Tumilty S, Munn J, McDonough S, Hurley DA, Basford JR, Baxter GD. Low level laser treatment of tendinopathy: a systematic review with meta-analysis. Photomed Laser Surg. 2010;28(1):3-16.

Design: Systematic review of clinical trials

Purpose of study: to assess the clinical effectiveness of low level laser therapy (LLLT) in the treatment of tendinopathy

Reasons not to cite as evidence:

- Only two studies were available for LLLT and Achilles tendinopathy
- The pooled effect for LLLT compared to placebo for pain from these two studies was 13.64 on a 100 point scale, with confidence intervals from 1.11 to 26.17; the point estimate is less than the minimally clinically important difference for pain of 1.4 points which has been suggested for rotator cuff disease (Tashjian 2009)
- Estimates of the effects of LLLT on function are not reported
- One of the two studies was a 12 week pilot study which has published a followup report (Tumilty 2012) for pain at 52 weeks, which showed no difference on pain or on the Victorian Institute of Sports Assessment-Achilles (VISA-A) questionnaire between LLLT and placebo
- There is no evidence that LLLT is effective in the treatment of Achilles tendinopathy

References:

Tashjian RZ, Deloach J, et al. Minimal clinically important differences (MCID) and patient acceptable symptomatic state (PASS) for visual analog scales (VAS) measuring pain in patients treated for rotator cuff disease. J Shoulder Elbow Surg 2009; 18: 927–32.

Tumilty S, McDonough S, et al. Clinical effectiveness of low-level laser therapy as an adjunct to eccentric exercise for the treatment of Achilles' tendinopathy: a randomized controlled trial. Arch Phys Med Rehabil. 2012;93(5):733-9.