

JOURNAL CLUB

Final Outcomes Summary: Live Webinar and Twitter Chat Journal Club

August 2021 - August 2022

Grant ID: IME_2020_00003141

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Boehringer Ingelheim Pharmaceuticals, Inc.*



**National Jewish
Health®**

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Executive Summary

Final Outcomes Summary: August 2021 – August 2022

Program Overview

This pilot ILD Journal Club program was delivered via Twitter, live webinar, and endured online. The multimedia ILD Journal Club sessions were developed and moderated by NJH faculty on a monthly basis, with downloadable article summaries that provide the key points of recently published articles in ILD and a group opinion developed by the National Jewish Health ILD Physicians Group. Each article summary issue is archived on a dedicated webpage. Every month, a thirty-minute live webinar led by expert NJH faculty provided a succinct article summary and engaged participants in academic and peer discussion. The recording of each live webinar is endured on VuMedi and made available for a year. A 30-minute structured Twitter chat based on the same article was also offered each month, providing another forum for live interaction with peers and expert faculty, as well as ongoing Tweet exchange for those that could not attend the live portion.

Program Chair



Matthew Koslow, MD
Assistant Professor
Division of Pulmonary,
Critical Care & Sleep
Medicine
National Jewish Health

Program Webpage

Launch Date: August 10, 2021

End Date: August 9, 2022

Activity Link:

<https://www.nationaljewish.org/ildjournalclub>

Target Audience & Accreditation

Target Audience: Pulmonologists, Rheumatologists, Radiologists, Pathologists, Dermatologists, Primary Care Physicians, Physician Assistants, and Nurse Practitioners

Accreditation: National Jewish Health is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. *NJH designates each of the 24 live activities (12 live webinars, 12 live Twitter chats) for a maximum of 0.5 AMA PRA Category 1 Credit™.*

Learning Objectives

- Apply critical thinking for research analysis in the review of new data and guidelines in ILD.
- Utilize increased awareness and understanding of research, evidence and best practices to inform clinical practice in ILD.
- Support an online community of practitioners to share key insights, latest research, and treatment strategies for patients with ILD.

National Jewish Health Monthly ILD Journal Club Activities



Article Summary

developed by NJH
ILD experts
endured on NJH
Website



Article Summary

sent to target
audience with
registration links to
Zoom and Twitter
Journal Club



Live Webinar Journal Club via Zoom

30-minute
discussion led by
NJH ILD expert
(CME Credit)



Twitter Journal Club via Tweet Chat

(CME Credit)



Webinars Endured on Vu-Medi

12

article summaries
developed

1,234

article summary
downloads

219

webinar completers
(431 registrants)

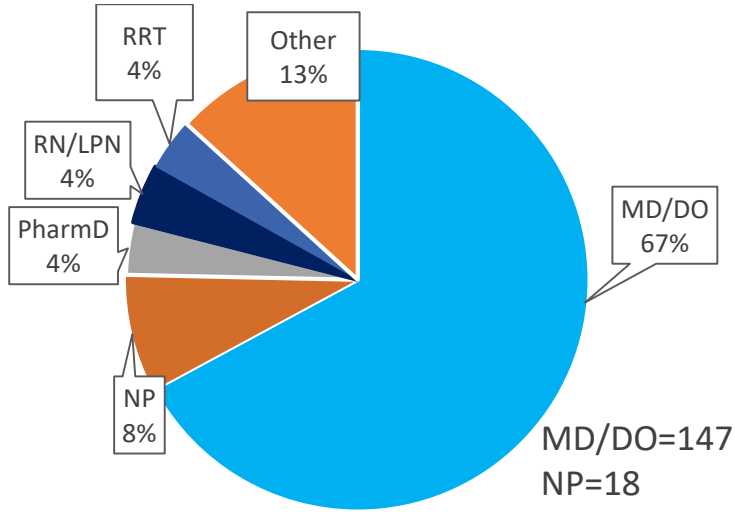
28,303
impressions

2,382
views

Educational Impact Summary – Overall Program

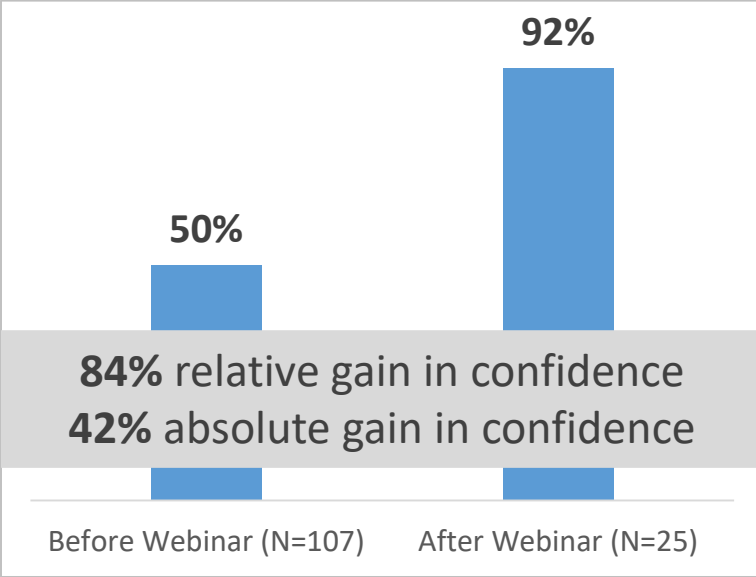
Final Outcomes Summary: August 2021 – August 2022

Webinar Participation



MD/DO=147
 NP=18
 RRT=8
 RN/LPN=9
 PharmD=8
 Other=29
Total Completers=219

75% of completers were physicians and APPs



Twitter Chat: August 2021-August 2022

Calendar Adds	555
Tweets	380
Impressions	28,303
Hashtag Usage	429
Replies	88
Likes	448

“Due to this activity I will be focusing on more evidence-based patient care”
 – ILD Journal Club participant

Webinar Evaluation Responses

96% indicated the learning objectives were met [N=26]

92% stated the activity increased their knowledge of ILD [N=26]

81% indicated the activity improved their ability to treat or manage patients [N=26]

91%
 N=22
 Evaluation respondents intend to make changes to practice as a result of the activity

- In this pilot program, we found that most participants are not seeking credit for webinars or Twitter chats, though they are engaging with the content.
- Article downloads and endured video views are high, indicating high levels of participation in the educational content beyond the live activities.
- It appears not all Twitter chat participants are “active” in the live activity. However, based on data for engagements and likes, there are many viewers consuming the education presented without posting comments and actively contributing to the discussion.

“Our goal was to bring quality CME activities to colleagues and foster multidisciplinary discussion over the latest studies and trials in ILD. The Twitter Journal Club was a fun way to push the envelope and offer free open access medical education to an even broader audience. We were grateful for the opportunity to share in learning with colleagues from around the country and world.”

– Matthew Koslow, MD
ILD Journal Club Program Co-Chair

Article Summary

Final Outcomes Summary: August 2021 – August 2022

1,234
article
downloads

JOURNAL CLUB
Article Summary by: Matthew Koslow, MD
& Jeffrey J. Swigris, DO, MS

ARTICLE
Effect of ambulatory oxygen on quality of life for patients with fibrotic lung disease (AmbOx): a prospective, open-label, mixed method, crossover randomized controlled trial. *Lancet Respir Med* 2018; 6: 759-70. <https://pubmed.ncbi.nlm.nih.gov/30170904/>

CLINICAL QUESTION
Should ambulatory oxygen be prescribed for adults with ILD who have exertional hypoxemia when breathing ambient air?

SUMMARY
The AmbOx trial was a prospective, open-label, crossover, randomized, controlled clinical trial that aimed to assess the effect of ambulatory oxygen on health-related quality of life (HRQL) in patients with interstitial lung disease and isolated exertional hypoxemia. Patients had fibrotic ILD, were not hypoxic at rest but had a fall in peripheral oxygenation saturation to 88% or less on a 6-min walk test (6MWT). Patients were randomly assigned to receive either ambulatory oxygen treatment (AmbOx) or no oxygen treatment for 2 weeks, followed by crossover (to the alternative) for another 2 weeks. The primary outcome was the change in total score on the King's Brief Interstitial Lung Disease questionnaire (K-BILD). In a subgroup of subjects, experiences were examined through qualitative interviews. A total of 84 patients underwent randomization and 76 subjects completed the trial.

For the primary outcome, ambulatory oxygen was associated with significant improvements in K-BILD total and two of the three domain scores: Breathlessness and Activities (B and A) and Chest Symptoms (CS). The scores for the psychological symptoms' domain did not differ significantly between groups. The mean between-groups treatment-associated difference in total K-BILD score (3.7) favored AmbOx and was at the lower end of its estimated minimal clinically important difference (4.0, range 3.7-4.2). Greater improvements, again favoring AmbOx, were noted for the B and A scores (mean difference of 8.6).

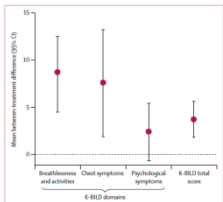
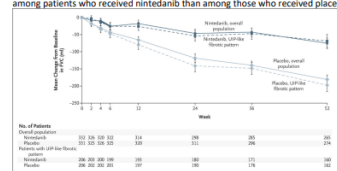


Figure 3. Mean difference in K-BILD scores between ambulatory oxygen and no treatment, adjusted for order of treatment. K-BILD=King's Brief Interstitial Lung Disease Questionnaire.

Anecdotal quotes of patients' attitudes regarding the benefits and challenges with AmbOx a original article.¹

In IPF and systemic sclerosis associated interstitial lung disease, treatment with an inhibitor of tyrosine kinases slows progression of pulmonary fibrosis.^{1,2} The NINTEDANIB investigate the safety and efficacy of nintedanib in slowing progression in all patients with IPF and systemic sclerosis associated interstitial lung disease. The NINTEDANIB INBUILD is a double-blind, placebo-controlled, phase-3 trial conducted in 15 countries affecting more than 10% of lung volume on HRCT, who met criteria for 6 months, were randomly assigned to receive nintedanib at 150mg twice daily or placebo. Patients with a forced vital capacity (FVC) of at least 45% of the predicted value and a diffusing capacity of the lung for carbon monoxide (DLCO) ranging from 30 to 80% of the predicted value. Patients who were treated with cyclosporine, mycophenolate mofetil, tacrolimus, rituximab, cyclophosphamide, or oral glucocorticoids more than 20mg daily were excluded. The primary end point was the annual rate of decline in FVC over 52 weeks.

A total of 663 patients were treated. The adjusted rate of decline in FVC was 80.8 ml per year group and 187.8 ml per year in the placebo group. The annual rate of decline in the FVC was among patients who received nintedanib than among those who received placebo.



JOURNAL CLUB
Article Summary by: Rebecca Keith, MD

ARTICLE
Utility of a Molecular Classifier as a Complement to High-Resolution Computed Tomography to Identify Usual Interstitial Pneumonia. *Am J Respir Crit Care Med* 2021; 203(2):211-220. doi: 10.1164/rccm.202003-0877OC. [View here.](https://doi.org/10.1164/rccm.202003-0877OC)

CLINICAL QUESTION
Can the Envisia Genomic Classifier add impactful information to achieve clinical consensus diagnosis in multidisciplinary discussion? If yes, what does the Envisia Genomic Classifier add to high-resolution computed tomography (HRCT) and clinical information?

SUMMARY
An early and accurate diagnosis of idiopathic pulmonary fibrosis (IPF) is important to identify appropriate therapeutic options, predict risk of progression and to provide an overall prognosis. Usual interstitial pneumonia (UIP) is the defining morphology of IPF. Guidelines for diagnosing IPF conditionally recommend surgical lung biopsy to establish a histopathologic diagnosis of UIP when a clinical consensus diagnosis cannot be reached in multidisciplinary discussion using available clinical and radiographic data. This study aims to validate the accuracy and reproducibility of the molecular diagnosis of UIP via less invasive transbronchial lung biopsy to accurately predict histopathologic UIP, facilitating a clinical diagnosis of IPF in the appropriate clinical context.

Ninety-six patients with diagnostic lung pathology as well as transbronchial lung biopsy for molecular testing with Envisia Genomic Classifier were included in this analysis. The classifier results were scored against reference pathology. UIP identified on HRCT as documented by features in local radiologists' reports was compared with histopathology. For these 96 patients, the Envisia Classifier achieved a specificity of 92.1% and a sensitivity of 60.3% in identifying a histology-proven UIP pattern.

AmbOx leads to clinically significant improvements in breathlessness, walking distance, and quality of life in patients with isolated exertional hypoxia (SpO2 88% or less on 6MWT). Although the trial was not powered to assess the effect of AmbOx on mortality, the high level of patient adherence and the fact that patients using AmbOx and elected to continue using it after the study trial. However, a significant negative impression of AmbOx and did not continue treatment after the trial. This suggests that, while on average AmbOx is associated with a clinical benefit, the use or not use it in patients with fibrotic lung disease and exertional desaturation should be based on an informed discussion of the potential merits and challenges of AmbOx. Further elucidate which patients with fibrotic lung disease may derive benefit from AmbOx and all

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Table 5. UIP Diagnostic Yield from Local Radiology in Conjunction with Envisia Genomic Classifier Testing

Local Radiology + Envisia Classifier	Pathology Reference Standard	
	UIP (n=53)	Non-UIP (n=32)
Definite/probable UIP or Envisia Classifier UIP, n	42	3
Indeterminate for UIP/consistent with non-IPF and Envisia Classifier non-UIP, n	11	29
Sensitivity, % (95% CI)	79.2 (65.0-89.2)	
Specificity, % (95% CI)	90.6 (75.0-98.0)	
NPV, % (95% CI)	72.5 (56.1-85.4)	
PPV, % (95% CI)	93.3 (81.7-98.6)	
UIP prevalence, %	62.4	

This study redemonstrates that a molecular UIP pattern determined from transbronchial biopsies using the Envisia Genomic Classifier has high reproducibility and accuracy for the detection of histopathologic UIP. This method is less invasive and can be used in conjunction with clinical data, HRCT, and multidisciplinary discussion to aid in achieving a clinical consensus diagnosis of IPF.

August 2021 Article Summary: Effect of Ambulatory Oxygen on Quality of Life for Patients with Fibrotic Lung Disease (AmbOx): A Prospective, Open-label, Mixed-method, Crossover Randomized Controlled Trial, *The Lancet Respiratory Medicine*. 2018;6(10):759-770. [View here.](https://doi.org/10.1016/S2213-2600(20)30318-0)

September 2021 Article Summary: Tocilizumab in Systemic Sclerosis: A Randomized, Double-blind, Placebo-controlled, Phase 3 Trial. *The Lancet Respiratory Medicine*. 2020 Oct;8(10):963-974. doi: 10.1016/S2213-2600(20)30318-0. [View here.](https://doi.org/10.1016/S2213-2600(20)30318-0)

October 2021 Article Summary: Utility of a Molecular Classifier as a Complement to High-Resolution Computed Tomography to Identify Usual Interstitial Pneumonia. *Am J Respir Crit Care Med*. 2021 Jan 15;203(2):211-220. doi: 10.1164/rccm.202003-0877OC. [View here.](https://doi.org/10.1164/rccm.202003-0877OC)

November 2021 Article Summary: Avacopan for the Treatment of ANCA-Associated Vasculitis. *N Engl J Med* 2021;384:599-609. DOI: 10.1056/NEJMoa2023386. [View here.](https://doi.org/10.1056/NEJMoa2023386)

December 2021 Article Summary: Nintedanib in Progressive Fibrosing Interstitial Lung Diseases. *N Engl J Med* 2019; 381:1718-1727 DOI: 10.1056/NEJMoa1908681. [View here.](https://doi.org/10.1056/NEJMoa1908681)

February 2022 Article Summary: Leukocyte Telomere Length and Mycophenolate Therapy in Chronic Hypersensitivity Pneumonitis. *Eur Respir J*. 2021 Mar 4;57(3):2002872. [View here.](https://doi.org/10.1183/13996631.2021.04511)

Article Summary

Final Outcomes Summary: August 2021 – August 2022

JOURNAL CLUB
Article Summary by: Matthew Koslow, MD & Jeffrey J. Swigris, DO, MS

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For the primary outcome, ambulatory oxygen was associated with significant improvements in K-BILD total and two of the three domain scores: Breathlessness and Activities (B and A) and Chest Symptoms (CS). The scores for the psychological symptoms domain did not differ significantly between groups. The mean between-groups treatment-associated difference in total K-BILD score (3.7) favored AmbOx and was at the lower end of its estimated minimal clinically important difference (4.0, range 3.7-4.2). Greater improvements, again favoring AmbOx, were noted for the B and A scores (mean difference of 8.6), which were perceived by a majority of 8.6% of patients who said they would choose AmbOx at the conclusion of the trial. Assessment of change in breathlessness and chest symptoms, again favoring AmbOx, were noted for the B and A scores (mean difference of 8.6), which were perceived by a majority of 8.6% of patients who said they would choose AmbOx at the conclusion of the trial. Assessment of change in breathlessness and chest symptoms, again favoring AmbOx, were noted for the B and A scores (mean difference of 8.6), which were perceived by a majority of 8.6% of patients who said they would choose AmbOx at the conclusion of the trial.

Figure 3 Mean difference in K-BILD scores between ambulatory oxygen and no treatment, adjusted for order of treatment (K-BILD King's Brief Interstitial Lung Disease Questionnaire).

Anecdotal quotes of patients' attitudes regarding the benefits and challenges with AmbOx a original article.¹

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In IPF and systemic sclerosis associated interstitial lung disease, treatment with an inhibitor of tyrosine kinases slows progression of pulmonary fibrosis.^{1,2} The NINTENDANIB trial investigated the safety and efficacy of nintedanib in slowing progression in all patients with IPF and systemic sclerosis associated interstitial lung disease.

NINTENDANIB is a double-blind, placebo-controlled, phase-3 trial conducted in 15 countries affecting more than 10% of lung volume on HRCT, who met criteria for months, were randomly assigned to receive nintedanib at 150mg twice daily or placebo. Mean forced vital capacity (FVC) of at least 45% of the predicted value and a diffusing capacity of the lung for carbon monoxide (DLCO) ranging from 30 to 80% of the predicted value. Patients who were treated with cyclosporine, mycophenolate mofetil, tacrolimus, rituximab, cyclophosphamide, or oral glucocorticoids were excluded. The primary end point was the annual rate of decline in FVC over 24 months.

A total of 663 patients were treated. The adjusted rate of decline in FVC was 80.8 ml per year group and 187.8 ml per year in the placebo group. The annual rate of decline in the FVC was among patients who received nintedanib than among those who received placebo.

Figure 4 Annual rate of decline in FVC (ml per year) over 24 months.

Time (months)	Nintedanib (n=331)	Placebo (n=332)
0	114	114
3	114	114
6	114	114
9	114	114
12	114	114
15	114	114
18	114	114
21	114	114
24	114	114

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JOURNAL CLUB
Article Summary by: Matthew Koslow, MD & Jeffrey J. Swigris, DO, MS

ARTICLE
Supplementation is derived from studies of COPD patients.^{1,2} Oxygen is a standard of care for resting severe hypoxemia (SpO2 at or below 88%) and, in whom it improves pulmonary hemodynamics,³ sleep quality,⁴ cognition and mood.⁵ Data from the long-term oxygen therapy trial (LTOT), which included patients with moderate to severe exercise-induced desaturation, suggested that AmbOx did not reduce the meaningful benefits on QoL, depression, anxiety or functional status.⁶ Tailored to patients with fibrotic ILD is unknown, particularly since exercise tolerance in patients with fibrotic ILD than in those with COPD, independent of resting SpO2 and

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JOURNAL CLUB
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Utility of a Molecular Classifier as a Complement to High-Resolution Computed Tomography to Identify Usual Interstitial Pneumonia. *Am J Respir Crit Care Med* 2013, 187, p211-220.

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March 2022 Article Summary: Diagnostic Accuracy of Endobronchial Optical Coherence Tomography for the Microscopic Diagnosis of Usual Interstitial Pneumonia. *Am J Respir Crit Care Med*. 2021 Nov 15;204(10):1164-1179. [View here.](#)

April 2022 Article Summary: Long-term Treatment with Human Immunoglobulin for Antisynthetase Syndrome-associated Interstitial Lung Disease. *Respir Med*. 2019 Jul-Aug;154:6-11. [View here.](#)

May 2022 Article Summary: The Role of Genetic Testing in Pulmonary Fibrosis: A Perspective From the Pulmonary Fibrosis Foundation Genetic Testing Work Group, *Chest*, 2022, ISSN 0012-3692, <https://doi.org/10.1016/j.chest.2022.03.023>. [View here.](#)

June 2022 Article Summary: Trial of a Preferential Phosphodiesterase 4B Inhibitor for Idiopathic Pulmonary Fibrosis. *N Engl J Med*. 2022 May 15. doi: 10.1056/NEJMoa2201737. [View here.](#)

July 2022 Article Summary: The Impact of Disease Severity Measures on Survival in U.S. Veterans with Rheumatoid Arthritis-associated Interstitial Lung Disease, *Rheumatology*, 2022, keac208. [View here.](#)

August 2022 Article Summary: Safety and Efficacy of Rituximab in Systemic Sclerosis (DESIREs): a Double-blind, Investigator-initiated, Randomised, Placebo-controlled Trial, *The Lancet Rheumatology*, Volume 3, Issue 7, 2021, Pages e489-e497, ISSN 2665-9913. [View here.](#)

Audience Generation

Final Outcomes Summary: August 2021 – August 2022



Personalized targeting tools across numerous tactics reach HCPs by leveraging demographic data (such as location, profession, specialty) and behavioral data (such as learner participation history, areas of interest).

Personalized emails and e-newsletters to NJH database and paid email lists



JOURNAL CLUB
Earn CME! Join us for our Next ILD Journal Club December 14-15
Nintedanib in Progressive Fibrosing Interstitial Lung Disease
ILD Journal Club Format:
• Article Summary (10 minutes)
• Zoom Webinar (30 minutes) with CME credit
• Twitter Chat (30 minutes)
Contact: Rebecca Keith, MD
For questions, please call the Office of Professional Education at National Jewish Health at 303.388.1000, 800.844.2300, or email ceos@njhealth.org.

Social media ads and posts



National Jewish Health Medical Education @NJHe... · Dec 14, 2021
Today on Zoom! Join Dr. Rebecca Keith at 11:30am PT, 12:30pm MT, 1:30pm CT, 2:30pm ET to discuss the #NBUILD trial and #Nintedanib in Progressive Fibrosing ILDs. Register here: fal.on/3kDCh #ILDTwitterJC #pulmtwitter #lungdisease #meded @RebeccaKeithMD

Personalized + Customized Intelligent Marketing Platform



NJH Branded Channel on VuMedi

Medical Education for Health Care Providers
National Jewish Health
Breathing Science is Life.
National Jewish Health Medical Education
@NJHealthMedEd
The leading respiratory hospital provides continuing medical education, research insights, and best practices for patient care. | For patients, follow @NJHealth
Denver, Colorado | njhealth.org/CME | Joined June 2021
296 Following 491 Followers



CenterTable Twitter Follower & Advertising Campaign

National Jewish Health @NJHealth · Nov 7, 2021
Do you treat autoimmune lung disease/ILD/DAH? Join expert faculty Dr. Maleki Fischbach 11/9 & 10 to discuss "Avacopan for Treatment of ANCA-Associated #Vasculitis." Learn more: fal.on/3JE0b #pulmtwitter #ILDTwitterJC #rheumatology @NJHealthMedEd @Mehrnaz7777 @RheumILD

Methods
• Histopathology diagnosis of up as a reference truth label fulfilled when pathology read either IOP or probable 2018 ATS guidelines
• HRCT reports generated by local and reviewed by central radiologists consisting of 2 expert radiologists using Fleischner Society criteria for IOP
Rebecca Keith, MD, of National Jewish Health, discusses the article "Utility of a Molecular Classifier as a Complement to High-Resolution Computed Tomography to Identify Usual Interstitial Pneumonia: Study Review" during the 30-minute webinar of the ILD Journal Club on October 12, 2021.

Executive Summary – Live Webinars

Final Outcomes Summary: August 2021 – August 2022



Webinar Date	Article Title	Faculty	Registrations	Attendance
August 10, 2021	Effect of Ambulatory Oxygen on Quality of Life for Patients with Fibrotic Lung Disease (AmbOx): A Prospective, Open-label, Mixed-method, Crossover Randomized Controlled Trial	Matthew Koslow, MD Jeffrey Swigris, DO	50	23
September 14, 2021	Tocilizumab in Systemic Sclerosis: A Randomized, Double-blind, Placebo-controlled, Phase 3 Trial	Liudmila Kastsianok, MD Rebecca Keith, MD	43	19
October 12, 2021	Utility of a Molecular Classifier as a Complement to High-Resolution Computed Tomography to Identify Usual Interstitial Pneumonia	Rebecca Keith, MD	19	13
November 9, 2021	Avacopan for the Treatment of ANCA-Associated Vasculitis	Mehrnaz Maleki-Fischbach, MD	14	8
December 14, 2021	Nintedanib in Progressive Fibrosing Interstitial Lung Diseases	Rebecca Keith, MD	34	21
February 8, 2022	Leukocyte Telomere Length and Mycophenolate Therapy in Chronic Hypersensitivity Pneumonitis	Matthew Koslow, MD Ayodeji Adegunsoye, MD	45	23

Executive Summary – Live Webinars

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Webinar Date	Article Title	Faculty	Registrations	Attendance
March 8, 2022	Diagnostic Accuracy of Endobronchial Optical Coherence Tomography for the Microscopic Diagnosis of Usual Interstitial Pneumonia	Rebecca Keith, MD Lida Hariri, MD, PhD	28	16
April 19, 2022	Long-term Treatment with Human Immunoglobulin for Antisynthetase Syndrome-associated Interstitial Lung Disease	Liudmila Kastsianok, MD Jinny Tavee, MD	49	29
May 10, 2022	The Role of Genetic Testing in Pulmonary Fibrosis: A Perspective From the Pulmonary Fibrosis Foundation Genetic Testing Work Group	Zulma Yunt, MD Janet Talbert	34	14
June 14, 2022	Trial of a Preferential Phosphodiesterase 4B Inhibitor for Idiopathic Pulmonary Fibrosis	Rebecca Keith, MD	47	22
July 12, 2022	The Impact of Disease Severity Measures on Survival in U.S. Veterans with Rheumatoid Arthritis-associated Interstitial Lung Disease	Isabelle Amigues, MD	28	16
August 9, 2022	Safety and Efficacy of Rituximab in Systemic Sclerosis (DESIREs): a Double-blind, Investigator-initiated, Randomised, Placebo-controlled Trial	Mehrnaz Maleki-Fischbach, MD	40	15
Total August 2021 – August 2022			431	219



Executive Summary – Live Webinars

Final Outcomes Summary: August 2021 – August 2022

Ambox improved breathlessness, chest symptoms and K-BILD total scores

Domain	Mean Difference (95% CI)
Breathlessness and activities	~8.5 (4.5, 12.5)
Chest symptoms	~7.5 (2.5, 12.5)
Psychological symptoms	~2.5 (0.5, 4.5)
K-BILD total score	~4.0 (2.0, 6.0)

Figure 3: Mean difference in K-BILD scores between ambulatory oxygen and no treatment, adjusted for order of treatment
K-BILD=King's Brief Interstitial Lung Disease Questionnaire.

focuSSed trial

Tocilizumab in systemic sclerosis: a randomised, double-blind, placebo-controlled, phase 3 trial

Dinesh Khanna, Celia J Lin, Daniel E Furst, Jonathan Goldin, Grace Kim, Masataka Kuwana, Yannick Allanore, Marco Matucci-Cerinic, Oliver Distler, Yoshihito Shima, Jacob M van Laar, Helen Spotswood, Bridget Wagner, Jeffrey Siegel, Angelika Jahreis, Christopher P Denton*, for the focuSSed investigators**

- focuSSed was a multicenter, international, randomized, double-blind, placebo-controlled, phase 3 trial to investigate the safety and efficacy of tocilizumab, an anti-interleukin-6 antibody, in the treatment of systemic sclerosis

Results

- Sustained remission at week 52 (the second primary end point) was observed in:
 - ✓ 109 of 166 patients (65.7%) receiving avacopan
 - ✓ 90 of 164 patients (54.9%) receiving prednisone
 - ✓ Estimated common difference, 12.5 percentage points; 95% CI, 2.6 to 22.3; P<0.001 for noninferiority; P=0.007 for superiority

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ILD Journal Club Webpage

<https://www.nationaljewish.org/ildjournalclub>



National Jewish Health Journal Clubs

COPD Journal Club

ILD Journal Club

NTM Journal Club

PH Journal Club

How to Participate in a Journal Club Twitter Chat



Respiratory Medicine Updates: A Virtual Clinical Community

The 2021-2022 ILD Journal Club has concluded. Check out article summaries and recordings of the previous sessions below.

Previous ILD Journal Club Sessions:



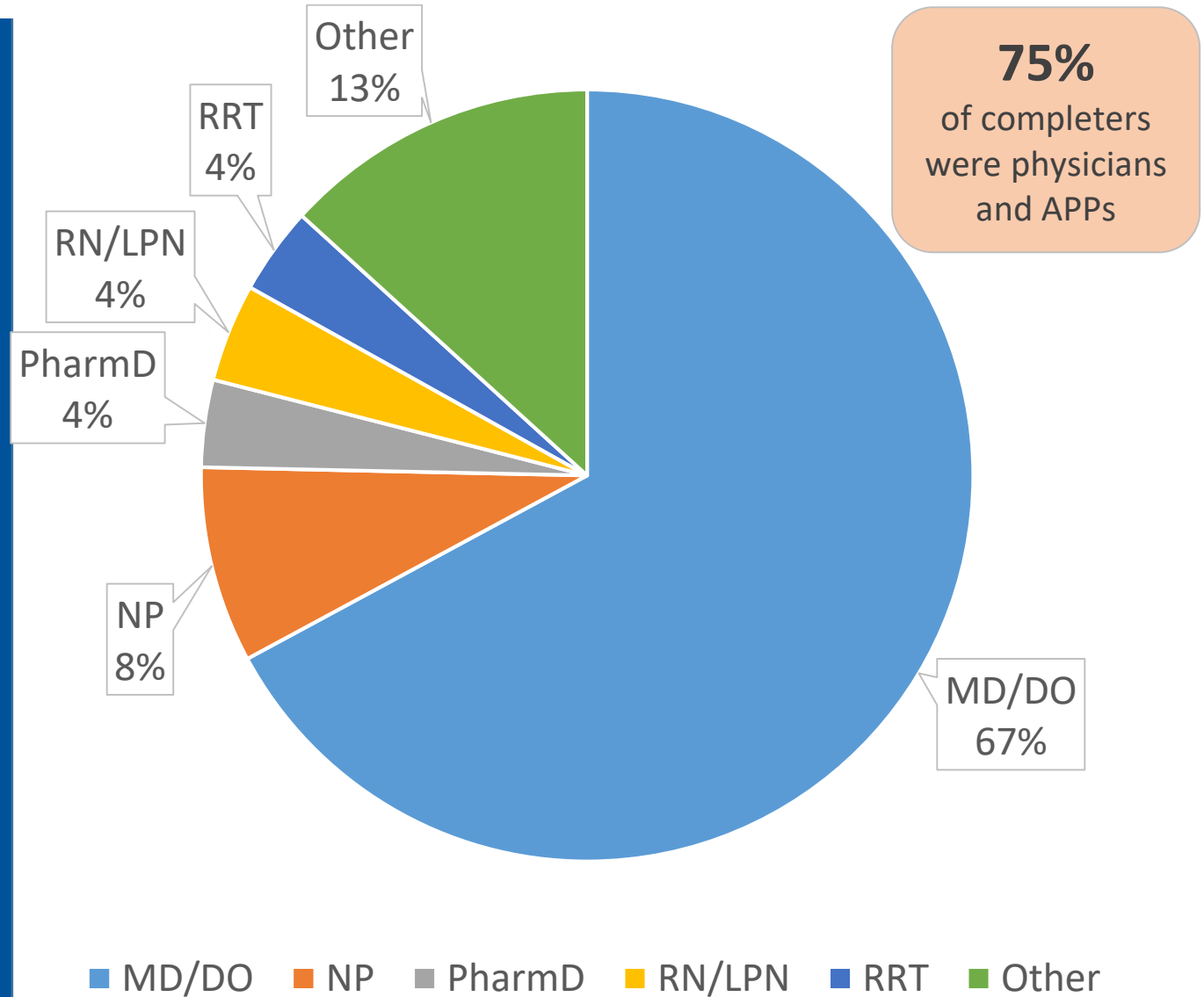
- **August 9, 2022**
 - **August 2022 Article Summary:** Safety and efficacy of rituximab in systemic sclerosis (DESIREs): a double-blind, investigator-initiated, randomised, placebo-controlled trial, The Lancet Rheumatology, Volume 3, Issue 7, 2021, Pages e489-e497, ISSN 2665-9913, [https://doi.org/10.1016/S2665-9913\(21\)00107-7](https://doi.org/10.1016/S2665-9913(21)00107-7). [View here.](#)
 - **Recorded Zoom Webinar** on VuMedi.

*Data from 7/29/21 – 9/15/22



Level (1) Outcomes: Live Webinars Participation: By Degree

Final Outcomes Summary: August 2021 – August 2022

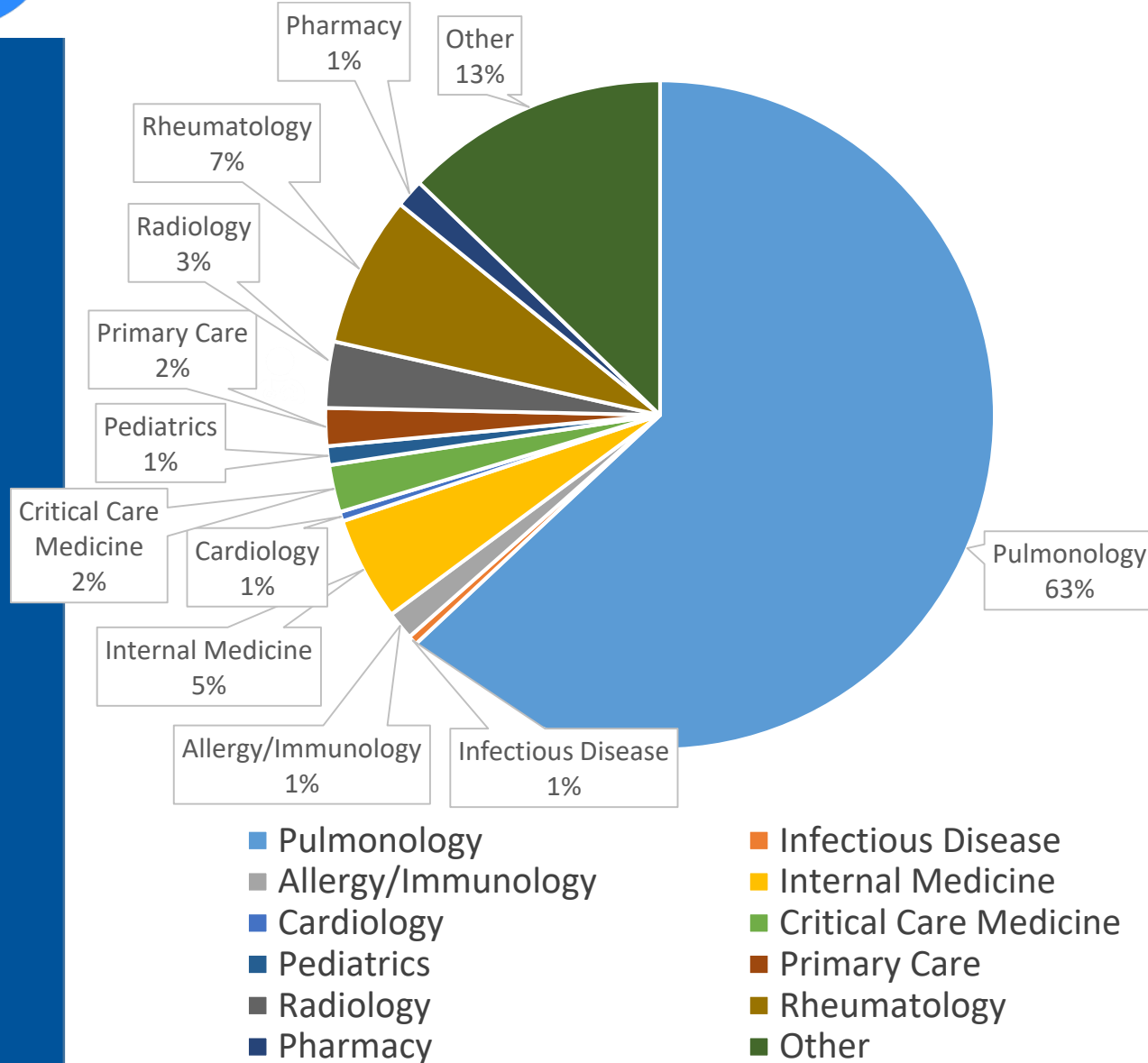


Degree	Completer #s
MD/DO	147
NP	18
RRT	8
RN/LPN	9
PharmD	8
Other	29
Total Completers	219



Level (1) Outcomes: Live Webinars Participation: By Specialty

Final Outcomes Summary: August 2021 – August 2022

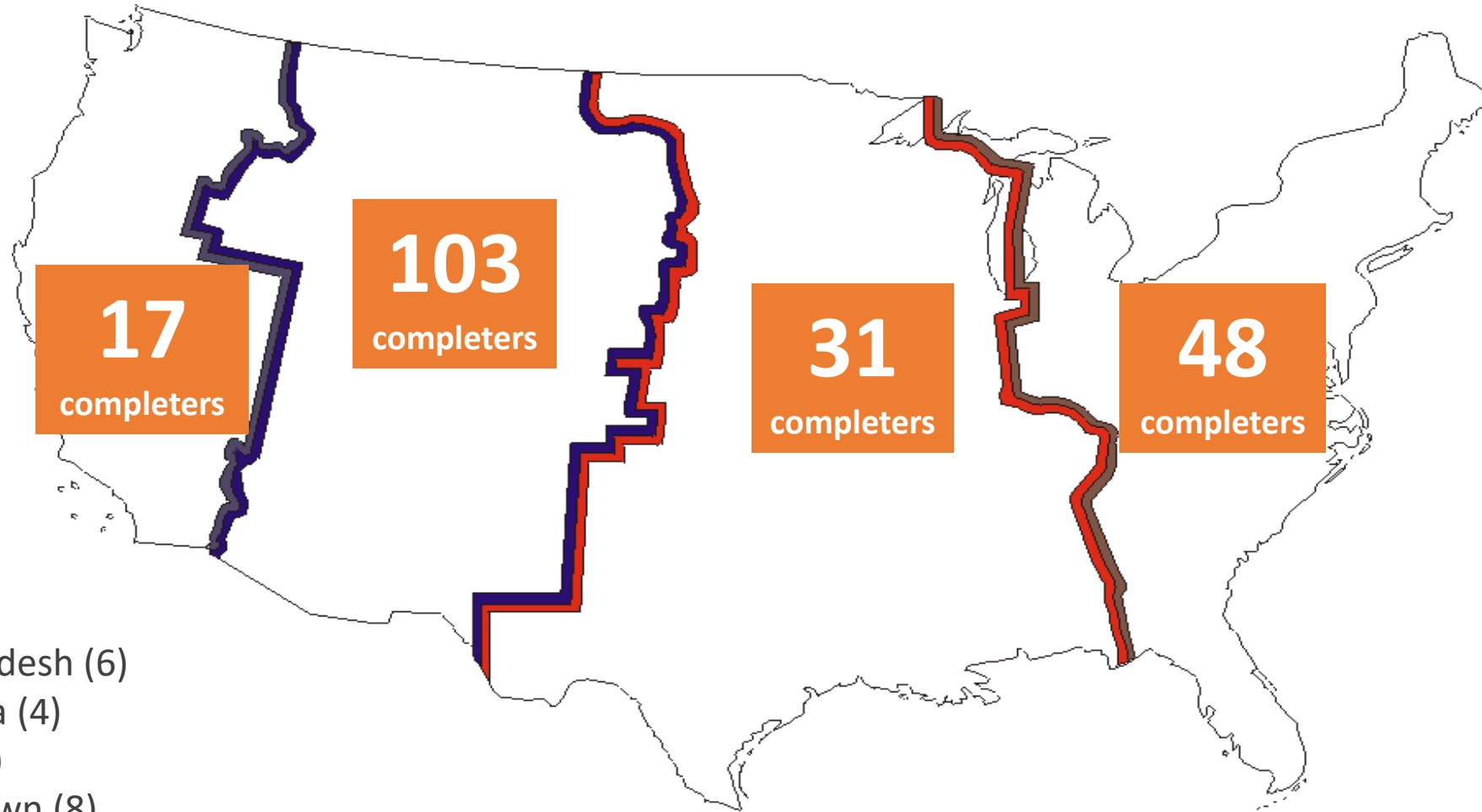


Specialty	Completers
Pulmonology	138
Internal Medicine	11
Radiology	7
Rheumatology	16
Critical Care Medicine	5
Primary Care	4
Allergy/Immunology	3
Pharmacy	3
Pediatrics	2
Infectious Disease	1
Cardiology	1
Other	28
Total Completers	219



Level (1) Outcomes: Live Webinars Participation

Final Outcomes Summary: August 2021 – August 2022



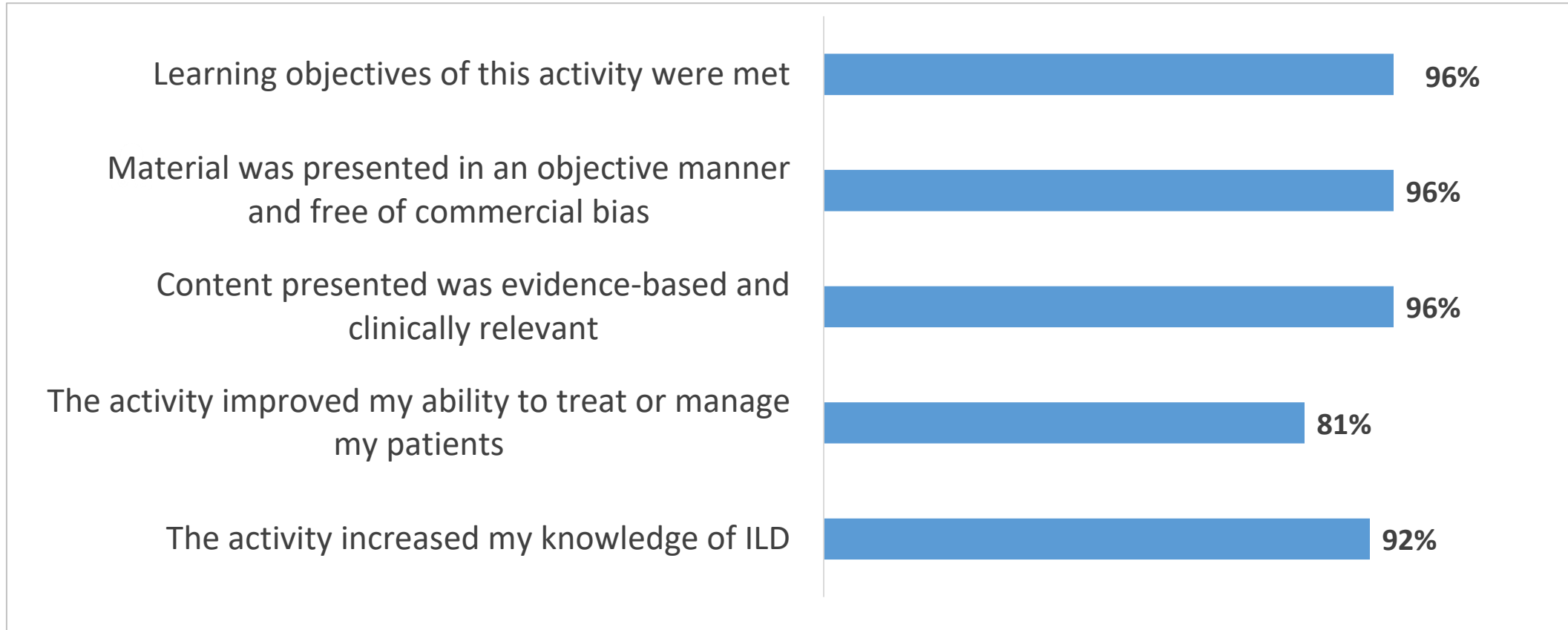
Other

- Bangladesh (6)
- Canada (4)
- Iraq (1)
- Unknown (8)
- Australia (1)

N=219



Completers “Strongly Agree” or “Agree” that:



N=26

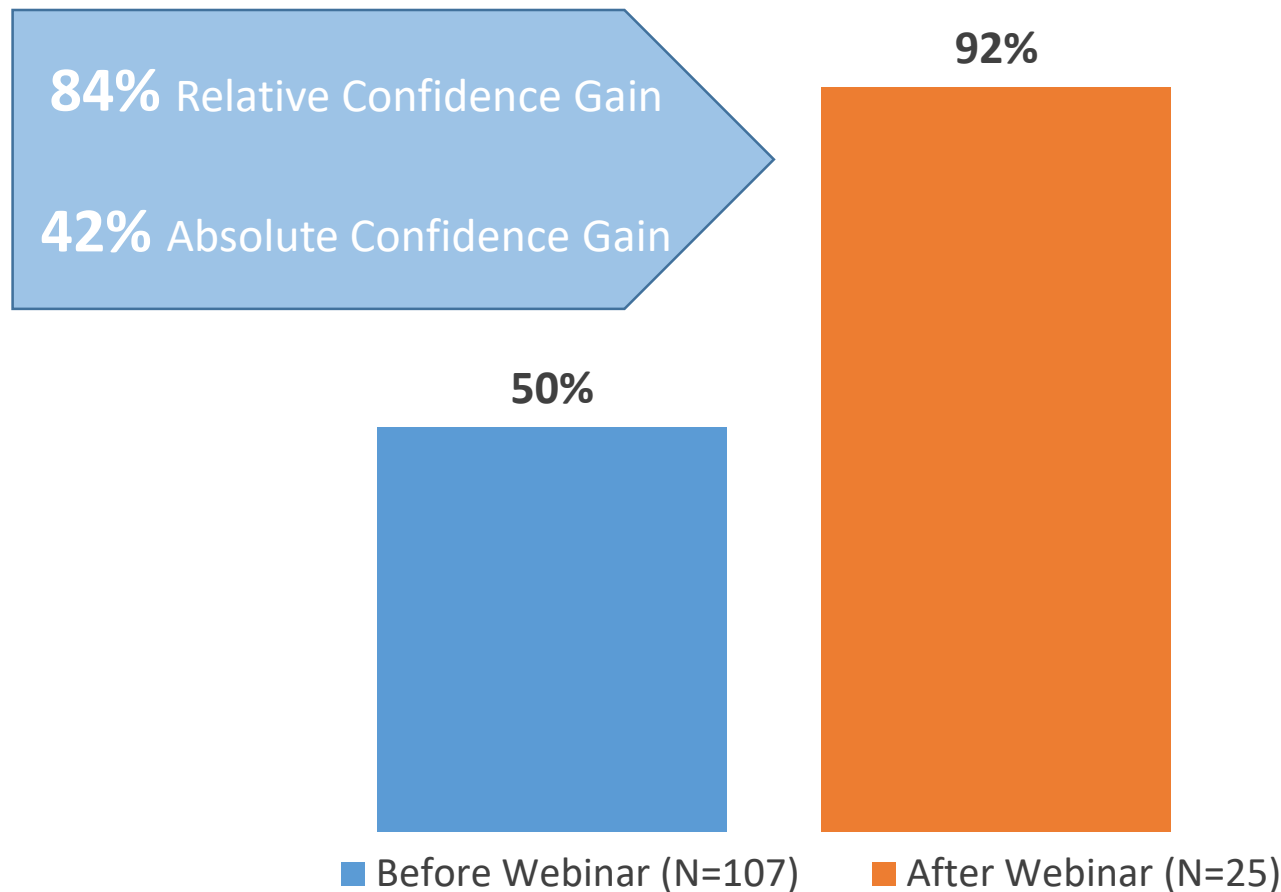


Level (4) Outcomes: Live Webinars Competence

Final Outcomes Summary: August 2021 – August 2022



Completers report they are “Very Confident” to “Somewhat Confident” in their ability to integrate the findings of the research article into clinical practice:



Note: We calculated relative confidence gain using unmatched learner samples. 54 of 107 learners (50%) reported confidence in the pre-assessment and 23 of 25 (92%) reported confidence in the post-assessment.

This activity had an attrition rate of 77% from pre- to post-assessment, as most learners completed the pre-test and participated in the activity but did not claim credit, and therefore did not complete the post-assessment.



Level (4) Outcomes: Live Webinars Competence

Final Outcomes Summary: August 2021 – August 2022



An analysis of open-ended comments demonstrates the following changes completers intend to make:

91%

N=22

Evaluation respondents intend to make changes in practice as a result of the activity

Intended Changes by Activity

August 2021: Effect of Ambulatory Oxygen on Quality of Life for Patients with Fibrotic Lung Disease (AmbOx)

- Increase use of oxygen

September 2021: Tocilizumab in Systemic Sclerosis

- Implement the use of tocilizumab

November 2021: Avacopan for the Treatment of ANCA-Associated Vasculitis

- Consider steroid tapering more often

December 2021: Nintedanib in Progressive Fibrosing Interstitial Lung Diseases

- Implement the use of nintedanib in HP, auto immune ILD, Idio NSP, Unclass IP, and others where criteria is met
- Recognize this medication as an option

**No intended changes reported for October article*



Level (4) Outcomes: Live Webinars Competence

Final Outcomes Summary: August 2021 – August 2022

An analysis of open-ended comments demonstrates the following changes completers intend to make:

Intended Changes by Activity

February 2022: Leukocyte Telomere Length and Mycophenolate Therapy in Chronic Hypersensitivity Pneumonitis

- I will watch for other signs of telomere shortening when making clinical decisions in HP
- I will look for opportunities to clinically measure telomere length
- Discussion among senior consultants regarding telomere length in cHP patients undergoing/about to treat with MMF for fILD

March 2022: Diagnostic Accuracy of Endobronchial Optical Coherence Tomography for the Microscopic Diagnosis of Usual Interstitial Pneumonia

- Armored myself with the knowledge of EB-OCT

April 2022: Long-term Treatment with Human Immunoglobulin for Antisynthetase Syndrome-associated Interstitial Lung Disease

- I will consider IVIG earlier in the treatment of patients with antisynthetase syndrome



Level (4) Outcomes: Live Webinars Competence

Final Outcomes Summary: August 2021 – August 2022



An analysis of open-ended comments demonstrates the following changes completers intend to make:

Intended Changes by Activity

May 2022: The Role of Genetic Testing in Pulmonary Fibrosis: A Perspective From the Pulmonary Fibrosis Foundation Genetic Testing Work Group

- I will look to these soft guidelines when presented with a patient with familial ILD

July 2022: The Impact of Disease Severity Measures on Survival in U.S. Veterans with Rheumatoid Arthritis-associated Interstitial Lung Disease

- Investigate RA disease activity as well as respiratory symptoms

**No intended changes reported for June or August articles*



Outcomes: Live Webinars

Final Outcomes Summary: August 2021 – August 2022

August: Effect of Ambulatory Oxygen on Quality of Life for Patients with Fibrotic Lung Disease (AmbOx)



Key Takeaways

- Impact of O2

October: Utility of a Molecular Classifier as a Complement to High-Resolution Computed Tomography to Identify Usual Interstitial Pneumonia



Key Takeaways

- Molecular classifiers may assist in diagnosis



Future Topics

- CH-ILD
- CPFE
- Biomass/Smoker's ILD

September: Tocilizumab in Systemic Sclerosis



Key Takeaways

- Tocilizumab is safe to use

December: Nintedanib in Progressive Fibrosing Interstitial Lung Diseases



Key Takeaways

- FVC decline 80 ml/y in nintedanib and 190 ml/y in the placebo
- May be beneficial for CTD-ILD

***Qualitative data not available for November*



Outcomes: Live Webinars

Final Outcomes Summary: August 2021 – August 2022

February: Leukocyte Telomere Length and Mycophenolate Therapy in CHP



Key Takeaways

- That there are clinical signs of telomere shortening
- Raising awareness of potential to harm fibrotic HP patients with immunosuppressive medications
- Telomere length (TL) may identify f-ILD patients at increased risk with exposure to immunosuppression.



Future Topics

- COVID-19 related ILD if possible. Prognosis, management, antifibrotics, anti-inflammatory, etc.

March: Diagnostic Accuracy of Endobronchial Optical Coherence Tomography for the Microscopic Diagnosis of UIP



Key Takeaways

- EB-OCT is a promising complement to HRCT & Biopsy
- The treatment



Future Topics

- MicroCT for early COPD diagnosis
- Long COVID

April: Long-term Treatment with Human Immunoglobulin for Antisynthetase Syndrome-associated ILD



Key Takeaways

- Early treatment with IVIG
- Treatment



Outcomes: Live Webinars

Final Outcomes Summary: August 2021 – August 2022

May: The Role of Genetic Testing in Pulmonary Fibrosis: A Perspective From the Pulmonary Fibrosis Foundation Genetic Testing Work Group

Key Takeaways

- How to better approach patient care
- Understanding the nuances of genetic testing, including their approaches and limitations

Future Topics

- More genetic based articles

June: Trial of a Preferential Phosphodiesterase 4B Inhibitor for Idiopathic Pulmonary Fibrosis

Key Takeaways

- That this new treatment is on the horizon and to follow up when we have more trial data

July: The Impact of Disease Severity Measures on Survival in U.S. Veterans with Rheumatoid Arthritis-associated ILD

Key Takeaways

- RA and ILD disease severity measures were independent predictors of survival in RA-ILD

Future Topics

- Pulmonary hypertension and ILD

August: Safety and Efficacy of Rituximab in Systemic Sclerosis (DESIREs): A Double-blind, Investigator-initiated, Randomised, Placebo-controlled Trial

Key Takeaways

- The impact of rituximab on FVC



Outcomes: VuMedi Webinar Recordings



Final Outcomes Summary: August 2021 – August 2022

National Jewish Health VuMedi Channel:

<https://www.vumedi.com/channel/national-jewish-health/tab/journal-club/>

Data from 8/1/21 to 9/15/22

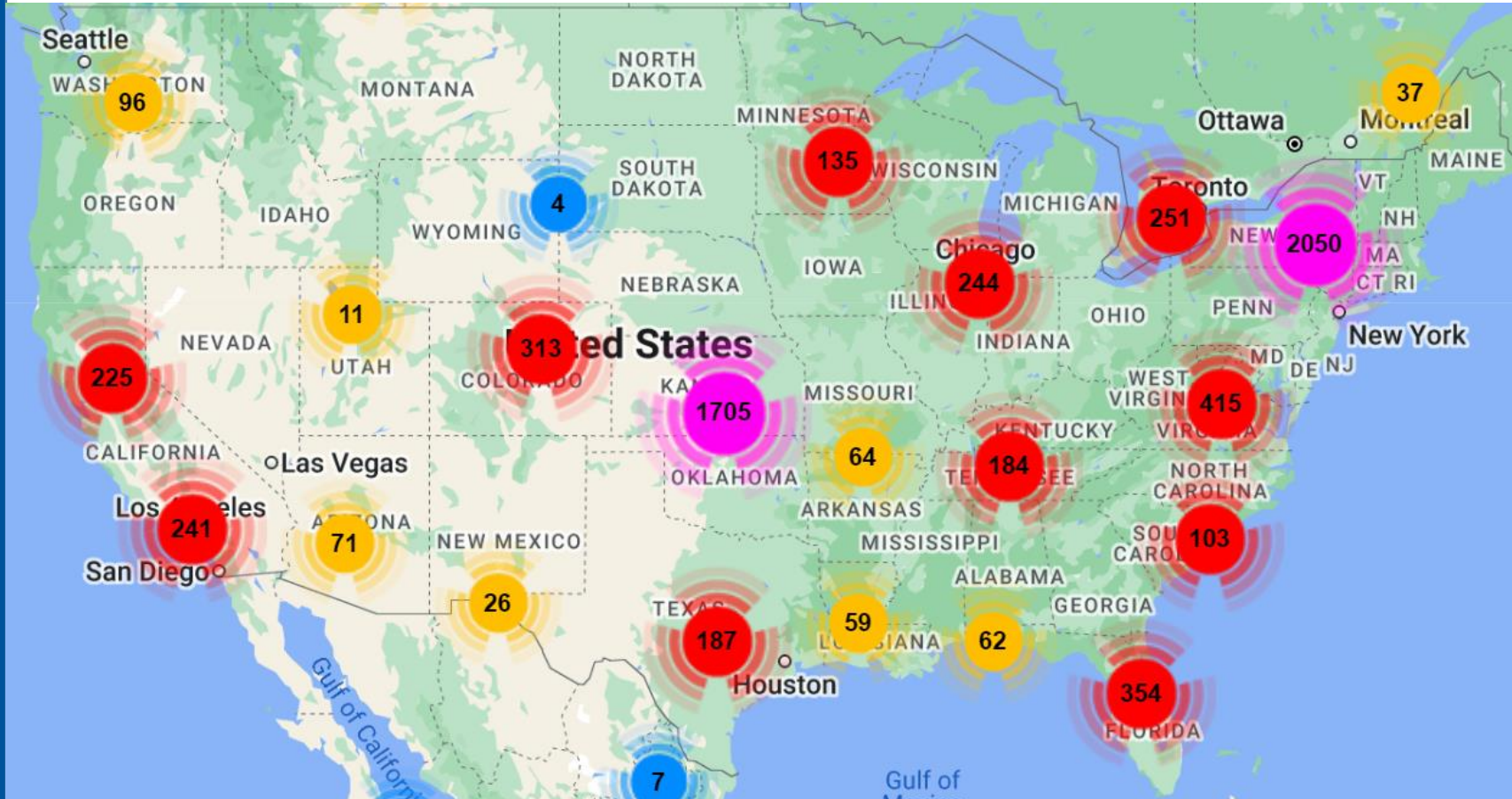
Month	Impressions	Video Page Views	Unique Page Viewers	Starts	Unique Starts
August 2021	1,512	241	145	115	96
September 2021	2,362	218	164	140	96
October 2021	1,424	156	117	86	66
November 2021	2,009	126	92	80	60
December 2021	825	369	256	269	193
February 2022	1,930	266	169	145	108
March 2022	765	61	31	22	16
April 2022	559	59	31	42	25
May 2022	681	186	113	81	62
June 2022	724	347	216	182	137
July 2022	1,398	206	154	137	98
August 2022	262	147	106	58	47
Total	14,451	2,382	1,594	1,357	1,004

Outcomes: VuMedi Webinar Recordings

Final Outcomes Summary: August 2021 – August 2022

National Jewish Health VuMedi Channel:

<https://www.vumedi.com/channel/national-jewish-health/tab/journal-club/>



About VuMedi

- Nearly 14,000 registered pulmonary specialists and over 96,000 primary care physicians (over 600,000 total)
- Distribution of video content to reach a large physician audience
- Analytics dashboard that shows video views, impressions, geolocation of viewers

Note: Heat map encompasses all 4 NJH Journal Clubs from 8/1/21-9/15/22



National Jewish Health Medical Education Twitter

Final Outcomes Summary: August 2021 – August 2022



Medical Education for Health Care Providers

 **National Jewish Health**
Breathing Science is Life.



[Edit profile](#)

National Jewish Health Medical Education
@NJHealthMedEd

The leading respiratory hospital provides continuing medical education, research insights, and best practices for patient care. | For patients, follow [@NJHealth](#)

📍 Denver, Colorado [njhealth.org/CME](#) 📅 Joined June 2021

296 Following **488** Followers

**Twitter Handle:
@NJHealthMedEd**

**Hashtag:
#ILDTwitterJC**





Executive Summary – Twitter Chats

Final Outcomes Summary: August 2021 – August 2022



Definitions:
Impressions - the number of impressions on a tweet sent in the selected date range. An impression is the number of times a tweet appears to users in either their timeline or search results
Engagements - the total number of times a user interacted with the tweets sent during the selected date range

Twitter Date	Article Title	Faculty	Calendar Adds	Tweets	Retweets	Likes	Hashtag Usage	Impressions	Engagements
August 11, 2021	Effect of Ambulatory Oxygen on Quality of Life for Patients with Fibrotic Lung Disease (AmbOx): a Prospective, Open-label, Mixed-method, Crossover Randomized Controlled Trial	Matthew Koslow, MD	59	42	16	95	53	5,159	90
September 14, 2021	Tocilizumab in Systemic Sclerosis: a Randomized, Double-blind, Placebo-controlled, Phase 3 Trial	Rebecca Keith, MD	24	36	2	67	36	1,326	57
October 13, 2021	Utility of a Molecular Classifier as a Complement to High-Resolution Computed Tomography to Identify Usual Interstitial Pneumonia	Rebecca Keith, MD	15	45	1	91	54	1,811	77
November 10, 2021	Avacopan for the Treatment of ANCA-Associated Vasculitis	Mehrnaz Maleki-Fischbach, MD	53	42	3	36	43	1,728	58
December 15, 2021	Nintedanib in Progressive Fibrosing Interstitial Lung Diseases	Rebecca Keith, MD	14	50	1	35	50	1,504	38



Executive Summary – Twitter Chats

Final Outcomes Summary: August 2021 – August 2022



Definitions:
Impressions - the number of impressions on a tweet sent in the selected date range. An impression is the number of times a tweet appears to users in either their timeline or search results
Engagements - the total number of times a user interacted with the tweets sent during the selected date range

Twitter Date	Article Title	Faculty	Calendar Adds	Tweets	Retweets	Likes	Hashtag Usage	Impressions	Engagements
February 9, 2022	Leukocyte Telomere Length and Mycophenolate Therapy in Chronic Hypersensitivity Pneumonitis	Matthew Koslow, MD Ayodeji Adegunsoye, MD	18	17	2	9	19	2,481	62
March 9, 2022	Diagnostic Accuracy of Endobronchial Optical Coherence Tomography for the Microscopic Diagnosis of Usual Interstitial Pneumonia	Rebecca Keith, MD Lida Hariri, MD, PhD	24	22	0	6	18	1,038	28
April 20, 2022	Long-term Treatment with Human Immunoglobulin for Antisynthetase Syndrome-associated Interstitial Lung Disease	Liudmila Kastsianok, MD Jinny Tavee, MD	13	22	2	15	22	1,470	52
May 11, 2022	The Role of Genetic Testing in Pulmonary Fibrosis: A Perspective From the Pulmonary Fibrosis Foundation Genetic Testing Work Group	Zulma Yunt, MD Janet Talbert, MS, CGC, LGC	17	46	2	26	42	1,526	65



Executive Summary – Twitter Chats

Final Outcomes Summary: August 2021 – August 2022



Twitter Date	Article Title	Faculty	Calendar Adds	Tweets	Retweets	Likes	Hashtag Usage	Impressions	Engagements
June 15, 2022	Trial of a Preferential Phosphodiesterase 4B Inhibitor for Idiopathic Pulmonary Fibrosis	Rebecca Keith, MD	279	21	3	7	21	1,671	44
July 13, 2022	The Impact of Disease Severity Measures on Survival in U.S. Veterans with Rheumatoid Arthritis-associated Interstitial Lung Disease	Isabelle Amigues, MD	13	17	12	46	52	7,460	322
August 9, 2022	Safety and Efficacy of Rituximab in Systemic Sclerosis (DESIREs): A Double-blind, Investigator-initiated, Randomised, Placebo-controlled Trial	Mehrnaz Maleki-Fischbach, MD	26	20	4	15	19	1,129	64
Total August 2021 – August 2022			555	380	48	448	429	28,303	957

Definitions:

Impressions - the number of impressions on a tweet sent in the selected date range. An impression is the number of times a tweet appears to users in either their timeline or search results

Engagements - the total number of times a user interacted with the tweets sent during the selected date range



ILD Journal Club August Twitter Highlights

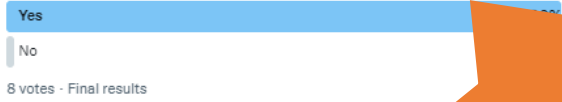
Final Outcomes Summary: August 2021 – August 2022



August 2021 Highlights

National Jewish Health Medical Education @NJHealthMedEd

Will these findings change your practice? #ILDTwitterJC



7:18 PM · Aug 11, 2021 · Twitter Web App

View Tweet activity

Tweet your reply

Patricia George, MD @PGeorgeMD · Aug 11
 Replying to @NJHealthMedEd
 A1 Although I advise oxygen use in patients with fibrosing ILD, the data from this trial help in discussing with patients to better set expectations. #ILDTwitterJC

Patricia George, MD @PGeorgeMD · Aug 11
 ~with F-ILD AND hypoxemia (clarification) #ILDTwitterJC

Matthew Koslow, M.D. @mkoslow73 · Aug 11
 Replying to @NJHealthMedEd
 For those who answered yes, how so? #ILDTwitterJC

Jake Woodrow @JakeWoodrow3 · Aug 11
 A1 I agree . It will change the way I "sell" oxygen to patients. Can offer QOL benefit not just protection against right heart strain #ILDTwitterJC

Andrea Harshman @aharshy1 · Aug 11
 Replying to @NJHealthMedEd
 Did the study change your practice? #ILDTwitterJC @mkoslow73

95 Likes on Tweets

National Jewish Health Medical Education @NJHealthMedEd

Q2 - The Ambox authors suggest that a 2-week trial period could help assess whether benefits outweigh burden, before a long-term commitment. Do you agree?

In your reply, start with A2 and include #ILDTwitterJC

Aug 11, 2021 · Twitter Web App

View Tweet activity

Tweet your reply

Patricia George, MD @PGeorgeMD · Aug 11
 Replying to @NJHealthMedEd
 A2 - I think/hope that framing this way is helpful - that when people think of a "trial of therapy" it seems less intimidating than a mindset of "I need to be on this for the rest of my life." #ILDTwitterJC

Jake Woodrow @JakeWoodrow3 · Aug 11
 Good point I hadn't thought of it that way. Maybe a month though. It's such a hassle to get O2 I'd like to give it a real shot to work #ILDTwitterJC

Jake Woodrow @JakeWoodrow3 · Aug 11
 Replying to @NJHealthMedEd
 A2 Seems like a short trial. Wouldn't it take longer to get used to O2? It's a big life change #ILDTwitterJC

Matthew Koslow, M.D. @mkoslow73 · Aug 11
 Agree cannot assess long-term benefit vs harm given short duration of trial. But I believe the 2 week trial is a clinical pearl and will change my approach. #ILDTwitterJC

Matthew Koslow, M.D. @mkoslow73 · Aug 11
 May explore 2 week trial to introduce Ambox to pt and caregiver without a long-term commitment which can be daunting. And explore realistic expectations and anticipate challenges prior to short trial. #ILDTwitterJC

5,159 Impressions

Matthew Koslow, M.D. @mkoslow73 · Aug 11
 Yes, thanks everyone for joining tonight! I will respond to any further comments/questions after the chat and look forward to chatting with you again next month. #ILDTwitterJC

Patricia George, MD @PGeorgeMD · Aug 11
 Neat - data that in patients prescribed O2 for fibrosing ILD + hypoxemia, ppl felt they could do more on O2, cont'd therapy. This may help in convos abt starting O2 (often a tough decision for the person with lung disease). #medtwitter #pulmtwitter #ILDTwitterJC @NJHealthMedEd

Matthew Koslow, M.D. @mkoslow73 · Aug 11
 Replying to @PGeorgeMD and @NJHealthMedEd
 Agree again with @PGeorgeMD . This concept from Ambox authors changed my perspective to focus on benefits and away from potential challenges. Most subjects changed their view after "feeling they could do more". #ILDTwitterJC

National Jewish Health Medical Education @NJHealthMe... · Aug 11
 ...joining the first #ILDTwitterJC! We hope you enjoyed the ... you next month on Sept 16 at 9PM ET / 8PM CT / 7PM MT / ... where we will discuss phase 3 trials of tocilizumab for the ... of systemic sclerosis #SSc #ILD #medtwitter #pulmtwitter

Matthew Koslow, M.D. @mkoslow73 · Aug 11
 Replying to @PGeorgeMD and @NJHealthMedEd
 Agree again with @PGeorgeMD . This concept from Ambox authors changed my perspective to focus on benefits and away from potential challenges. Most subjects changed their view after "feeling they could do more". #ILDTwitterJC

National Jewish Health Medical Education @NJHealthMe... · Aug 11
 Our time is coming to a close but please feel free to add comments after the chat ends. #ILDTwitterJC

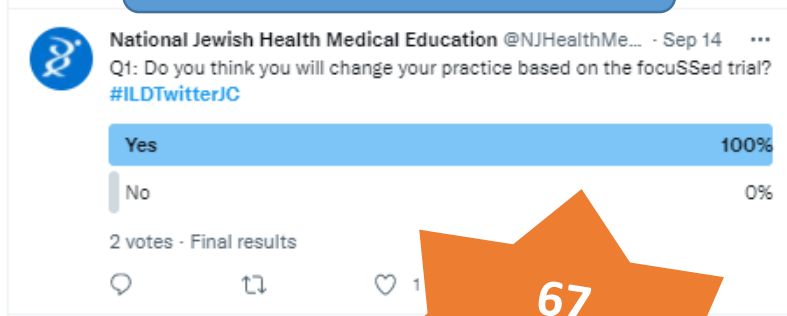


ILD Journal Club September & October Twitter Highlights

Final Outcomes Summary: August 2021 – August 2022



September Highlights



67
Likes on
Tweets

discuss use of a molecular classifier as a comple...
usual interstitial pneumonia #ILD #medtwitt...

National Jewish Health Medical Education @NJHealthMe...
Our time is coming to a close, but please feel free to ad...
the chat ends. #ILDTwitterJC

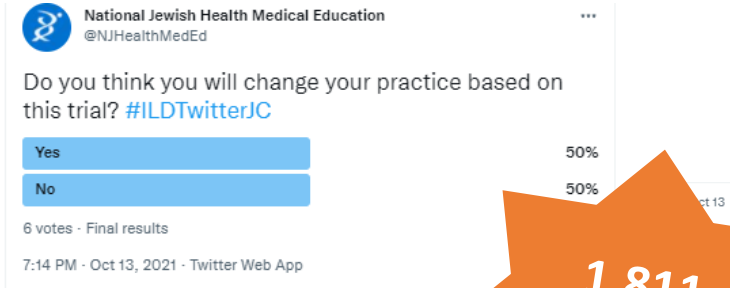
Liudmila Kastsianok MD, RhMSUS @MilaKastsianok · Sep 14 ...
A2 to Q2 I feel there are still a lot of gray area with how to use tocilizumab
in SSC-ILD, more studies need to be done to investigate the use of
tocilizumab with different ILD severity. Tocilizumab would be a great
addition to treat inflammatory arthritis in SSC #ILDTwitterJC

National Jewish Health Medical Education @NJHealthMe... · Sep 14 ...
Q2: How do you think tocilizumab will be used in treating patients with SSC
moving forward?
Type your response starting with A2 and use #ILDTwitterJC

Liudmila Kastsianok MD, RhMSUS @MilaKastsianok · Sep 14 ...
A1 to Q1 For me, I think tocilizumab would be a great addition to
medications I can use in patients with SSC, esp one with inflammatory
arthritis and mild ILD #ILDTwitterJC

Liudmila Kastsianok MD, RhMSUS @MilaKastsianok · Sep 14 ...
For those who answered "yes," could participants share specific examples
for the discussion? #ILDTwitterJC

October Highlights



1,811
Impressions

View Tweet activity

Tweet your reply

Patricia George, MD @PGeorgeMD · Oct 13
Replying to @NJHealthMedEd
I'll be honest - As a #pulmonaryhypertension doc, I'll still refer my #ILD
patients to my colleagues at @NJHealth #ILDTwitterJC

Patricia George, MD @PGeorgeMD · Oct 13
Replying to @NJHealthMedEd
A1. Answering this question with a question for @RebeccaKeithMD - Is this
test available to use clinically today? If you wanted to use it, could you?
#ILDTwitterJC

Rebecca @RebeccaKeithMD · Oct 13
Yes. Clinically I use this on patient with indeterminant pattern CT when no
clear consensus diagnosis at multidisciplinary conference. ATS algorithm
has these patients going to BAL. The classifier can give UIP vs not UIP

MPH @KerriBerriKerri · Oct 13
Replying to @RebeccaKeithMD
A1. Answering this question with a question for @RebeccaKeithMD - Is this
test available to use clinically today? If you wanted to use it, could you?
#ILDTwitterJC

National Jewish Health Medical Education @NJHealthMe... · Oct 13 ...
Thank you for joining tonight's #ILDTwitterJC! We hope you enjoyed the
chat & see you next month on Nov 10 @ 9PM ET/8PM CT/7PM MT/6PM PT!
#ILD #medtwitter #pulmtwitter #FOAMed

National Jewish Health Medical Education @NJHealthMe... · Oct 13 ...
Our time is coming to a close, but please feel free to add comments after
the chat ends. #ILDTwitterJC

Rebecca @RebeccaKeithMD · Oct 13
Replying to @KerriBerriKerri
Agree completely. This is not what was looked at in this article. That is
why I would like to see more data about indeterminant patterns in a similar
study moving forward. #ILDTwitterJC

Kerri Johansson MD MPH @KerriBerriKerri · Oct 13
Replying to @KerriBerriKerri and @RebeccaKeithMD
Good call, thanks! I guess that isn't quite addressed in this article but
sounds like useful in this scenario in actual clinical practice. #ILDTwitterJC

Patricia George, MD @PGeorgeMD · Oct 13
Replying to @RebeccaKeithMD and @NJHealthMedEd
Wow! That's very cool. #ILDTwitterJC

Kerri Johansson MD MPH @KerriBerriKerri · Oct 13
Replying to @RebeccaKeithMD
A1 Given the strong performance characteristics of HRCT pattern + clinical
exclusion of other ethologies to dx IPF, histo ID of UIP is less helpful to me
clinically. Still may not further inform therapeutic decision making. Is this
additionally discriminative? #ILDTwitterJC

Patricia George, MD @PGeorgeMD · Oct 13
Replying to @NJHealthMedEd
A1. Answering this question with a question for @RebeccaKeithMD - Is this
test available to use clinically today? If you wanted to use it, could you?
#ILDTwitterJC

MPH @KerriBerriKerri · Oct 13
Replying to @RebeccaKeithMD
A1. Answering this question with a question for @RebeccaKeithMD - Is this
test available to use clinically today? If you wanted to use it, could you?
#ILDTwitterJC

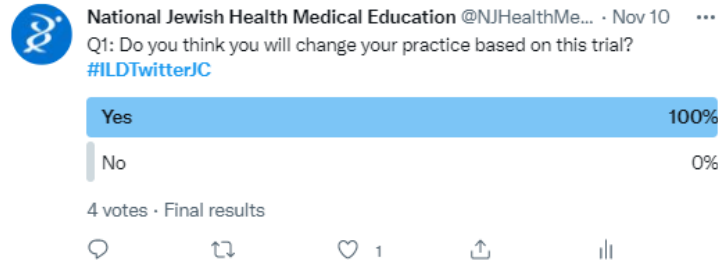


ILD Journal Club November & December Twitter Highlights

Final Outcomes Summary: August 2021 – August 2022



November Highlights



Q2: For those who answered "yes," can you share specific examples of how you might change your practice?

Type your response starting with A1 and use #ILDtwitterJC

58 Engagements

Mehrnaz Maleki Fischbach, MD, FACP @Mehrnaz7777 · Nov 10

Methods: ADVOCATE trial: Randomized, double-blind, double-dummy, controlled trial. #ILDtwitterJC

Mehrnaz Maleki Fischbach, MD, FACP @Mehrnaz7777 · Nov 10

The results in both avacopan groups were noninferior to those in the control group. #ILDtwitterJC

Mehrnaz Maleki Fischbach, MD, FACP @Mehrnaz7777 · Nov 10

Activation of the alternative complement pathway plays a role in the pathogenesis of ANCA-associated vasculitis in a murine model. #ILDtwitterJC

Mehrnaz Maleki Fischbach, MD, FACP @Mehrnaz7777 · Nov 10

Background: Avacopan is an oral small molecule that blocks the activity of complement C5a, a component of the alternative complement system and the natural ligand for C5aR (CD88). #ILDtwitterJC

Mehrnaz Maleki Fischbach, MD, FACP @Mehrnaz7777 · Nov 10

I will briefly talk regarding the main points of the article and then @NJHealthMedEd will post some discussion questions #ILDtwitterJC

Mehrnaz Maleki Fischbach, MD, FACP @Mehrnaz7777 · Nov 10

Jayne DRW, Merkel PA, Schall TJ, Bekker P; ADVOCATE Study Group. Avacopan for the Treatment of ANCA-Associated Vasculitis. N Engl J Med. 2021 Feb 18;384(7):599-609. doi: 10.1056/NEJMoa2023386. PMID: 33596356. #ILDtwitterJC

Liudmila Kastisianok MD, RhMSUS @MilaKastisianok · Nov 10

Replying to @NJHealthMedEd

I would use Avacopan in patients with severe uncontrolled diabetes, severe chronic infections such as NTM, pseudomonas, osteomyelitis, etc

Liudmila Kastisianok MD, RhMSUS @MilaKastisianok · Nov 10

Replying to @NJHealthMedEd

Another situation would be steroid induced psychosis #ildtwitterjc

December Highlights

1,504 Impressions

Rebecca @RebeccaKeithMD · Dec 15

Replying to @PGeorgeMD and @NJHealthMedEd

This is a useful tool in progressive fibrotic autoimmune hypersensitivity pneumonitis, and other progressive ILD have both inflammatory drivers and fibrotic drivers of #ILDtwitterJC

Rebecca @RebeccaKeithMD · Dec 15

I think the interesting thing about progressive fibrosis target both inflammatory pathways and fibrotic pathways

Patricia George, MD @PGeorgeMD · Dec 15

Replying to @NJHealthMedEd

A1. I defer to my expert ILD colleagues in prescribing, #ILDtwitterJC

National Jewish Health Medical Education @NJHealthMedEd · Dec 15

Q1: How do you use nintedanib in your clinical practice? Type your response starting with A1 and use #ILDtwitterJC

Rebecca @RebeccaKeithMD · Dec 15

For me this has changed how I think about progressive fibrotic lung disease and the tools I can use to help my patient slow progression of fibrosis. #ILDtwitterJC

Rebecca @RebeccaKeithMD · Dec 15

For those who answered "yes" how you might change your practice?

Rebecca @RebeccaKeithMD · Dec 15

Replying to @PGeorgeMD and @NJHealthMedEd

I am very hopeful that inhaled therapies will provide a mechanism to give higher doses of medication to the lung and avoid systemic side effects. #ILDtwitterJC

Patricia George, MD @PGeorgeMD · Dec 15

Replying to @NJHealthMedEd

I think it is exciting to see multiple mechanistic pathways targeted in inhaled imatinib, for fibrotics might allow higher doses of medication to the lung and avoid systemic side effects? #ILDtwitterJC

National Jewish Health Medical Education @NJHealthMedEd · Dec 15

Q2: Do you think you will change your practice based on this trial? #ILDtwitterJC

Response	Percentage
Yes	50%
No	50%

4 votes · 2 days left



ILD Journal Club November & December Twitter Highlights

Final Outcomes Summary: August 2021 – August 2022



February Highlights

Patricia George, MD @PGeorgeMD · Feb 9
 Replying to @NJHealthMedEd
 My question to @mkoslow73 is - are there any ways (phenotype) in which cHP patients with short telomeres manifest that would make you think about short telo? And those avoid MMF? Or is it just by lab testing?

Matthew Koslow, M.D. @mkoslow73 · Feb 9
 Replying to @NJHealthMedEd
 I think the management

Patricia George, MD @PGeorgeMD · Feb 9
 Didn't have time to read the article? Make sure you check out their article summary. This is going to be interesting. #ILDTwitterJC

National Jewish Health Medical Education @NJHealthM... · Feb 9
 ProEd Staff
 Dr. Matthew Koslow along with the NJH ILD physicians group, has also provided a summary of the article here: nationaljewish.org/education/pro-... #ILDTwitterJC

Patricia George, MD liked a Tweet you were mentioned in

I will briefly talk regarding the main points of the article and then @NJHealthMedEd will post some discussion questions #ILDTwitterJC

March Highlights

National Jewish Health Medical Educati... @NJHealthMed... · Mar 9
 Do you think this imaging modality has the potential to replace surgical lung biopsy? Yes/No

Yes	0%
No	100%

2 votes · Final results

National Jewish Health Medical Educati... @NJHealthMed... · Mar 8
 Join us today on Zoom at 11:30am PT, 12:30pm MT, 1:30pm CT, 2:30pm ET. Drs. Rebecca Keith & Lida Hariri will discuss EB-OCT for the Diagnosis of Interstitial Lung Disease. Register at: fal.cn/3mLgB #ILDTwitterJC #lungdisease #meded @RebeccaKeithMD

JOURNAL CLUB

Read the Article Summary
NJHealth.org/ILDJournalClub

Zoom Discussion March 8, 2:30pm EST	Twitter #ILDTwitterJC March 9, 9pm EST
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Faculty Host: Rebecca C. Keith, MD | Guest Presenter: Lida Hariri, MD, PhD

28 Engagements

2,481 Impressions



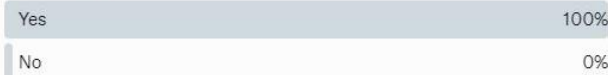
ILD Journal Club November & December Twitter Highlights

Final Outcomes Summary: August 2021 – August 2022



April Highlights

National Jewish Health Medical Educat... @NJHealthMed... · Apr 20 ...
Do you think you will change your practice based on this trial?
#ILDTwitterJC



2 votes · 6 hours left

National Jewish Health Medical Educat... @NJHealthMed... · Apr 20 ...
Thank you @MilaKastisianok. We will now start posting discussion questions. To respond, reply directly to the discussion question post, include A1 for Q1, A2 for Q2 and so on, and use #ILDTwitterJC.

National Jewish Health Medical Educat... @NJHealthMed... · Apr 20 ...
Dr. Liudmila Kastisianok is a rheumatologist in the Division of Rheumatology and Department of Medicine at @NJHealth nationaljewish.org/doctors-depart... #ILDTwitterJC

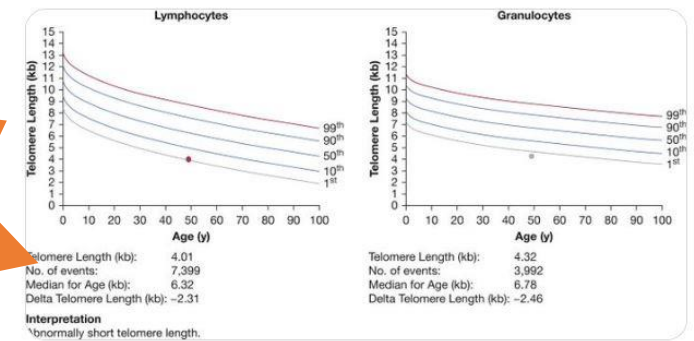


nationaljewish.org
Liudmila Kastisianok
Liudmila Kastisianok, MD, is a rheumatologist at National Jewish Health. Dr. Kastisianok is in the Division of Rheumatology and Department of ...

1,470 Impressions

May Highlights

National Jewish Health Medical Educat... @NJHealthMed... · May 11 ...
Authors recommend that TL be measured using flow-FISH methods. These graphs depict the flow-FISH data from a patient with telomerase gene mutation. #ILDTwitterJC



65 Engagements

National Jewish Health Medical Educat... @NJHealthMed... · May 11 ...
Thank you for joining tonight's #ILDTwitterJC! We hope you enjoyed the chat & see you next month on June 14th @ 9PM ET/8PM CT/7PM MT/6PM PT #ILD #medtwitter #pulmtwitter #FOAMed

National Jewish Health Medical Educat... @NJHealthMed... · May 11 ...
Our time is coming to a close but please feel free to add comments after the chat ends. #ILDTwitterJC

National Jewish Health Medical Educat... @NJHealthMed... · May 11 ...
Q1: How should genetic testing inform clinical practice in the setting of familial pulmonary fibrosis?#ILDTwitterJC

Type your response starting with A1 and use #ILDTwitterJC

... @NJHealthMed... · May 11 ...
etic testing. TL must be corrected th age. Shorter length, particularly suggestive of a telomeropathy.



ILD Journal Club November & December Twitter Highlights

Final Outcomes Summary: August 2021 – August 2022



June Highlights

National Jewish Health Medical Educati... @NJHealthMed... · Jun 15 ...
 Thank you @RebeccaKeithMD. We will now start posting discussion questions. To respond, reply directly to the discussion question post, include A1 for Q1, A2 for Q2 and so on, and use #ILDTwitterJC.

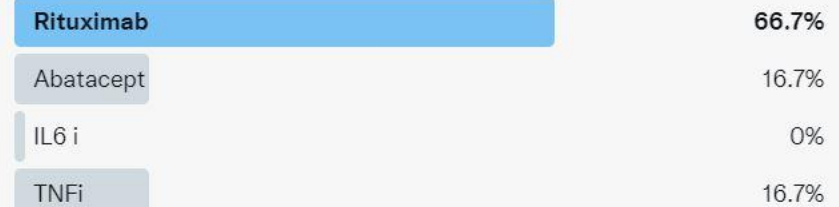
Rebecca @RebeccaKeithMD · Jun 15 ...
 For patients with IPF, treatment with BI 101550 prevented a decrease in lung function over 12 weeks. The sample size was small and the results need to be confirmed in a larger trial. The safety profile of BI 101550 warrants further research in a phase III trial. #ILDTwitterJC

Rebecca @RebeccaKeithMD · Jun 15 ...
 Conclusions: Treatment w/ BI 1015550 appeared to stabilize lung function regardless of whether patients were receiving background antifibrotic therapy. Although the trial was only 12 weeks it appeared to show stabilization of FVC. Longer term phase 3 trial needed. #ILDTwitterJC

1,671 Impressions

July Highlights

Isabelle Amigues, MD, MS, RhMSUS, mom etc @isa75012 · Jul 13 ...
 Q3: What is your drug of choice in a patient that was followed with RA and developed ILD? #ILDTwitterJC



Isabelle Amigues, MD, MS, RhMSUS, mom etc @isa75012 · Jul 13 ...
 Q2: Do you have a lot of RA-ILD patient in your practice? Do you refer them out (eg. a tertiary center) if you do? #ILDTwitterJC

Isabelle Amigues, MD, MS, RhMSUS, mom etc @isa75012 · Jul 13 ...
 Q5: What research question would you like to see answered for patients with RA-ILD that would improve your care? #ILDTwitterJC

Isabelle Amigues, MD, MS, RhMSUS, mom etc @isa75012 · Jul 13 ...
 My personal Questions: Should we perform MSK US on all patients with ILD and +CCP? Should we do HRCT on all patients with RA at 50/60 to evaluate for subclinical ILD? #ILDTwitterJC

7,460 Impressions



ILD Journal Club November & December Twitter Highlights

Final Outcomes Summary: August 2021 – August 2022



August 2022 Highlights

1129 Impressions

Mehrnaz Maleki Fischbach,MD, FACP @Mehrnaz7777 · Aug 9
Patients with systemic sclerosis with serious complications such as pulmonary hypertension and renal crisis were excluded from this study. [#ILDTwitterJC](#)

1

Mehrnaz Maleki Fischbach,MD, FACP @Mehrnaz7777 · Aug 9
This DESIRES trial included only a small number of Japanese patients. The rituximab efficacy for patients with systemic sclerosis in the USA and Europe and other regions of the world needs to be tested in other clinical trials. [#ILDTwitterJC](#)

1

Mehrnaz Maleki Fischbach,MD, FACP @Mehrnaz7777 · Aug 9
Percentage of absolute change in area occupied with interstitial shadows slightly decreased in rituximab group while increased in placebo group. (-0.32% vs -2.39% (4-73); difference -2.71% [95% CI 0.48 to 7.52]; p=0.034) [#ILDTwitterJC](#)

1

Mehrnaz Maleki Fischbach,MD, FACP @Mehrnaz7777 · Aug 9
The rituximab group had a mean change in mRSS of -6.30 at 24 weeks from baseline and a difference of -8.44 (95% CI -11.00 to -5.88) compared with the placebo group. [#ILDTwitterJC](#)

1

Mehrnaz Maleki Fischbach,MD, FACP @Mehrnaz7777 · Aug 9
In the DESIRES trial, the mean baseline mRSS in the placebo group was 15.7, resulting in a mean increase of 2.14 points at 24 weeks. [#ILDTwitterJC](#)

1

Mehrnaz Maleki Fischbach,MD, FACP @Mehrnaz7777 · Aug 9
The changes in occupied area of interstitial shadows (reticular changes, honeycombing, and ground-glass opacities) by high-resolution CT, Surfactant protein-D and Sialylated carbohydrate antigen Krebs von den Lungen (KL)-6 measured at 24 weeks in patients with ILD. [#ILDTwitterJC](#)

1



National Jewish Health Medical Educati... @NJHealthMed... · Aug 9

Do you think you will change your practice based on this trial?

[#ILDTwitterJC](#)

Yes 50%

No 50%

2 votes · Final results

1

Accreditation

Final Outcomes Summary: August 2021 – August 2022

National Jewish Health is proud to be accredited with Commendation by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The NJH Office of Professional Education produced and accredited this program and adhered to the updated ACCME guidelines.

Live Webinars

National Jewish Health designates each live activity for a maximum of 0.5 *AMA PRA Category 1 Credit™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Live Twitter Chats

National Jewish Health designates each Other activity (social media discussion) for a maximum of 0.5 *AMA PRA Category 1 Credit™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

