

Appendix 2. Other functional outcomes [posted as supplied by author]

The following functional outcomes were reported in one study comparing LIPUS with sham device: TRUST Investigators writing group, Busse JW, Bhandari M, Einhorn TA, et al. Re-evaluation of low intensity pulsed ultrasound in treatment of tibial fractures (TRUST): randomized clinical trial. *BMJ (Clinical research ed)* 2016;355:i5351.

Time to return to work

Time to event analysis

Hazard ratio 1.11 (95% CI, 0.82 to 1.50) in favour of sham device

Time to return to leisure activities

Time to event analysis

Hazard ratio 1.06 (95% CI, 0.77 to 1.46) in favour of sham device

Time to return to $\geq 80\%$ of pre-injury level of function

Time to event analysis

Hazard ratio 1.00 (95% CI, 0.80 to 1.25)

Time to return to full weight bearing

Time to event analysis

Hazard ratio 0.87 (95% CI, 0.70 to 1.08) in favour of LIPUS

Time to return to household activities

Time to event analysis

Percentage difference -1.9% (95% CI, -11.6% to 8.9%) in favour of LIPUS

The following functional outcomes were reported in two studies: 1) TRUST Investigators writing group, Busse JW, Bhandari M, Einhorn TA, et al. Re-evaluation of low intensity pulsed ultrasound in treatment of tibial fractures (TRUST): randomized clinical trial. *BMJ (Clinical research ed)* 2016;355:i5351, and 2) Lubbert PH, van der Rijt RH, Hoorntje LE, van der Werken C. Low-intensity pulsed ultrasound (LIPUS) in fresh clavicle fractures: a multi-centre double blind randomised controlled trial. *Injury* 2008;39:1444-52.

Fig A, Forest plot of percent difference for days to return to leisure activities for LIPUS compared with sham device

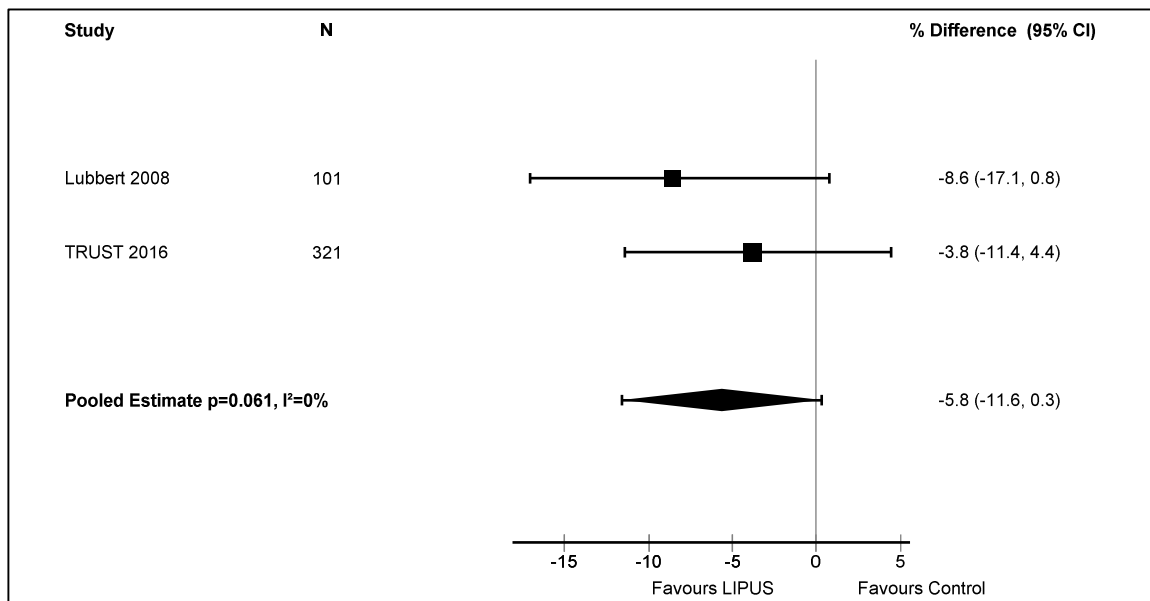
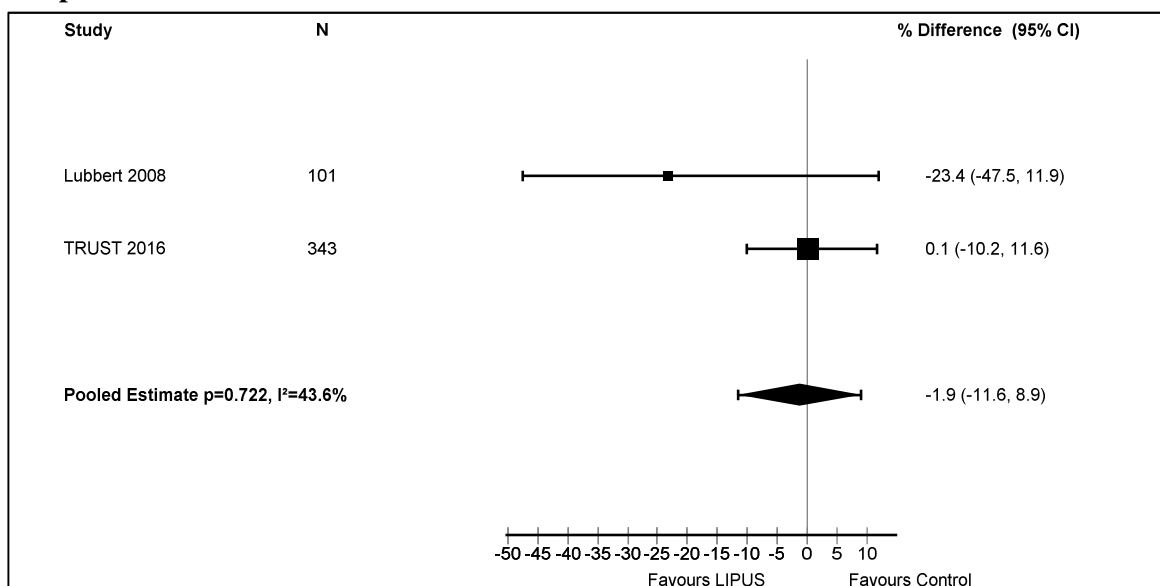
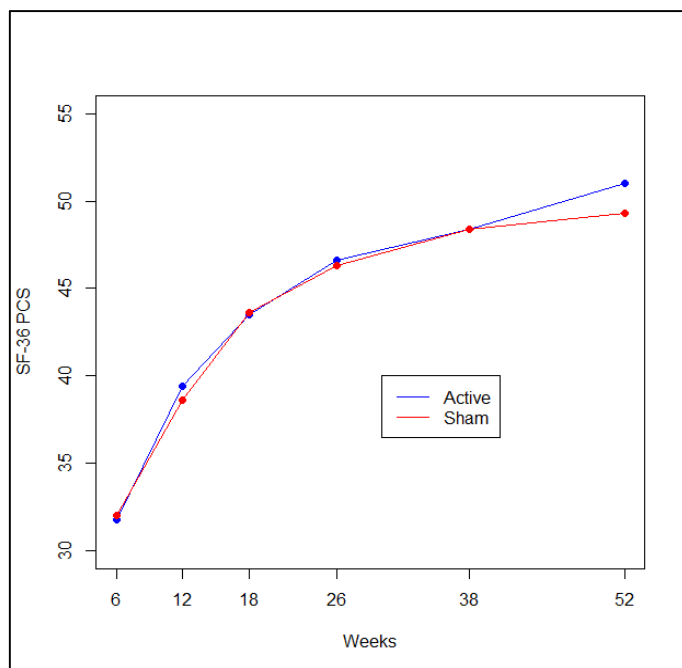


Fig B, Forest plot of percent difference for days to return to household activities for LIPUS compared with sham device



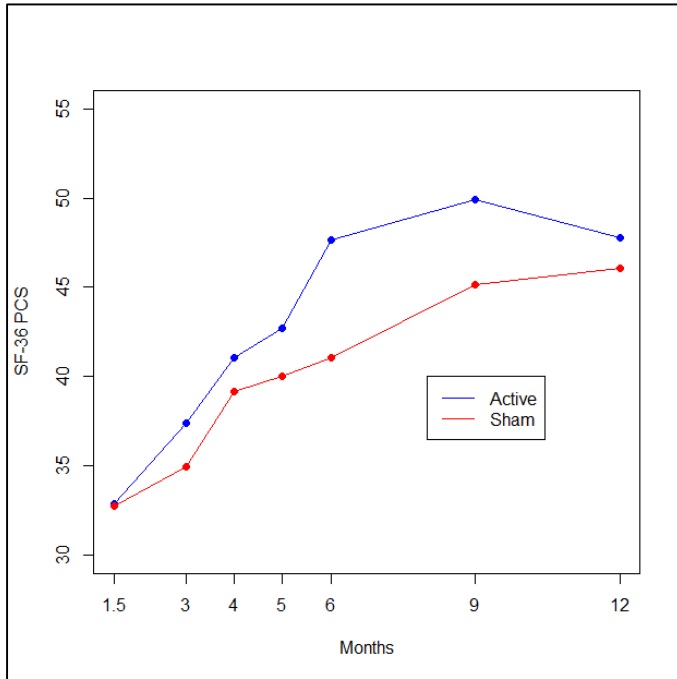
Multidimensional physical function, measured by the Short Form 36 physical component summary scores at multiple time points, was reported in two studies: 1) TRUST Investigators writing group, Busse JW, Bhandari M, Einhorn TA, et al. Re-evaluation of low intensity pulsed ultrasound in treatment of tibial fractures (TRUST): randomized clinical trial. *BMJ (Clinical research ed)* 2016;355:i5351., and 2) Busse JW, Bhandari M, Einhorn TA, et al. Trial to re-evaluate ultrasound in the treatment of tibial fractures (TRUST): a multicenter randomized pilot study. *Trials* 2014;15:206.

Fig C, Busse et al. (2016): Short Form 36 Physical Component Scores over time for LIPUS compared with sham device. A repeated measurement analysis found no significant interaction with time ($p=0.30$)



N ranging from 475 at 6 weeks to 301 at 52 weeks

Fig D, Busse et al. (2014), unpublished material: Short Form 36 Physical Component Scores over time for LIPUS compared with sham device



N ranging from 50 at 6 weeks to 43 at 1 year.