



# LUNG Year in Review: 2023

Peter V. Dicpinigaitis<sup>1</sup>

Accepted: 13 January 2024 / Published online: 2 February 2024

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2024

Thanks to a dedicated editorial and production team, the year 2023 represented a period of further growth and progress at *LUNG*. The positive trajectory established in recent years [1] continued, as evidenced by a further significant rise in impact factor as well as strong numbers of article downloads. The acceptance rate of submitted manuscripts continued to decrease, to approximately 10%, reflecting publication of the highest quality contributions received from authors worldwide.

The field of cough has been an area of very active investigation during the past several years, highlighted in 2022 by the publication of the first-ever phase 3 clinical trial of an antitussive agent, gefapixant [2], leading to its approval in Japan and Switzerland in 2022, and by the European Medicines Agency in 2023. *LUNG* has been proud to serve as a source of numerous cough-related articles in the past year, covering basic [3, 4] and clinical [5–13] aspects of cough, as well as the ongoing and prolific field of antitussive drug development [14–18].

The topic of sarcoidosis was featured prominently throughout the pages of the journal in 2023. Clinical [19–21] and genetic [22, 23] aspects of this condition were considered, as well as the role of artificial intelligence (AI) in the diagnosis of sarcoidosis [24–26]. Treatment and evaluation of bronchiectasis were examined [27–29] and, as would be expected, interstitial lung disease (ILD) [30, 31] and idiopathic pulmonary fibrosis (IPF) specifically [11, 32–34] received appropriate attention.

Studies of obstructive airways disease were well represented in 2023. Various aspects of adult and pediatric asthma [29, 35–38], basic and clinical chronic obstructive pulmonary disease (COPD) [39–43] and asthma-COPD overlap syndrome [44] were examined.

The importance of lung cancer as an active field of inquiry was evident in the journal's issues throughout the year. Studies evaluating outcomes [45], screening [46], diagnosis [47, 48], treatment [49] and prognosis [50] were presented, in addition, a state-of-the-art review on the increasingly-important topic of lung cancer in never smokers [51]. Relevant to lung cancer diagnosis, the journal continued to receive quality submissions in the growing field of interventional pulmonology [47, 52, 53].

As was the case in previous years, COVID-19-related publications were few and represented only the highest quality submissions. Selected studies examined therapeutic [54, 55] as well as diagnostic [56, 57] aspects of the illness. Other articles in the area of pulmonary infectious disease examined nasal colonization in asthma [38], the lung microbiome in chronic respiratory disorders [58], as well as concomitant viral and fungal pulmonary infections [59, 60].

Continuously growing in importance, the field of lung transplantation was featured in studies describing survival [61] as well as post-transplant complications [62, 63]. Other significant aspects of pulmonary disease were covered in articles addressing sleep apnea [64], and in a number of articles examining pulmonary function and respiratory mechanics in subjects with cystic fibrosis [65], pregnant women [66] and persons with neuromuscular disease [67].

The journal remains eager to enhance its Critical Care content and encourages authors to consider *LUNG* for submission of their quality work. This past year we were pleased to publish clinically-relevant articles in areas such as extubation failure in acute respiratory failure [68], several studies involving extracorporeal membrane oxygenation (ECMO) [57, 69, 70] as well as point-of-care lung ultrasound [56, 71]. *LUNG* also encourages authors to contribute work in the areas of pulmonary hypertension, pediatric pulmonology and pulmonary infectious diseases.

A major effort of the new editorial team during the past few years has been to increase the quality and quantity our preclinical and translational research content [1, 72]. To underscore this effort, the Editor-in-Chief appointed the first-ever Deputy Editor for Basic Science Research. In 2023,

✉ Peter V. Dicpinigaitis  
pdicpin@gmail.com

<sup>1</sup> Division of Critical Care Medicine, Albert Einstein College of Medicine and Montefiore Medical Center, 1825 Eastchester Road, Bronx, NY 10461, USA

*LUNG* was pleased to publish a variety of high-quality translational studies on topics including acute lung injury [73, 74], respiratory tract infection [75], pulmonary fibrosis [76], COPD [42, 43], biomarkers of respiratory disease [77], and bronchopulmonary dysplasia [78].

The editorial team at *LUNG* is pleased by the recent success of the journal and remains enthusiastic and motivated to continue this positive trajectory. We aim to further improve the quality and impact of our journal, and to continue to expand our readership. To achieve our goal, we will remain dependent on our colleagues worldwide, working at the laboratory bench and at the bedside, to contribute their quality work to *LUNG*.

## Declarations

**Conflict of interest** Peter Dicipinigaitis, MD, is the Editor-in-Chief of *LUNG*.

## References

- Dicipinigaitis PV (2023) LUNG year in review: 2022. *Lung* 201(1):1–4
- McGarvey LP, Birring SS, Morice AH et al (2022) Efficacy and safety of gefapixant, a P2X3 receptor antagonist, in refractory chronic cough and unexplained chronic cough (COUGH-1 and COUGH-2): results from two double-blind, randomised, parallel-group, placebo-controlled, phase 3 trials. *Lancet* 399(10328):909–923. [https://doi.org/10.1016/S0140-6736\(21\)02348-5](https://doi.org/10.1016/S0140-6736(21)02348-5)
- Kornfield J, De La Torre U, Mize E et al (2023) Illuminating airway nerve structure and function in chronic cough. *Lung* 201(6):499–509
- Edwards DA, Chung KF (2023) Mucus transpiration as the basis for chronic cough and cough hypersensitivity. *Lung*. <https://doi.org/10.1007/s00408-023-00664-0>
- Kaulamo JT, Latti AM, Koskela HO (2023) Healthcare-seeking behaviour due to cough in finnish elderly: too much and too little. *Lung* 201(1):37–46
- Kum E, Brister D, Diab N et al (2023) Canadian Health Care Professionals' familiarity with chronic cough guidelines and experiences with diagnosis and management: a cross-sectional survey. *Lung* 201(1):47–55
- Koskela HO, Kaulamo JT, Latti AM (2023) Cough sensitivity to several external triggers is associated with multiple non-respiratory symptoms. *Lung* 201(3):267–274
- Davila I, Puente L, Quirce S et al (2023) Characteristics and management of patients with refractory or unexplained chronic cough in outpatient hospital clinics in spain: a retrospective multicenter study. *Lung* 201(3):275–286
- Jo E-J, Lee J-H, Won H-K et al (2023) Baseline cohort profile of the korean chronic cough registry: a multicenter, prospective, observational study. *Lung* 201(5):477–488
- Turner RD, Hirons B, Cortese A et al (2023) Chronic cough as a genetic neurological disorder? Insights from cerebellar ataxia with neuropathy and vestibular Areflexia syndrome (CANVAS). *Lung* 201(6):511–519
- Liu S, Ye X (2023) Assessment and management of cough in idiopathic pulmonary fibrosis: a narrative review. *Lung* 201(6):531–544
- Kaulamo JT, Latti AM, Koskela HO (2023) Recurrent cough in the elderly: a forgotten entity. *Lung* 201(6):545–553
- Lee S-E, Rudd M, Kim T-H et al (2023) Feasibility and utility of a smartphone application-based longitudinal cough monitoring in chronic cough patients in a real-world setting. *Lung* 201(6):555–564
- McGarvey L, Smith JA, Morice A et al (2023) A randomized, double-blind, placebo-controlled, parallel-group phase 2b trial of P2X3 receptor antagonist sivopixant for refractory or unexplained chronic cough. *Lung* 201(1):25–35
- McGarvey L, Sher M, Shvarts YG et al (2023) The efficacy and safety of Gefapixant in a phase 3b trial of patients with recent-onset chronic cough. *Lung* 201(2):111–118
- Dicipinigaitis PV, Morice AH, Smith JA et al (2023) Efficacy and safety of eliapixant in refractory chronic cough: the randomized, placebo-controlled phase 2b PAGANINI study. *Lung* 201(3):255–266
- Smith JA (2023) The therapeutic landscape in chronic cough. *Lung*. <https://doi.org/10.1007/s00408-023-00666-y>
- Abstracts from the 2023 American Cough Conference. *Lung* 201 (Suppl 1):1–6 (2023). <https://doi.org/10.1007/s00408-023-00634-6>
- Moller J, Hilberg O, Bendstrup E (2023) Fatigue in patients with sarcoidosis in Denmark. *Lung* 201(1):103–110
- Shkolnik B, Sore R, Salick M et al (2023) The relationship between serum angiotensin converting enzyme level and the decision to escalate treatment of sarcoidosis. *Lung* 201(4):381–386
- Bonas MJ, Sundaresan J, Keijsers RGM et al (2023) Methotrexate polyglutamate concentrations as a possible predictive marker for effectiveness of methotrexate therapy in patients with sarcoidosis: a pilot study. *Lung* 201(6):617–624
- Judson MA (2023) The relationship between sarcoidosis organ involvement, environment, race, and genetics: there's a signal. But fine tuning is needed. *Lung* 201(3):253–254
- Rasmussen A, Dawkins BA, Li C et al (2023) Multiple correspondence analysis and HLA-associations of organ involvement in a large cohort of African-American and European-American patients with sarcoidosis. *Lung* 201(3):297–302
- Chen ES (2023) Is this the dawning of AI for sarcoidosis? *Lung* 201(5):443–444
- Lew D, Klang E, Soffer S et al (2023) Current applications of artificial intelligence in sarcoidosis. *Lung* 201(5):445–454
- Judson MA, Qiu J, Dumas CL et al (2023) An artificial intelligence platform for the radiologic diagnosis of pulmonary sarcoidosis: an initial pilot study of chest computed tomography analysis to distinguish pulmonary sarcoidosis from a negative lung cancer screening scan. *Lung* 201(6):617–624
- Martinez-Garcia MA (2023) Bronchodilators in bronchiectasis: we urgently need more trials. *Lung* 201(1):5–7
- Shi Z-L, Zhang H-Y, Peng HB et al (2023) Tiotropium in patients with bronchiectasis: a prospective cohort study. *Lung* 201(1):9–15
- Hill AR, Bedi P, Cartlidge MK et al (2023) Early exacerbation relapse is increased in patients with asthma and bronchiectasis (a post hoc analysis). *Lung* 201(1):17–23
- O'Mahony AT, Henry PJ, Coghlan P et al (2023) Analytic morphomics in myositis-related interstitial lung disease. *Lung* 201(4):345–353
- Lui JK, Gillmeyer KR, Sangani RA et al (2023) A clinical decision tool for risk stratifying patients with systemic sclerosis-related pulmonary hypertension. *Lung* 201(6):565–569
- Platenburg MGJP, van Moorsel CHM, Wiertz IA et al (2023) Improved survival of IPF patients treated with antifibrotic drugs compared with untreated patients. *Lung* 201(4):335–343

33. Huang D, Gong L, Wu Z et al (2023) Genetic association of circulating Adipokines with risk of idiopathic pulmonary fibrosis: a two-sample Mendelian randomization study. *Lung* 201(4):355–362
34. Fan Y, Zheng C, Ma R et al (2023) MMP19 variants in familial and sporadic idiopathic pulmonary fibrosis. *Lung* 201(6):571–580
35. Khan AH, Gouia I, Kamat S et al (2023) Prevalence and severity distribution of type 2 inflammation-related comorbidities among patients with asthma, chronic rhinosinusitis with nasal polyps, and atopic dermatitis. *Lung* 201(1):57–63
36. Malheiro APG, Gianfrancesco L, Nogueira RJN et al (2023) Association between serum Vitamin D levels and asthma severity and control in children and adolescents. *Lung* 201(2):181–187
37. Lin Z, Huang J, Xie S et al (2023) The association between insulin use and asthma: an epidemiological observational analysis and mendelian randomization study. *Lung* 201(2):189–199
38. Won H-K, Yoo Y, Lee J et al (2023) Clinical relevance of *Staphylococcus aureus* nasal colonization and staphylococcal enterotoxin-specific IgE sensitization in late-onset asthma. *Lung* 201(3):303–308
39. Kunutsor SK, Voutilainen A, Laukkanen JY (2023) Serum copper-to-zinc ratio and risk of chronic obstructive pulmonary disease: a cohort study. *Lung* 201(1):79–84
40. Li S, Huang Q, He B (2023) SIRT1 as a potential therapeutic target for chronic obstructive pulmonary disease. *Lung* 201(2):201–215
41. Garcia-Talavera I, Figueira-Goncalves JM, Golpe R et al (2023) Early desaturation during 6-minute walk test is a predictor of mortality in COPD. *Lung* 201(2):217–224
42. Garantziotis S (2023) Activated CYPD in COPD: filling in the puzzle of how perturbed epithelial respiration leads to disturbed respiratory function. *Lung* 201(3):251–252
43. Zhang R, Shan H, Li Y et al (2023) Cyclophilin D contributes to airway epithelial mitochondrial damage in chronic obstructive pulmonary disease. *Lung* 201(3):287–295
44. de la Hoz RE, Shapiro M, Nolan A et al (2023) Association of World Trade Center (WTC) occupational exposure intensity with chronic obstructive pulmonary disease (COPD) and asthma COPD overlap (ACO). *Lung* 201(4):325–334
45. Motono N, Mizoguchi T, Ishikawa M et al (2023) PD-L1 expression is not a predictive factor for recurrence in resected non-small cell lung cancer. *Lung* 201(1):95–101
46. Lee K, Haramati LB, Ye K et al (2023) Lung cancer screening penetration in an urban underserved county. *Lung* 201(2):243–249
47. Fielding D, Dalley AJ, Singh M et al (2023) Whole genome sequencing in advanced lung cancer can be performed using diff-quick cytology smears derived from endobronchial ultrasound, transbronchial needle aspiration (EBUS TBNA). *Lung* 201(4):407–413
48. Cai J-S, Wang X (2023) Investigation of early-stage non-small cell lung cancer patients with different T2 descriptors: real word data from a large database. *Lung* 201(4):415–423
49. Tian W, Zhao J, Wang W (2023) Targeting CDH17 with chimeric antigen receptor-redirected T cells in small cell lung cancer. *Lung* 201(5):489–497
50. Motono N, Mizoguchi T, Ishikawa M et al (2023) Prognostic impact of cancer inflammation prognostic index for non-small cell lung cancer. *Lung* 201(6):603–610
51. Daylan AEC, Miao E, Tang K et al (2023) Lung cancer in never smokers: delving into epidemiology, genomic and immune landscape, prognosis, treatment, and screening. *Lung* 201(6):521–529
52. Ho ATN, Gorthi R, Lee R et al (2023) Solitary lung nodule: CT-guided transthoracic biopsy vs transbronchial biopsy with endobronchial ultrasound and flexible bronchoscope, a meta-analysis of randomized controlled trials. *Lung* 201(1):85–93
53. Ali SO, Castellani C, Benn BS (2023) Transbronchial lung cryobiopsy performed with cone beam computed tomography guidance versus fluoroscopy: a retrospective cohort review. *Lung*. <https://doi.org/10.1007/s00408-023-00663-1>
54. Pilia E, Belletti A, Fresilli S et al (2023) The effect of heparin full-dose anticoagulation on survival of hospitalized, non-critically ill COVID-19 patients: a meta-analysis of high quality studies. *Lung* 201(2):135–147
55. Papi A, Stapleton RD, Shore PM et al (2023) Efficacy and safety of garadacimab in combination with standard of care treatment in patients with severe COVID-19. *Lung* 201(2):159–170
56. Eman G, Synn S, Galen B et al (2023) Thoracic ultrasound in COVID-19: use of lung and diaphragm ultrasound in evaluating dyspnea in survivors of acute respiratory distress syndrome from COVID-19 pneumonia in a post-ICU clinic. *Lung* 201(2):149–157
57. Nunez JI, Uehara M, Mohamad A et al (2023) Lactate dehydrogenase and hemorrhagic stroke during extracorporeal membrane oxygenation for COVID-19. *Lung* 201(4):397–406
58. Scialo F, Vitale M, D'Agnano V et al (2023) Lung microbiome as a treatable trait in chronic respiratory disorders. *Lung* 201(5):455–466
59. Yin L, Zhang Y, Zheng Y et al (2023) Early detection of aspergillus species in lower respiratory tract is associated with higher mortality in viral community-acquired pneumonia: a multicenter prospective cohort study in China. *Lung* 201(4):387–396
60. Roe K (2023) Increased fungal infection mortality induced by concurrent viral cellular manipulations. *Lung* 201(5):467–476
61. Friedman RS, Tarasova A, Jain VR et al (2023) Predictive value of CT biomarkers in lung transplantation survival: preliminary investigation in a diverse, underserved. *Urban Popul Lung* 201(6):581–590
62. Armati M, Cattelan S, Guerrieri M et al (2023) Collagen type IV Alpha 5 chain in bronchiolitis obliterans syndrome after lung transplant: the first evidence. *Lung* 201(4):363–369
63. Cui Y, Lv Z, Yang Z et al (2023) Inhibition of prostaglandin-degrading enzyme 15-PGDH mitigates acute murine lung allograft rejection. *Lung* 201(6):591–601
64. Locke BW, Sellman J, McFarland J et al (2023) Predictors of initial CPAP prescription and subsequent course with CPAP in patients with central sleep apneas at a single center. *Lung* 201(6):625–634
65. Smirnova N, Lowers J, Magee MJ et al (2023) Pulmonary function and quality of life in adults with cystic fibrosis. *Lung* 201(6):635–639
66. Bourjeily G, Sanapo L, Messerlian G et al (2023) A longitudinal study of respiratory mechanics in pregnant women with obesity and overweight. *Lung* 201(4):371–379
67. Hanon S, Verbanck S, Stylemans D et al (2023) Peak inspiratory flow for screening of inspiratory muscle weakness in neuromuscular disease. *Lung* 201(3):321–323
68. Abplanalp LA, Ionescu F, Calvo-Ayala E et al (2023) Static respiratory system compliance as a predictor of extubation failure in patients with acute respiratory failure. *Lung* 201(3):309–314
69. Saeed O, Nunez JI, Jorde UP (2023) Pulmonary protection from left ventricular distension during venoarterial extracorporeal membrane oxygenation: review and management algorithm. *Lung* 201(2):119–134
70. Akbar AF, Shou BL, Feng C-Y et al (2023) Lower oxygen tension and intracranial hemorrhage in veno-venous extracorporeal membrane oxygenation. *Lung* 201(3):315–320
71. Yamada T, Minami T, Yoshino S et al (2023) Diaphragm ultrasonography: reference values and influencing factors for thickness, thickening fraction, and excursion in the seated position. *Lung*. <https://doi.org/10.1007/s00408-023-00662-2>
72. Dicipinigaitis PV (2022) LUNG year in review: 2021. *Lung* 200(1):1–4

73. Zhang J, Zhou J, Yu Y et al (2023) Sesamin induces the transdifferentiation of type II alveolar epithelial cells via AnnexinA1 and TRPV1. *Lung* 201(1):65–77
74. He F, Wang Q-F, Li L et al (2023) Melatonin protects against hyperoxia-induced apoptosis in alveolar epithelial type II cells by activating the MT2/PI3K/AKT/ETS1 signaling pathway. *Lung* 201(2):225–234
75. Chapman R, Jones L, D'Angelo A et al (2023) Nanopore-based metagenomic sequencing in respiratory tract infection: a developing diagnostic platform. *Lung* 201(2):171–179
76. Li G, Shen C, Wei D et al (2023) Deficiency of HtrA3 attenuates bleomycin-induced pulmonary fibrosis via TGF- $\beta$ 1/Smad signaling pathway. *Lung* 201(2):235–242
77. Jia Q, Ouyang Y, Yang Y et al (2023) Osteopontin: a novel therapeutic target for respiratory diseases. *Lung*. <https://doi.org/10.1007/s00408-023-00665-z>
78. Yang M, Chen Y, Huang X et al (2023) ETS1 ameliorates hyperoxia-induced bronchopulmonary dysplasia in mice by activating Nrf2/HO-1 mediated ferroptosis. *Lung* 201(4):425–441

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.