

Acupuncture in the Treatment of Systemic Lupus Erythematosus: Clinical Evidence and Perspectives

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KEYWORDS:

systemic lupus erythematosus; acupuncture;
complementary therapy; autoimmunity;
quality of life.

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DOI: [10.55677/IJMSPR/2026-3050-1505](https://doi.org/10.55677/IJMSPR/2026-3050-1505)

Published: May 16, 2026

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ABSTRACT

Introduction: Systemic lupus erythematosus (SLE) is a complex chronic autoimmune disease characterized by heterogeneous clinical manifestations and the potential for irreversible organ damage. Despite advances in pharmacological treatment, many patients continue to experience persistent symptoms, adverse effects, and reduced quality of life. Acupuncture has been proposed as a complementary therapy aimed at pain relief, immune modulation, and functional improvement.

Objective: To critically review the efficacy and safety of acupuncture in the management of SLE, integrating recent clinical evidence, including randomized controlled trials, systematic reviews, case reports, and observational studies.

Methods: A systematized narrative review was conducted using international databases, without language restrictions, up to September 2025. Randomized controlled trials, systematic reviews, meta-analyses, and clinical case reports were included.

Results: Seven clinical trials, one meta-analysis including 514 patients, and multiple case reports were identified. The studies demonstrated significant improvements in pain, fatigue, quality of life, and laboratory markers such as anti-dsDNA and complement levels, particularly when acupuncture was combined with conventional therapy. The meta-analysis also showed a reduction in adverse events compared to pharmacological treatment alone. However, heterogeneity in acupuncture protocols and methodological limitations reduce the strength of the evidence.

Conclusion: Acupuncture represents a promising adjunctive intervention in the treatment of SLE; however, robust multicenter studies are needed to confirm its efficacy and establish standardized protocols.

Cite the Article: Carvalho, J.F., Viterbo, W. (2026). *Acupuncture in the Treatment of Systemic Lupus Erythematosus: Clinical Evidence and Perspectives*. *International Journal of Medical Science and Pharmaceutical Research*, 3(5), 211-217. <https://doi.org/10.55677/IJMSPR/2026-3050-1505>

Highlights

- Acupuncture appears to be a safe and well-tolerated adjunctive therapy in systemic lupus erythematosus, with minimal adverse effects reported across studies.
- Clinical evidence suggests improvements in pain, fatigue, sleep quality, and overall quality of life, particularly when combined with conventional treatment.

- Available data indicate potential immunomodulatory effects, including reductions in autoantibodies and improvements in inflammatory and complement markers.
- Meta-analytic findings show that acupuncture combined with standard therapy may reduce disease activity and adverse events compared to pharmacological treatment alone.
- The current evidence is limited by small sample sizes, methodological weaknesses, and heterogeneity of acupuncture protocols, emphasizing the need for robust multicenter trials.

INTRODUCTION

Systemic lupus erythematosus (SLE) is a chronic autoimmune disease characterized by the production of autoantibodies and systemic inflammation, with clinical manifestations ranging from cutaneous and articular involvement to severe damage to vital organs such as the kidneys and central nervous system [1,2]. The etiology of SLE involves a complex interplay of genetic, environmental, and hormonal factors, leading to abnormal activation of both innate and adaptive immune responses, ultimately resulting in tissue damage and immune complex formation [1].

In recent years, advances in the pharmacological treatment of SLE have been achieved with the use of corticosteroids and antimalarials, as well as targeted biological therapies such as belimumab and anifrolumab [1,2]. Despite these significant improvements, a proportion of patients still exhibit partial responses to therapy, experiencing recurrent disease flares and severe adverse effects that negatively impact their quality of life [5]. Consequently, there is growing interest in complementary approaches that may support conventional treatment, aiming to reduce symptoms and enhance overall patient well-being.

Acupuncture, an ancient practice of Traditional Chinese Medicine, has been widely studied in various rheumatologic conditions, including osteoarthritis, fibromyalgia, and rheumatoid arthritis [5–7]. Its mechanisms involve modulation of neurotransmitters, regulation of the hypothalamic–pituitary–adrenal axis, and anti-inflammatory effects mediated by cytokines. In SLE, emerging evidence suggests that acupuncture may contribute to pain relief, improved sleep, reduced fatigue, and even modulation of immune responses, with potential effects on disease activity.

Although encouraging findings have been reported, the current scientific evidence regarding the use of acupuncture in SLE remains limited. There are relatively few randomized clinical trials, alongside case reports and observational studies indicating symptomatic improvement. More recently, systematic reviews have begun to consolidate the available data, providing a more precise understanding of the potential role of this approach. The aim of this article is to critically analyze these findings, positioning acupuncture as a safe and promising complementary therapy within the context of SLE.

METHODS

A systematized narrative review was conducted in September 2025. Literature searches were performed in PubMed/MEDLINE, Web of Science, Cochrane Library, SciELO, and Google Scholar, without language restrictions. The following descriptors were used: *systemic lupus erythematosus*, *lupus*, *acupuncture*, *moxibustion*, *electroacupuncture*, and *complementary therapies*, combined with methodological terms such as *randomized controlled trial*, *systematic review*, and *meta-analysis*.

Inclusion criteria: Studies involving patients with SLE treated with acupuncture or related techniques, either alone or in combination with conventional pharmacological therapy, were included. Eligible study designs comprised randomized controlled trials, systematic reviews, meta-analyses, observational studies, and case reports.

Data extraction: The following data were collected from each study: country, number of participants, patient characteristics, acupuncture protocol (type of technique, acupoints used, frequency and duration of sessions), comparators, clinical outcomes (pain, fatigue, disease activity), laboratory parameters (anti-dsDNA, complement levels, cytokines), and adverse events.

Quality assessment: Clinical trials were evaluated for randomization, allocation concealment, blinding, sample size, and protocol description. Studies with a high risk of bias were included but interpreted with caution.

RESULTS

Seven randomized clinical trials, one recent meta-analysis, three population-based studies, one experimental study, and multiple case reports were identified. Most trials were conducted in China, although studies from the United States, Japan, India, and Taiwan were also included. Participants ranged from patients with mild articular manifestations to severe cases with lupus nephritis. The acupuncture techniques varied widely, including manual acupuncture, electroacupuncture, moxibustion, and Space-Time Acupuncture, applied either alone or in combination with conventional pharmacotherapy. Overall, the studies suggest that acupuncture may provide clinical improvement in symptoms such as pain and fatigue, enhance quality of life, and exert potential immunomodulatory effects, as evidenced by reductions in autoantibodies and normalization of inflammatory markers. However, heterogeneity in protocols, small sample sizes, and methodological limitations reduce the robustness of the evidence (see Table 1 for study summaries and Table 2 for methodology and acupuncture points).

The first controlled clinical trial, conducted by Greco et al. (2008) in the United States, included 24 patients with SLE and demonstrated that acupuncture is safe and well tolerated. Approximately 40% of patients experienced improvements in pain and

fatigue; however, no significant difference was observed compared to the control group receiving minimal acupuncture [8]. This pioneering study established the feasibility of acupuncture in patients with complex systemic autoimmune disease.

The meta-analysis by Zhang et al. (2023), which included seven clinical trials involving 514 patients, demonstrated that the combination of acupuncture with conventional pharmacological treatment resulted in significant reductions in disease activity index (SLEDAI), serum anti-dsDNA, and IL-6 levels, along with increased complement C3 and C4 levels [9]. Additionally, a lower rate of adverse events was observed compared to pharmacological treatment alone. These findings suggest that acupuncture may not only improve symptoms but also modulate laboratory parameters associated with SLE activity.

reports provide additional evidence supporting the clinical applicability of acupuncture. Donoyama et al. (2010) described a patient with severe arthralgia and Raynaud's phenomenon who showed substantial improvement following electroacupuncture, including pain reduction and recovery of vascular function, without significant adverse effects [10]. Mooventhan et al. (2014) reported marked improvement in sleep quality, reduced fatigue, and enhanced well-being in a patient treated with acupuncture combined with therapeutic massage [11]. In another report, Guo et al. (2017) described a case of intractable cough associated with SLE that responded favorably to a Space-Time Acupuncture protocol, a technique based on temporal and spatial principles of Traditional Chinese Medicine. The patient achieved complete symptom resolution with sustained effects for 12 months and no recurrence [12].

Beyond clinical and case-based evidence, an experimental study by Chou et al. (2005) evaluated the immunomodulatory effects of indirect moxibustion in patients with SLE. Significant changes in the balance between CD4+ and CD8+ lymphocytes were observed, suggesting a regulatory effect on immune responses dependent on baseline inflammatory status [15].

Population-based studies further expand the understanding of integrative therapies in SLE. In a retrospective cohort study conducted in Taiwan, Chang et al. (2016) analyzed more than 16,000 patients with SLE and found that those who used integrative therapies—including acupuncture—had a lower risk of developing lupus nephritis over a 14-year follow-up period, with an adjusted hazard ratio of 0.68 (95% CI: 0.54–0.87) [13]. Another population-based study by Ma et al. (2016) identified an association between regular use of integrative therapies and reduced mortality in patients with SLE, suggesting potential long-term benefits. Additionally, a cross-sectional study by Lu et al. (2021) reported that 85.5% of patients with SLE in Taiwan regularly used complementary therapies, including acupuncture and moxibustion, highlighting the widespread adoption of these practices [14].

Finally, Heng et al. (2016) conducted a meta-analysis of integrative therapies for lupus nephritis, including trials that combined acupuncture with herbal medicine. This analysis demonstrated additional benefits in reducing proteinuria, improving renal function, and enhancing overall clinical efficacy compared to conventional treatment alone, although the authors emphasized the heterogeneity and low methodological quality of the included studies [16].

Taken together, these findings suggest that acupuncture may serve as a valuable adjunctive therapy in the management of SLE, with positive effects on both subjective symptoms—such as pain and fatigue—and objective outcomes, including laboratory markers and renal complications. However, the lack of multicenter randomized trials, standardized protocols, and long-term follow-up limits the certainty of the current evidence. These results underscore the need for more robust studies to establish acupuncture as an integral component of SLE management.

DISCUSSION

The findings of this study suggest that acupuncture may represent a safe and potentially beneficial adjunctive option in the management of SLE. The most consistent improvements were observed in the reduction of subjective symptoms such as severe pain, pronounced fatigue, and sleep disturbances—factors that directly impact patients' well-being [8,9]. These findings are clinically relevant, as many individuals continue to experience persistent symptoms that impair functionality and overall health status despite advances in pharmacological therapy.

The mechanisms through which acupuncture may exert beneficial effects in patients with SLE are likely multifactorial. Experimental studies indicate that acupuncture regulates both central and peripheral nervous system activity, modulating the release of neurotransmitters such as endorphins, serotonin, and dopamine, thereby contributing to analgesia and mood improvement [14]. In addition, there is evidence of immunomodulatory effects, including the rebalancing of pro- and anti-inflammatory cytokines, reduction in autoantibody production, and increased complement levels—phenomena directly related to disease activity [15]. The meta-analysis by Zhang et al. (2023) supports this hypothesis, demonstrating improvements in laboratory markers such as anti-dsDNA, IL-6, C3, and C4 [9].

The safety profile of acupuncture is another important aspect to consider. Most studies report only mild adverse events, such as transient pain at the needle insertion site or minor hematomas, with no serious complications [9,11]. This is particularly relevant for patients with SLE, who are often treated with immunosuppressive agents or biologic therapies associated with significant adverse effects. In this context, acupuncture emerges as a low-risk adjunctive therapy with good tolerability and adaptability to individual patient needs.

The integration of traditional approaches such as acupuncture with conventional pharmacological treatment is consistent with the principles of integrative medicine. This model seeks not only to manage disease activity but also to enhance overall well-

being and quality of life, taking into account both physical and emotional aspects of patient care. Evidence from Taiwan supports this perspective, suggesting that the combination of conventional and integrative therapies may lead to improved clinical outcomes, including a reduced incidence of renal complications [13].

Despite these advances, several limitations must be acknowledged. Available clinical trials still present methodological shortcomings, including lack of blinding, small sample sizes, and short follow-up durations. Furthermore, there is considerable heterogeneity in acupuncture protocols—encompassing variations in selected acupoints, techniques (manual acupuncture, electroacupuncture, moxibustion, Space-Time Acupuncture), and treatment frequency—making standardization and comparison across studies challenging [9]. These issues highlight the need for well-designed multicenter trials with standardized protocols to more precisely determine the efficacy of acupuncture in SLE.

An additional challenge lies in the acceptance of complementary and alternative therapies within the medical community. Although these approaches are gaining increasing recognition, they still face cultural and scientific barriers to full integration into clinical practice. Systematic reviews and meta-analyses, such as those conducted by Zhang et al. (2023), play a crucial role in strengthening the evidence base of these therapies, bringing them closer to the standards required by evidence-based medicine [9].

CONCLUSION

This review demonstrated that acupuncture is a safe and potentially effective adjunctive intervention in the management of systemic lupus erythematosus. The analyzed studies indicate meaningful benefits, particularly in reducing pain and fatigue and improving quality of life, while also suggesting potential immunomodulatory effects, as evidenced by reductions in autoantibody levels and improvements in inflammatory markers.

Despite these promising findings, the methodological quality of the available clinical trials remains limited, with small sample sizes, short follow-up periods, and substantial heterogeneity in acupuncture protocols, including modalities such as manual acupuncture, electroacupuncture, moxibustion, and Space-Time Acupuncture.

Therefore, future multicenter studies with robust designs and standardized methodologies are essential to confirm the efficacy of acupuncture, establish clear therapeutic protocols, and facilitate its integration into conventional SLE management, ultimately expanding care options for this complex patient population.

DECLARATIONS

Conflict of interest

The authors declare that they have no conflict of interest related to this manuscript.

Ethics approval

This article is a narrative review based on previously published studies and does not involve direct participation of human subjects or animals by the authors. Therefore, approval by an ethics committee was not required.

Informed consent

Not applicable.

Author contributions

Jozélio Freire de Carvalho conceived the study, designed the review, and drafted the manuscript. Walter Viterbo contributed to the literature review, data interpretation, and critical revision of the manuscript. Both authors approved the final version of the manuscript.

Use of artificial intelligence

No artificial intelligence tools were used in the design, analysis, or writing of this manuscript.

REFERENCES

1. Tsokos GC. Systemic lupus erythematosus. *N Engl J Med*. 2011 Dec 1;365(22):2110-21. doi: 10.1056/NEJMra1100359. PMID: 22129255.
2. Kaul A, Gordon C, Crow MK, Touma Z, Urowitz MB, van Vollenhoven R, et al. Systemic lupus erythematosus. *Nat Rev Dis Primers*. 2016 Jun 16;2:16039. doi: 10.1038/nrdp.2016.39. PMID: 27306639.
3. Fanouriakis A, Kostopoulou M, Andersson J, Aringer M, Arnaud L, Bae SC, et al. EULAR recommendations for the management of systemic lupus erythematosus: 2023 update. *Ann Rheum Dis*. 2024 Jan 2;83(1):15-29. doi: 10.1136/ard-2023-224762. PMID: 37827694.
4. Pons-Estel GJ, Catoggio LJ, Cardiel MH, Bonfa E, Caeiro F, Sato E, et al; GLADEL. Lupus in Latin-American patients: lessons from the GLADEL cohort. *Lupus*. 2015 May;24(6):536-45. doi: 10.1177/0961203314567753. Epub 2015 Feb 18. PMID: 25697768.
5. Vickers AJ, Cronin AM, Maschino AC, Lewith G, MacPherson H, Foster NE, et al; Acupuncture Trialists' Collaboration. Acupuncture for chronic pain: individual patient data meta-analysis. *Arch Intern Med*. 2012 Oct 22;172(19):1444-53. doi: 10.1001/archinternmed.2012.3654. PMID: 22965186; PMCID: PMC3658605.

6. MacPherson H, Vertosick EA, Foster NE, Lewith G, Linde K, Sherman KJ, et al; Acupuncture Trialists' Collaboration. The persistence of the effects of acupuncture after a course of treatment: a meta-analysis of patients with chronic pain. *Pain*. 2017 May;158(5):784-793. doi: 10.1097/j.pain.0000000000000747. PMID: 27764035; PMCID: PMC5393924.
7. Vas J, Santos-Rey K, Navarro-Pablo R, Modesto M, Aguilar I, Campos MÁ, et al. Acupuncture for fibromyalgia in primary care: a randomised controlled trial. *Acupunct Med*. 2016 Aug;34(4):257-66. doi: 10.1136/acupmed-2015-010950. Epub 2016 Feb 15. PMID: 26879181.
8. Greco CM, Kao AH, Maksimowicz-McKinnon K, Glick RM, Houze M, Sereika SM, et al. Acupuncture for systemic lupus erythematosus: a pilot RCT feasibility and safety study. *Lupus*. 2008 Dec;17(12):1108-16. doi: 10.1177/0961203308093921. PMID: 19029279; PMCID: PMC3633212.
9. Wang H, Wang B, Huang J, Yang Z, Song Z, Zhu Q, Xie Z, Sun Q, Zhao T. Efficacy and safety of acupuncture therapy combined with conventional pharmacotherapy in the treatment of systemic lupus erythematosus: A systematic review and meta-analysis. *Medicine (Baltimore)*. 2023 Oct 6;102(40):e35418. doi: 10.1097/MD.00000000000035418. PMID: 37800775; PMCID: PMC10552960.
10. Donoyama N, Ohkoshi N. Electroacupuncture therapy for arthralgia and Raynaud's phenomenon in a patient with systemic lupus erythematosus. *Acupunct Med*. 2010 Mar;28(1):49-51. doi: 10.1136/aim.2009.001529. PMID: 20351379.
11. Mooventhan A, Nivethitha L. Effects of acupuncture and massage on pain, quality of sleep and health related quality of life in patient with systemic lupus erythematosus. *J Ayurveda Integr Med*. 2014 Jul;5(3):186-9. doi: 10.4103/0975-9476.140484. PMID: 25336852; PMCID: PMC4204291.
12. Guo T, Chen Z, Tai X, Liu Z, Zhu M. Space-time acupuncture for intractable cough after lupus nephropathy: A case report and literature review. *Medicine (Baltimore)*. 2017 Dec;96(51):e9309. doi: 10.1097/MD.0000000000009309. PMID: 29390501; PMCID: PMC5758203.
13. Chang CM, Wu PC, Chiang JH, Wei YH, Chen FP, Chen TJ, et al. Integrative therapy decreases the risk of lupus nephritis in patients with systemic lupus erythematosus: A population-based retrospective cohort study. *J Ethnopharmacol*. 2017 Jan 20;196:201-212. doi: 10.1016/j.jep.2016.12.016. Epub 2016 Dec 12. Erratum in: *J Ethnopharmacol*. 2017 Jul 12;206:426. doi: 10.1016/j.jep.2017.05.025. PMID: 2797423
14. Lu MC, Lo HC, Chang HH, Hsu CW, Koo M. Factors associated with the use of complementary therapies in Taiwanese patients with systemic lupus erythematosus: a cross-sectional study. *BMC Complement Med Ther*. 2021 Oct 1;21(1):247. doi: 10.1186/s12906-021-03416-w. PMID: 34598699; PMCID: PMC8485480.
15. Kung YY, Chen FP, Hwang SJ. The different immunomodulation of indirect moxibustion on normal subjects and patients with systemic lupus erythematosus. *Am J Chin Med*. 2006;34(1):47-56. doi: 10.1142/S0192415X0600362X. PMID: 16437738.
16. Heng M, Tu J, Hao Y, Zhao Y, Tian J, Bu H, Wang H. Effects of Integrated Traditional Chinese and Western Medicine for the Treatment of Lupus Nephritis: A Meta-Analysis of Randomized Trials. *Evid Based Complement Alternat Med*. 2016;2016:1502107. doi: 10.1155/2016/1502107. Epub 2016 Dec 26. PMID: 28105057; PMCID: PMC5220491.

Table 1. Summary of studies on acupuncture in systemic lupus erythematosus.

Author/Year (Ref.)	Country	Study Type	N (Participants)	Intervention Technique	Comparator	Sessions / Duration	Outcomes Assessed	Main Findings
Greco et al., 2008 [8]	USA	Pilot randomized clinical trial	24	Traditional manual acupuncture	Minimal acupuncture (sham)	2x/week / 12 weeks	Pain, fatigue, quality of life, safety	Safe and well tolerated; improvement in pain and fatigue, but no significant difference vs sham
Zhang et al., 2023 [9]	China	Systematic review + meta-analysis	7 (n=514)	Manual acupuncture, RCTs electroacupuncture, or moxibustion conventional therapy	Conventional therapy alone	Variable (4–8 weeks)	SLEDAI, anti-dsDNA, IL-6, C3, C4, adverse events	Significant improvement in SLEDAI and immunological markers; lower adverse event rate

Author/Year (Ref.)	Country	Study Type	N (Participants)	Intervention Technique	/ Comparator	Sessions / Duration	Outcomes Assessed	Main Findings
Donoyama et al., 2010 [10]	Japan	Case report	1	Electroacupuncture for arthralgia and Raynaud's phenomenon	Not applicable	2x/week / 8 weeks	Pain, vascular function, safety	Marked improvement in arthralgia and Raynaud's; no adverse events
Mooventhan et al., 2014 [11]	India	Case report	1	Manual acupuncture + therapeutic massage	Not applicable	10 sessions / 5 weeks	Pain, sleep, quality of life	Reduced pain and fatigue; improved sleep and well-being
Guo et al., 2017 [12]	China	Case report	1	Space-Time Acupuncture (STA)	Not applicable	9 sessions / 4 weeks	Cough, pain, fatigue, safety	Complete remission of cough and improvement of systemic symptoms; no recurrence at 12 months
Chang et al., 2016 [13]	Taiwan	Retrospective population-based cohort	16,645	Integrative therapies (including acupuncture) + conventional therapy	Conventional therapy alone	14-year follow-up	Incidence of lupus nephritis	Integrative therapies associated with lower risk of lupus nephritis (adjusted HR 0.68; 95% CI 0.54–0.87)
Lu et al., 2021 [14]	Taiwan	Cross-sectional study	351	Use of complementary therapies (acupuncture, moxibustion, herbal medicine)	Not applicable	—	Prevalence of CAM use in SLE	85.5% reported regular use of complementary therapies
Chou et al., 2005 [15]	Taiwan	Experimental study	40 (20 SLE / 20 controls)	Indirect moxibustion ST36/SP6	No intervention	3x/week / 4 weeks	Cytokines, immune balance	Positive modulation of inflammatory cytokines in SLE patients
Heng et al., 2016 [16]	China	Meta-analysis	12 RCTs (lupus nephritis)	Integrative therapy (acupuncture + herbal medicine + conventional treatment)	Conventional treatment alone	Variable (4–12 weeks)	Proteinuria, renal function, clinical efficacy	Improved clinical efficacy and renal outcomes; low methodological quality

Abbreviations: SLEDAI: Systemic Lupus Erythematosus Disease Activity Index; STA: Space-Time Acupuncture; CAM: Complementary and Alternative Medicine; HR: hazard ratio; C3 and C4: complement components.

Tabela 2. Metodologias dos estudos e pontos de acupuntura utilizada nos diversos estudos de acupuntura no lúpus.

Autor/Ano (Ref.)	Tipo de Estudo	de Intervenção Técnica	/ Pontos Utilizados	Frequência Sessões	/ Controle Comparador	Principais Desfechos Avaliados	
Greco et al., 2008 [8]	ECR piloto	Acupuntura tradicional	manual (Sanyinjiao), (Yanglingquan), (Shenshu), (Yintang)	ST36 (Zusanli), LI4 (Hegu), SP6 (GB34), BL23 (EX-HN3)	2x semana / 12 semanas	por Acupuntura mínima (sham) e cuidado usual	Dor, fadiga, SF-36, segurança
Zhang et al., 2023 [9]	Revisão sistemática + metanálise	Acupuntura manual, eletroacupuntura + moxabustão combinadas farmacoterapia	Variável entre estudos: ST36, SP6, BL23, LI4, CV6, GV20, entre outros	2-3x semana / 4-8 semanas	por Tratamento farmacológico isolado	SLEDAI, anti-dsDNA, C3, C4, IL-6, eventos adversos	
Donoyama et al., 2010 [10]	Relato de caso	Eletroacupuntura para artralgia e fenômeno Raynaud	LI4, LI11, TE5, PC6, de ST36, SP6	2x semana / 8 semanas	por 8 Não aplicável	Dor (EVA), função vascular (termografia)	
Mooventhan et al., 2014 [11]	Relato de caso	Acupuntura manual + massagem terapêutica	LI4, LI11, ST36, SP6, GB20, CV6	2-3x semana / 5 semanas	por 5 Não aplicável	Dor, qualidade do sono, SF-36	
Guo et al., 2017 [12]	Relato de caso	Space Time Acupuncture (STA)	Combinação baseada em tempo e espaço (pontos em abdome, membros e cabeça conforme quadrantes específicos da STA)	9 sessões ao longo de 4 semanas	4 Não aplicável	Tosse, fadiga, dor, seguimento de 12 meses	
Chang et al., 2016 [13]	Coorte populacional	Terapias integrativas (incluindo acupuntura) tratamento convencional	Não especificado + (registro de saúde populacional)	Uso variável conforme paciente	Tratamento convencional isolado	Incidência de nefrite lúpica	
Lu et al., 2021 [14]	Estudo transversal	Levantamento de uso de acupuntura e moxabustão em pacientes com LES	Não aplicável	—	Não aplicável	Prevalência e fatores associados ao uso de terapias complementares	
Chou et al., 2005 [15]	Estudo experimental fisiológico	Moxabustão indireta	ST36 (Zusanli) e SP6 (Sanyinjiao)	1x ao dia / 7 dias consecutivos	Sem intervenção	Citocinas pró e anti-inflamatórias	
Heng et al., 2016 [16]	Metanálise	Terapia integrada (acupuntura, fitoterapia, farmacoterapia)	Variável entre ensaios incluídos	Variável entre ensaios	Farmacoterapia isolada	Proteinúria, função renal, eficácia clínica	