Supplementary material

Results

Effectiveness of integrative Korean medicine/CAM treatment–Western medicine

Certain infectious and parasitic diseases (A00-B99): 2 studies

In this category, 2 studies of infectious diseases were included (Table 1). One study tested electroacupuncture in patients with herpes zoster and concluded that electroacupuncture combined with antiviral medications noticeably alleviated symptoms of herpes zoster compared with antiviral medications alone [1]. The other study demonstrated remarkedly better outcomes of Chinese herbal granules with antiretroviral medication than antiretroviral medication alone for chronic hepatitis B [2].

Endocrine, nutritional, and metabolic diseases (E00-E90): 7 studies

Three studies tested abdominal acupuncture [3,4], electroacupuncture [3,4], or sesame and rice bran oil [5] combined with antidiabetic medication against medication alone, in 299 type 2 diabetic patients, which all demonstrated that combined treatment was superior to medication alone. The other 4 studies involved patients with subacute thyroiditis [6], polycystic ovary syndrome [7], obesity with iron-deficiency [8], or primary hyperlipidemia [9]. All four studies compared acupuncture–moxibustion plus Western medication with Western medication alone, and all showed notably better outcomes of combined treatments compared with medication only (Table 2).

Groups of diseases by human anatomical system: mental and behavioral disorders (F00-F99), nervous system (G00-G99), ear and mastoid process (H60-H95), circulatory system (I00-I99), respiratory system (J00-J99), digestive system (K00-K93), skin and subcutaneous tissue (L00-L99), musculoskeletal system and connective tissue (M00-M99), and genitourinary system (N00-N99): 62 studies

A. Mental and behavioral disorders (F00-F99): 9 studies

There were 9 studies on various mental and behavioral disorders (Table 3A): mild cognitive impairment (*n* = 1), schizophrenia (*n* = 2), depression/major depressive disorder (*n* = 4), preoperative anxiety (*n* = 1), and primary insomnia (*n* = 1). In a study by Fogarty et al., a combination of Tai Chi and a memory intervention program was used in patients with mild cognitive impairment over 10 weeks. However, there were no major differences in cognitive function or physical activity improvement between groups [10]. Two schizophrenia studies all tested Tai Chi against standard medication, and both articles favored the combined intervention group [11,12] Three studies compared different herbal medicines with antidepressants [13-15], and 1 study tested 5 elements of music therapy against muscle relaxation training [16] over 1–2 months in patients with depression. Among them, only 1 trial in which saffron–fluoxetine capsules were compared with fluoxetine and saffron placebo capsules, respectively, failed to detect a statistical difference in the improvement of the Beck Depression Inventory scores [15]. When Attias et al. compared different types of CAM treatment, such as guided imagery, acupuncture, and reflexology with benzodiazepines in patients waiting for surgeries, preoperatively, CAM treatments appreciably reduced the anxiety level compared with Western medication [17]. Lastly, in Huang et al.'s primary insomnia disorder study, 4-week acupuncture at acupoints HT7 and ST36 adjunctive to zolpidem dramatically improved the Pittsburgh Sleep Quality Index scores than zolpidem alone [18].

B. Diseases of the nervous system (G00-G99): 6 studies

Six studies tested various Korean Medicine/CAM–Western Medicine interventions (Table 3B): in 120 patients with Parkinson's disease, Bushenhuoxue granules added to levodopa treatment statistically improved most domains of quality of life, including mobility, emotional well-being, and cognition than levodopa alone [19]. Cilantro syrup and sodium valproate statistically relieved migraine [20], whereas there was no additive or synergistic effect of combining Shiatsu massage and amitriptyline to treat intractable primary headache compared with the respective medications alone [21]. Chung et al. reported that the use of electroacupuncture with wrist splints was more effective

than the use of splints alone in carpal tunnel syndrome [22]. In an Egyptian study involving 40 children aged 1–4 years with rigid cerebral palsy, laser acupuncture combined with physical therapy over 12 weeks noticeably improved symptoms compared with physical therapy only [23]. Compared with lactulose alone, Chinese herbal medicine formula Jieduhuayu granules with lactulose demonstrated a greater effect on cognitive and neurophysiological functions in patients with cirrhosis who had minimal hepatic encephalopathy [24].

C. Diseases of the ear and mastoid process (H60-H95): 1 study

Only one study belonged to this category (Table 3C). Patients with chronic tinnitus receiving a combination of transcranial magnetic stimulation and laser acupuncture for 1 month improved more than those receiving transcranial magnetic stimulation only [25].

D. Diseases of the circulatory system (I00-I99): 16 studies

Among 16 studies on diseases of the circulatory system (Table 3D), 13 RCTs all involved stroke patients with various conditions and tested acupuncture, except 2 studies of Tai Chi [26] and moxibustion [27], respectively. Stroke patients receiving combined treatment of scalp acupuncture [28], manual acupuncture [29], or electroacupuncture and Chinese herbal medicine [30], in combination with medications or rehabilitation programs, reported statistically better recovery than those receiving medications or rehabilitation programs alone. Twelve-week acupuncture with nimodipine statistically improved the Montreal Cognitive Assessment score in patients with mild cognitive impairment after cerebral infarction [31], and combined plum blossom needle tapping therapy at acupoints–Bobath therapy effectively relieved hemiplegic spasticity, besides improving the motor function of the extremities, as well as activities of daily living (ADL) for patients with cerebral infarction [32]. Moxibustion with rehabilitation training also dramatically improved functional recovery, such as relieving spasticity, promoting function recovery of motion, improving the performance of ADL, and increasing quality of life in post-stroke spastic hemiplegic patients [27]. There were 3 studies on post-stroke dysphagia in which the acupoints GB20, CV23, EX-HN12, and

EX-HN13 were commonly used [33-35]. All reported that acupuncture with swallowing training [34,35] or electrostimulation in the neck skin [33] alleviated symptoms of dysphagia. The remaining 2 studies, which involved patients with post-stroke depression who were on selective serotonin reuptake inhibitors, found that cranial electroacupuncture [36] or midnight–midday ebb flow acupuncture [37] over a month combined with medication all markedly alleviated depressive symptoms.

Gao et al. tested oral administration of nifedipine with acupuncture against nifedipine alone over 6 weeks in patients with cerebral infarction and essential hypertension and noted that the integrated treatment statically decreased blood pressure compared with nifedipine alone [38]. In chronic stable angina pectoris, a 4-week electroacupuncture at acupoint PC6, in addition to nitroglycerine, statistically reduced the incidence of angina and dose of nitroglycerin in comparison with nitroglycerine alone [39]. The water extract of Terminalia arjuna stem bark in combination with an angiotensin-converting enzyme inhibitor/angiotensin II type 1 receptor blocker and β-blocker with/without diuretics/digoxin did not provide symptom relief relative to medication alone in patients with chronic heart failure [40]. Lastly, compared with multilayer compression bandages, larval debridement therapy plus bandages more effectively relieved symptoms in chronic venous leg ulcers [41].

E. Diseases of the respiratory system (J00-J99): 4 studies

There were 4 studies on diseases of the respiratory system (Table 3E). In Turkish patients with acute exacerbation of chronic obstructive pulmonary disease, transcutaneous electrical nerve stimulation at acupoints combined with inhaled anticholinergics and corticosteroids provided better clinical improvement in 1-s forced expiratory volume and exercise capacity than medication alone [42]. The other 2 studies involved patients with asthma [43] and pneumoconiosis [44], respectively. As a result, combined treatment of Cordyceps sinensis with an inhaled corticosteroid and β-agonists dramatically improved lung function compared with medication alone in asthmatic patients [43], and 12-week acupuncture treatment–acetylcysteine resulted in better outcomes than acetylcysteine alone for patients with pneumoconiosis [44]. Conversely, combined treatment of respiratory rehabilitation–

manual therapy provided no marked advantage over respiratory rehabilitation alone for patients with respiratory failure [45].

F. Diseases of the digestive system (K00-K99): 2 studies

One trial showed a remarkably better effect of omeprazole when it was combined with myrtle berry water extract for gastroesophageal reflux disease [46], while the other study investigating the combined effect of 8-week acupoint embedding therapy with laxatives for diabetic constipation did not find any statistical intergroup difference [47] (Table 3F).

G. Diseases of the skin and subcutaneous tissue (L00-L99): 3 studies

Two studies tested the external application of honey in patients with acne [48] and oral lichen planus [49], respectively, but neither demonstrated superior outcomes in the combined treatment group. On the contrary, in patients with psoriasis, Daivobet® ointment or Dovonex® cream was more effective when incorporated with a herbal prescription [50] (Table 3G).

H. Diseases of the musculoskeletal system and connective tissue (M00-M99): 18 studies

This category had the largest number of studies: 7 studies of rheumatoid arthritis/osteoarthritis, 3 studies of neck pain, 4 studies of low back pain, and 1 each of shoulder impingement, fibromyalgia, non-traumatic osteonecrosis of the femoral head, and Sever's disease (Table 3H).

Better outcomes were found when the medication was supplemented with moxibustion therapy in patients with rheumatoid arthritis [51,52]. In 5 trials, the additive effect of various Western medicine treatments and iontophoresis with herbal medicine [53], green tea extract [54], burdock tea [55], manipulation [56], and massage [57] proved more efficacious than just the Western medicine treatments for osteoarthritis.

There were 3 studies on neck pain: for mechanical neck pain, Gorrell et al. tested the effects of different cervical manipulation techniques [58]. Manually applied manipulation combined with

stretching had the best analgesic effect compared with instrument-applied manipulation with stretching or stretching alone [58]. Connective tissue massage with stabilizing exercise over 4 weeks noticeably improved pain intensity and anxiety state compared with exercise only [59]. In Cerezo-Téllez et al.'s chronic nonspecific neck pain study, the integrative treatment of dry needling with stretching was more effective than stretching alone [60].

Among 4 studies on low back pain, 2 studies testing Chinese massage [61] and myofascial trigger-point therapy [62] with core-stabilizing exercise, showed notable outcomes. Morris et al. reported that a homeopathic complex in combination with medication and physiotherapy was more effective than either treatment alone for chronic low back pain due to osteoarthritis [63]. In contrast, an Australian study found physiotherapy was just as effective as physiotherapy combined with a 6-week visceral manipulation treatment [64].

The remaining 4 trials involved various diseases/conditions: Devereaux et al. did not detect any marked benefits of combined kinesiology taping–exercise physiotherapy versus exercise physiotherapy alone for shoulder impingement syndrome [65]. In 164 patients with fibromyalgia, acupuncture–pharmacological treatment improved symptoms of fibromyalgia relative to medication alone [66]. The Chinese herbal medicine, Qing'e pill, was given along with Caltrate D to patients with femoral head osteonecrosis, and after 6 months, it led to a greater improvement than Caltrate D only [67]. Lastly, Mitchell et al. conducted a factorial design trial to investigate whether noninvasive electrical stimulation at acupoints ST36, SP6, BL60, and KI3 along with oral administration of 24% sucrose reduced heelstick pain in 162 neonates. However, this combination therapy did not relieve heelstick pain measured by the Premature Infant Pain Profile [68].

I. Diseases of the genitourinary system (N00-N99): 3 studies

There were 3 studies in this category (Table 3I). For women with overactive bladder, the combination of Weng-li-tong and tolterodine was shown to be more effective than tolterodine alone [69]. Six-month treatment of benign prostatic hyperplasia with Longbishu capsule–mesylate doxazosin was more effective than mesylate doxazosin alone [70]. Finally, no additional benefit was

recorded when oral contraceptives were given along with the Chinese herbal medicine, Dan'e mixture, to women with endometriosis relative to the control group [71].

Symptoms, signs, and abnormal clinical and laboratory findings, NEC (R00-R99) and injury, poisoning, and certain other consequences of external causes (S00-T98): 9 studies

A. Symptoms, signs, and abnormal clinical and laboratory findings, NEC (R00-R99): 6 studies

Four studies investigated whether acupuncture-related techniques added to antiemetics helped chemotherapy-induced nausea and vomiting in cancer patients: transcutaneous electrical acupoint stimulation [72], moxa salt packet [73], or auricular acupressure [74] were given for 5–6 days and all alleviated nausea and vomiting, except 1 trial in which K1 acupoint electrostimulation was added to tropisetron injection and compared with the injection alone [75]. Alsharnoubi et al. reported that laser acupuncture with desmopressin was not superior to desmopressin alone in children with nocturnal enuresis [76]. The other study involving patients with septic shock demonstrated that the addition of Shenfu ginsenoside injection produced a dramatic benefit to early goal-directed therapy, including improved hemodynamics, reduced damage to vital organs, and shortened ventilation and intensive care unit stay time [77] (Table 4A).

B. Injury, poisoning, and certain other consequences of external causes (S00-T98): 3 studies

All of these were injury studies. Heweijiegu decoction with Caltrate D given for 3 months to patients with femoral intertrochanteric fracture yielded better outcomes than Caltrate D only [78]. Quadriceps vastus medialis dry needling combined with the usual rehabilitation protocol for 5 weeks resulted in substantially better recovery of complete anterior cruciate ligament rupture [79], and 4 weeks of chiropractic manipulation integrated with the usual rehabilitation protocol was more effective than just the usual rehabilitation protocol regarding recurrent ankle sprain [80] (Table 4B).

Factors influencing health status and contact with health services (Z00-Z99): 13 studies

There were 13 studies on the management of postoperative pain and wounds (Table 5).

Among them, 5 trials tested interventions other than acupuncture/electroacupuncture: Except for 1 trial in which lavender oil inhalation with icing did not produce a notably better analgesic effect than icing in post-surgical chest tube removal pain [81], all 4 trials demonstrated greater analgesic/esthetic effect of the integrated treatment, such as topical application of honey with conventional dressing [82], kinesiology taping with paracetamol [83], oral intake of honey with antibiotics and acetaminophen [84], and fascial manipulation with physiotherapy [85] than Western medicine treatment alone in postoperative pain and wounds. The remaining 7 studies all tested acupuncture, electroacupuncture, or lidocaine injection on acupoints plus analgesic medication against analgesics alone for postoperative pain. All of them alleviated postoperative pain better than just analgesic medication given for various surgical conditions, including cardiac surgery [86], lobectomy [87], tonsillectomy [88,89], hysteroscopic surgery [90], laparoscopic cholecystectomy [91], and total knee arthroplasty [92]. Finally, there was no advantage of acupuncture–kinesiotherapy over kinesiotherapy alone in alleviating pain, depression, upper extremity function, and ADL in post-breast cancer surgery patients [93].

1. Zhang H, et al. Impacts of electroacupuncture combined with ultraviolet therapy on cytokines of herpes zoster at the acute stage in patients. Zhongguo Zhen Jiu. 2015 Feb;35(2):145-8. Available from: http://www.cjacupuncture.com/WKA/WebPublication/paperDigest.aspx?paperID=37ddc197-0159-456c-9046-cda7ca2be4e9 [In Chinese]

2. Ye Y, et al. Effect of shuanghu qinggan granule and yigan yiqi jieyu granule plus lamivudine on chronic hepatitis B patients: A randomized double-blind placebo-controlled trial. Chin J Integr Med:1-7. DOI: 10.1007/s11655-016-2519-9

3. Firouzjaei A, et al. Comparative evaluation of the therapeutic effect of metformin monotherapy with metformin and acupuncture combined therapy on weight loss and insulin sensitivity in diabetic patients. Nutr Diabetes. 2016;6(5):e209. DOI: 10.1038/nutd.2016.16

4. Yang Y. BO's abdominal acupuncture for obese type-2 diabetes mellitus. Zhongguo Zhen Jiu. 2015 Apr;35(4):330-4. Available from: http://www.cjacupuncture.com/WKA/WebPublication/wkTextContent.aspx?colType=4&yt=2015&tp=gklb [In Chinese]

5. Devarajan S, et al. A blend of sesame and rice bran oils lowers hyperglycemia and improves the lipids. Am J Med. 2016;129(7):731-9. DOI: 10.1016/j.amjmed.2016.02.044

6. Lu J. Ginger-partition moxibustion combined with glucocorticoid for thyroiditis at subacute stage: A randomizd controlled trial. Zhongguo Zhen Jiu. 2016 Jan;36(1):7-11. Available from: http://www.cjacupuncture.com/WKA/WebPublication/wkTextContent.aspx?colType=4&yt=2016&tp=gklb

7. Jiang D. Infertility in polycystic ovary syndrome treated with acupuncture and clomiphene: A randomized controlled trial. Zhongguo Zhen Jiu. 2015 Feb;35(2):114-8. Available from: http://www.cjacupuncture.com/WKA/WebPublication/paperDigest.aspx?paperID=bf44a022-c7d4-4391-9203-0451d0c49936 [In Chinese]

8. Xie XC. Acupuncture improves intestinal absorption of iron in iron-deficient obese patients: A randomized controlled preliminary trial. Chin Med J. 2017 Mar 5;130(5):508-15. DOI: 10.4103/0366-6999.200549

9. Sun YZ. Clinical trials for treatment of primary hyperlipidemia by using acupuncture in combination with lipitor. Zhen Ci Yan Jiu. 2015 Feb;40(1):61-4.

10. Fogarty JN. Taoist tai chi® and memory intervention for individuals with mild cognitive impairment. J Aging Phys Act. 2016;24(2):169-80. DOI: 10.1123/japa.2014-0062

11. Kang R. Effect of community-based social skills training and tai-chi exercise on outcomes in patients with chronic schizophrenia: A randomized, one-year study. Psychopathology. 2016;49(5):345-55. DOI: 10.1159/000448195

12. Ho RT. A randomized controlled trial on the psychophysiological effects of physical exercise and tai-chi in patients with chronic schizophrenia. Schizophr Res. 2016;171(1-3):42-9. DOI: 10.1016/j.schres.2016.01.038

13. Firoozabadi A. Effectiveness of cuscuta planiflora ten. and nepeta menthoides boiss. & buhse in major depression: A triple-blind randomized controlled trial study. J Evid Based Complementary Altern Med.. 2015;20(2):94-7. DOI: 10.1177/2156587214557359

14. Talaei A. Crocin, the main active saffron constituent, as an adjunctive treatment in major depressive disorder: A randomized, double-blind, placebo-controlled, pilot clinical trial. J Affect Disord. 2015;174:51-6. DOI: 10.1016/j.jad.2014.11.035

15. Sahraian A. Study the effects of saffron on depression and lipid profiles: A double blind comparative study. Asian J Psychiatr.. 2016;22:174-6. DOI: 10.1016/j.ajp.2015.10.012

16. Liao J. Progressive muscle relaxation combined with chinese medicine five-element music on depression for cancer patients: A randomized controlled trial. Chin J Integr Med. 2018;24(5):343-7. DOI: 10.1007/s11655-017-2956-0

17. Attias S, et al. Effectiveness of integrating individualized and generic complementary medicine treatments with standard care versus standard care alone for reducing preoperative anxiety. J Clin Anesth. 2016;29:54-64. DOI: 10.1016/j.jclinane.2015.10.017

18. Huang H, et al. Comparison between acupuncture and biofeedback as adjunctive treatments for primary insomnia disorder. Altern Ther Health Med. 2017;23(4)

19. Li M. Multi-dimensional analysis on parkinson's disease questionnaire-39 in parkinson's patients treated with bushen huoxue granule: A multicenter, randomized, double-blinded and placebo controlled trial. Complement Ther Med. 2016;29:116-20. DOI: 10.1016/j.ctim.2016.09.008

20. Delavar Kasmaei H, et al. Effects of coriandrum sativum syrup on migraine: A randomized, triple-blind, placebo-controlled trial. Iran Red Crescent Med J. 2016 Jan 2;18(1):e20759. DOI: 10.5812/ircmj.20759

21. Villani V et al. Single-blind, randomized, pilot study combining shiatsu and amitriptyline in refractory primary headaches. Neurol Sci.. 2017;38(6):999-1007. DOI: 10.1007/s10072-017-2888-7

22. Chung VCH et al. Electroacupuncture and splinting versus splinting alone to treat carpal tunnel syndrome: A randomized controlled trial. CMAJ. 2016 Sep 6;188(12):867-75. DOI: 10.1503/cmaj.151003

23. Dabbous OA, et al. Laser acupuncture as an adjunctive therapy for spastic cerebral palsy in children. Lasers Med Sci.. 2016;31(6):1061-7. DOI: 10.1007/s10103-016-1951-6

24. Yao C, et al.. Chinese herbal medicine formula jieduhuayu granules improves cognitive and neurophysiological functions in patients with cirrhosis who have minimal hepatic encephalopathy: A randomized controlled trial. Complement Ther Med. 2014;22(6):977-85. DOI: 10.1016/j.ctim.2014.10.005

25. Thabit MN, et al. Combined central and peripheral stimulation for treatment of chronic tinnitus: A randomized pilot study. Neurorehabil Neural Repair. 2015;29(3):224-33. DOI: 10.1177/1545968314542616

26. Kim H, Kim YL, Lee SM. Effects of therapeutic tai chi on balance, gait, and quality of life in chronic stroke patients. Int J Rehabil Res.. 2015;38(2):156-61. DOI: 10.1097/MRR.0000000000000103

27. Wei Y, Zhao X, Zhang B. Synergistic effect of moxibustion and rehabilitation training in functional recovery of post-stroke spastic hemiplegia. Complement Ther Med. 2016;26:55-60. DOI: 10.1016/j.ctim.2016.02.014

28. Wang JH, Zhao M, Bao YC, Shang JF, Yan Q, Zhang ZC, et al. Effect of scalp-acupuncture treatment on levels of serum high-sensitivity C-reactive protein, and pro-inflammatory cytokines in patients with acute cerebral infarction. Zhen Ci Yan Jiu. 2016 Feb;41(1):80-4.

29. Jiang C, Yang S, Tao J, Huang J, Li Y, Ye H, et al. Clinical efficacy of acupuncture treatment in combination with rehacom cognitive training for improving cognitive function in stroke: A 2× 2 factorial design randomized controlled trial. J Am Med Dir Assoc.. 2016;17(12):1114-22. DOI: 10.1016/j.jamda.2016.07.021

30. Fang J, Chen L, Ma R, Keeler CL, Shen L, Bao Y, et al. Comprehensive rehabilitation with integrative medicine for subacute stroke: A multicenter randomized controlled trial. Scientific reports. 2016;6:25850. DOI: 10.1038/srep25850

31. Wang S, et al. Efficacy and safety assessment of acupuncture and nimodipine to treat mild cognitive impairment after cerebral infarction: A randomized controlled trial. BMC Complement Altern Med.. 2016;16(1):361. DOI: 10.1186/s12906-016-1337-0

32. Wang F, Zhang L, Wang J, Shi Y, Zheng L. Efficacy on hemiplegic spasticity treated with plum blossom needle tapping therapy at the key points and bobath therapy: A randomized controlled trial. Zhongguo Zhen Jiu. 2015 Aug;35(8):781-4.

33. Ma JN, Wang ZL, Ning LN, Yang H, Xiong J. Observation on therapeutic effects of acupuncture combined with cutaneous electrical stimulation for dysphagia in patients with cerebral 1nfarction. Zhen Ci Yan Jiu. 2015 Jun;40(3):238-41.

34. Xia W, Zheng C, Zhu S, Tang Z. Does the addition of specific acupuncture to standard swallowing training improve outcomes in patients with dysphagia after stroke? a randomized controlled trial. Clin Rehabil. 2016;30(3):237-46. DOI: 10.1177/0269215515578698

35. Feng S, et al. Acupuncture combined with swallowing training for post-stroke dysphagia: A randomized controlled trial. Zhongguo Zhen Jiu. 2016 Apr;36(4):347-50.

36. Man S, et al. A pilot controlled trial of a combination of dense cranial electroacupuncture stimulation and body acupuncture for post-stroke depression. BMC Complement Altern Med.. 2014;14(1):255. DOI: 10.1186/1472-6882-14-255

37. Sun Y, Bao Y, Wang S, Chu J, Li L. Efficacy on post-stroke depression treated with acupuncture at the acupoints based on ziwuliuzhu and prozac. Zhongguo Zhen Jiu. 2015 Feb;35(2):119-22.

38. Gao X, Ma F, Zhao Q, Zhang Y, Du Y. Acupuncture method of "huoxue sanfeng, shugan jianpi" for morning blood pressure in patients with cerebral infraction combined with essential hypertension: A randomized controlled trial. Zhongguo Zhen Jiu. 2016 May;36(5):459-62.

39. Wang M, Chen H, Lu S, Wang J, Zhang W, Zhu B. Impacts on neutrophil to lymphocyte ratio in patients of chronic stable angina pectoris treated with acupuncture at neiguan (PC 6). Zhongguo Zhen Jiu. 2015 May;35(5):417-21.

40. Maulik SK, et al. Clinical efficacy of water extract of stem bark of terminalia arjuna (roxb. ex DC.) wight & arn. in patients of chronic heart failure: A double-blind, randomized controlled trial. Phytomedicine. 2016;23(11):1211-9. DOI: 10.1016/j.phymed.2016.02.007

41. Davies C, et al. Maggots as a wound debridement agent for chronic venous leg ulcers under graduated compression bandages: A randomised controlled trial. Phlebology. 2015;30(10):693-9. DOI: 10.1177/0268355514555386

42. Ö ncü E, Zincir H. The effect of transcutaneous electrical nerve stimulation in patients with acute exacerbation of chronic obstructive pulmonary disease: Randomised controlled trial. J Clin Nurs. 2017;26(13-14):1834-44. DOI: 10.1111/jocn.13450

43. Wang N, Li J, Huang X, Chen W, Chen Y. Herbal medicine cordyceps sinensis improves health-related quality of life in moderate-to-severe asthma. Evid Based Complement Alternat Med.. 2016;2016 DOI: 10.1155/2016/6134593

44. Zhang RY, Wang D, Wu JP, Li XL, Li CX, Guo CF. Randomized controlled clinical trials for acupuncture treatment of pneumoconiosis. Zhen Ci Yan Jiu. 2016 Apr;41(2):163-8.

45. Jones M, et al. Does manual therapy provide additional benefit to breathing retraining in the management of dysfunctional breathing? A randomised controlled trial. Disabil Rehabil. 2015;37(9):763-70. DOI: 10.3109/09638288.2014.941020

46. Zohalinezhad ME, Hosseini-Asl MK, Akrami R, Nimrouzi M, Salehi A, Zarshenas MM. Myrtus communis L. freeze-dried aqueous extract versus omeprazol in gastrointestinal reflux disease: A double-blind randomized controlled clinical trial. J Evid Based Complementary Altern Med.. 2016;21(1):23-9. DOI: 10.1177/2156587215589403

47. Li Y, An L, Tian H. Diabetic constipation treated with acupoint embedding therapy and forlax: A randomized controlled trial. Zhongguo Zhen Jiu. 2016 Feb;36(2):124-8.

48. Semprini A, et al. Randomised controlled trial of topical kanuka honey for the treatment of acne. BMJ Open. 2016 Feb 1;6(2):e009448,2015-009448. DOI: 10.1136/bmjopen-2015-009448

49. Sanatkhani M, et al. Effect of cedar honey in the treatment of oral lichen planus. Iran J Otorhinolaryngol. 2014 Jul;26(76):151-61.

50. Yao D, et al. Oral PSORI-CM01, a chinese herbal formula, plus topical sequential therapy for moderate-to-severe psoriasis vulgaris: Pilot study for a double-blind, randomized, placebo-controlled trial. Trials. 2016;17(1):140. DOI: 10.1186/s13063-016-1272-x

51. Defang L, et al. Effect of sanhuangwuji powder, anti-rheumatic drugs, and ginger-partitioned acupoint stimulation on the treatment of rheumatoid arthritis with peptic ulcer: A randomized controlled study. J Tradit Chin Med.. 2015;35(3):273-80.

52. Hongwu Y, et al. Clinical efficacy of moxibustion as supplement on rheumatoid arthritis and the exploration on its mechanism. Zhongguo Zhen Jiu. 2016 Jan;36(1):17-20.

53. Geng XL, Sun XH, Zhang J, Yang LB, Liang QD. Observation of the clinical effects of iontophoresis of a chinese drug in the treatment of degenerative osteoarthropathy. J Biol Regul Homeost Agents. 2015 Jan-Mar;29(1):135-41.

54. Hashempur MH, Sadrneshin S, Mosavat SH, Ashraf A. Green tea (camellia sinensis) for patients with knee osteoarthritis: A randomized open-label active-controlled clinical trial. Clinical Nutrition. 2018;37(1):85-90. DOI: 10.1016/j.clnu.2016.12.004

55. Maghsoumi-Norouzabad L, et al. Effects of arctium lappa L.(burdock) root tea on inflammatory status and oxidative stress in patients with knee osteoarthritis. Int J Rheum Dis.. 2016;19(3):255-61. DOI: 10.1111/1756-185X.12477

56. Dwyer L, et al. Manual and manipulative therapy in addition to rehabilitation for osteoarthritis of the knee: Assessor-blind randomized pilot trial. J Manipulative Physiol Ther. 2015;38(1):1,21. e2. DOI: 10.1016/j.jmpt.2014.10.002

57. Field T, Diego M, Solien-Wolfe L. Massage therapy plus topical analgesic is more effective than massage alone for hand arthritis pain. J Bodywork Movement Ther. 2014;18(3):322-5. DOI: 10.1016/j.jbmt.2013.12.002

58. Gorrell LM, Beath K, Engel RM. Manual and instrument applied cervical manipulation for mechanical neck pain: A randomized controlled trial. J Manipulative Physiol Ther. 2016;39(5):319-29. DOI: 10.1016/j.jmpt.2016.03.003

59. Celenay ST, Kaya DO, Akbayrak T. Cervical and scapulothoracic stabilization exercises with and without connective tissue massage for chronic mechanical neck pain: A prospective, randomised controlled trial. Man Ther. 2016;21:144-50. DOI: 10.1016/j.math.2015.07.003

60. Cerezo-Téllez E, et al. Effectiveness of dry needling for chronic nonspecific neck pain: A randomized, single-blinded, clinical trial. Pain. 2016;157(9):1905-17. DOI: 10.1097/j.pain.0000000000000591

61. Zhang Y, Tang S, Chen G, Liu Y. Chinese massage combined with core stability exercises for nonspecific low back pain: A randomized controlled trial. Complement Ther Med. 2015;23(1):1-6. DOI: 10.1016/j.ctim.2014.12.005

62. Trampas A, Mpeneka A, Malliou V, Godolias G, Vlachakis P. Immediate effects of core-stability exercises and clinical massage on dynamic-balance performance of patients with chronic specific low back pain. J Sport Rehab. 2015;24(4):373-83. DOI: 10-1123/jsr.2014-0215

63. Morris M, Pellow J, Elizabeth M, Tsele-Tebakang T. Physiotherapy and a homeopathic complex for chronic low back pain due to osteoarthritis: A randomized, controlled pilot study. Altern Ther Health Med. 2016 Jan-Feb;22(1):48-56.

64. Panagopoulos J, Hancock M, Ferreira P, Hush J, Petocz P. Does the addition of visceral manipulation alter outcomes for patients with low back pain? A randomized placebo controlled trial. Eur J Pain. . 2015;19(7):899-907. DOI: 10.1002/ejp.614

65. Devereaux M, Velanoski KQ, Pennings A, Elmaraghy A. Short-term effectiveness of precut kinesiology tape versus an NSAID as adjuvant treatment to exercise for subacromial impingement: A randomized controlled trial. Clin J Sport Med. 2016 Jan;26(1):24-32. DOI: 10.1097/JSM.0000000000000187

66. Vas J, et al. Acupuncture for fibromyalgia in primary care: A randomised controlled trial. Acupunct Med.. 2016;34(4):257-66. DOI: 10.1136/acupmed-2015-010950

67. Li C, Shen L, Yang Y, Xu X, Shuai B, Ma C. Effects of modified qing'e pill on expression of adiponectin, bone morphogenetic protein 2 and coagulation-related factors in patients with nontraumatic osteonecrosis of femoral head. Chin J Integr Med. 2017;23(3):183-9. DOI: 10.1007/s11655-016-2407-3

68. Mitchell AJ, et al. Does noninvasive electrical stimulation of acupuncture points reduce heelstick pain in neonates? Acta Paediatrica. 2016;105(12):1434-9. DOI: 10.1111/apa.13581

69. Xiao D, Lv J, Xie X, Jin X, Lu M, Shao Y. The combination of herbal medicine weng-li-tong with tolterodine may be better than tolterodine alone in the treatment of overactive bladder in women: A randomized placebo-controlled prospective trial. BMC urology. 2016;16(1):49. DOI: 10.1186/s12894-016-0167-1

70. Chang DG, et al. Longbishu capsule combined with mesylate doxazosin: An efficacious therapy for benign prostatic hyperplasia. Zhonghua Nan Ke Xue. 2015 Feb;21(2):165-9.

71. Zhu S, et al. Post-laparoscopic oral contraceptive combined with chinese herbal mixture in treatment of infertility and pain associated with minimal or mild endometriosis: A randomized controlled trial. BMC Complement Altern Med.. 2014;14(1):222. DOI: 10.1186/1472-6882-14-222

72. Xie J, et al. Effect of transcutaneous electrical acupoint stimulation combined with palonosetron on chemotherapy-induced nausea and vomiting: A single-blind, randomized, controlled trial. Chin J Cancer.. 2017;36(1):6. DOI: 10.1186/s40880-016-0176-1

73. Cai Y, Wu Y, Ye F. Moxa salt packets at zhongwan (CV 12) for cisplatin chemotherapy-induced gastrointestinal reactions: A clinical study. Zhongguo Zhen Jiu. 2016 Apr;36(4):405-8.

74. Eghbali M, Yekaninejad MS, Jalalinia SF, Samimi MA, Sa'atchi K. The effect of auricular acupressure on nausea and vomiting caused by chemotherapy among breast cancer patients. Complement Ther Clin Pract.. 2016;24:189-94. DOI: 10.1016/j.ctcp.2016.06.006

75. Shen Y, et al. Randomized, placebo-controlled trial of K1 acupoint acustimulation to prevent cisplatin-induced or oxaliplatin-induced nausea. Cancer. 2015;121(1):84-92. DOI: 10.1002/cncr.28973

76. Alsharnoubi J, Sabbour AA, Shoukry AI, Abdelazeem AM. Nocturnal enuresis in children between laser acupuncture and medical treatment: A comparative study. Lasers Med Sci.. 2017;32(1):95-9. DOI: 10.1007/s10103-016-2090-9

77. Li M, et al. Effect of the shenfu injection combined with early goal-directed therapy on organ functions and outcomes of septic shock patients. Cell Biochem Biophys. 2015;72(3):807-12. DOI: 10.1007/s12013-015-0537-4

78. Shen LW, Zhou H, Xia ZM, Fang YY. Therapeutic evaluation of he-wei jie-gu (chinese characters)decoction on femoral intertrochanteric fracture after internal fixation in elderly: A randomized controlled trial. Zhongguo Gu Shang. 2015 May;28(5):417-21.

79. Velazquez-Saornil J, Ruiz-Ruiz B, Rodriguez-Sanz D, Romero-Morales C, Lopez-Lopez D, Calvo-Lobo C. Efficacy of quadriceps vastus medialis dry needling in a rehabilitation protocol after surgical reconstruction of complete anterior cruciate ligament rupture. Medicine (Baltimore). 2017 Apr;96(17):e6726. DOI: 10.1097/MD.0000000000006726

80. Lubbe D, et al. Manipulative therapy and rehabilitation for recurrent ankle sprain with functional instability: A short-term, assessor-blind, parallel-group randomized trial. J Manipulative Physiol Ther. 2015;38(1):22-34. DOI: 10.1016/j.jmpt.2014.10.001

81. Hasanzadeh F, et al. The effect of cold application and lavender oil inhalation in cardiac surgery patients undergoing chest tube removal. EXCLI J. 2016 Jan 22;15:64-74. DOI: 10.17179/excli2015-748

82. Goharshenasan P, Amini S, Atria A, Abtahi H, Khorasani G. Topical application of honey on surgical wounds: A randomized clinical trial. Forsch Komplementmed. 2016;23(1):12-5. DOI: 10.1159/000441994

83. Imperatori A, et al. Chest pain control with kinesiology taping after lobectomy for lung cancer: Initial results of a randomized placebo-controlled study. Interact Cardiovasc Thorac Surg. 2016;23(2):223-30. DOI: 10.1093/icvts/ivw110

84. Mohebbi S, Nia FH, Kelantari F, Nejad SE, Hamedi Y, Abd R. Efficacy of honey in reduction of post tonsillectomy pain, randomized clinical trial. Int J Pediatr Otorhinolaryngol. 2014;78(11):1886-9. DOI: 10.1016/j.ijporl.2014.08.018

85. Busato M, et al. Fascial manipulation associated with standard care compared to only standard postsurgical care for total hip arthroplasty: A randomized controlled trial. PM&R. 2016;8(12):1142-50. DOI: 10.1016/j.pmrj.2016.04.007

86. Yu HJ, Xu XQ, Xu SA, Xu J, Cao WZ. Analgesic and sedative effect of acupuncture combined with medicine on patients undergoing cardiac surgery. Zhongguo Zhong Xi Yi Jie He Za Zhi. 2016 Mar;36(3):289-93.

87. Chen T, Wang K, Xu J, Ma W, Zhou J. Electroacupuncture reduces postoperative pain and analgesic consumption in patients undergoing thoracic surgery: A randomized study. Evid Based Complement Alternat Med.. 2016;2016

88. Tsao GJ, Messner AH, Seybold J, Sayyid ZN, Cheng AG, Golianu B. Intraoperative acupuncture for posttonsillectomy pain: A randomized, double-blind, placebo-controlled trial. Laryngoscope. 2015;125(8):1972-8. DOI: 10.1002/lary.25252

89. Dingemann J, Plewig B, Baumann I, Plinkert P, Sertel S. Acupuncture in posttonsillectomy pain: A prospective, double-blinded, randomized, controlled trial. HNO. 2017;65(1):73-9. DOI: 10.1007/s00106-016-0289-5

90. Yang H, Yin XQ, Li GA, Yuan L, Zhou H. Effect of application of acupuncture-anesthetic composite anesthesia on hysteroscopic surgery: A clinical study. Zhongguo Zhong Xi Yi Jie He Za Zhi. 2014 Jul;34(7):804-7.

91. Meng XL, Qu Q. Effect of subcutaneous injection of lidocaine in zusanli (ST 36) and jiaji (EX-B 2) regions on immune function in patients undergoing laparoscopic cholecystectomy. Zhen Ci Yan Jiu. 2016 Feb;41(1):74-9.

92. Chen CC, Yang CC, Hu CC, Shih HN, Chang YH, Hsieh PH. Acupuncture for pain relief after total knee arthroplasty: A randomized controlled trial. Reg Anesth Pain Med. 2015 Jan-Feb;40(1):31-6. DOI: 10.1097/AAP.0000000000000138

93. Giron PS, Haddad CAS, de Almeida Rizzi, Samantha Karlla Lopes, Nazário ACP, Facina G. Effectiveness of acupuncture in rehabilitation of physical and functional disorders of women undergoing breast cancer surgery. Support Care Cancer. 2016;24(6):2491-6. DOI: 10.1007/s00520-015-3054-5

Table 1. Studies of certain infectious and parasitic diseases (A00-B99) (n=2).

Author (year)	Disease/condition	KCD code	Size	Treatment duration	Korean Medicine/CAM integration group*	Control group	Direction of outcome†
Zhang (2015) [1]	Herpes zoster	B02	34	10 days	Electroacupuncture ultraviolet therapy	Acyclovir injection and ointment Vit.B12 i.m. TDP lamp therapy	○
Ye (2016) [2]	Chronic hepatitis B	B18.0 B18.1	320	48 weeks	Shuanghu Qinggan granule‡ Yigan Yiqi Jieyu granule§	Lamivudine Chinese herb placebo	○

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; †○ indicates Korean Medicine/CAM integration group is significantly better than the control group while X indicates non-significant outcomes; ‡Shuanghu Qinggan granule consists of Polygonum Cuspidatum, Lonicerae Japonica Thunberg, Hedyotidis Herba, Taraxaci Herba, Chrysanthemi Indici Flos, Violae Herba, Trichosanthes Semen, Pinellia ternata Breitenbach, Coptidis Rhizoma, Aurantii Immaturus Fructus, and Salviae Miltiorrhizae Radix.; § Yigan Yiqi Jieyu Granule consists of Bupleuri Radix, Aurantii Fructus, Paeoniae Radix Alba, Salviae Miltiorrhizae Radix, Astragali Radix, Radix codonopsis, and Picrorrhozae Rhizoma. CAM, complementary and alternative medicine; i.m., intramuscular injection; TDP, Teding Diancibo Pu; Vit, vitamin.

Table 2. Studies of endocrine, nutritional and metabolic diseases (E00-E90) (n=7).

Author (year)	Disease/condition	KCD code	Size	Treatment duration	Korean Medicine/CAM integration group*	Control group	Direction of outcome†
Firouzjaei (2016) [3]	Obese type 2 diabetes	E11.9 E66.9	39	3 weeks	Electroacupuncture	Metformin	○
Yang (2015) [4]	Obese type-2 diabetes	E11 E66.9	60	3 weeks	Bo's abdominal acupuncture	Antidiabetics	○
Devarajan (2016) [5]	Type 2 diabetes	E11	200	8 weeks	Sesame and rice bran oil	Glibenclamide	○
Lu (2016) [6]	Subacute thyroiditis	E06.1	81	12 weeks	Ginger-partition moxibustion	Oral glucocorticoid (Methylprednisolone)	○
Jiang (2015) [7]	Polycystic ovary syndrome	E28.2	120	3 months	Acupuncture Moxibustion Herbal medicine	Clomiphene	○
Xie (2017) [8]	Obesity with iron-deficiency	E66 D50	60	8 weeks	Acupuncture	Oral iron replacement (Ferrous fumarate tablet)	○
Sun (2015) [9]	Primary hyperlipidemia	E78.5	60	6 weeks	Acupuncture	Statin	○

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; †○ indicates Korean Medicine/CAM integration group is significantly better than the control group.

Table 3. Studies of groups of diseases by human anatomical system: A. mental and behavioral disorders (F00-F99), B. nervous system (G00-G99), ear and mastoid process (H60-H95), circulatory system (I00-I99), respiratory system (J00-J99), digestive system (K00-K93), skin and subcutaneous tissue (L00-L99), musculoskeletal system and connective tissue (M00-M99), and genitourinary system (N00-N99) (n=61).

A. Mental and behavioral disorders (F00-F99): 9 studies							
Author (year)	**Disease/condition**	**KCD code**	**Size**	**Treatment duration**	**Korean Medicine/CAM integration group***	**Control group**	**Direction of outcome†**
Fogarty (2016) [10]	Mild cognitive impairment	F06.7	48	10 weeks	Tai Chi	Memory intervention program	X
Kang (2016) [11]	Chronic schizophrenia	F20	244	52 weeks	Tai Chi Community-centered social skills training	Chlorpromazine	○
Ho (2016) [12]	Chronic schizophrenia	F20	102	12 weeks	Tai Chi	Standard medication	○
Firooza-badi (2015) [13]	Major depressive disorder	F32.2	43	8 weeks	1) Cuscuta planiflor‡ 2) Nepeta menthoides§	Benzodiazepines SSRIs	○
Talaei (2015) [14]	Major depressive disorder	F32.2	40	4 weeks	Crocin (a constituent of saffron)	SSRIs	○
Sahraian (2016) [15]	Depression	F32	40	4 weeks	Saffron capsule	Fluoxetine Saffron placebo	X
Liao (2018) [16]	Depression	F32	60	8 weeks	Five-element music therapy	PMRT	○

Attias (2016) [17]	Preoperative anxiety	F43.0	360	Once	1) Guided imagery with CD recording 2) Acupuncture 3) Individualized guided imagery 4) Reflexology 5) Individualized guided imagery with reflexology	Benzodiazepines	○
Huang (2017) [18]	Primary insomnia	F51.0	49	4 weeks	Acupuncture	Zolpidem	○

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; †○ indicates Korean Medicine/CAM integration group is significantly better than the control group while X indicates non-significant outcomes; ‡Cuscuta japonica Chois.; §Vitex seed. PMRT, progressive muscle relaxation training; SSRIs, selective serotonin reuptake inhibitors.

B. Diseases of the nervous system (G00-G99): 6 studies

Author (year)	Disease/condition	KCD code	Size	Treatment duration	Korean Medicine/CAM integration group*	Control group	Direction of outcome†
Li (2016) [19]	Parkinson's disease	G20	120	3 months	Bushenhuoxue‡ granule	Levodopa	○
Delavar (2015) [20]	Migraine	G43	68	4 weeks	Cilantro syrup	Sodium valproate	○
Villani (2017) [21]	Intractable primary headache	G43 G44	37	12 weeks	Shiatsu massage	Amitriptyline	X

Chung (2016) [22]	Carpal tunnel syndrome	G56.0	181	17 weeks	Electroacupuncture	Splint	○
Dabbous (2016) [23]	Rigid cerebral palsy	G80.0	40	12 weeks	Laser acupuncture	Physical therapy	○
Yao (2014) [24]	Minimal hepatic encephalopathy	G93.80	80	15 days	Jieduhuayu[§] granules	Lactulose	○

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; [†]○ indicates Korean Medicine/CAM integration group is significantly better than the control group while X indicates non-significant outcomes; [‡]Bushenhuoxue granule consists of 6 herbs, i.e., Astragali radix, Angelicae sinensis radix, Ligustici Chuanxiong Rhizoma, Cuscutae semen, Taxilli Herba, and Dipsaci Radix; [§]Jieduhuayu granule consists of Rhei Rhizoma , Paeoniae Radix Rubra, Artemisiae Capillaris Herba, Oldenlandiae Diffusae Herba, Curcumae Radix and Acori Graminei Rhizoma, 15g each.

C. Diseases of the ear and mastoid process (H60-H95): 1 study

Author (year)	Disease/condition	KCD code	Size	Treatment duration	Korean Medicine/CAM integration group*	Control group	Direction of outcome[†]
Mohamed (2014) [25]	Chronic tinnitus	H93.1	30	4 weeks	Laser acupuncture	Transcranial magnetic stimulation	○

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; [†]○ indicates Korean Medicine/CAM integration group is significantly better than the control group while X indicates non-significant outcomes.

D. Diseases of the circulatory system (I00-I99): 16 studies

Author (year)	Disease/condition	KCD code	Size	Treatment duration	Korean Medicine/CAM integration group*	Control group	Direction of outcome[†]
Kim (2015)	Stroke	I64	22	6 weeks	Tai Chi	General physical therapy	○

[26]							
Wei (2016) [27]	Post-stroke spastic hemiplegia	I69.4 G81.1	84	2 weeks	Moxibustion	Rehabilitation training	○
Wang J (2016) [28]	Acute cerebral infarction	I63	61	1 week	Scalp acupuncture	Aspirin Danhong injection Citicoline	○
Jiang (2016) [29]	Stroke	I64	204	12 weeks	Acupuncture	Computer-assisted cognitive rehabilitation	○
Fang (2016) [30]	Subacute stroke	I64	366	8 weeks	Electroacupuncture Acupuncture Chinese herbal medicine	Conventional rehabilitation	○
Wang S (2016) [31]	Mild cognitive impairment after cerebral infarction	I69.3 F06.7	126	12 weeks	Acupuncture	Nimodipine	○
Wang F (2015) [32]	Spasticity after cerebral infarction	I69.3 G81	80	8 weeks	Plum blossom needle	Bobath manipulation therapy	○
Ma (2015) [33]	Post-stroke dysphagia	I69.3 R13	120	2 weeks	Acupuncture	Skin electrostimulation in the neck	○
Xia (2016) [34]	Post-stroke dysphagia	I69.4 R13	124	4 weeks	Acupuncture	Swallowing training	○

Feng (2016) [35]	Post-stroke dysphagia	I69.4 R13	60	3 weeks	Acupuncture	Swallowing training	○
Man (2014) [36]	Post-stroke depression	I69.4 F32	43	4 weeks	Dense cranial electroacupuncture	SSRIs	○
Sun (2015) [37]	Post-stroke depression	I69.4 F32	93	4 weeks	Midnight-midday ebb flow acupuncture	SSRIs	○
Gao (2016) [38]	Cerebral infarction with essential hypertension	I10 I63	68	6 weeks	Acupuncture	Nifedipine	○
Wang M (2015) [39]	Chronic stable angina pectoris	I20.88	45	4 weeks	Electroacupuncture	Nitroglycerine	○
Maulik (2016) [40]	Chronic heart failure	I50	100	12 weeks	Terminalia arjuna	Angiotensin converting enzyme inhibitor/angiotensin II type 1 receptor blocker and ß-blocker with/without diuretics/digoxin Terminalia arjuna placebo	X
Davies (2015) [41]	Chronic venous leg ulcer	I83.0	20	12 weeks	Larval debridement therapy	4-layer compression bandages	○

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; †○ indicates Korean Medicine/CAM integration group is significantly better than the control group while X indicates non-significant outcomes.

E. Diseases of the respiratory system (J00-J99): 4 studies							
Author (year)	**Disease/condition**	**KCD code**	**Size**	**Treatment duration**	**Korean Medicine/CAM integration group***	**Control group**	**Direction of outcome†**
Ö ncü (2017) [42]	Chronic obstructive pulmonary disease	J44	82	20 times	Transcutaneous electrical acupoint stimulation	Inhaled anticholinergics and corticosteroids Placebo transcutaneous electrical acupoint stimulation	○
Wang N (2016) [43]	Moderate-to-severe persistent asthma	J45	120	12 weeks	Corbin capsule containing Cordyceps sinensis‡	Inhaled corticosteroid β-agonists as-needed	○
Zhang (2016) [44]	Pneumoconiosis	J64	120	12 weeks	Acupuncture	Acetylcysteine capsules	○
Jones (2015) [45]	Respiratory failure	J98.8	60	26 weeks	Manual therapy	Respiratory rehabilitation	X

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; †○ indicates Korean Medicine/CAM integration group is significantly better than the control group while X indicates non-significant outcomes; ‡Cordyceps militaris (L.) Link

F. Diseases of the digestive system (K00-K99): 2 studies							
Author (year)	**Disease/condition**	**KCD code**	**Size**	**Treatment duration**	**Korean Medicine/CAM integration group***	**Control group**	**Direction of outcome†**
Zohalinezhad (2016) [46]	GERD	K21.0 K21.9	45	6 weeks	Myrtle berries freeze-dried aqueous extract	Omeprazole	X

Li (2016) [47]	Diabetic constipation	K59.0 E10.68 E11.68 E12.68 E13.68 E14.68	150	8 weeks	Acupoint embedding therapy	Laxatives	○

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; †○ indicates Korean Medicine/CAM integration group is significantly better than the control group while X indicates non-significant outcomes. GERD, gastroesophageal reflux disease.

G. Diseases of the skin and subcutaneous tissue (L00-L99): 3 studies							
Author (year)	**Disease/condition**	**KCD code**	**Size**	**Treatment duration**	**Korean Medicine/CAM integration group***	**Control group**	**Direction of outcome†**
Semprini (2016) [48]	Acne	L70	136	12 weeks	Kanuka honey	Standard antibacterial soap treatment	X
Sanatkhani (2014) [49]	Oral lichen planus	L43	30	4 weeks	Cedar honey	Dexamethasone mouthwash Fluconazole capsule	X
Yao (2016) [50]	Psoriasis	L40	18	12 weeks	PSORI-CM01 prescription‡	Daivobet® ointment or Dovonex® cream	○

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; †○ indicates Korean Medicine/CAM integration group is significantly better than the control group while X indicates non-significant outcomes; ‡PSORI-CM01 prescription consists of Curcumae rhizome, Radix paeoniae rubra, Rhizoma smilacis glabrae, Mume fructus, and Sarcandrae herba.

H. Diseases of the musculoskeletal system and connective tissue (M00-M99): 18 studies							
Author (year)	**Disease/condition**	**KCD code**	**Size**	**Treatment duration**	**Korean Medicine/CAM integration group***	**Control group**	**Direction of outcome†**

Liu (2015) [51]	Rheumatoid arthritis with peptic ulcer	M05 K25	120	8 weeks	Moxibustion on ginger oral Sanhuangwuji[‡] powder	Anti-rheumatic drugs	○
Hongwu (2016) [52]	Rheumatoid arthritis	M05	40	4 weeks	Moxibustion	Diclofenac Methotrexate Folic acid	○
Geng (2015) [53]	Degenerative osteoarthritis	M15-M19	296	4 weeks	Iontophoresis of the herbal drug	Electrotherapy	○
Hashempur (2016) [54]	Knee osteoarthritis	M17.0-1	50	4 weeks	Green tea extract	Diclofenac	○
Maghsoumi-Norouzabad (2016) [55]	Knee osteoarthritis	M17.0-1	36	42 days	Burdock tea Glucosamine	Acetaminophen	○
Dwyer (2015) [56]	Knee osteoarthritis	M17.0-1	83	4 weeks	Manipulative therapy	Rehabilitation program	○
Field (2014) [57]	Hand arthritis	M19.04	20	4 weeks	Massage	Analgesic cream	○
Gorrell (2016) [58]	Mechanical neck pain	M54.2	65	1 week	1) Manually applied manipulation 2) Instrument-applied manipulation	Stretching	○
Celenay (2015) [59]	Chronic mechanical neck pain	M54.2	60	4 weeks	Connective tissue massage	Cervical and scapulothoracic stabilization exercise	○

Cerezo-Téllez (2016) [60]	Chronic nonspecific neck pain	M54.2	130	2 weeks	Dry needling	Stretching	○
Zhang (2015) [61]	Nonspecific low back pain	M54.5	92	8 weeks	Chinese massage	Core stability exercises	○
Trampas (2015) [62]	Chronic low back pain	M54.5	10	Once	Myofascia trigger point therapy	Core-stability exercises Clinical Massage	○
Morris (2016) [63]	Chronic low back pain due to osteoarthritis	M54.5	30	6 weeks	Homeopathic complex	Drug therapy Physiotherapy including massage, thermal therapy, and joint mobilization Placebo homeopathic complex	○
Panagopoulos (2015) [64]	Low back pain	M54.5	64	6 weeks	Visceral manipulation	Physiotherapy	X
Devereaux (2015) [65]	Shoulder impingement	M75.4	100	8 weeks	Kinesiology taping	Exercise physiotherapy	X
Vas (2016) [66]	Fibromyalgia	M79.7	164	10 weeks	Acupuncture	Pharmacological treatment	○
Li (2017) [67]	Nontraumatic osteonecrosis of the femoral head	M87.35 M90.45 M90.55	96	6 months	Qing'e pill[§]	Caltrate D	○
Mitchell (2016)	Sever’s disease	M92.6	162	10 minutes	Noninvasive electrical stimulation	Sucrose	X

[68]					at acupoints		

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; †○ indicates Korean Medicine/CAM integration group is significantly better than the control group while X indicates non-significant outcomes; ‡Sanhuangwuji powder contains Radix Scutellariae Baicalensis 15g, Rhizoma Coptidis 10g, Cortex Phellodendri Amurensis 15g, Pheretima Aspergillum 10g, Endoconcha Sepiellae 30g, and Rhizoma Bletillae Striatae 15g; §Qing'e pill consists of 4 primary compounds of cortex eucommiae, fructus psoraleae, semen juglandis, and Allium sativum.

I. Diseases of the genitourinary system (N00-N99): 3 studies

Author (year)	Disease/condition	KCD code	Size	Treatment duration	Korean Medicine/CAM integration group*	Control group	Direction of outcome†
Xiao (2016) [69]	Overactive bladder	N32.8	146	8 weeks	Weng-li-tong‡	Tolterodine	○
Chang (2015) [70]	Benign prostatic hyperplasia	N40	60	6 months	Longbishu§ capsule	Mesylate doxazosin	○
Zhu (2014) [71]	Endometriosis	N80	156	1-2 weeks	Dan'e mixture‖	Oral contraceptives	X

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; †○ indicates Korean Medicine/CAM integration group is significantly better than the control group while X indicates non-significant outcomes; ‡Weng-li-tong consists of Coix Seed, Fritillaria sinensis, Chuanmutong, roasted Gardeniae Fructus, honeysuckle, inula, Lycopi Herba, Rhubarb, Malachitum, licorice, and candied Astragali Radix; §Longbishu capsule consists of Psoralea corylifolia, Leonurus japonicus Houtt, Glechoma longituba, Lygodium japonicum Swartz, Succinum, and Tulipa edulis Bak; ‖Dan'e mixture consists of Salviae Miltiorrhizae Radix, Zedoariae Rhizoma, Paeoniae Radix Rubra, Angelicae Gigantis Radix, Gypsophilae Radix, and Corydalis Tuber.

Table 4. Symptoms, signs and abnormal clinical and laboratory findings, NEC (R00-R99) and injury, poisoning and certain other consequences of external causes (S00-T98) (n=9).

A. Symptoms, signs and abnormal clinical and laboratory findings, NEC (R00-R99): 6 studies							
Author (year)	Disease/condition	KCD code	Size	Treatment duration	Korean Medicine/CAM integration group*	Control group	Direction of outcome†
Xie (2017) [72]	Chemotherapy-induced nausea and vomiting	R11. 3	142	6 days	Transcutaneous electrical acupoint stimulation	Palonosetron	○
Cai (2016) [73]	Cisplatin chemotherapy-induced nausea and vomiting	R11.3	60	5 days	Moxa salt packets	Tropisetron hydrochloride, i.v.	○
Eghbali (2016) [74]	Chemotherapy-induced nausea and vomiting in breast cancer patients	R11.3	48	5 days	Auricular acupressure	Antiemetics	○
Shen (2015) [75]	Cisplatin chemotherapy-induced nausea and vomiting	R11.3	103	5 days	K1 acupoint electrostimulation	Tropisetron hydrochloride, i.v.	X
Alsharnoubi (2016) [76]	Nocturnal enuresis	R35.2	45	12 weeks	Laser acupuncture	Desmopressin acetate	X
Li (2015) [77]	Septic shock	R57.2	45	NR	Shenfu ginsenoside injection	Early Goal-Directed Therapy	○

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; †○ indicates Korean Medicine/CAM integration group

is significantly better than the control group while X indicates non-significant outcomes. i.v., intravenous; NEC, not elsewhere classified; NR, not reported.

B. Injury, poisoning and certain other consequences of external causes (S00-T98): 3 studies							
Author (year)	Disease/condition	KCD code	Size	Treatment duration	Korean Medicine/CAM integration group*	Control group	Direction of outcome[†]
Shen (2015) [78]	Femoral intertrochanteric fracture	S72.12	90	3 months	Heweijiegu decoction[‡]	Caltrate D	○
Velázquez-Saornil (2017) [79]	Complete anterior cruciate ligament rupture	S83.52	44	5 weeks	Dry needling	Rehabilitation protocol	○
Lubbe (2015) [80]	Recurrent ankle sprain with functional instability	S93.4	33	4 weeks	Chiropractic manipulative therapy	Rehabilitation protocol	○

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; [†]○ indicates Korean Medicine/CAM integration group is significantly better than the control group while X indicates non-significant outcomes; [‡]Heweijiegu decoction consists of Drynariae Rhizoma 150g, Dipsaci Radix 150g, Eupolyphaga sinensis Walker 90g, Pyritum 300g, Sepiae Os 150g, Angelicae Gigantis Radix 150g, Corydalis Tuber 200g, Artemisia selengensis Turcz 150g, Chaenomelis Fructus 150g, Atractylodis Rhizoma White 120g, Fructus Citri Sarcodactylis 100g, Helenii Radix 60g, Oryzae Fructus Germinatus 150g, Hordei Fructus Germiniatus 150g, and sodium benzoate 3g.

Table 5. Factors influencing health status and contact with health services (Z00-Z99) (n=12).

Author (year)	Disease/condition	KCD code	Size	Treatment duration	Korean Medicine/CAM integration group*	Control group	Direction of outcome†
Hasanzadeh (2015) [81]	Post-surgical chest tube removal pain	Z98.8 R07.3	80	Once	Lavender oil inhalation	Icing application	X
Goharshenasan (2016) [82]	Plastic surgical wounds	Z48.0	72	5 days	Topical application of honey	Conventional dressing	○
Imperatori (2016) [83]	Post-lobectomy pain	Z98.8 R07.3	92	10 days	Kinesiology taping	Paracetamol	○
Mohebbi (2014) [84]	Post-tonsillectomy pain	Z98.8	80	10 days after surgery	Oral intake of honey	Antibiotics Acetaminophen	○
Busato (2016) [85]	Post-total hip arthroplasty pain	Z98.8	51	10 days	Fascial Manipulation	Physiotherapy	○
Yu (2016) [86]	Post-cardiac surgery pain	Z98.8 R07.3	50	During anesthesia for surgery	Electroacupuncture	Dexmedetomidine injection	○
Chen (2016) [87]	Post-lobectomy pain	Z98.8 R07.3	92	3 days after surgery	Electroacupuncture	Fentanyl Flurbiprofen	○
Tsao (2015) [88]	Post-tonsillectomy pain	Z98.8	59	During anesthesia for surgery	Perioperative acupuncture	Anesthetic protocol	○
Dingemann (2017) [89]	Post-tonsillectomy pain	Z98.8	46	Within one day after surgery	Acupuncture	Diclofenac	○
Yang (2014) [90]	Post-hysteroscopic surgery pain	Z98.8	93	During anesthesia for surgery	Electroacupuncture	Sufentanil and propofol injection	○
Meng (2016) [91]	Post-laparoscopic cholecystectomy pain	Z98.8	80	48 hours after surgery	Lidocaine injection on acupoints	Analgesics, i.v.	○
Chen (2015) [92]	Post-total knee arthroplasty pain	Z98.8	60	3 days	Acupuncture	Fentanyl, i.v.	○

Giron (2016) [93]	Breast cancer	D05	48	10 weeks	Acupuncture	Kinesiotherapy	X

*indicates Korean Medicine/CAM combined with the control intervention in this integration group; †○ indicates Korean Medicine/CAM integration group is significantly better than the control group while X indicates non-significant outcomes. i.v., intravenous.