The 138th Congress of the Korean Academy of Tuberculosis and Respiratory Diseases

# Better Lungs, Better Tomorrow!



| Name                    | Toru Arai                                    |  |
|-------------------------|--|--|
| Country                 | Japan  |  |
| Organization            | NHO Kinki Chuo Chest Medical Center          |  |
| <b>Current Position</b> | Executive Director, Clinical Research Center |  |

## **Educational Background**

Graduated from School of Medicine, Osaka University, Japan Received PhD from Graduate School of Medicine, Faculty of Medicine, Osaka University.

## **Professional Experiences**

Since 2000, I have worked in NHO Kinki Chuo Chest Medical Center (KCCMC) and I have chiefly treated patients with non-malignant lung diseases, including interstitial lung diseases (ILDs), acute exacerbation of ILDs, and rare lung diseases including pulmonary alveolar proteinosis (PAP) and lymphangioleiomyomatosis (LAM).

2014-2023; Director of Department of Respiratory Failure, NHO KCCMC 2023-present, Executive Director, Clinical Research Center, NHO KCCMC

### **Professional Organizations**

Member of Japanese Respiratory Society (JRS), American Thoracic Society, European Respiratory Society, British Thoracic Society, Japan College of Rheumatology, Japanese Society of Allergology, Japanese Society of Internal Medicine, Japanese Society of Sarcoidosis and other Granulomatous Disorders (JSSOG) Councilor of JRS and JSSOG
Head of Respiratory Research, NHO Hospitals

#### **Main Scientific Publications**

- 1) Arai T, Hirose M, Kagawa T, et al. Interleukin-11 in idiopathic pulmonary fibrosis: predictive value of prognosis and acute exacerbation. J Thorac Dis. 2023 Feb 28;15(2):300-310.
- 2) Arai T, Kurahara Y, Moda M, et al. COVID-19 in Patients with Pre-Existing Interstitial Lung Disease: Potential Value of a Steroid-Based Treatment Strategy. J Clin Med. 2023 Jul 27;12(15):4940.
- 3) Arai T, Inoue Y. Two cases of nintedanib-induced diarrhoea treated using a 5-hydroxytryptamine type 3 receptor antagonist. ERJ Open Res. 2022 Sep 26;8(3):00242-2022.
- 4) Arai T, Kagawa T, Sasaki Y, et al. Hemosiderin-laden macrophages in bronchoalveolar lavage: Predictive role for acute exacerbation of idiopathic pulmonary fibrosis. Canadian Respir J Volume 2021, Article ID 4595019
- 5) Arai T, Hirose M, Kagawa T, et al. Platelet-derived growth factor can predict survival and acute exacerbation in patients with idiopathic pulmonary fibrosis. J Thoracic D 2022; 14: 278-294

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- 6) Arai T, Hirose M, Hamano Y, et al. Anti-Myxovirus resistant protein-1 immunoglobulin A autoantibody in idiopathic pulmonary fibrosis. Canadian Respir J Volume 2022, Article ID 1107673
- 7) Arai T, Matsuoka H, Kida Hiroshi, et al. Prognostic significance of serum cytokines during acute exacerbation of idiopathic interstitial pneumonias treated with thrombomodulin. BMJ Open Respir Res 2021; 8: e000889
- 8) Arai T, Kida H, Ogata Y, et al. Efficacy of recombinant thrombomodulin for poor prognostic cases of acute exacerbation in idiopathic interstitial pneumonia: secondary analysis of SETUP trial. BMJ Open Resp Res 2020; 7: e000558. doi: bmjresp-2020-000558.
- 9) Arai T, Akira M, Sugimoto C, et al. Seroradiologic prognostic evaluation of acute exacerbation in patients with idiopathic interstitial pneumonia: a retrospective observational study. J Thorac Dis 2020; 12: 4132-4147.
- 10) Arai T, Kasai T, Shimizu K, et al. Autoimmune pulmonary alveolar proteinosis complicated with sarcoidosis: clinical courses and serum levels of anti-granulocyte-macrophage colony-stimulating factor autoantibody. Internal Medicine 2020, 2020; 59: 2539-2546.
- 11) Arai T, Inoue Y. Is corticosteroid use truly not associated with improved outcomes in AE-IPF? Respirology 2020, doi: 10.1111/resp.13825.
- 12) Arai T, Ogata Y, Marumo S, et al. Recombinant thrombomodulin for acute exacerbation in idiopathic interstitial pneumonias. Respirology 2019, doi: 10.1111/resp. 13514.
- 13) Arai T, Inoue Y. Corticosteroids in acute exacerbation of idiopathic interstitial pneumonias: Time to debate. Respirology 2018, 23; 546-547.
- 14) Arai T, Tachibana K, Sugimoto K, et al. High-dose prednisolone after intravenous methylprednisolone improves prognosis of acute exacerbation in idiopathic interstitial pneumonia. Respirology 2017; 22: 1363-1370.
- 15) Arai T, Kagawa T, Sasaki Y, et al. Heterogeneity of incidence and outcome of acute exacerbation in idiopathic interstitial pneumonias. Respirology 2016; 21: 1431-1437.
- 16) Arai T, Inoue Y, Akira M, et al. A case of autoimmune pulmonary alveolar proteinosis following pulmonary aspergillosis. Intern Med 2015; 54: 3177-3180.
- 17) Arai T, Inoue Y, Sasaki Y, et al. Predictors of the clinical effects of pirfenidone on idiopathic pulmonary fibrosis. Respir Invest 2014; 52: 136-143.
- 18) Arai T, Inoue Y, Sugimoto C, et al. CYFRA 21-1 as a disease severity marker for autoimmune pulmonary alveolar proteinosis. Respirology 2014; 19: 246-252.
- 19) Arai T, Inoue Y, Tachibana K, et al. Cytomegalovirus infection during immunosuppressive therapy for diffuse parenchymal lung diseases. Respirology 2013; 18: 117-124.
- 20) Arai T, Inoue Y, Eishi Y, et al. Propionibacterium acnes in granulomas of a patient with necrotizing sarcoid granuolmatosis. Thorax 2008; 63: 90-91.
- 21) Arai T, Inoue Y, Hayashi S, et al. Intractable Desquamative Interstitial Pneumonia in a tattooed man. Intern Med 2006; 45: 1055-1058.
- 22) Arai T, Inoue Y, Hayashi S, et al. Risedronate-induced BOOP complicated with sarcoidosis. Thorax 2005; 60: 613-614.
- 23) Arai T, Inoue Y, Yamamoto S, et al. Incipient stage of pulmonary Langerhans'-cell histiocytosis complicated with pulmonary tuberculosis happened to be examined by high resolution computed tomography. Respir Med 2005; 99: 1188-1190
- 24) Arai T, Hamano E, Inoue Y, et al. Serum neutralizing capacity of GM-CSF reflects disease severity in a patient with pulmonary alveolar proteinosis successfully treated with inhaled GM-CSF. Respir Med 2004; 98: 1227-1230.
- 25) Arai T, Abe K, Matsuoka H, et al.Introduction of the interleukin-10 gene into mice inhibited bleomycin-induced lung injury in vivo. Am J Physiol Lung Cell Mol Physiol. 2000; 278(5): L914-922.