

Supplementary file 1: Studies were included in this systemic review and meta-analysis.

- 1 Zhu LW, Zhang T, Pan HF, et al. BMI, disease activity, and health-related quality-of-life in systemic lupus erythematosus. *Clin Rheumatol* 2010;29:1413-1417.
- 2 Jolly M, Utset TO. Can disease specific measures for systemic lupus erythematosus predict patients health related quality of life? *Lupus* 2004;13:924-926.
- 3 Urowitz M, Gladman DD, Ibañez D, et al. Changes in quality of life in the first 5 years of disease in a multicenter cohort of patients with systemic lupus erythematosus. *Arthritis Care Res (Hoboken)* 2014;66:1374-1379.
- 4 Mok CC, Ho LY, Cheung MY, et al. Effect of disease activity and damage on quality of life in patients with systemic lupus erythematosus: a 2-year prospective study. *Scand J Rheumatol* 2009;38:121-127
- 5 Wolfe F, Michaud K, Li T, et al. EQ-5D and SF-36 quality of life measures in systemic lupus erythematosus: comparisons with rheumatoid arthritis, noninflammatory rheumatic disorders, and fibromyalgia. *J Rheumatol* 2010;37:296-304.
- 6 Bruce IN, Mak VC, Hallett DC, et al. Factors associated with fatigue in patients with systemic lupus erythematosus. *Ann Rheum Dis* 1999;58:379-381
- 7 Yilmaz-Oner S, Ilhan B, Can M, et al. Fatigue in systemic lupus erythematosus : Association with disease activity, quality of life and psychosocial factors. *Z Rheumatol* 2017 ;76:913-919.
- 8 García-Carrasco M, Mendoza-Pinto C, Cardiel MH, et al. Health related quality of life in Mexican women with systemic lupus erythematosus: a descriptive study using SF-36 and LupusQoL(C). *Lupus* 2012;21:1219-1224.
- 9 Duarte C, Abreu P, Couto M, et al. Health-related quality of life in portuguese SLE patients: an

- outcome measure independent of disease activity and cumulative damage. *Acta Reumatol Port.* 2010;35:30-35.
- 10 Chaiamnuay S, Lomaratana V, Sumransurp S, et al. Health-related quality of life and disease severity of SLE patients in Phramongkutklao Hospital. *J Med Assoc Thai* 2010;93 Suppl 6:S125-S130.
- 11 Chen HH, Chen DY, Chen YM, et al. Health-related quality of life and utility: comparison of ankylosing spondylitis, rheumatoid arthritis, and systemic lupus erythematosus patients in Taiwan. *Clin Rheumatol* 2017;36:133-142.
- 12 Yilmaz-Oner S, Oner C, Dogukan FM, et al. Health-related quality of life assessed by LupusQoL questionnaire and SF-36 in Turkish patients with systemic lupus erythematosus. *Clin Rheumatol* 2016;35:617-622.
- 13 Rinaldi S, Doria A, Salaffi F, et al. Health-related quality of life in Italian patients with systemic lupus erythematosus. I. Relationship between physical and mental dimension and impact of age. *Rheumatology (Oxford)* 2004;43:1574-1579.
- 14 Medeiros MM, Menezes AP, Silveira VA, et al. Health-related quality of life in patients with systemic lupus erythematosus and its relationship with cyclophosphamide pulse therapy. *Eur J Intern Med* 2008;19:122-128.
- 15 Jolly M. How does quality of life of patients with systemic lupus erythematosus compare with that of other common chronic illnesses? *J Rheumatol* 2005;32:1706-1708.
- 16 Rinaldi S, Ghisi M, Iaccarino L, et al. Influence of coping skills on health-related quality of life in patients with systemic lupus erythematosus. *Arthritis Rheum* 2006;55:427-433.
- 17 Zheng Y, Ye DQ, Pan HF, et al. Influence of social support on health-related quality of life in

- patients with systemic lupus erythematosus. *Clin Rheumatol* 2009;28:265-269.
- 18 Kulczycka L, Sysa-Jedrzejowska A, Zalewska-Janowska A, et al. Quality of life and socioeconomic factors in Polish patients with systemic lupus erythematosus. *J Eur Acad Dermatol Venereol* 2008;22:1218-1226.
- 19 Stoll T, Kauer Y, Büchi S, et al. Prediction of depression in systemic lupus erythematosus patients using SF-36 Mental Health scores. *Rheumatology (Oxford)* 2001;40:695-698.
- 20 Furukawa M, Kiyohara C, Horiuchi T, et al. Quality of life in Japanese female patients with systemic lupus erythematosus: Evaluation using the Short Form 36 Health Survey. *Mod Rheumatol* 2016;26:240-247.
- 21 Barnado A, Wheless L, Meyer AK, et al. Quality of life in patients with systemic lupus erythematosus (SLE) compared with related controls within a unique African American population. *Lupus* 2012;21:563-569.
- 22 Jolly M, Galicier L, Aumaitre O, et al. Quality of life in systemic lupus erythematosus: description in a cohort of French patients and association with blood hydroxychloroquine levels. *Lupus* 2016;25:735-740.
- 23 Zeng F, Xu Q, Liu D, et al. Relatives' quality of life and psychological disturbance: a new concern of SLE management. *Clin Rheumatol* 2018;37:67-73.
- 24 Abu-Shakra M, Keren A, Livshitz I, et al. Sense of coherence and its impact on quality of life of patients with systemic lupus erythematosus. *Lupus* 2006;15:32-37.
- 25 Colangelo KJ, Pope JE, Peschken C. The minimally important difference for patient reported outcomes in systemic lupus erythematosus including the HAQ-DI, pain, fatigue, and SF-36. *J Rheumatol* 2009;36:2231-2237.

- 26 Da Costa D, Clarke AE, Dobkin PL, et al. The relationship between health status, social support and satisfaction with medical care among patients with systemic lupus erythematosus. *Int J Qual Health Care* 1999;11:201-207.
- 27 Huang HC, Chou CT, Lin KC, et al. The relationships between disability level, health-promoting lifestyle, and quality of life in outpatients with systemic lupus erythematosus. *J Nurs Res* 2007;15:21-32.
- 28 Thumboo J, Fong KY, Ng TP, et al. Validation of the MOS SF-36 for quality of life assessment of patients with systemic lupus erythematosus in Singapore. *J Rheumatol* 1999;26:97-102.
- 29 Shakeri H, Arman F, Hossieni M, et al. Depression, Anxiety and Disease-Related Variables and Quality of Life Among Individuals With Systemic Lupus Erythematosus Living in Kermanshah Province, Iran. *Iran Red Crescent Med J* 2015;17:e31047.
- 30 Freire E, Bruscatto A, Ciconelli R. Quality of life in systemic lupus erythematosus patients in Northeastern Brazil: Is health-related quality of life a predictor of survival for these patients? *Acta Reumatol Port* 2009;34:207-11.
- 31 Wang C, Mayo NE, Fortin PR. The relationship between health related quality of life and disease activity and damage in systemic lupus erythematosus. *J Rheumatol* 2001;28:525-532.
- 32 Appenzeller S, Clarke AE, Panopalis P, et al. The relationship between renal activity and quality of life in systemic lupus erythematosus. *J Rheumatol* 2009;36:947-952.
- 33 Sliem H, Tawfik G, Khalil KA, et al. Pattern of systemic lupus erythematosus in Egyptian patients: the impact of disease activity on the quality of life. *Pan Afr Med J* 2010;6:14.
- 34 Alarcón GS, McGwin G Jr, Uribe A, et al. Systemic lupus erythematosus in a multiethnic lupus cohort (LUMINA). XVII. Predictors of self-reported health-related quality of life early in the

disease course. *Arthritis Rheum* 2004;51:465-474.

35 Dorsey RR, Andresen EM, Moore TL. Health-related quality of life and support group attendance

for patients with systemic lupus erythematosus. *J Clin Rheumatol* 2004;10:6-9.

36 Mak A, Tang CS, Ho RC. Serum tumour necrosis factor-alpha is associated with poor health-related quality of life and depressive symptoms in patients with systemic lupus erythematosus. *Lupus* 2013;22:254-261.