## Table 10: Summary of Recommendations in Included Guidelines

| Recommendations and Evidence Summary | Strength of Evidence and Recommendations |
|---|---|
| **American College of Rheumatology / National Psoriasis Foundation (ACR/NPF), 2019[29]** | |
| **Active Psoriatic Arthritis**<br>"*Recommend acupuncture over no acupuncture.*" (p. 26) | Very low<br>- "*conditional recommendation means that the panel believed the desirable effects of following the recommendation probably outweigh the undesirable effects, so the course of action would apply to the majority of the patients, but a small proportion of clinicians/patients may not want to follow the recommendation.*" (p. 10)<br>- "*Conditional recommendation based on very-low-quality evidence; may consider no acupuncture due to associated costs.*" (p. 26) |
| **Cleveland (Ohio) Clinic Family Medicine Residency (CC), 2019[2]** | |
| **Chronic Low Back Pain**<br>"*For chronic low back pain, acupuncture is significantly more effective clinically in the short term than sham acupuncture; both verum and sham acupuncture have large placebo responses.*" (p. 93) | "*A = consistent, good-quality patient-oriented evidence.*" (p. 93)<br>- "*Consistent findings from multiple systematic reviews of RCTs.*" (p. 93) |
| **Knee Osteoarthritis**<br>"*For knee osteoarthritis, acupuncture and sham acupuncture both have clinically significant effects. Acupuncture can be an effective treatment for knee osteoarthritis in the short term.*" (p. 93) | "*B = inconsistent or limited-quality patient-oriented evidence.*" (p. 93)<br>- "*Network meta-analysis of RCTs with varying thresholds for clinical significance and high risk of bias.*" (p. 93) |
| **Chronic Headache / Migraine**<br>"*Acupuncture is effective in reducing frequency of chronic daily idiopathic or tension headaches.*" (p. 93) | "*A = consistent, good-quality patient-oriented evidence.*" (p. 93)<br>- "*Consistent findings in a Cochrane review of 12 RCTs.*" (p. 93) |
| "*Acupuncture reduces the frequency of episodic migraines about as well as drug prophylaxis.*" (p. 93) | "*A = consistent, good-quality patient-oriented evidence.*" (p. 93)<br>- "*Consistent findings from multiple systematic reviews of RCTs.*" (p. 93) |
| **Myofascial Pain Syndrome**<br>"*Dry needling of trigger points associated with myofascial pain syndromes can be effective in the short term for pain relief and improved range of motion.*" (p. 93) | "*B = inconsistent or limited-quality patient-oriented evidence.*" (p. 93)<br>- "*Systematic reviews of dry needling for different pain conditions; variable quality studies.*" (p. 93) |
| **Safety of Acupuncture**<br>"*Acupuncture is safe and well tolerated, and significant adverse effects are uncommon.*" (p. 93) | "*A = consistent, good-quality patient-oriented evidence.*" (p. 93)<br>- "*Overview of 17 systematic reviews of adverse events with consistent* |

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| | *results; serious adverse effects may occur in as few as one in 100,000 needles inserted.*" (p. 93**)** |
| **Canadian Urological Association (CUA), 2018[30]** | |
| **Chronic Scrotal Pain**<br>"Acupuncture (Grade 4D):<br>*Extrapolating from reports on men with [chronic pelvic pain syndrome], acupuncture may also represent a safe and potentially efficacious therapy for [chronic scrotal pain]. In one pilot study, patients with [chronic pelvic pain syndrome] underwent two acupuncture sessions weekly for a total of eight weeks. A significant decrease in NIH-CPSI scores were found in more than half of the patients. Further study is required to determine the translatability of these results to the specific [chronic scrotal pain] population.*" (p. 165) | "*Level 4 Evidence, Grade D Recommendation.*" (p. 165) |
| **American College of Physicians (ACP), 2017[31]** | |
| **Chronic Low Back Pain**<br>"*For patients with chronic low back pain, clinicians and patients should initially select nonpharmacologic treatment with … acupuncture.*" (p. 514) | "*Moderate-quality evidence … Grade: strong recommendation.*" (p. 514) |
| "*Low-quality evidence showed that acupuncture was associated with moderate improvement in pain relief immediately after treatment and up to 12 weeks later compared with sham acupuncture, but there was no improvement in function. Moderate-quality evidence showed that acupuncture was associated with moderately lower pain intensity and improved function compared with no acupuncture at the end of treatment. Low-quality evidence showed a small improvement in pain relief and function compared with medications (NSAIDs, muscle relaxants, or analgesics).*" (p. 519) | "*Strong = Benefits Clearly Outweigh Risks and Burden or Risks and Burden Clearly Outweigh Benefits.*" (p. 515) |
| **Belgian Health Care Knowledge Centre (KCE), 2017[32]** | |
| **Chronic Low Back Pain**<br>"*No recommendation on acupuncture has been formulated.*" (p.76)<br>- "*After discussion in the Belgian GDG meeting, a consensus was reached not to formulate a recommendation on the use of acupuncture in low back patients. Following issues were the basis for this decision:*<br>  ○ *The difference between the NICE 2009 and the 2016 recommendation (going from a pro to an against recommendation)*<br>  ○ *No clear superior effect of acupuncture versus sham*<br>  ○ *No evidence available on harmful effects*<br>  ○ *Not sufficient evidence on the potential benefits and harms to formulate a clear recommendation. Not formulating a recommendation gives the clinician more free choice to offer acupuncture to his/her patient, if needed. As a reminder, in a previous KCE-report it was recommended that only certain clinicians could perform acupuncture (physicians, physiotherapists, nurses and midwives).*<br>  ○ *No preference for a research recommendation.*" (p. 76) | "*Recommendation: No recommendation on acupuncture has been formulated. Strength of Recommendation: N/A Level of Evidence: N/A*" (p. 76) |
| **Canadian Pain: Spinal Cord Injury Working Group (CanPain SCI), 2016[33]** | |
| **Neuropathic Pain – Spinal Cord Injury**<br>"*[CanPain SCI] evaluated one therapy, acupuncture, with conflicting evidence of benefit for reduction in the intensity of [spinal cord injury]-related [neuropathic pain]. Meta-analysis was not possible because of the absence of comparable data between studies."* (p. S19)<br>"*Acupuncture. One study showed no significant effect on chronic pain intensity in patients with SCI-related pain or chronic musculoskeletal pain; non-responders were* | No recommendation formulated.<br>"*Needs Further Research*" (p. S20) |

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| *all from the central pain population. In another study, 8 of 15 patients with SCI-related NP responded to acupuncture.52 A retrospective observational case series of patients with traumatic or nontraumatic SCI found a significant improvement in pain for bilateral, for bilateral, symmetric, burning or constant pain compared with unilateral, asymmetric, atypical or intermittent pain. Studies of acupuncture suffer from a lack of standardization of process or procedure delivery and practice principles, and evidence for effectiveness is inconclusive. Additional studies are needed to clarify the benefit of using this modality.*" (p. S19) | |
| **Ontario Protocol for Traffic Injury Management (OPTIMa) Collaboration, 2016[34]** | |
| **Neck Pain and Associated Disorders (NAD) Grades I-II of >3 Months Duration**<br>"*For [neck pain and associated disorders] grades I-II >3 months duration: … In view of evidence of no effectiveness, clinicians should not offer … electroacupuncture.*" (p. 2001)<br>"*Acupuncture: Clinicians should not offer electroacupuncture. This recommendation is based on one low risk of bias RCT that found similar outcomes between electroacupuncture and simulated acupuncture for [whiplash-associated disorders] of variable duration.*" (p. 2014) | "*Interventions that are not recommended did not satisfy the criteria of one or more key decision determinants (i.e., evidence of effectiveness, safety, cost-effectiveness, and/or consistency with societal and ethical values).*" (p. 2007) |
| **Prostatitis Expert Reference Group (PERG), 2015[35]** | |
| **Chronic Prostatitis/Chronic Pelvic Pain Syndrome**<br>"*The following specialist physiotherapy treatment options may be considered: … acupuncture for trigger point release and pain management.*" (p. 521)<br>- "*Small pilot studies of acupuncture in patients with [chronic prostatitis/chronic pelvic pain syndrome] refractory to standard pharmacotherapy have provided positive results; in 12 men, a 6-week acupuncture regimen (given twice weekly), achieved a significant decrease in total, pain, urinary and [quality of life] NIH-CPSI scores after an average 33 weeks follow-up (P < 0.05). Similarly, symptom improvements, as assessed by the NIH-CPSI, were seen with a 5-week and 6-week course of acupuncture (on the bilateral BL33 region), with improvements in pain, voiding symptoms and [quality of life] in non-inflammatory [chronic prostatitis/chronic pelvic pain syndrome]. Randomised, sham-controlled studies (n = 39–89) support these results; a 10-week course of acupuncture proved almost twice as likely as sham treatment to improve [chronic prostatitis/chronic pelvic pain syndrome] symptoms, while a three-arm trial showed that after 6 weeks of electro-acupuncture, the NIH-CPSI total score had decreased significantly vs the sham and advice and exercise groups alone (P < 0.001). A recent review of the evidence on the use of acupuncture in prostatitis concluded that the findings should encourage healthcare providers to use acupuncture to manage pain in [chronic prostatitis/chronic pelvic pain syndrome], in conjunction with standard treatment.*" (p. 516) | Level 5<br>"*Mechanism-based reasoning, expert committee reports or opinions or clinical experience of respected authorities.*" (p. 510) |
| **Department of Veterans Affairs and the Department of Defense (VA/DoD), 2014[36]** | |
| **Pain-Predominant Chronic Multisymptom Illness (CMI)**<br>"*The guideline panel recommends considering acupuncture as part of the management of patients with pain-predominant symptoms of [chronic multisymptom illness]. (Weak For)*" (p. 42)<br>"*Although the quality of evidence is low for acupuncture, there is some evidence of benefit for pain reduction. As with all interventions, acupuncture can be a component of a personalized proactive, patient-driven model of care, with shared decision making. Unfortunately, there is little evidence currently available on the use of complementary and integrated medicines for [chronic multisymptom illness]. Furthermore, much of the current research on acupuncture discusses short-term rather than long-term effects. There is a lack of high quality evidence on the long-term effects of acupuncture, along with some of the potential cost implications that* | Weak For |

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| *this treatment can carry for both the patient and the health care system overall. The guideline panel emphasizes the need for more research in this area.*" (p. 42) | |
| Studies Comparing Acupuncture to Sham Acupuncture:<br>"*Langhorst et al. performed a review of the literature and meta-analysis on the benefits and harms of acupuncture for [fibromyalgia syndrome]. The evidence base for this review consisted of seven RCTs enrolling a total of 242 adults. Most patients across the studies were female (median percent female 95%). All studies used traditional Chinese acupuncture points, with two studies utilizing standardized points and five studies utilizing an individualized paradigm. Two trials performed electro-acupuncture and five trials performed manual acupuncture. The length of the interventions, excluding follow-up, ranged from 2 to 15 weeks with a median of eight weeks. The median duration of acupuncture treatment was nine sessions (range 6–25). The control condition across all studies was sham or simulated acupuncture. The standardized mean difference was calculated in order to estimate the summary effect size for the following outcomes: pain, fatigue, sleep disturbances, and physical function. The findings demonstrated a small, but significant effect of acupuncture compared to sham for reducing pain (-0.25; 95% CI[-0.49 to -0.02]; p = 0.04) at post-treatment. The positive effect of acupuncture compared to sham was not observed at later follow-up times. No significant differences were observed between acupuncture and sham for fatigue, sleep disturbances, and physical function at post-treatment or at later follow-up times. Three studies reported on side effects such as discomfort at side of needle sensation, nausea, soreness and worsening of [fibromyalgia syndrome] symptoms. The frequency of the side effects reported ranged from 3% to 70% for all types of acupuncture.*" (p. 53) | |
| Studies Comparing Acupuncture to Conventional Medicine:<br>"*Cao et al. performed a review of the literature and meta-analysis on the benefits and harms of Traditional Chinese Medicine (TCM) therapies for [fibromyalgia syndrome]. A total of three RCTs enrolling 73 patients compared acupuncture to conventional medicine. Two studies compared acupuncture to amitriptyline, and one study compared acupuncture to ibuprofen. The mean age range of the patients enrolled in the studies was 31 to 50 years. The gender of the patients enrolled in the studies was not reported. Duration of treatment ranged from four to eight weeks. The mean difference was calculated as an estimated summary effect size for pain, which was measured using the Visual Analog Scale. Data for other outcomes considered in the studies comparing acupuncture to conventional medicine (e.g., quality of life, depression, or anxiety) were not reported in a manner that allowed for a meta-analysis to be performed. The results of the analysis indicated that acupuncture was significantly better than conventional medication in reducing pain ([mean difference], -1.78; 95% CI-2.24 to -1.32, p <0.00001). The reported adverse effects of acupuncture were bruising, nausea, fainting, discomfort at the sites of needle insertions or simulated needle insertions, and temporary edema of the hand. Lethargy, nausea, fainting, dry mouth, fatigue, blurred vision, hyperhydrosis, and constipation were reported adverse effects of conventional medications.*" (p. 43) | |

CI= Confidence Interval, CrI= Credible Interval, SR= Systematic Review, MA= Meta-Analysis, NMA= Network Meta-Analysis, RCT= Randomized Controlled Trial, NS= Non-Randomized Study, VAS= Visual Analog Scale, NRS= Numerical Rating Scale, NIH-CPSI= National Institutes of Health Chronic Prostatitis Symptom Index, WOMAC= Western Ontario and McMaster Osteoarthritis Index