

<b>Bibliographic Data</b>	
Authors	Glazov G, Yelland M, Emery J
Title	Low-level laser therapy for chronic non-specific low back pain: a metaanalysis of randomised controlled trials
PMID	27207675
Citation	Acupunct Med 2016;34:328–341
Other information if relevant	

<b>Methods</b>	
Aim of study	To assess the effectiveness of low-level laser therapy (LLLT) in the setting of chronic nonspecific low back pain
Design	Meta-analysis of randomized clinical trials

<b>Reasons not to cite as evidence</b>
<ul style="list-style-type: none"> <li>- The pooled effect sizes for LLLT are small and clinically unimportant for the majority of outcomes and analyses</li> <li>- Results at immediate followup (such as in Figure 3) are of little relevance to decision-making regarding the likely benefits of referring back pain patients for LLLT versus other treatment options</li> <li>- The effects of laser treatment in Figure 4, which displays data favoring laser from three studies (Okamoto 1989, Soriano 1998, and Umekagi 1999), are from studies in which the criterion of random sequence generation was not met, creating a significant risk of bias in favor of laser therapy</li> <li>- LLLT for chronic low back pain therefore appears to be unsupported by convincing clinical evidence</li> <li>- In addition, there is a lack of a plausible biological mechanism for LLLT, since there are experimental data (Esnouf 2007) indicating that energy from LLLT is not likely to penetrate past the first millimeter of skin, meaning that the prior probability of its effectiveness for back pain is very small, and is not convincingly changed by the trial data available for this review</li> </ul>

<b>Additional references or comments if relevant</b>
<ul style="list-style-type: none"><li>- Esnouf, A., Wright, P., Moore, J., &amp; Ahmed, S. (2007). Depth of Penetration of an 850nm Wavelength Low Level Laser in Human Skin. Acupunct Electrother Res, 32(1), 81-86. <a href="http://dx.doi.org/10.3727/036012907815844165">http://dx.doi.org/10.3727/036012907815844165</a></li></ul>