

Supplement A. PICO (Patient, Intervention, Comparator, Outcome) Questions on the treatment of Ankylosing Spondylitis.

PHARMACOLOGICAL THERAPY

PICO 1. In adults with active or stable AS, is continuous treatment with NSAIDs more effective than on-demand treatment with NSAIDs in improving outcomes?

PICO 2. In adults with active AS, are NSAIDs more effective than no treatment with NSAIDs in improving outcomes?

PICO 3. In adults with active AS, are certain NSAIDs more effective than other NSAIDs in improving outcomes?

PICO 4. In adults with active AS, are systemic corticosteroids more effective than no treatment with systemic corticosteroids in improving outcomes?

PICO 5. In adults with active AS, are certain TNFi more effective than other TNFi in improving outcomes?

PICO 6. In adults with active AS despite treatment with NSAIDs, are TNFi more effective than no treatment with TNFi in improving outcomes?

PICO 7. In adults with active AS despite treatment with NSAIDs, are slow-acting antirheumatic drugs more effective than no treatment with slow-acting antirheumatic drugs in improving outcomes?

PICO 8. In adults with active AS despite treatment with NSAIDs and who have contraindications to TNFi, is treatment with a non-TNFi biologic more effective than treatment with slow-acting antirheumatic drugs in improving outcomes?

PICO 9. In adults with active AS despite treatment with the first TNFi agent used, is switching to a different TNFi more effective than adding a slow-acting antirheumatic drug in improving outcomes?

PICO 10. In adults with active AS despite treatment with the first TNFi agent used, is switching to a different TNFi more effective than switching to non-TNFi biologics in improving outcomes?

PICO 11. In adults with stable AS on treatment with TNFi and NSAIDs, is continuing both medications more effective in improving outcomes than continuing treatment with TNFi alone?

PICO 12. In adults with stable AS on treatment with TNFi and slow-acting antirheumatic drugs, is continuing both medications more effective in improving outcomes than withdrawing one treatment and continuing either TNFi or slow-acting antirheumatic drugs alone?

PICO 13. In adults with AS and isolated active sacroiliitis despite treatment with NSAIDs, is treatment with locally administered corticosteroids more effective than no treatment with local corticosteroids in improving outcomes?

PICO 14. In adults with AS with stable axial disease and active enthesitis despite treatment with NSAIDs, are locally administered parenteral corticosteroids more effective than no treatment with local corticosteroids in improving outcomes?

PICO 15. In adults with AS with stable axial disease and active peripheral arthritis despite treatment with NSAIDs, are locally administered parenteral corticosteroids more effective than no treatment with local corticosteroids in improving outcomes?

REHABILITATION

PICO 16. In adults with active AS, is physical therapy more effective than no physical therapy in improving health status and functional status?

PICO 17. In adults with active AS, are active physical therapy interventions (supervised exercise) more effective than passive physical therapy interventions (massage, ultrasound, heat) in improving health status and functional status?

PICO 18. In adults with active AS, are aquatic physical therapy interventions more effective than land-based physical therapy interventions in improving health status and functional status?

PICO 19. In adults with stable AS, is physical therapy more effective than no physical therapy in improving health status and functional status?

PICO 20. In adults with active or stable AS, are unsupervised back exercises more effective than no exercise in improving health status and functional status?

PICO 21. In adults with active or stable AS, is spinal manipulation more effective than no spinal manipulation in improving health status and functional status?

TREATMENT OF PATIENTS WITH SPECIFIC IMPAIRMENTS OR COMORBID CONDITIONS

PICO 25. In adults with AS and advanced hip arthritis, is total hip arthroplasty more effective than no surgery in improving outcomes?

PICO 26. In adults with AS and severe kyphosis, is elective spinal osteotomy more effective than no surgery in improving outcomes?

PICO 27. In adults with AS, is treatment of acute episodes of iritis by an ophthalmologist more effective than no ophthalmologist care in decreasing the severity, duration, or complications of episodes?

PICO 28. In adults with AS, is prescription of topical corticosteroids for prompt at-home use in the event of eye symptoms more effective than no at-home use in decreasing the severity or duration of iritis episodes?

PICO 29. In adults with AS, is treatment with TNFi monoclonal antibodies more effective than treatment with etanercept in decreasing the occurrence or rate of recurrence of episodes of iritis?

PICO 30. In adults with AS who develop iritis while treated with a TNFi, is switching the TNFi more effective in decreasing recurrences of iritis than continuing the same TNFi?

PICO 31. In adults with AS and inflammatory bowel disease, are certain NSAIDs more likely to worsen IBD symptoms than other NSAIDs?

PICO 32. In adults with AS and inflammatory bowel disease, are certain TNFi more effective than other TNFi in improving outcomes?

DISEASE MONITORING

PICO 54. In adults with active or stable AS, is regular interval use and monitoring of a validated AS-specific disease activity measure more effective than usual care without monitoring of these measures in improving outcomes?

PICO 55. In adults with active or stable AS, is regular interval use and monitoring of C-reactive protein (CRP) concentrations or erythrocyte sedimentation rate (ESR) more effective than usual care without CRP or ESR monitoring in improving outcomes?

EDUCATION AND PREVENTIVE CARE

PICO 48. In adults with AS, is group or individual self-management education more effective than no formal self-management education in improving outcomes?

PICO 49. In adults with AS, is screening for osteopenia/osteoporosis with DXA scanning (yearly, every other year, every five years) more effective than no screening in improving outcomes?

PICO 50. In adults with AS and syndesmophytes or spinal fusion, is screening for osteopenia/osteoporosis with DXA scanning of the hip or other non-spine sites more effective than DEXA scanning of the spine in improving outcomes?

PICO 51. In adults with AS, is fall evaluation and counseling more effective than no fall evaluation and counseling in improving outcomes?

PICO 52. In adults with AS, is screening for cardiac conduction defects with electrocardiogram (at diagnosis, yearly, every other year, or every five years) more effective than no screening in improving outcomes?

PICO 53. In adults with AS, is screening for valvular heart disease with echocardiogram (at diagnosis, yearly, every other year, or every five years) more effective than no screening in improving outcomes?