SUPPLEMENTARY MATERIALS 2: PICO Questions

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

Note: PICO questions 1 - 24 are documented in SUPPLEMENTARY APPENDIX 2, associated with the ILD Guideline for Screening and Monitoring that accompanies this ILD Guideline focused on Treatment.

Medical Management Rheumatic disease 1st ILD therapy

- 25. In people with rheumatic disease associated-ILD, what is the impact of mycophenolate compared to no mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 26. In people with rheumatic disease associated-ILD, what is the impact of cyclophosphamide compared to no cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 27. In people with rheumatic disease associated-ILD, what is the impact of leflunomide compared to no leflunomide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 28. In people with rheumatic disease associated-ILD, what is the impact of methotrexate compared to no methotrexate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 29. In people with rheumatic disease associated-ILD, what is the impact of azathioprine compared to no azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 30. In people with rheumatic disease associated-ILD, what is the impact of calcineurin inhibitors compared to no calcineurin inhibitors as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 31. In people with rheumatic disease associated-ILD, what is the impact of anti-TNF therapy compared to no anti-TNF therapy as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 32. In people with rheumatic disease associated-ILD, what is the impact of abatacept compared to no abatacept as first line ILD treatment on disease-related outcomes and treatment-related adverse events?

- 33. In people with rheumatic disease associated-ILD, what is the impact of anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) compared to no anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 34. In people with rheumatic disease associated-ILD, what is the impact of IL-6 receptor antagonists (tocilizumab, sarilumab) compared to no IL-6 receptor antagonists (tocilizumab, sarilumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 35. In people with rheumatic disease associated-ILD, what is the impact of JAK inhibitors compared to no JAK inhibitors as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 36. In people with rheumatic disease associated-ILD, what is the impact of daily oral prednisone compared to no daily oral prednisone as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 37. In people with rheumatic disease associated-ILD, what is the impact of IV pulse glucocorticoids compared to no IV pulse glucocorticoids first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 38. In people with rheumatic disease associated-ILD, what is the impact of nintedanib compared to no nintedanib as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 39. In people with rheumatic disease associated-ILD, what is the impact of pirfenidone compared to no pirfenidone as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 40. In people with rheumatic disease associated-ILD, what is the impact of IVIG compared to no IVIG as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 41. In people with rheumatic disease associated-ILD, what is the impact of plasma exchange compared to no plasma exchange as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 42. In people with rheumatic disease associated-ILD receiving mycophenolate without evidence of ILD progression, what is the impact of adding nintedanib to mycophenolate compared to not adding nintedanib to mycophenolate on disease-related outcomes and treatment-related adverse events?
- 43. In people with rheumatic disease associated-ILD receiving mycophenolate without evidence of ILD progression, what is the impact of adding pirfenidone to mycophenolate compared to not adding pirfenidone to mycophenolate on disease-related outcomes and treatment-related adverse events?

- 44. In people with rheumatic disease associated-ILD, what is the impact of upfront combination of nintedanib with mycophenolate compared to mycophenolate alone as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 45. In people with rheumatic disease associated-ILD, what is the impact of upfront combination of pirfenidone with mycophenolate compared to mycophenolate alone as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 46. In people with rheumatic disease associated-ILD, what is the impact of methotrexate compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 47. In people with rheumatic disease associated-ILD, what is the impact of leflunomide compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 48. In people with rheumatic disease associated-ILD, what is the impact of azathioprine compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 49. In people with rheumatic disease associated-ILD, what is the impact of cyclophosphamide compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 50. In people with rheumatic disease associated-ILD, what is the impact of calcineurin inhibitors compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 51. In people with rheumatic disease associated-ILD, what is the impact of TNF inhibitors compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 52. In people with rheumatic disease associated-ILD, what is the impact of IL-6 receptor antagonists (tocilizumab, sarilumab) compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 53. In people with rheumatic disease associated-ILD, what is the impact of anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 54. In people with rheumatic disease associated-ILD, what is the impact of abatacept compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 55. In people with rheumatic disease associated-ILD, what is the impact of JAK inhibitors compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?

- 56. In people with rheumatic disease associated-ILD, what is the impact of nintedanib compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 57. In people with rheumatic disease associated-ILD, what is the impact of pirfenidone compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 58. In people with rheumatic disease associated-ILD, what is the impact of IVIG compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 59. In people with rheumatic disease associated-ILD, what is the impact of oral prednisone compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 60. In people with rheumatic disease associated-ILD, what is the impact of intravenous pulse methylprednisolone compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 61. In people with rheumatic disease associated-ILD, what is the impact of plasma exchange compared to mycophenolate as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 62. In people with rheumatic disease associated-ILD, what is the impact of methotrexate compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 63. In people with rheumatic disease associated-ILD, what is the impact of leflunomide compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 64. In people with rheumatic disease associated-ILD, what is the impact of azathioprine compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 65. In people with rheumatic disease associated-ILD, what is the impact of cyclophosphamide compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 66. In people with rheumatic disease associated-ILD, what is the impact of calcineurin inhibitors compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 67. In people with rheumatic disease associated-ILD, what is the impact of TNF inhibitors compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?

- 68. In people with rheumatic disease associated-ILD, what is the impact of IL-6 receptor antagonists (tocilizumab, sarilumab) compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 69. In people with rheumatic disease associated-ILD, what is the impact of abatacept compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 70. In people with rheumatic disease associated-ILD, what is the impact of JAK inhibitors compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 71. In people with rheumatic disease associated-ILD, what is the impact of nintedanib compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 72. In people with rheumatic disease associated-ILD, what is the impact of pirfenidone compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 73. In people with rheumatic disease associated-ILD, what is the impact of IVIG compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 74. In people with rheumatic disease associated-ILD, what is the impact of oral prednisone compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 75. In people with rheumatic disease associated-ILD, what is the impact of intravenous pulse methylprednisolone compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 76. In people with rheumatic disease associated-ILD, what is the impact of plasma exchange compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 77. In people with rheumatic disease associated-ILD, what is the impact of methotrexate compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 78. In people with rheumatic disease associated-ILD, what is the impact of leflunomide compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?

- 79. In people with rheumatic disease associated-ILD, what is the impact of cyclophosphamide compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 80. In people with rheumatic disease associated-ILD, what is the impact of calcineurin inhibitors compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 81. In people with rheumatic disease associated-ILD, what is the impact of TNF inhibitors compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 82. In people with rheumatic disease associated-ILD, what is the impact of IL-6 receptor antagonists (tocilizumab, sarilumab) compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 83. In people with rheumatic disease associated-ILD, what is the impact of abatacept compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 84. In people with rheumatic disease associated-ILD, what is the impact of JAK inhibitors compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 85. In people with rheumatic disease associated-ILD, what is the impact of nintedanib compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 86. In people with rheumatic disease associated-ILD, what is the impact of pirfenidone compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 87. In people with rheumatic disease associated-ILD, what is the impact of IVIG compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 88. In people with rheumatic disease associated-ILD, what is the impact of oral prednisone compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 89. In people with rheumatic disease associated-ILD, what is the impact of intravenous pulse methylprednisolone compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 90. In people with rheumatic disease associated-ILD, what is the impact of plasma exchange compared to azathioprine as first line ILD treatment on disease-related outcomes and treatment-related adverse events?

- 91. In people with rheumatic disease associated-ILD, what is the impact of methotrexate compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 92. In people with rheumatic disease associated-ILD, what is the impact of leflunomide compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 93. In people with rheumatic disease associated-ILD, what is the impact of calcineurin inhibitors compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 94. In people with rheumatic disease associated-ILD, what is the impact of TNF inhibitors compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 95. In people with rheumatic disease associated-ILD, what is the impact of IL-6 receptor antagonists (tocilizumab, sarilumab) compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 96. In people with rheumatic disease associated-ILD, what is the impact of abatacept compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 97. In people with rheumatic disease associated-ILD, what is the impact of JAK inhibitors compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 98. In people with rheumatic disease associated-ILD, what is the impact of nintedanib compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 99. In people with rheumatic disease associated-ILD, what is the impact of pirfenidone compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 100. In people with rheumatic disease associated-ILD, what is the impact of IVIG compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 101. In people with rheumatic disease associated-ILD, what is the impact of oral prednisone compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?

- 102. In people with rheumatic disease associated-ILD, what is the impact of intravenous pulse methylprednisolone compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 103. In people with rheumatic disease associated-ILD, what is the impact of plasma exchange compared to cyclophosphamide as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 104. In people with rheumatic disease associated-ILD, what is the impact of nintedanib compared to IL-6 receptor antagonists (tocilizumab, sarilumab) as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 105. In people with rheumatic disease associated-ILD, what is the impact of referral for stem cell transplant compared to optimal medical management as first line ILD treatment on disease-related outcomes and treatment-related adverse events?
- 106. In people with rheumatic disease associated-ILD, what is the impact of referral for lung transplant compared to optimal medical management as first line ILD treatment on disease-related outcomes and treatment-related adverse events?

Rheumatic disease with ILD progression after any 1st ILD therapy

Note: for each PICO question/recommendation statement below, 1st ILD therapy refers to any 1st ILD therapy other than those mentioned as potential interventions

- 107. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding the combination of nintedanib and mycophenolate compared to adding mycophenolate alone on disease-related outcomes and treatment-related adverse events?
- 108. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding the combination of pirfenidone and mycophenolate compared to adding mycophenolate alone on disease-related outcomes and treatment-related adverse events?
- 109. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding methotrexate compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 110. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding leflunomide compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 111. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding azathioprine compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?

- 112. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding cyclophosphamide compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 113. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding calcineurin inhibitors compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 114. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding TNF inhibitors compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 115. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding IL-6 receptor antagonists (tocilizumab, sarilumab) compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 116. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 117. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding abatacept compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 118. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding JAK inhibitors compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 119. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding nintedanib compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 120. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding pirfenidone compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 121. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding IVIG compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 122. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding oral prednisone compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 123. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding intravenous pulse methylprednisolone compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?

- 124. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding plasma exchange compared to adding mycophenolate on disease-related outcomes and treatment-related adverse events?
- 125. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding methotrexate compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 126. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding leflunomide compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 127. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding azathioprine compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 128. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding cyclophosphamide compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 129. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding calcineurin inhibitors compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 130. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding TNF inhibitors compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 131. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding IL-6 receptor antagonists (tocilizumab, sarilumab) compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 132. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding abatacept compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 133. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding JAK inhibitors compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 134. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding nintedanib compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 135. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding pirfenidone compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?

- 136. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding IVIG compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 137. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding oral prednisone compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 138. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding intravenous pulse methylprednisolone compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 139. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding plasma exchange compared to adding anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) on disease-related outcomes and treatment-related adverse events?
- 140. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding methotrexate compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 141. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding leflunomide compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 142. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding cyclophosphamide compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 143. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding calcineurin inhibitors compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 144. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding TNF inhibitors compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 145. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding IL-6 receptor antagonists (tocilizumab, sarilumab) compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 146. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding abatacept compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?

- 147. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding JAK inhibitors compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 148. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding nintedanib compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 149. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding pirfenidone compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 150. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding IVIG compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 151. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding oral prednisone compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 152. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding intravenous pulse methylprednisolone compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 153. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding plasma exchange compared to adding azathioprine on disease-related outcomes and treatment-related adverse events?
- 154. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding methotrexate compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?
- 155. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding leflunomide compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?
- 156. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding calcineurin inhibitors compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?
- 157. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding TNF inhibitors compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?
- 158. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding IL-6 receptor antagonists (tocilizumab, sarilumab) compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?

- 159. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding abatacept compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?
- 160. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding JAK inhibitors compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?
- 161. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding nintedanib compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?
- 162. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding pirfenidone compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?
- 163. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding IVIG compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?
- 164. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding oral prednisone compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?
- 165. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding intravenous pulse methylprednisolone compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?
- 166. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of adding plasma exchange compared to adding cyclophosphamide on disease-related outcomes and treatment-related adverse events?
- 167. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of referral for stem cell transplant compared to optimal medical management on disease-related outcomes and treatment-related adverse events?
- 168. In people with rheumatic disease associated-ILD progression after 1st ILD therapy, what is the impact of referral for lung transplant compared to optimal medical management on disease-related outcomes and treatment-related adverse events?

Medical Management of Rheumatic disease with rapidly progressive ILD

169. In people with rheumatic disease and rapidly progressive ILD, what is the impact of daily oral prednisone compared to no daily oral prednisone as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?

- 170. In people with rheumatic disease and rapidly progressive ILD, what is the impact of pulse intravenous glucocorticoids compared to no pulse intravenous glucocorticoids as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 171. In people with rheumatic disease and rapidly progressive ILD, what is the impact of nintedanib compared to no nintedanib as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 172. In people with rheumatic disease and rapidly progressive ILD, what is the impact of pirfenidone compared to no pirfenidone as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 173. In people with rheumatic disease and rapidly progressive ILD, what is the impact of adding nintedanib to mycophenolate compared to not adding nintedanib to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 174. In people with rheumatic disease and rapidly progressive ILD, what is the impact of adding pirfenidone to mycophenolate compared to not adding pirfenidone to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 175. In people with rheumatic disease and rapidly progressive ILD, what is the impact of upfront combination of nintedanib with mycophenolate compared to mycophenolate alone as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 176. In people with rheumatic disease and rapidly progressive ILD, what is the impact of upfront combination of pirfenidone with mycophenolate compared to mycophenolate alone as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 177. In people with rheumatic disease and rapidly progressive ILD, what is the impact of methotrexate compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 178. In people with rheumatic disease and rapidly progressive ILD, what is the impact of leflunomide compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 179. In people with rheumatic disease and rapidly progressive ILD, what is the impact of azathioprine compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 180. In people with rheumatic disease and rapidly progressive ILD, what is the impact of cyclophosphamide compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 181. In people with rheumatic disease and rapidly progressive ILD, what is the impact of calcineurin inhibitors compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?

- 182. In people with rheumatic disease and rapidly progressive ILD, what is the impact of TNF inhibitors compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 183. In people with rheumatic disease and rapidly progressive ILD, what is the impact of IL-6 receptor antagonists (tocilizumab, sarilumab) compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 184. In people with rheumatic disease and rapidly progressive ILD, what is the impact of anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 185. In people with rheumatic disease and rapidly progressive ILD, what is the impact of abatacept compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 186. In people with rheumatic disease and rapidly progressive ILD, what is the impact of JAK inhibitors compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 187. In people with rheumatic disease and rapidly progressive ILD, what is the impact of nintedanib compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 188. In people with rheumatic disease and rapidly progressive ILD, what is the impact of pirfenidone compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 189. In people with rheumatic disease and rapidly progressive ILD, what is the impact of IVIG compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 190. In people with rheumatic disease and rapidly progressive ILD, what is the impact of oral prednisone compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 191. In people with rheumatic disease and rapidly progressive ILD, what is the impact of intravenous pulse methylprednisolone compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 192. In people with rheumatic disease and rapidly progressive ILD, what is the impact of plasma exchange compared to mycophenolate as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 193. In people with rheumatic disease and rapidly progressive ILD, what is the impact of methotrexate compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?

- 194. In people with rheumatic disease and rapidly progressive ILD, what is the impact of leflunomide compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 195. In people with rheumatic disease and rapidly progressive ILD, what is the impact of azathioprine compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 196. In people with rheumatic disease and rapidly progressive ILD, what is the impact of cyclophosphamide compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 197. In people with rheumatic disease and rapidly progressive ILD, what is the impact of calcineurin inhibitors compared to anti-CD20 (rituximab, ocrelizumab, obinutuzumab, ofatumumab) antibody as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 198. In people with rheumatic disease and rapidly progressive ILD, what is the impact of TNF inhibitors compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 199. In people with rheumatic disease and rapidly progressive ILD, what is the impact of IL-6 receptor antagonists (tocilizumab, sarilumab) compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 200. In people with rheumatic disease and rapidly progressive ILD, what is the impact of abatacept compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 201. In people with rheumatic disease and rapidly progressive ILD, what is the impact of JAK inhibitors compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 202. In people with rheumatic disease and rapidly progressive ILD, what is the impact of nintedanib compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 203. In people with rheumatic disease and rapidly progressive ILD, what is the impact of pirfenidone compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 204. In people with rheumatic disease and rapidly progressive ILD, what is the impact of IVIG compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?

- 205. In people with rheumatic disease and rapidly progressive ILD, what is the impact of oral prednisone compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 206. In people with rheumatic disease and rapidly progressive ILD, what is the impact of intravenous pulse methylprednisolone compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 207. In people with rheumatic disease and rapidly progressive ILD, what is the impact of plasma exchange compared to anti-CD20 antibody (rituximab, ocrelizumab, obinutuzumab, ofatumumab) as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 208. In people with rheumatic disease and rapidly progressive ILD, what is the impact of methotrexate compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 209. In people with rheumatic disease and rapidly progressive ILD, what is the impact of leflunomide compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 210. In people with rheumatic disease and rapidly progressive ILD, what is the impact of cyclophosphamide compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 211. In people with rheumatic disease and rapidly progressive ILD, what is the impact of calcineurin inhibitors compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 212. In people with rheumatic disease and rapidly progressive ILD, what is the impact of TNF inhibitors compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 213. In people with rheumatic disease and rapidly progressive ILD, what is the impact of IL-6 receptor antagonists (tocilizumab, sarilumab) compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 214. In people with rheumatic disease and rapidly progressive ILD, what is the impact of abatacept compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 215. In people with rheumatic disease and rapidly progressive ILD, what is the impact of JAK inhibitors compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?

- 216. In people with rheumatic disease and rapidly progressive ILD, what is the impact of nintedanib compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 217. In people with rheumatic disease and rapidly progressive ILD, what is the impact of pirfenidone compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 218. In people with rheumatic disease and rapidly progressive ILD, what is the impact of IVIG compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 219. In people with rheumatic disease and rapidly progressive ILD, what is the impact of oral prednisone compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 220. In people with rheumatic disease and rapidly progressive ILD, what is the impact of intravenous pulse methylprednisolone compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 221. In people with rheumatic disease and rapidly progressive ILD, what is the impact of plasma exchange compared to azathioprine as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 222. In people with rheumatic disease and rapidly progressive ILD, what is the impact of methotrexate compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 223. In people with rheumatic disease and rapidly progressive ILD, what is the impact of leflunomide compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 224. In people with rheumatic disease and rapidly progressive ILD, what is the impact of calcineurin inhibitors compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 225. In people with rheumatic disease and rapidly progressive ILD, what is the impact of TNF inhibitors compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 226. In people with rheumatic disease and rapidly progressive ILD, what is the impact of IL-6 receptor antagonists (tocilizumab, sarilumab) compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 227. In people with rheumatic disease and rapidly progressive ILD, what is the impact of abatacept compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?

- 228. In people with rheumatic disease and rapidly progressive ILD, what is the impact of JAK inhibitors compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 229. In people with rheumatic disease and rapidly progressive ILD, what is the impact of nintedanib compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 230. In people with rheumatic disease and rapidly progressive ILD, what is the impact of pirfenidone compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 231. In people with rheumatic disease and rapidly progressive ILD, what is the impact of IVIG compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 232. In people with rheumatic disease and rapidly progressive ILD, what is the impact of oral prednisone compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 233. In people with rheumatic disease and rapidly progressive ILD, what is the impact of intravenous pulse methylprednisolone compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 234. In people with rheumatic disease and rapidly progressive ILD, what is the impact of plasma exchange compared to cyclophosphamide as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 235. In people with rheumatic disease and rapidly progressive ILD, what is the impact of dual combination therapy* compared to monotherapy⁺ as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 236. In people with rheumatic disease and rapidly progressive ILD, what is the impact of triple combination therapy‡ compared to monotherapy† as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 237. In people with rheumatic disease and rapidly progressive ILD, what is the impact of triple combination therapy‡ compared to dual combination therapy* as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 238. In people with rheumatic disease and rapidly progressive ILD, what is the impact of using IVIG and/or plasma exchange in addition to monotherapy⁺, dual combination therapy^{*}, or triple combination therapy[‡] compared to using monotherapy⁺, dual combination therapy^{*}, or triple combination therapy[‡] alone as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?

- 239. In people with rheumatic disease and rapidly progressive ILD, what is the impact of using an antifibrotic (e.g., nintedanib or pirfenidone) in addition to monotherapy⁺, dual combination therapy^{*}, or triple combination therapy[‡] compared to using monotherapy⁺, dual combination therapy^{*}, or triple combination therapy[‡] alone as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 240. In people with rheumatic disease and rapidly progressive ILD, what is the impact of referral for stem cell transplant compared to optimal medical management as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?
- 241. In people with rheumatic disease and rapidly progressive ILD, what is the impact of referral for lung transplant compared to optimal medical management as first line rapidly progressive ILD treatment on disease-related outcomes and treatment-related adverse events?

[†] <u>Monotherapy examples</u>: oral prednisone/intravenous pulse methylprednisolone, or mycophenolate, or azathioprine, or a calcineurin inhibitor, or rituximab, or cyclophosphamide

* <u>Dual combination therapy examples</u>: oral prednisone/intravenous pulse methylprednisolone and mycophenolate, or oral prednisone/intravenous pulse methylprednisolone and azathioprine, or oral prednisone/intravenous pulse methylprednisolone and a calcineurin inhibitor, or oral prednisone/intravenous pulse methylprednisolone and rituximab, or oral prednisone/intravenous pulse methylprednisolone and cyclophosphamide, or oral prednisone/intravenous pulse methylprednisolone and a JAK inhibitor. Note that this definition of dual combination therapy does not include antifibrotics.

[‡] <u>Triple combination therapy examples</u>: oral prednisone/intravenous pulse methylprednisolone and rituximab and cyclophosphamide, or oral prednisone/intravenous pulse methylprednisolone and cyclophosphamide and a calcineurin inhibitor, or oral prednisone/intravenous pulse methylprednisolone and mycophenolate and a calcineurin inhibitor, or oral prednisone/intravenous pulse methylprednisolone and mycophenolate and a abatacept, or oral prednisone/intravenous pulse methylprednisolone and mycophenolate and abatacept, or oral prednisone/intravenous pulse methylprednisolone and mycophenolate. Note that this definition of triple combination therapy does not include antifibrotics.