SUPPLEMENTARY MATERIALS 2: PICO Questions

2023 American College of Rheumatology (ACR)/American College of Chest Physicians (CHEST) Guideline for the Screening and Monitoring of Interstitial Lung Disease in People with Systemic Autoimmune Rheumatic Diseases

- 1. In people with rheumatic disease at increased risk of developing ILD, what is the impact of pulmonary function tests (PFTs (spirometry, lung volumes and diffusion capacity)) compared to history/physical alone (e.g., shortness of breath (dyspnea), functional class and physical examination: crackles on auscultation) on diagnostic accuracy, disease-related outcomes, and diagnostic testing-related adverse events?
- 2. In people with rheumatic disease at increased risk of developing ILD, what is the impact of high resolution chest CT (HRCT) compared to history/physical alone (e.g., shortness of breath (dyspnea), functional class and physical examination: crackles on auscultation) on diagnostic accuracy, disease-related outcomes, and diagnostic testing-related adverse events?
- 3. In people with rheumatic disease at increased risk of developing ILD, what is the impact of 6-minute walk test distance compared to history/physical alone (e.g., shortness of breath (dyspnea), functional class and physical examination: crackles on auscultation) on diagnostic accuracy, disease-related outcomes, and diagnostic testing-related adverse events?
- 4. In people with rheumatic disease at increased risk of developing ILD, what is the impact of chest x-ray compared to history/physical alone (e.g., shortness of breath (dyspnea), functional class and physical examination: crackles on auscultation) on diagnostic accuracy, disease-related outcomes, and diagnostic testing-related adverse events?
- 5. In people with rheumatic disease at increased risk of developing ILD, what is the impact of testing for ambulatory desaturation compared to history/physical alone (e.g., shortness of breath (dyspnea), functional class and physical examination: crackles on auscultation) on diagnostic accuracy, disease-related outcomes, and diagnostic testing-related adverse events?
- 6. In people with rheumatic disease at increased risk of developing ILD, what is the impact of chest x-ray compared to HRCT thorax on diagnostic accuracy, disease-related outcomes, and diagnostic testing-related adverse events?
- 7. In people with rheumatic disease at increased risk of developing ILD, what is the impact of pulmonary function tests (PFTs (spirometry, lung volumes and diffusion capacity)) compared to testing for ambulatory desaturation on diagnostic accuracy, disease-related outcomes, and diagnostic testing-related adverse events?
- 8. In people with rheumatic disease at increased risk of developing ILD, what is the impact of HRCT compared to PFTs (spirometry, lung volumes and diffusion capacity) on diagnostic accuracy, disease-related outcomes, and diagnostic testing-related adverse events?
- 9. In people with rheumatic disease at increased risk of developing ILD, what is the impact of HRCT and

PFTs (spirometry, lung volumes and diffusion capacity) compared to PFTs (spirometry, lung volumes and diffusion capacity) alone on diagnostic accuracy, disease-related outcomes, and diagnostic testing-related adverse events?

- 10. In people with rheumatic disease at increased risk of developing ILD, what is the impact of bronchoscopy (may include broncho-alveolar lavage, transbronchial biopsy, cryobiopsy) compared to no bronchoscopy (may include broncho-alveolar lavage, transbronchial biopsy, cryobiopsy) on diagnostic accuracy, disease-related outcomes, and diagnostic testing-related adverse events?
- 11. In people with rheumatic disease at increased risk of developing ILD, what is the impact of surgical lung biopsy compared to no surgical lung biopsy on diagnostic accuracy, disease-related outcomes, and diagnostic testing-related adverse events?

Monitoring disease progression and treatment complications in people with rheumatic disease associated-ILD

- 12. In people with rheumatic disease associated-ILD, what is the impact of monitoring with pulmonary function tests (PFTs (spirometry, lung volumes and diffusion capacity)) compared to history/physical alone (e.g., shortness of breath (dyspnea), functional class and physical examination: crackles on auscultation) on responsiveness/sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events and testing-related adverse events?
- 13. In people with rheumatic disease associated-ILD, what is the impact of monitoring with HRCT compared to history/physical alone (e.g., shortness of breath (dyspnea), functional class and physical examination: crackles on auscultation) on responsiveness/sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events and testing-related adverse events?
- 14. In people with rheumatic disease associated-ILD, what is the impact of monitoring with 6-minute walk test distance compared to history/physical alone (e.g., shortness of breath (dyspnea), functional class and physical examination: crackles on auscultation) on responsiveness/sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events and testing-related adverse events?
- 15. In people with rheumatic disease associated-ILD, what is the impact of monitoring with chest x-ray compared to history/physical alone (e.g., shortness of breath (dyspnea), functional class and physical examination: crackles on auscultation) on responsiveness/sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events and testing-related adverse events?
- 16. In people with rheumatic disease associated-ILD, what is the impact of monitoring with testing for ambulatory desaturation compared to history/physical alone (e.g., shortness of breath (dyspnea), functional class and physician examination: crackles on auscultation) on responsiveness/sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events and testing-related adverse events?
- 17. In people with rheumatic disease associated-ILD, what is the impact of chest x-ray compared to HRCT on responsiveness/ sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events, and testing-related adverse events?

- 18. In people with rheumatic disease associated-ILD, what is the impact of monitoring with bronchoscopy (may include broncho-alveolar lavage, transbronchial biopsy, cryobiopsy) compared to no bronchoscopy (may include broncho-alveolar lavage, transbronchial biopsy, cryobiopsy) on responsiveness/ sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events and testing-related adverse events?
- 19. In people with rheumatic disease associated-ILD, what is the impact of monitoring with HRCT compared to bronchoscopy (may include broncho-alveolar lavage, transbronchial biopsy, cryobiopsy) on responsiveness/ sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events and testing-related adverse events?
- 20. In people with rheumatic disease associated-ILD, what is the impact of monitoring with PFTs (spirometry, lung volumes and diffusion capacity) compared to 6-minute walk test distance on responsiveness/ sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events and testing-related adverse events?
- 21. In people with rheumatic disease associated-ILD, what is the impact of monitoring with PFTs (spirometry, lung volumes and diffusion capacity) and 6-minute walk test distance compared to PFTs (spirometry, lung volumes and diffusion capacity) alone on responsiveness/ sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events and testing-related adverse events?
- 22. In people with rheumatic disease associated-ILD, what is the impact of monitoring with PFTs (spirometry, lung volumes and diffusion capacity) compared to testing for ambulatory desaturation on responsiveness/ sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events and testing-related adverse events?
- 23. In people with rheumatic disease associated-ILD, what is the impact of monitoring with PFTs (spirometry, lung volumes and diffusion capacity) and HRCT compared to PFTs (spirometry, lung volumes and diffusion capacity) alone on responsiveness/ sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events and testing-related adverse events?
- 24. In people with rheumatic disease associated-ILD, what is the impact of monitoring with 6-minute walk test distance compared to testing for ambulatory desaturation on responsiveness/ sensitivity to change of the test, disease-related outcomes, treatment-related serious adverse events and testing-related adverse events?