Table S1. Patient eligibility and concomitant medication of the included randomized controlled trials

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| **ID** | **Study** | **Patient eligibility** | **Concomitant medication** |
| 1 | Antoni2005(1)22 | adult patients; ≥ 6 months duration; active PsA; an inadequate response to current or previous DMARDs or NSAIDs; with ≥ one qualifying target skin lesion ≥ 2 cm in diameter | Oral GC（≤ 10 mg/day prednisone or equivalent） |
| 2 | Antoni2005(2)23 | ≥18 years of age; ≥ 6 months duration; active peripheral polyarticular arthritis; previous failure of treatment with ≥1 DMARDs;  | stable doses of DMARDs: MTX (≥ 15 mg/week, with folic acid supplementation), LEF, SSZ, HCQ, intramuscular gold, penicillamine, or AZA. |
| 3 | Cutolo 201624 | ≥18 years of age; ≥ 6 months duration; active PsA; despite prior treatment with cDMARDs and/or bDMARDs or concurrent treatment with cDMARDs; TNFa inhibitors failures were limited to ≤ 10% of randomized patients | stable doses of MTX (≤ 25 mg/week), LEF (≤ 20 mg/day), SSZ (≤ 2 g/day), or a combination of these agents. |
| 4 | Edwards 201625 | ≥ 6 months duration; active PsA; with ≥ one plaque psoriasis skin lesion≥2 cm in size; prior treatment with cDMARDs and/or bDMARDs; TNFa inhibitors efficacy failures were limited to ≤10% of randomised patients | continue stable doses of MTX (≤25 mg/ week), LEF (≤20 mg/day), SSZ (≤2 g/day), or combination. |
| 5 | Genovese200726 | ≥18 years of age; ≥ 3 swollen joints and ≥ 3 tender or painful joints; receiving concomitant DMARDs or had a history of DMARDs with an inadequate response; chronic plaque psoriasis | Oral GCs (≤ 10 mg/day prednisone or equivalent); MTX (≤30 mg/week) or other DMARD, with the exception of CsA and TAC. |
| 6 | Gladman201718 | ≥18 years of age; ≥6 months duration; ≥ 3 swollen joints and ≥ 3 tender or painful joints; inadequate response to ≥ one anti-TNF agent | A stable dose of a single cDMARD. |
| 7 | Gottlieb200927 | ≥18 years of age; ≥6 months duration; active plaque psoriasis, with a qualifying target lesion ≥2 cm in size; an inadequate response to DMARDs, NSAIDs, TNF inhibitors, or a combination of these; | Stable regimens of MTX (≤25 mg/week), GCs (≤ 10 mg/day prednisone or equivalent), NSAIDS, or a combination of these drugs. |
| 8 | Kavanaugh201728 | ≥18 years of age; ≥ 6 months duration; active PsA; despite current or previous DMARDs (≥ 3 months) and/orNSAIDs therapy (≥ 4 weeks) or demonstrate intolerance to these agents | MTX (≤25 mg/week), GCs (≤ 10 mg/day prednisone or equivalent), and NSAIDs.  |
| 9 | Kavanaugh200929 | active PsA; despite therapy with DMARDs or NSAIDs | Stable doses of MTX, NSAIDs, and GCs (≤10mg/day of prednisone or equivalent). |
| 10 | Kavanaugh201430 | aged ≥ 18 years; active PsA; despite prior treatment with cDMARDs and/or bDMARDs or concurrent treatment with cDMARDs; TNF inhibitors efficacy failures were limited to ≤10% of enrolled patients. | stable dose of MTX (≤25 mg/week), LEF (≤20 mg/day), SSZ ≤2g/day, or a combination). Stable doses of oral GCs (≤10 mg/day prednisone or equivalent) and NSAIDs |
| 11 | McInnes 201331 | ≥ 6 months duration; despite 3 months or more of treatment with DMARDs or 4 weeks or more of treatment with NSAIDs, or both, or with intolerance to these treatments | NA |
| 12 | Mease 201132 | ≥3 months duration; active arthritis; active plaque psoriasis; had an inadequate response to DMARDs, including, but not limited to, MTX or TNF inhibitors. | MTX |
| 13 | Mease2018(1)33 | ≥18 years of age; ≥ 6 months duration; moderate-to-severe PsA; despite ≥4 weeks of treatment with NSAIDs, or an intolerance to them. | Concomitant GCs (≤10mg/day prednisone or equivalent), NSAIDs and MTX (≤25mg/week). |
| 14 | Mease2014(1)34 | ≥18 years of age; ≥ 6 months duration; previously failed ≥1 DMARDs; active psoriatic skin lesions or a documented history of psoriasis | NA |
| 15 | Mease2014(2)17 | ≥18 years of age; ≥ 3 swollen joints and ≥ 3 tender joints;  | stable doses of MTX (≤25 mg/ week), LEF (≤20 mg/day), GCs (≤10 mg/day prednisone or equivalent), or NSAIDs |
| 16 | Mease2018(2)19 | ≥18 years of age;≥3 months duration; active PsA;  | stable dose of MTX (≥10 mg/week). |
| 17 | Mease200535 | ≥18 years of age; moderately to severely active PsA; with a history of an inadequate response or intolerance to NSAIDs | stable dose of MTX.  |
| 18 | Mease200036 | ≥18 years of age; active PsA; inadequate response to NSAIDs. | stable doses of MTX (≤25 mg/ week); GCs (≤10 mg/day of prednisone equivalent).  |
| 19 | Mease201616 | ≥18 years of age; an inadequate response to NSAIDs and/or DMARDs | MTX, stable doses of GCs (≤10 mg/day prednisone or equivalent), and NSAIDs.  |
| 20 | Mease2017(1)37 | ≥18 years of age; active PsA; inadequate responseor intolerance to ≥1 non-biologic DMARDs | MTX, LEF, SSZ or HCQ, NSAIDs and oral GCs (<10mg/day)  |
| 21 | Mease201538 | aged ≥18 years; active PsA; despite previoustreatment with NSAIDs, DMARDs, or TNF inhibitors | oral GCs (≤10 mg/day prednisone or equivalent) and MTX (≤25 mg/week). |
| 22 | Mease2017(2)39 | ≥18 years of age; ≥6 months duration; naive to biologic therapy with active PsA;  | NSAIDs; cDMARDs; Topical Steroids; Oral Corticosteroids (≤10 mg/day prednisone or equivalent) |
| 23 | Nash 201740 | ≥18 years of age; ≥6 months duration; limited to patients who were previously treated with TNF inhibitors and had an inadequate response to one or two TNF inhibitors or were intolerant to TNF inhibitors. | stable doses of cDMARDs, oral GCs, opiates, NSAIDs, and cyclo-oxygenase-2 inhibitors. |
| 24 | Mease 200441 | ≥18 years of age; active PsA;  | stable dosage of MTX (≤25 mg/week); GC (≤10 mg/day prednisone or equivalent) |
| 25 | Nash 2018(1)42 | ≥ 18 years of age; active PsA; despite previous treatment with NSAIDs, DMARDS, or TNF inhibitors. | stable doses of oral GCs (≤ 10 mg/day prednisone or equivalent) and MTX (≤ 25 mg/week)  |
| 26 | Nash 2018(2)43 | ≥18 years of age; active PsA; bDMARDs-naïve Patients | stable doses of oral GCs (≤ 10 mg/day prednisone or equivalent), NSAIDs or opioid analgesics. |
| 27 | Ritchlin 201444 | Adult patients; ≥6 months duration; Active PsA; despite≥3 months of DMARDs, ≥4 weeks of NSAIDs therapy and/or ≥8(etanercept, adalimumab, golimumab, certolizumab pegol) or 14 (infliximab) continuous weeks of TNF inhibitors (or less if patient was intolerant of TNF inhibitors) | stable doses of MTX (≤25 mg/week), NSAIDs and oral GCs (≤ 10 mg/day prednisone) |
| 28 | Schett 201245 | ≥18 years of age; ≥6 months duration; active PsA; | stable doses of MTX, oral GCs (≤ 10 mg/day prednisone or equivalent), and NSAIDs. |
| 29 | Wells 201846 | ≥18 years of age;≥3 months duration; no priortreatment with cDMARDs or biologics was allowed | stable doses of oral GCs (≤ 10 mg/day prednisone or equivalent), NSAIDs, low-potency topical GCs  |
| 30 | McInnes 201447 | ≥18 years of age; moderate-to-severe PsA; disease inadequately controlled on ≥1 DMARDs given for ≥3 months at the maximum tolerated dose; | MTX, LEF, Chloroquine, and SSZ. |

Note：MTX, methotrexate; NSAIDS, non-steroidal anti-inflammatory drugs; DMARDs,disease-modifying anti-rheumatic drugs; cDMARDs, conventional disease-modifying anti-rheumatic drugs; bDMARDs, biological disease-modifying anti-rheumatic drugs; LEF, leflunomide; SSZ, sulfasalazine; HCQ, hydroxy-chloroquine; AZA, azathioprine; GC, glucocorticoid; CsA,cyclosporine ; TAC, tacrolimus; NA, not available.