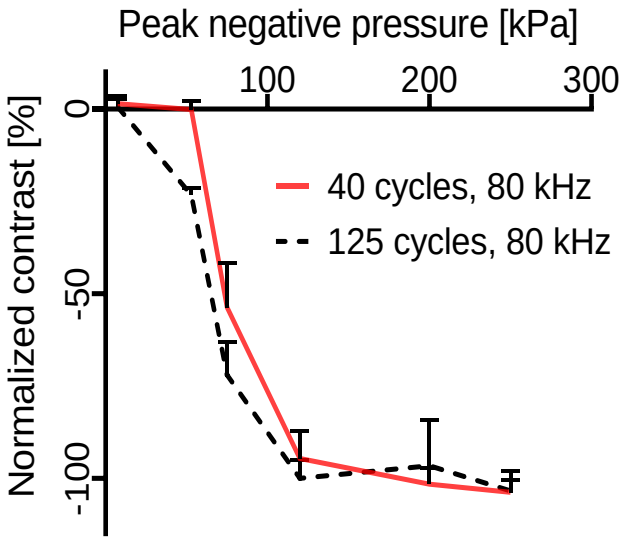

Figure S1. Normalized contrast reduction as a function of the peak negative pressure for 80 kHz insonation with 40 cycles or 125 cycles, and a pulse repetition frequency of 30 Hz. All experiments were performed in triplicates. All data are plotted as mean ± SD.

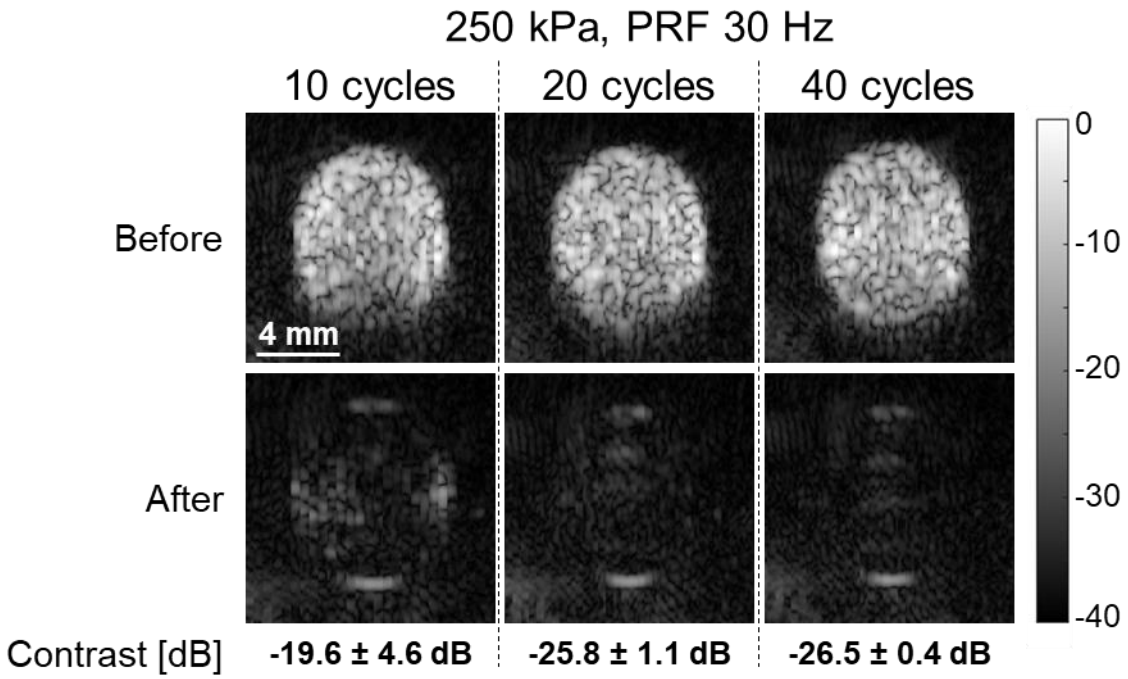

Figure S2. Optimization of the number of ultrasound (US) cycles in a tissue mimicking phantom. US images of a microbubbles-filled inclusion before and after application of a therapeutic US treatment with center frequency of 80 kHz, for number of cycles of 10, 20 and 40 (duty cycles of 0.375%, 0.75% and 1.5%, respectively). Constant parameters are peak negative pressure of 250 kPa and pulse repetition frequency (PRF) of 30 Hz. All experiments were performed in triplicates. All data are reported as mean ± SD.

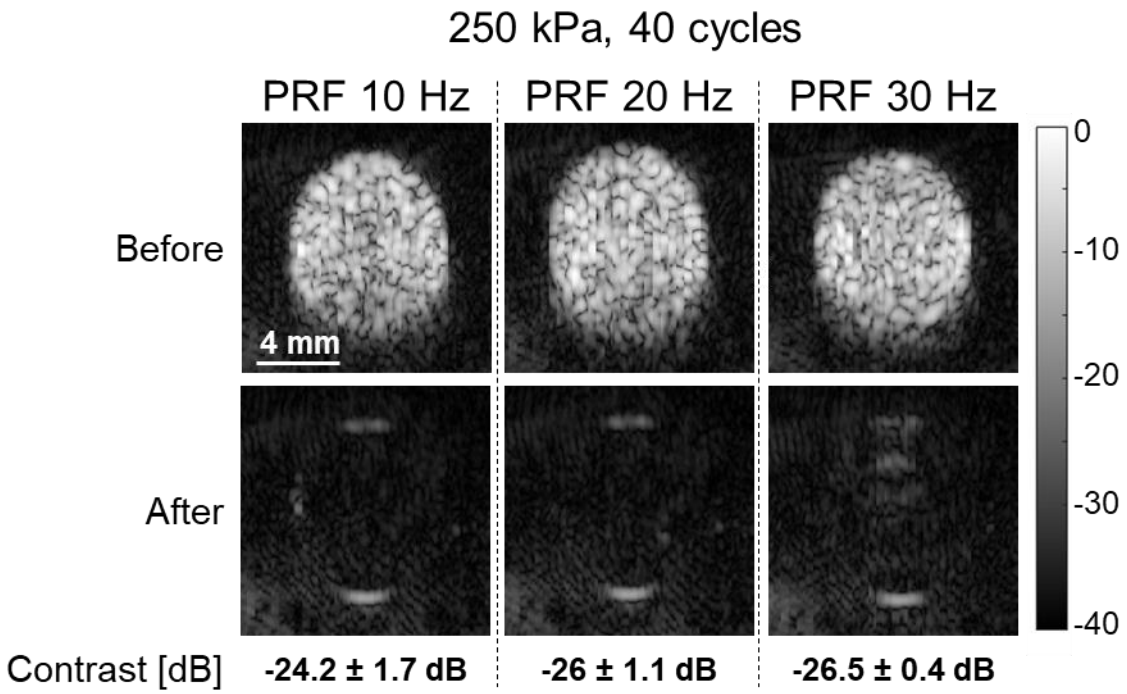

Figure S3. Optimization of the pulse repetition frequency (PRF) in a tissue mimicking phantom. Ultrasound (US) images of a microbubbles-filled inclusion before and after application of a therapeutic US treatment with center frequency of 80 kHz, for PRFs of 10, 20 and 30 (duty cycles of 0.5%, 1% and 1.5%, respectively). Constant parameters are peak negative pressure of 250 kPa and pulse length of 40 cycles. All experiments were performed in triplicates. All data are reported as mean ± SD.