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Lessons from the Care Center Network (CCN) and U.S. Bronchiectasis and NTM Research Registry – A Journey

Beyond Boundaries : Global Perspectives on TB and NTM-PD Management

6th KATRD TB/NTM International Symposium
Korean Academy of Tuberculosis and Respiratory Diseases
Konkuk University Medical Center
Seoul, Republic of Korea
24 October 2026

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Division of
PULMONARY &
CRITICAL CARE MEDICINE

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US Bronchiectasis and NTM Association – BRR/CTN

DISCLOSURE

Director: Bronchiectasis and NTM Association, Education, Awareness and Advocacy
Past-chair: U.S. Bronchiectasis Research Registry
Research clinical study activity (no personal funding or research support):

-All funding directly made to the Mayo Foundation for Medical Research and Education
-U.S. Bronchiectasis Research Registry
-Insmed, inhaled liposomal amikacin, brensocatib
-BI, BI1291583
-Verona, ensifentrine
-Zambon, inhaled colistin
-AztraZeneca, benralizumab
-Armata, AP-PA02 phage
-Spero, SPR720
-Electromed, HillRom, RespiTech

Consultant:

-Boehringer Ingelheim

WORLD BRONCHIECTASIS DAY JULY 1ST

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- United States Bronchiectasis and NTM Research Registry - BRR -Background
- Bronchiectasis and NTM Association
- Care Center Network
  - •Clinical Trials Network
  - •Patient reported PRO - EMPOWER
- Education and Advocacy
  - World Bronchiectasis Day
- Summary

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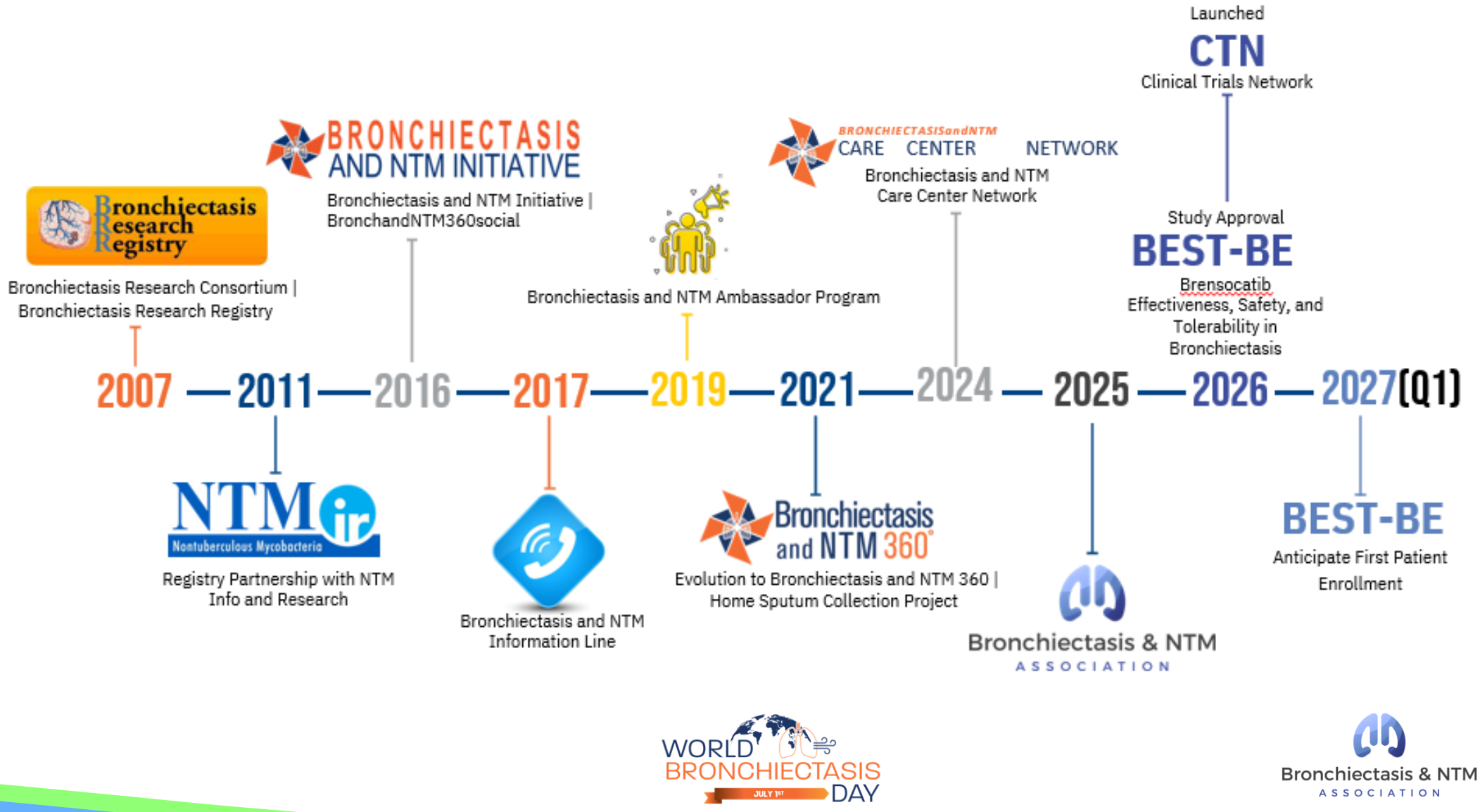
- **United States Bronchiectasis and NTM Research Registry - BRR -Background**
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31

Active Registry Sites



9,354

Participants



28,160

Clinic Visits



17

Years of Data

Female



78%

White



83%

Hispanic



4%

Average Age



66

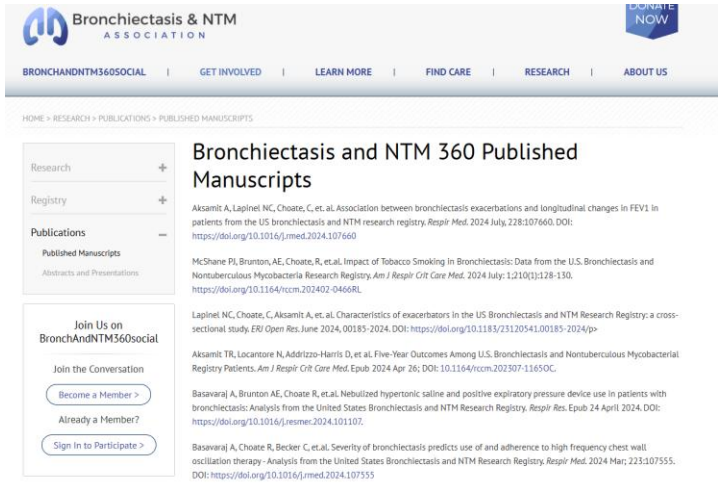
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Bronchiectasis and NTM Research Registry



Combined total of over 75 publications; several in progress

Streamlined patient recruitment into clinical trials and research studies



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Five-Year Outcomes among U.S. Bronchiectasis and NTM Research Registry Patients

Timothy R. Aksamit[1,2], Nicholas Locantore[1], Doreen Addrizzo-Harris[3], Juzar Ali[4], Alan Barker[5], Ashwin Basavaraj[3], Megan Behrman[6], Amanda E. Brunton[1], Sarah Chalmers[2], Radmila Choate[1,7], Nathan C. Dean[8], Angela DiMango[9], David Fraulino[14], Margaret M. Johnson[10], Nicole C. Lapinel[11], Diego J. Maselli[12], Pamela J. McShane[13], Mark L. Metersky[14], Bruce E. Miller[1], Edward T. Naureckas[15], Anne E. O'Donnell[16], Kenneth N. Olivier[17], Elly Pruginowski[15], Marcos I. Restrepo[12], Christopher J. Richards[18], Gloria Rhyne[21], Andreas Schmid[6]

Exacerbations, hospitalizations, lung function, and mortality across 5 years in patients with bronchiectasis with or without NTM at baseline.

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1. Baseline demographic and clinical characteristics of patients with bronchiectasis, stratified by NTM status

Characteristic	Total (N=2,634)	Bronchiectasis without NTM at baseline (N=1,085)	Bronchiectasis with NTM at baseline (N=1,549)	P-value*
Age, median [IQR], years	67 [58–74]	65 [54–73]	68 [60–75]	<0.0001
Female, n (%)	2,066 (79)	831 (77)	1,235 (80)	0.0499
Race, n (%)				
White	2,371 (91)	969 (90)	1,402 (91)	0.1246
Hispanic or Latino	113 (5)	50 (5)	63 (5)	0.7065
P. aeruginosa positive, n (%)	531 (20)	303 (28)	228 (15)	<0.0001
BMI, median [IQR], kg/m²	22 [20–25]	23 [20–26]	22 [20–25]	<0.0001
FEV_1, median [IQR], L†	1.80 [1.34–2.29]	1.79 [1.31–2.36]	1.80 [1.37–2.26]	0.9091
FEV_1 % predicted, median [IQR] †	73 [57–88]	71 [54–86]	75 [59–89]	0.0005
mBSI‡				
n	1,647	749	898	0.4451
Median [IQR]	6 [4–9]	6 [4–9]	6 [4–8]	
FACED				
n	2,061	858	1,203	0.4392
Median [IQR]	2 [1–3]	2 [1–3]	2 [1–3]	
Imaging, 3 or more lobes involved, n (%)	1,432 (61)	599 (63)	833 (59)	0.1447
Smoking status, n (%)				

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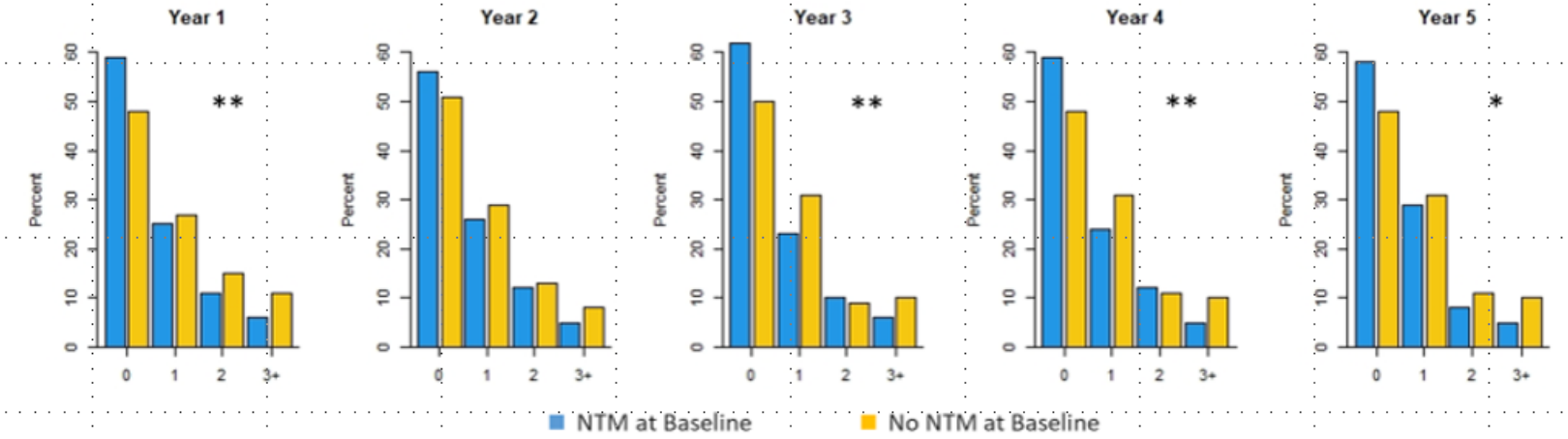
Current	48 (2)	16 (1)	32 (2)	
Former	1,030 (40)	383 (36)	647 (42)	0.0013
Never	1,527 (59)	673 (63)	854 (56)	
No. exacerbations during the 2 years prior to baseline, n (%)				
N	2,504	1,039	1,465	
0	858 (34)	266 (26)	592 (40)	
1	795 (32)	341 (33)	454 (31)	
2	354 (14)	176 (17)	178 (12)	<0.0001
3	159 (6)	74 (7)	85 (6)	
4	140 (6)	65 (6)	75 (5)	
5 or more	198 (8)	117 (11)	81 (6)	
Exacerbation rate, PPPY	0.80	1.00	0.67	<0.0001
No. hospitalizations§ during the 2 years prior to baseline, n (%)				
n	2,509	1,041	1,468	
0	1,988 (79)	781 (75)	1,207 (82)	
1	340 (14)	154 (15)	186 (13)	<0.0001
2	114 (5)	65 (6)	49 (3)	
3	32 (1)	18 (2)	14 (<1)	
4 or more	35 (1)	23 (2)	12 (<1)	
Hospitalization rate, PPPY	0.16	0.21	0.13	<0.0001
Mycobacterial culture findings, n (%)[]				
n (with culture data)	N/A	752	1,515	
MAC positive	N/A	0	946 (62)	N/A**

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Figure E2. Frequency distribution of annual number of exacerbations for patients with bronchiectasis, stratified by NTM status



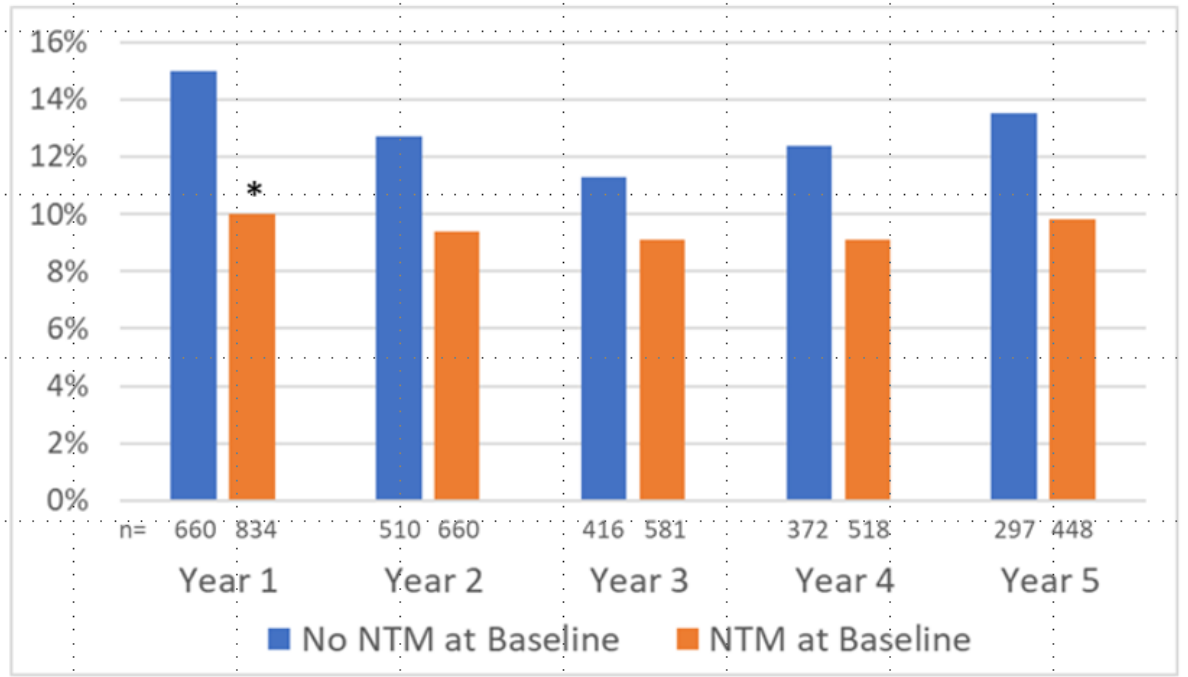
*p<0.05; **p<0.001 comparing patients with NTM at baseline versus those without NTM at baseline.

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Figure E3. Frequency distribution of percentage of patients with bronchiectasis who were hospitalized, stratified by NTM status



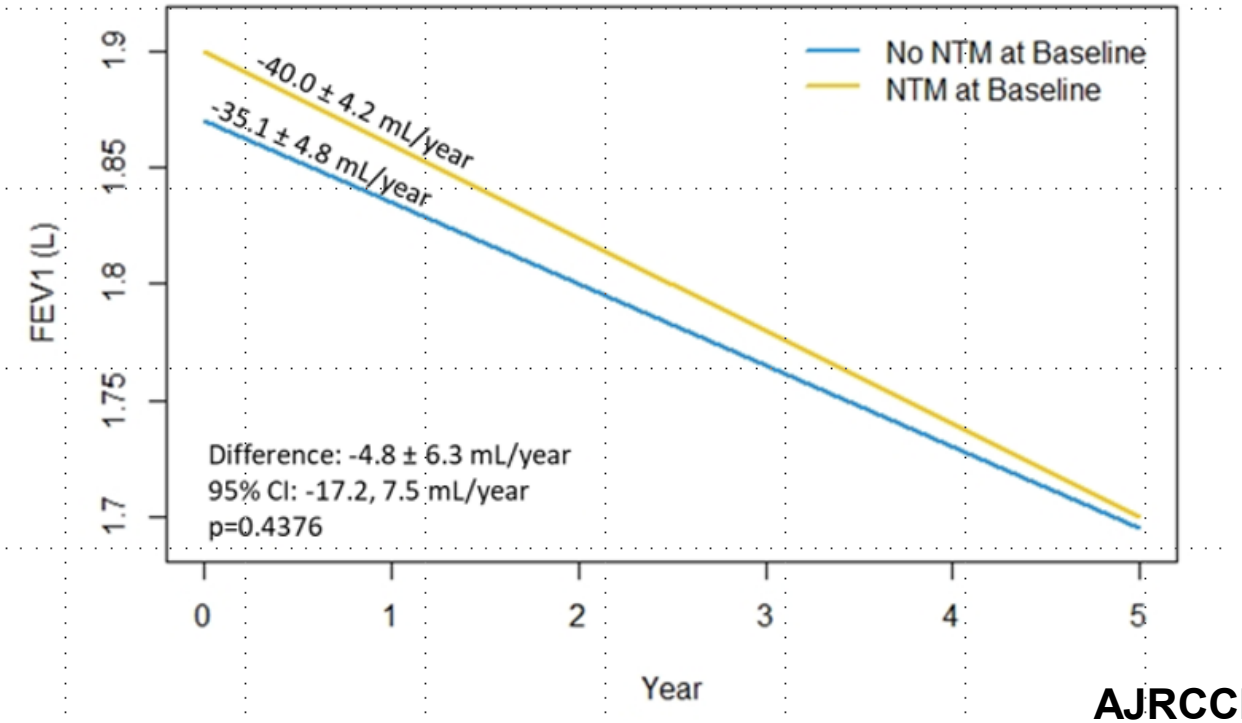
*p<0.01 for Year 1; all other years, no significant difference comparing patients with NTM at baseline versus those without NTM at baseline.

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Figure 3. Rate of decline in FEV_1 over 5 years in patients with bronchiectasis, stratified by NTM status

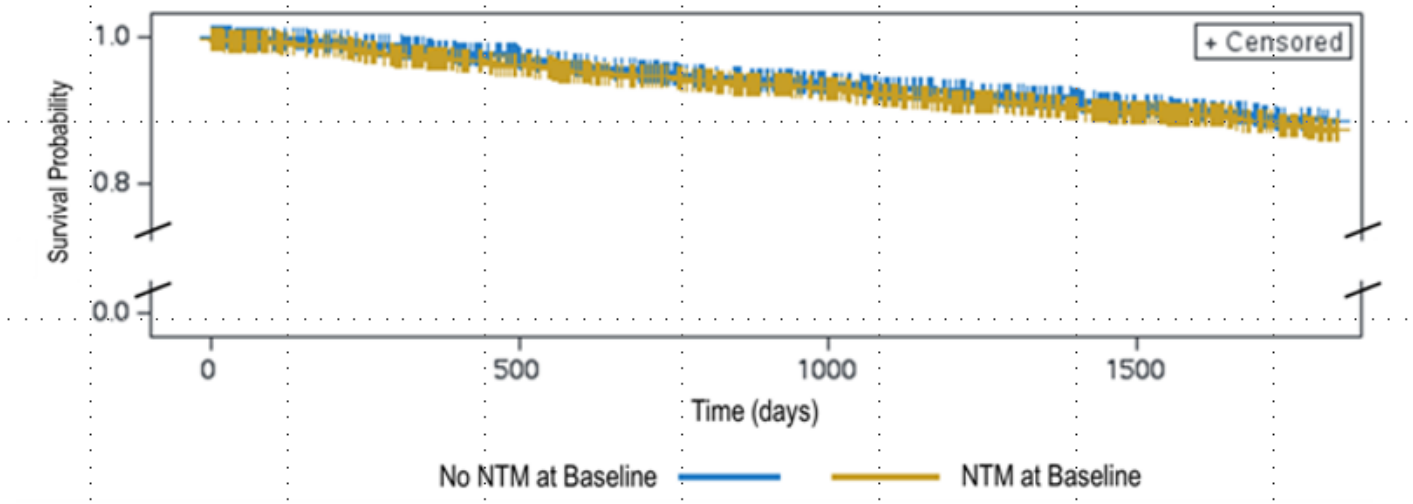


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Figure 2. Kaplan-Meier curve of survival over 5 years in patients with bronchiectasis, stratified by NTM status



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Table 2. Five-year mortality in patients with bronchiectasis, stratified by NTM status

	Total (N=2,634)	Bronchiectasis without NTM at baseline (N=1,085)	Bronchiectasis with NTM at baseline (N=1,549)
Vital status up to Year 5 (Day 1,825), n (%)			
Alive*	1,523 (58)	624 (58)	899 (58)
Lost to follow-up	910 (35)	382 (35)	528 (35)
Died	201 (8)	79 (7)	122 (8)
Days observed, median	1,316	1,401	1,247
Probability of death in 5 years, % (95% CI)	12.1 (10.5, 13.7)	11.5 (9.0, 13.9)	12.6 (10.5, 14.8)

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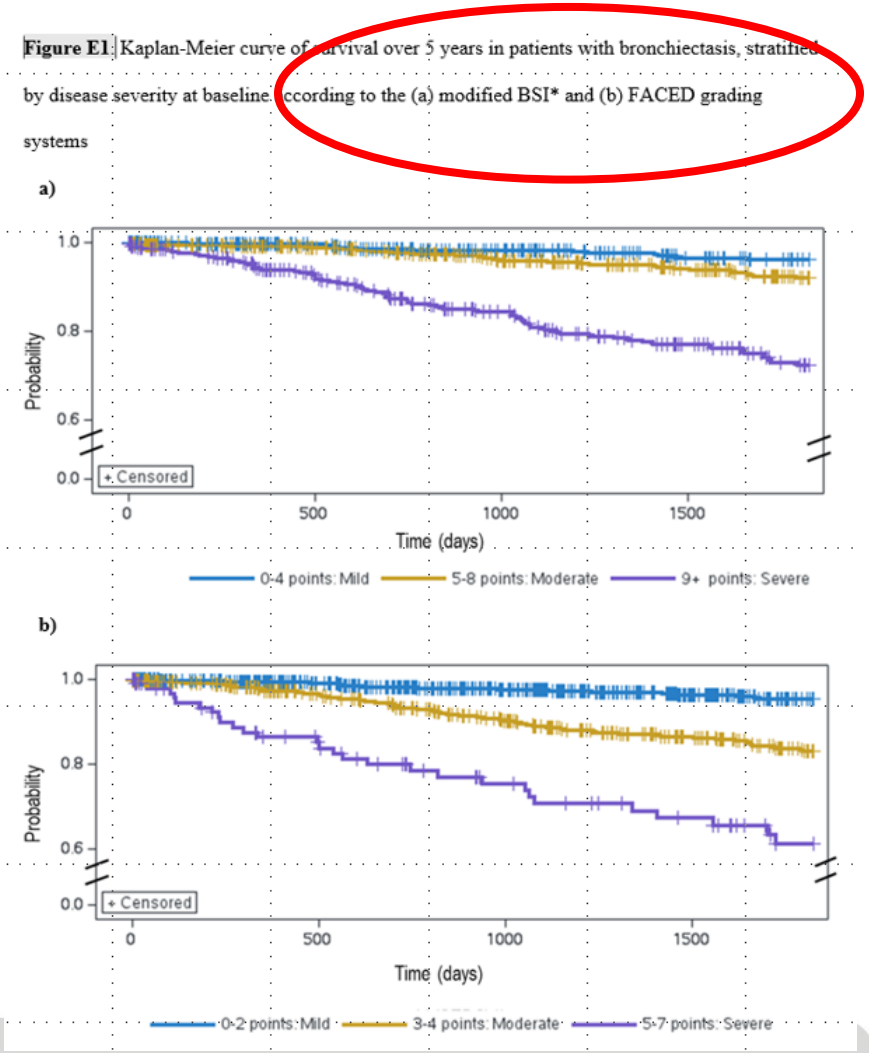
Table 4. Cox regression of 5-year mortality in patients with bronchiectasis based on baseline variable selection using LASSO method

Baseline characteristic	Hazard ratio (95% CI)	P-value
Age‡ (per year)	1.07 (1.05, 1.08)	<0.001
FEV_1 % predicted† (<50% vs. ≥50%)	2.98 (2.14, 4.15)	<0.001
Sex (male vs. female)	2.07 (1.52, 2.80)	<0.001
Hospitalization in prior 2 years (yes vs. no)	1.86 (1.38, 2.52)	<0.001
BMI (<18.5 vs. ≥18.5)	2.07 (1.42, 3.01)	<0.001
Oral steroid use (yes vs. no)	1.83 (1.30, 2.57)	<0.001
GERD medication use (yes vs. no)	1.63 (1.22, 2.18)	<0.001
Any antibiotic use (yes vs. no)	1.64 (1.24, 2.18)	<0.001
MRC dyspnea score§ (4 or 5 vs. 1–3)	1.43 (1.02, 2.00)	0.04
COPD diagnosis (yes vs. no)	1.22 (0.90, 1.67)	0.20

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Clinical outcomes including exacerbations, hospitalizations, and rate of FEV1 decline remained remarkably stable across 5 years of follow-up in a large cohort of BE patients in the U.S., irrespective of having NTM at baseline. All-cause mortality was lower than seen in other studies and did not vary based on the presence of NTM.

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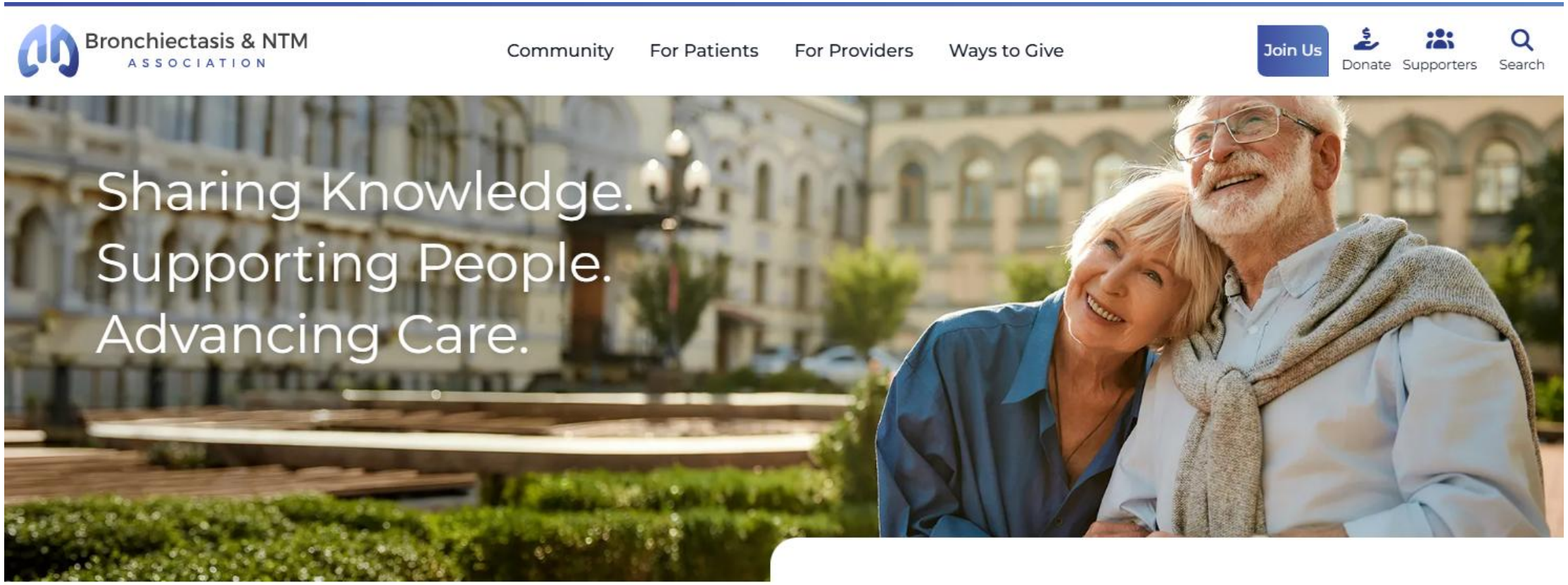
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Community

Connect with a supportive community that understands your journey with bronchiectasis and NTM lung disease. Share experiences, learn from others, and build meaningful connections with people who truly relate. Access resources, events, and insights designed to keep you informed, empowered, and engaged every step of the way.



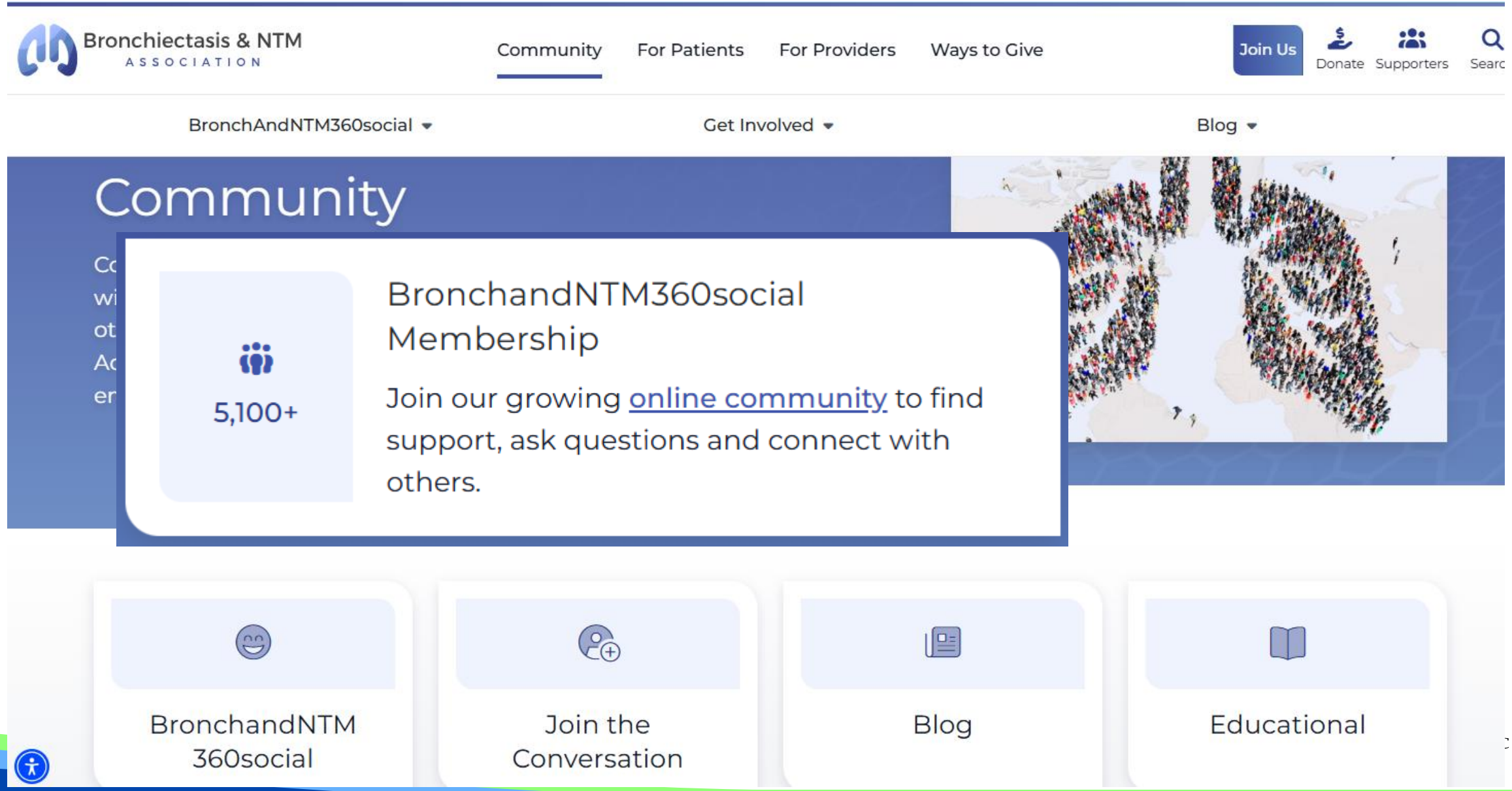
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Join the Conversation

Blog

Educational

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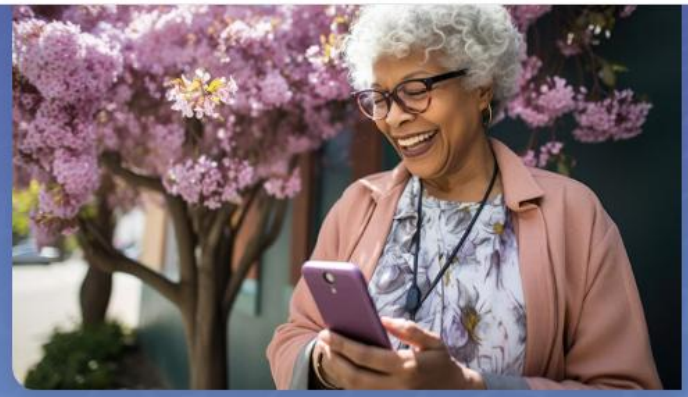
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Learn More | Find Care and Support | Participate in Research

For Patients

Find bronchiectasis and NTM lung disease information, support, and events all in one place. Explore expert educational resources, find care and community, get involved in research, and discover events designed to keep you informed and engaged. Whatever your journey looks like, we're here to support you every step of the way.



Educational Resources

Find Care

Research Opportunities

Check Calendar

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Clinical Care | Research | Educational Resources | Conferences

For Providers

Access the tools, resources, and connections you need to deliver high-quality care for patients with bronchiectasis and NTM lung disease. Explore opportunities to advance specialized care, participate in research, utilize practical educational materials, and stay current through conferences and events—all designed to support your work in the clinic and beyond.



Specialized Care

Participate in Research

Access Resources

Upcoming Events

Bronchiectasis Consensus Statement Update
Bronchiectasis Pathway Card

mMRC Breathlessness Scale

Grade	Description of Breathlessness
0	I only get breathless with strenuous exercise
1	I get short of breath when hurrying on level ground or walking up a slight hill
2	On level ground, I walk slower than people of the same age because of breathlessness, or have to stop for breath when walking at my own pace
3	I stop for breath after walking about 100 yards or after a few minutes on level ground
4	I am too breathless to leave the house or I am breathless when dressing

A mMRC score of 2 or more suggests significant symptoms.

Chris Stenton. The mMRC breathlessness scale. Occup Med (Lond) (2008)58(3): 226-227. DOI:10.1093/occmed/kqm162, Table 1. By permission of Oxford University Press on behalf of the Society of Occupational Medicine.

Bronchiectasis Severity Index BSI

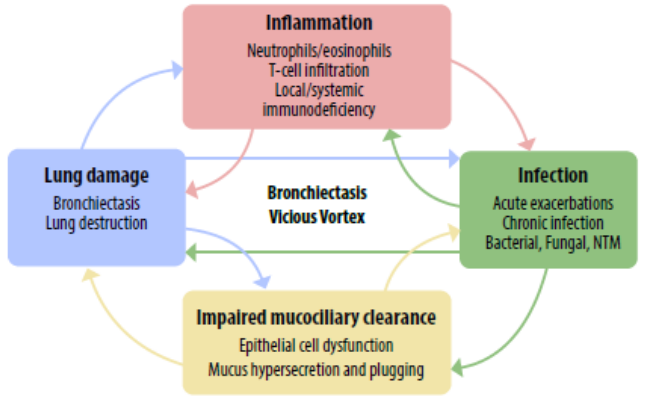
					SCORE
1	Age	☐ <50 (+0 pts)	☐ 50-69 (+2 pts)	☐ 70-79 (+4 pts)	☐ >80 (+6 pts)	
2	BMI	☐ <18.5 (+2 pts)	☐ 18.5-25 (+0 pts)	☐ 26-29 (+0pts)	☐ ≥30 (+0 pts)	
3	FEV_1 % Predicted	☐ >80 (+0 pts)	☐ 50-80 (+1 pts)	☐ 30-49 (+2pts)	☐ <30 (+3 pts)	
4	Bronchiectasis hospitalizations over last two years		☐ No (+0pts)	☐ Yes (+5 pts)	
5	Number of exacerbations in previous year		☐ 0 (+0 pts)	☐ 1-2 (+0pts)	☐ ≥3 (+2 pts)	
6	mMRC Breathlessness Score		☐ 0-2 (+0 pts)	☐ 3 (+2pts)	☐ 4 (+3 pts)	
7	Pseudomonas Colonization		☐ No (+0pts)	☐ Yes (+3 pts)	
8	Colonization with other organisms		☐ No (+0pts)	☐ Yes (+1 pts)	
9	Radiological Severity	☐ <3 lobes involved (+0 pts)	☐ ≥3 lobes involved or cystic bronchiectasis (+1 pts)		
				TOTAL SCORE	

Score-4-year risk of:		Mortality	Hospitalization
Mild	0-4	0-5.3%	0-9.2%
Moderate	5-8	4-11.3%	9.9-19.4%
Severe	≥9	9.9-29.2%	41.2-80.4%

Chalmers JD, Goeminne P, Aliberti S, McDonnell MJ, Lonni S, Davidson J, Poppelwell L, Salih W, Pesci A, Dupont LJ, Fardon TC, De Soyza A, Hill AT. The bronchiectasis severity index. An international derivation and validation study. *Am J Respir Crit Care Med*. 2014 Mar 1;189(5):576-85. DOI: 10.1164/rccm.201309-1575OC. PMID: 24328736; PMCID: PMC3977711.

Bronchiectasis

Bronchiectasis is a condition defined radiologically by abnormal dilatation and thickening of bronchial airways AND clinically by some combination of cough, sputum, exacerbations, dyspnea. Its course is often characterized by ongoing inflammation, infection, impaired mucociliary clearance and structural lung damage.



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Cite this article as: Chalmers JD, Haworth CS, Flume P, et al. European Respiratory Society clinical practice guideline for the management of adult bronchiectasis. *Eur Respir J*. 2025; 66: 2501126. DOI: 10.1183/13993003.01126-2025.

Activity – Severity Relationship

Sputum purulence Severity of daily symptoms (mMRC, CAAT scores) Frequency of exacerbations	Disease Activity	Control of disease best addressed by recognition of activity as well as severity Earlier identification of disease may provide opportunity to address activity and slow progression of disease	Disease Severity	Extent of bronchial dilatation and/or cystic bronchiectasis FEV_1 % predicted Pseudomonas

For more educational support, connection, and resources, please contact us at:
www.BronchandNTM.org, 833-411-LUNG (5864), or contactus@bronchandntm.org.

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Date of Publication: May 2026
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Bronchiectasis Pathway

STEP 1: Diagnostic Evaluation

Imaging: HRCT | Symptoms: mMRC, CAAT, Exacerbations

STEP 2: Data Collection

PFTs	Lab tests: CBC with diff, Immunoglobulins, CRP, A1AT, ABPA	Microbiology: Sputum cultures (bacterial, fungal, mycobacterial)	Assess comorbidities and etiologies including CF variants and PCD

STEP 3: Determine Disease Severity, Disease Activity

High Disease Severity:	High Disease Activity:	Determine infection status:
• HRCT ≥3 lobes and/or cystic bronchiectasis • FEV_1 <50% predicted	• ≥2 exacerbations/year or • Bronchiectasis hospitalization or • Symptoms: mMRC ≥4, CAAT ≥10	• Pseudomonas • NTM • Aspergillus

STEP 4: Establish Core Treatment Program

Airway Clearance:	Treat Comorbidities:	Supportive Care:
• Bronchodilator if indicated • Oscillatory PEP • Hypertonic saline, ACB/AD • Exercise/ Pulmonary Rehab • HFCWO	• COPD/Asthma • Chronic rhinosinusitis • GERD / aspiration • Autoimmune / rheumatologic • Immunodeficiency	• Nutrition • Psychosocial support • Supplemental oxygen if needed • Vaccination • Smoking cessation

Infection Management:	Consider Anti-inflammatory/immunomodulatory therapy:
• Treat symptomatic infections • Pseudomonas, other bacterial/ fungal pathogens • NTM	• Macrolide (if no NTM and no prolongation of QTc) or DPP1 inhibitor If problem tolerating a drug consider switching to other agent. If tolerating but limited response consider adding other agent. • Inhaled corticosteroids only in selected patients

STEP 5: Follow-up and Monitoring

Frequency of visits:	Assess:	Adjust therapy based on response, tolerance, new symptoms, or exacerbations
• Unstable: every 3–6 months • Stable: every 6–12 months • or as clinically indicated	• Symptoms • Exacerbations • Adherence to airway clearance • Sputum cultures/ PFTs • Followup imaging	

Suggested Considerations:
- Referral to clinical trials/ registries
- Surgical intervention for localized disease or hemoptysis
- Lung transplant evaluation
- Palliative care

HRCT=high resolution chest CT scan; A1AT=alpha-1 antitrypsin; ABPA=allergic bronchopulmonary aspergillosis; NTM=nontuberculous mycobacteria; CF=cystic fibrosis; PCD=primary ciliary dyskinesia; PEP=positive expiratory pressure; HFCWO=hi frequency chest wall oscillation; CAAT=Chronic Airway Assessment Test; ACB=Active Cycle of Breathing; AD=Autogenic Drainage; DPP1=Dipeptidyl Peptidase 1 Inhibitor

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Bronchiectasis Consensus Statement Update
Bronchiectasis Pathway Card

Airway Clearance

A typical airway clearance routine may use one or more of the following:

Medications for Airway Clearance	Devices for Airway Clearance	Manual Techniques	Other Therapy
• Bronchodilators • Hypertonic Saline (3% or 7%) • Guaifenesin* • Osmotics*	• Oscillatory Positive Expiratory Pressure (PEP) • High Frequency Chest Wall Oscillation • Cough Assisting Device	• Deep Cough • Huff Cough • Active Cycle of Breathing • Autogenic drainage • Chest Physical Therapy	• Hydration • Exercise • Pulmonary rehab • Postural Drainage

*There is limited data for the role of these medicines in airway clearance. Osmotics include mannitol and N-acetylcysteine (NAC).

Exacerbation

Diagnosis

Worsening symptoms that exceeds day-to-day variability and requiring a change in management. Symptoms include cough, sputum volume and/or consistency, sputum purulence, dyspnea and/or exercise tolerance, fatigue and/or malaise, hemoptysis.

Evaluation

Sputum for microbiology at onset of exacerbation before antibiotics started if possible.

Treatment

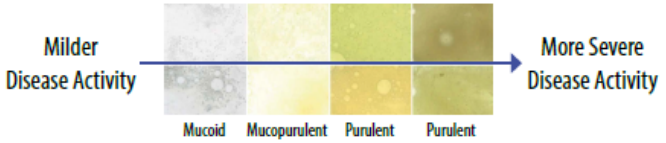
Antibiotics guided by previous microbiology results, generally 14-day course with shorter course for mild bronchiectasis, rapid clinical response, or pathogens more sensitive to antibiotics.

Airway clearance may need to be adjusted in frequency, intensity, and technique.

Frequent exacerbating or refractory patient

Comprehensive reassessment: microbiology including for bacteria, NTM, and fungal; imaging (e.g. CT scan); and review of potential "treatable traits" including comorbidities; airway clearance; mucoactive treatments; long-term (inhaled) antibiotics; anti-inflammatory options; long-term oxygen; pulmonary rehabilitation; and referral to specialty center if not already done.

Sputum Color Chart



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Cite this article as: Murray MP, Pentland JL, Turnbull K, et al. Sputum colour: a useful clinical tool in non-cystic fibrosis bronchiectasis. *Eur Respir J.* 2009; 34: 361-364. DOI: 10.1183/09031936.00163208

Chronic Airways Assessment Test (CAAT)

I never cough	0 1 2 3 4 5	I cough all the time
I have no phlegm (mucus) in my chest	0 1 2 3 4 5	My chest is completely full of phlegm (mucus)
My chest does not feel tight at all	0 1 2 3 4 5	My chest feels very tight
When I walk up a hill or one flight of stairs I am not breathless	0 1 2 3 4 5	When I walk up a hill or one flight of stairs I am very breathless
I am not limited doing any activities at home	0 1 2 3 4 5	I am very limited doing any activities at home
I am confident leaving my home despite my condition	0 1 2 3 4 5	I am not at all confident leaving my home because of my lung condition
I sleep soundly	0 1 2 3 4 5	I don't sleep soundly because of my lung condition
I have lots of energy	0 1 2 3 4 5	I have no energy at all
		TOTAL SCORE

CAAT
Chronic Airways Assessment Test

- A CAAT score of 10 or more suggests significant symptoms.
- A change in CAAT score of at least 3-4 suggests a possible change in health status.
- A worsening CAAT score could be explained by an exacerbation, poor medication adherence, poor airway clearance techniques, or progression of bronchiectasis, COPD or other comorbid conditions.
- Download the form at https://gaapp.org/caat-cat

The COPD assessment test (CAT) and the Chronic Airways Test (CAAT) were developed by an interdisciplinary group of international experts with support from GSK. CAT and CAAT activities are monitored by a supervisory council that includes independent experts, one of which is chair of the council. CAT, COPD Assessment Test, CAAT, Chronic Airways Assessment Test and the CAT logo are trademarks of the GSK group of companies. ©2009-2024 GSK 'Group of Companies' or its licensor. All rights reserved.

Nontuberculous Mycobacteria (NTM)

Diagnosis

- Most patients with NTM pulmonary disease (NTMPD) have bronchiectasis and should also be subject to the components of the bronchiectasis pathway

(Specific to NTM PD: Diagnosis is based on all 3 criteria)
Clinical: compatible symptoms and exclusion of other diagnoses
Microbiologic: At least 2 positive sputum cultures with the same species/subspecies
Radiologic: compatible radiologic abnormalities

Microbiology

- Culture with solid and liquid media recommended
- Species identification with molecular identification preferred

MAC and *M. abscessus* most common
***M avium* complex (MAC)**—10 species, most common are *M avium* and *M intracellulare*
M abscessus—3 subspecies: *M abscessus, M bolletii, M massiliense*

Drug susceptibility testing

MAC–test for macrolide and amikacin susceptibility

M abscessus–test for CLSI recommended antibiotics and inducible macrolide resistance

Treatment

- Initiation of treatment or "watchful waiting" dependent on benefit-risk assessment
- Goals of care: Culture conversion versus improving symptoms versus slowing progression
- Shared decision making is essential: acceptance, burden of treatment, goals of care
- Early treatment may favor less intense medications and better tolerance
- Risk factors for progression: fibrocavitary (**FC**) versu nodular bronchiectatic (**NB**), age, low BMI(<18.5), increased inflammatory markers (**CRP, ESR**), low albumin, male sex
- Severity factors: FC versus NB disease, multi-lobar, AFB smear positivity, presence of co-morbidities

Treatment of MAC (dosing available on app)

- Azithromycin, ethambutol, rifampin • Nodular bronchiectatic: T.I.W. dosing versus fibrocavitary: Q.D. dosing plus T.I.W. IV amikacin

Refractory or Recurrent MAC NTMPD

- Refractory defined as remaining sputum culture positive after at least 6 months of guideline-based therapy
- Treatment: Assess adherence to the treatment regimen, obtain repeat drug susceptibility test results, consider determination of serum drug concentrations, add amikacin liposome inhalation (ALIS) suspension to regimen, consider addition of another drug, and consider surgical resection
- Referral: Consider referral to specialized center of NTMPD care

Macrolide Resistant MAC NTMPD

Referral to a specialed center of NTMPD care

Treatment of *M abscessus* (dosing available on app)

IV medications: amikacin, imipenem or cefoxitin, tigecycline
Oral: azithromycin, bedaquiline, clofazimine, linezolid or tedizolid, omadacycline

Macrolide resistant: Initial Phase: 2–3 IV drugs, 2–3 oral drugs
Continuation Phase: 2–3 oral drugs
Macrolide susceptible: Initial Phase: 1–2 IV drugs, 2 oral drugs
Continuation Phase: 2–3 oral drugs

Monitoring on Treatment

- Treatment response: Sputum cultures every 1-2 months, low dose chest CT or other imaging at 3 - 6 months and then every 6–12 months and end of treatment , CRP/ESR if elevated at baseline
- Adverse drug reactions: CBC, CMP at baseline and every 1-3 months, visual acuity and red/green color discrimination at baseline and every 2-3 months, audiogram at baseline and every 2-3 months in people receiving an aminoglycoside, EKG at baseline and every 3-6 months in people receiving a macrolide, clofazimine, or bedaquiline
- Monitoring to be done sooner in event of new symptoms or concerns

Duration of Treatment

Dependent on goals of care, generally 12 months after sputum culture conversion

Referral

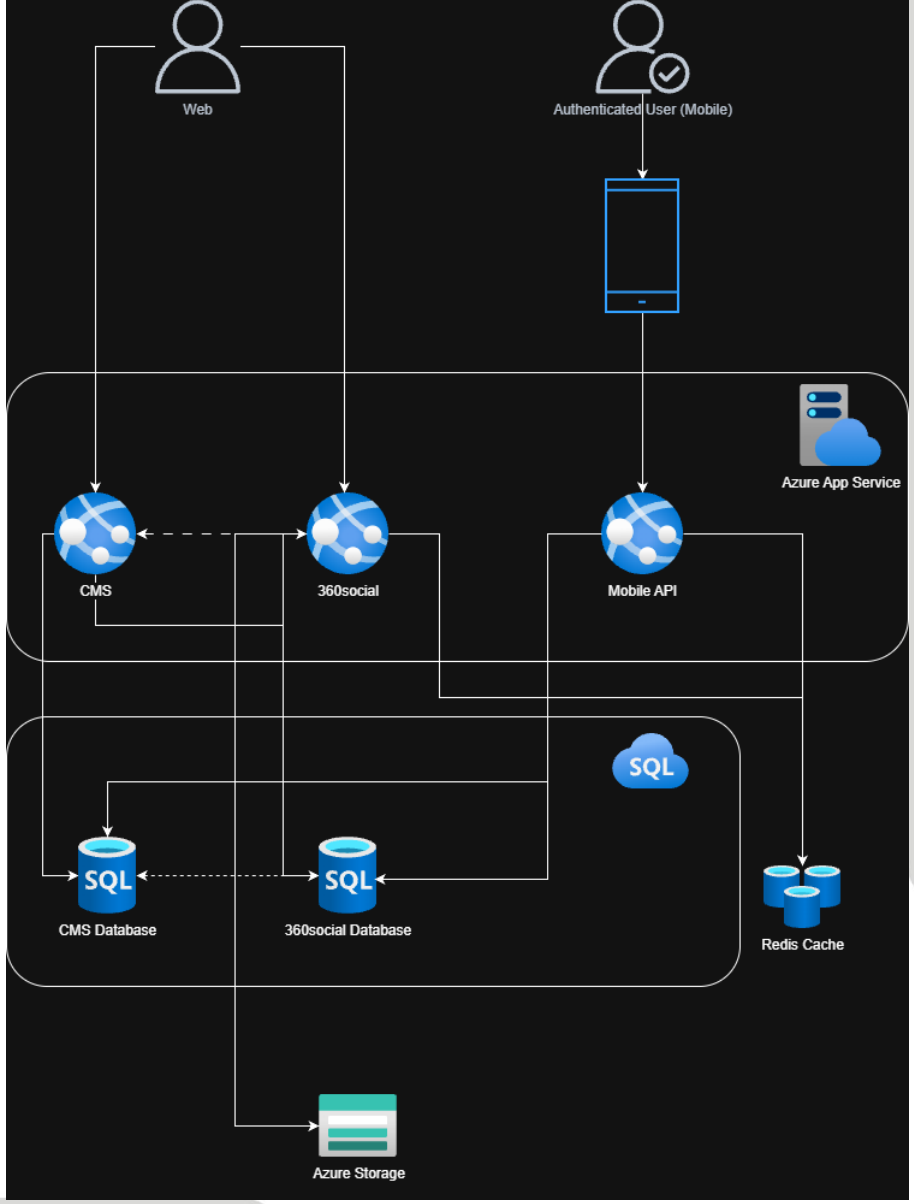
Consider referral to a specialized center for: refractory MAC, recurrent MAC, macrolide resistant MAC, M abscessus (especially if macrolide resistant), consideration of surgical intervention, development of medication intolerance, uncertain goals of care, refractory co-morbidities.

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Digital Engagement Platform

Version 1 launched in May 2026 with ongoing point and minor releases, and several major releases planned over the next 3 years.

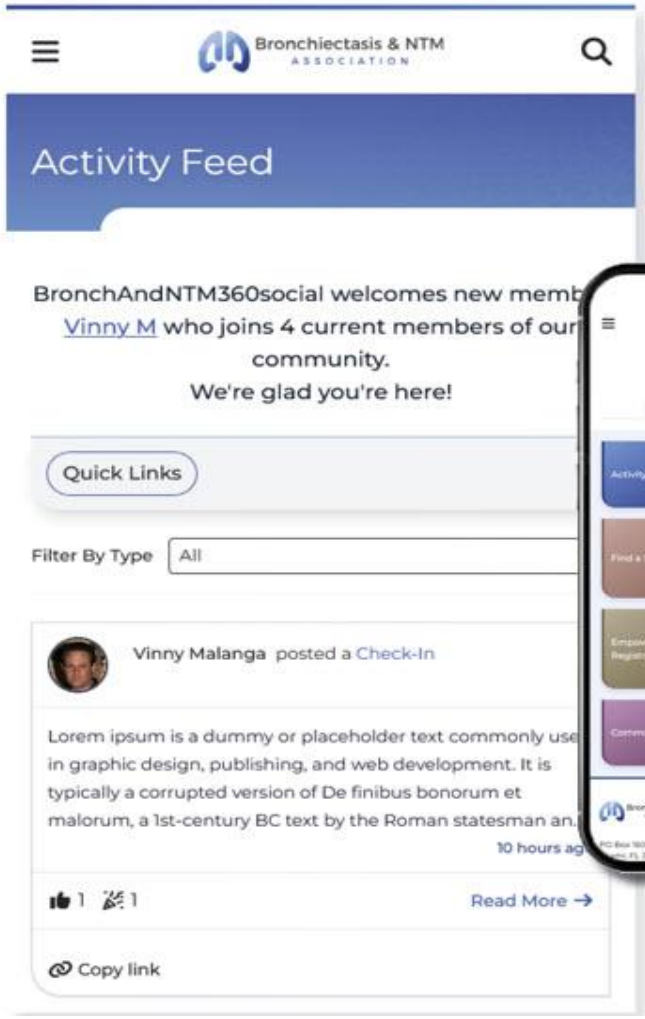
- Enterprise digital platform
- Four fully integrated core components
- Supports our websites, 360social online communities, mobile apps, and administrative platform management and reporting
- Cloud-based and AI-enabled
- Designed for scalability, flexibility, and seamless integration with internal and external digital systems and data sources



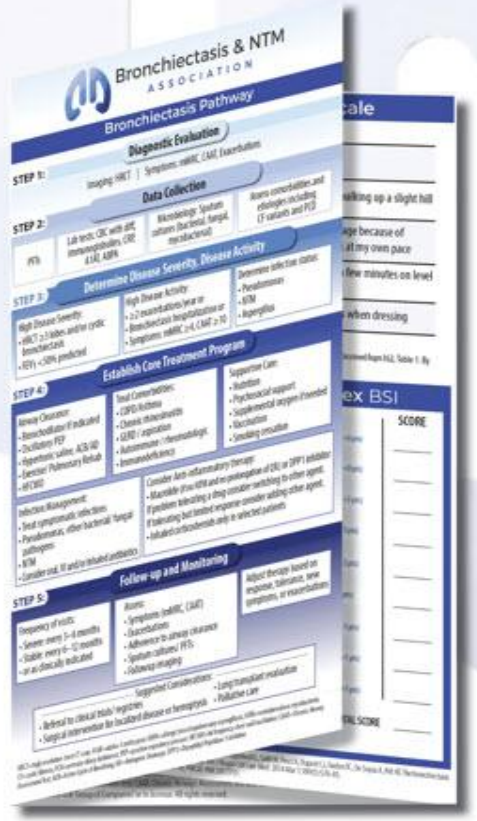
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Engagement Platform Digital Assets









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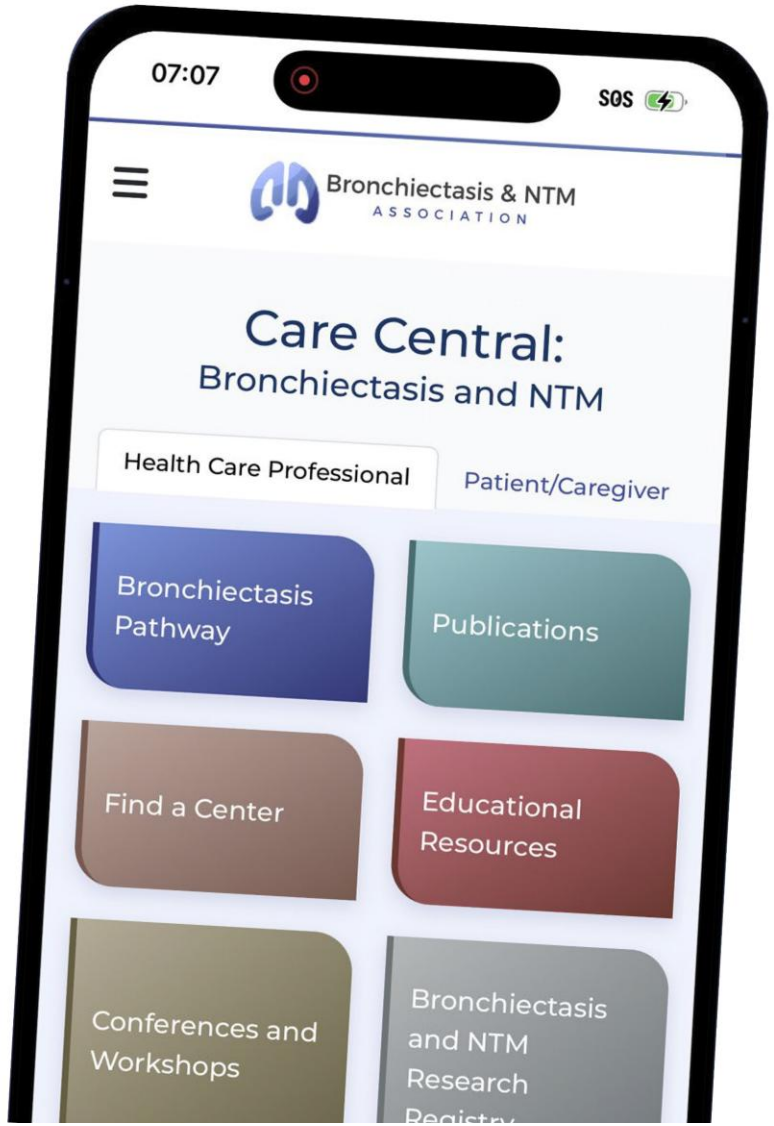
Mobile Application

- Patient and Provider views
- Therapy Flow Chart
- Content Shared from Website
- Education Materials
- Patient Assistance Programs
- BronchAndNTM360social
- Video Library
- Additional Resources

Download on the App Store

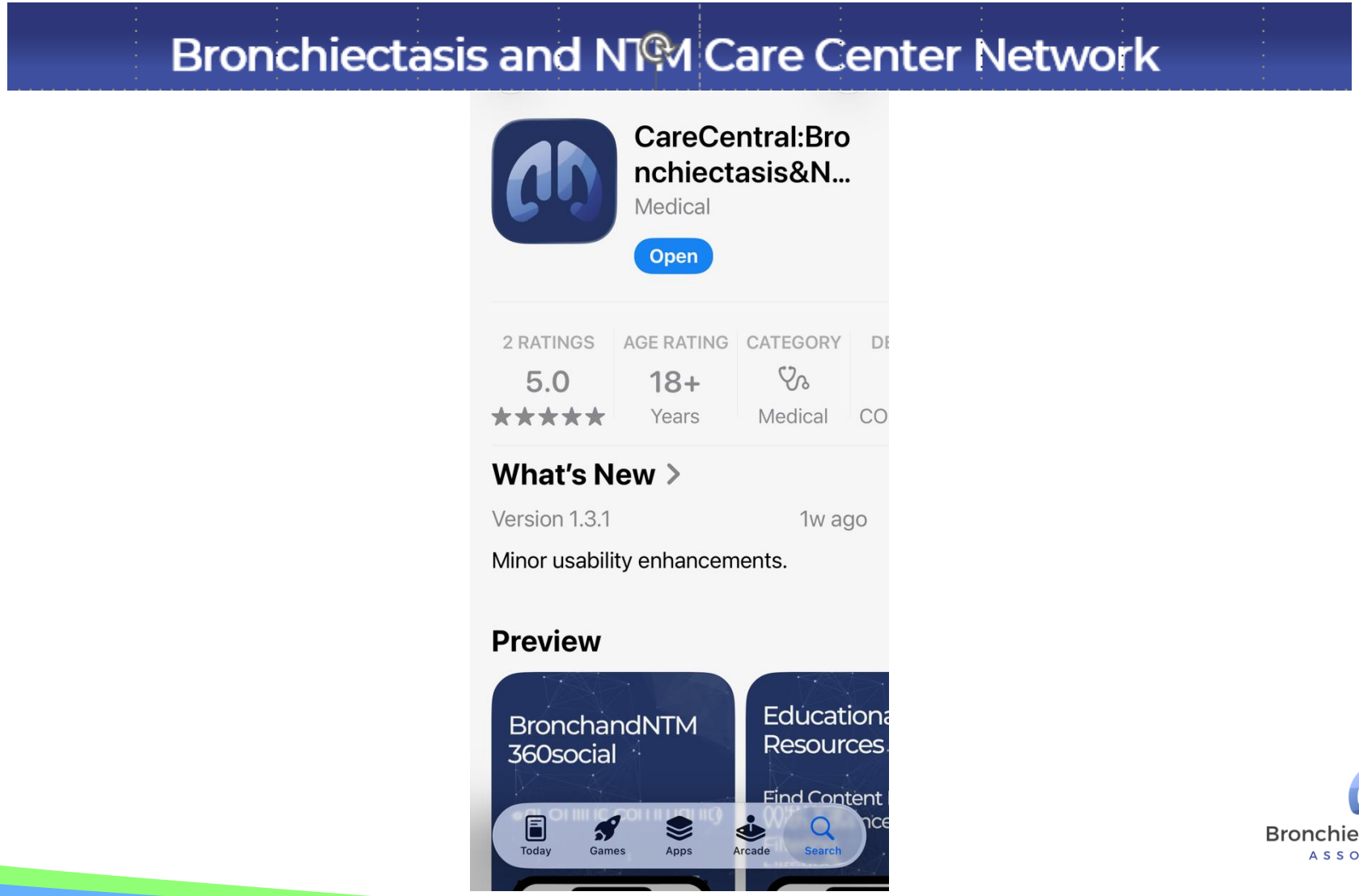
GET IT ON Google Play

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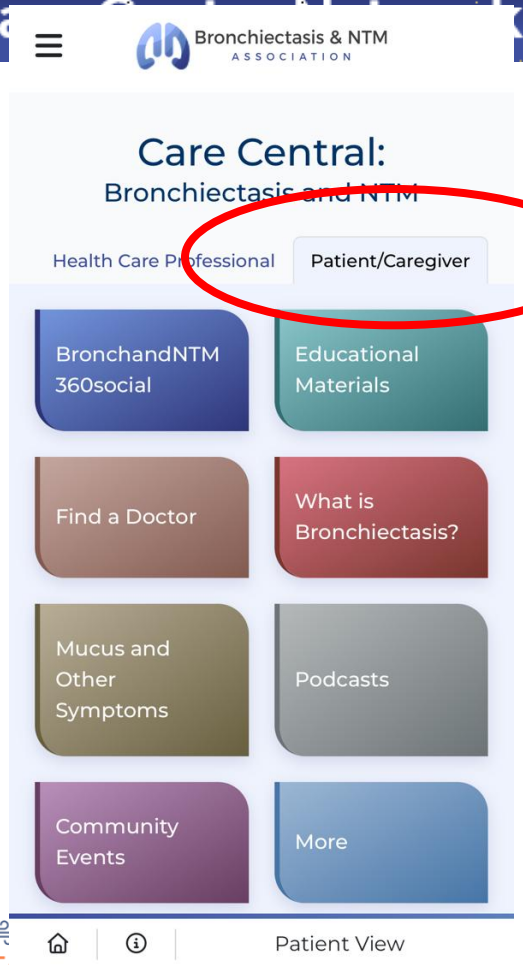
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AI-Enabled Search: Website and Mobile App (Q3 2026)

360social Menu ☰

Search

Search

AI Summary

This should not be considered medical advice and any content posted should not be used for medical advice, diagnosis or treatment. We make every effort to support our Please consult a physician before making changes to your own Bronchiectasis and NTM management plan.

Mucus buildup is common in bronchiectasis and NTM lung disease, and it can be hard to clear from the lungs. airway clearance routine to help loosen and remove mucus and reduce the risk of infection.

Ways to help clear mucus include:

- coughing exercises

Filter

- [ ] All
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- [ ] Website
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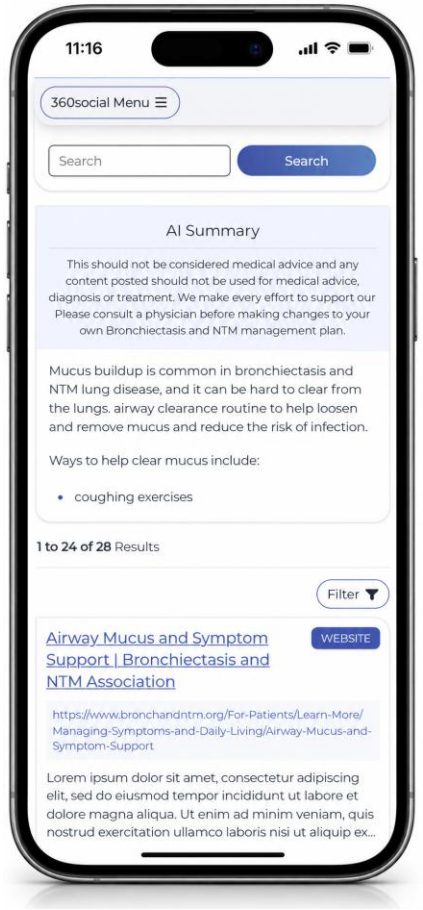
1 to 24 of 28 Results

Airway Mucus and Symptom Support | Bronchiectasis and NTM Association WEBSITE

https://www.bronchandntm.org/For-Patients/Learn-More/Managing-Symptoms-and-Daily-Living/Airway-Mucus-and-Symptom-Support

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Airway Mucus and Symptom Support | Bronchiectasis and NTM Association WEBSITE



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US Bronchiectasis and NTM Association – BRR/CTN

- United States Bronchiectasis and NTM Research Registry - BRR -Background
- Bronchiectasis and NTM Association
- Care Center Network
  - •Clinical Trials Network
  - •Patient reported PRO - EMPOWER
- Education and Advocacy
  - World Bronchiectasis Day
- Summary

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Bronchiectasis and NTM Care Center Network



The Bronchiectasis and NTM Care Center Network mission is to **establish a network of centers across the country, with the goal of reducing the time to diagnosis and supporting high-quality bronchiectasis and nontuberculous mycobacterial (NTM) lung disease care.**



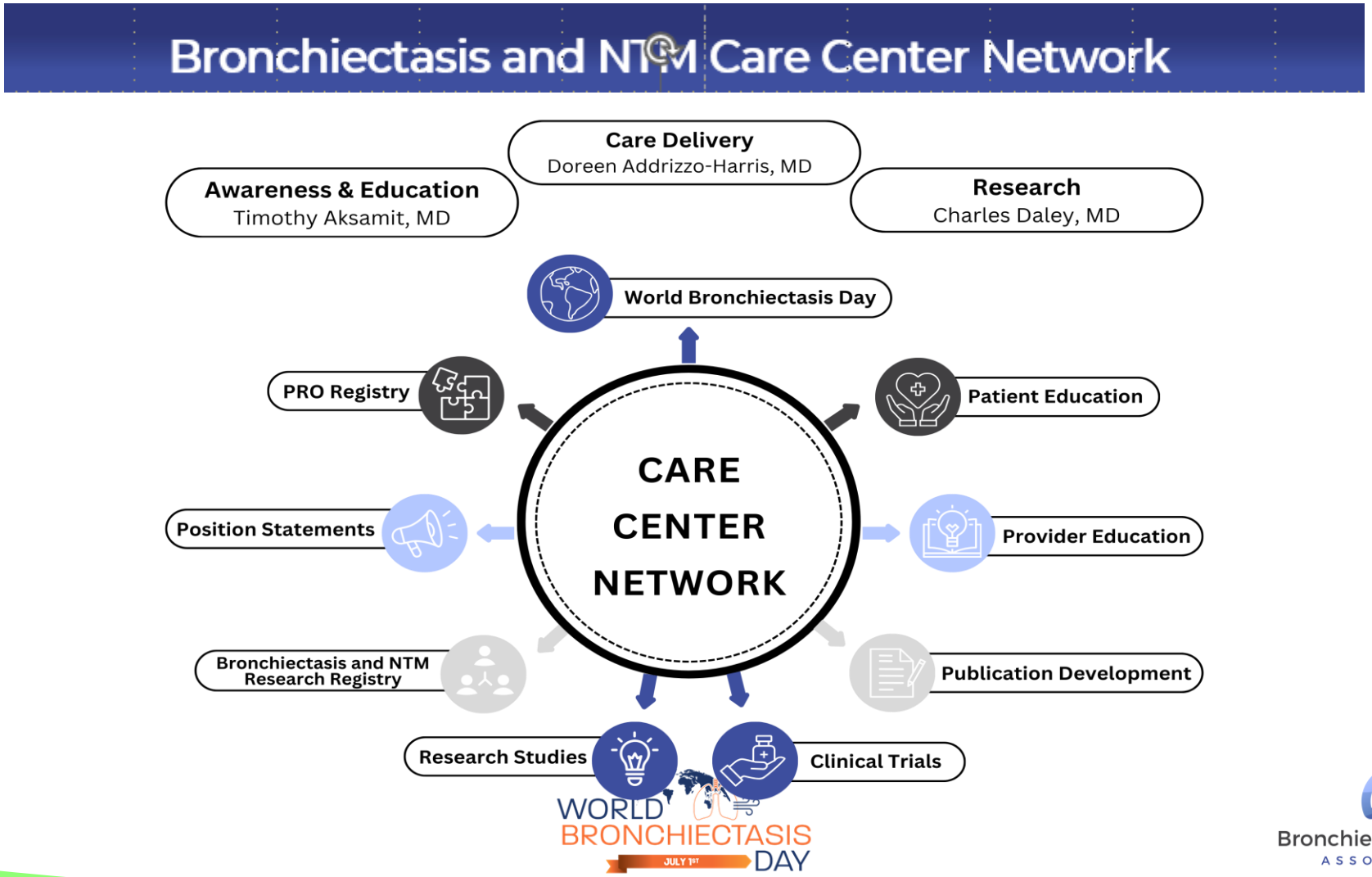
The Vision of the Bronchiectasis and NTM Care Center Network is that **every patient receives a prompt, accurate diagnosis; the highest quality, patient-centered care; and the resources, education and support necessary to properly manage their disease.**

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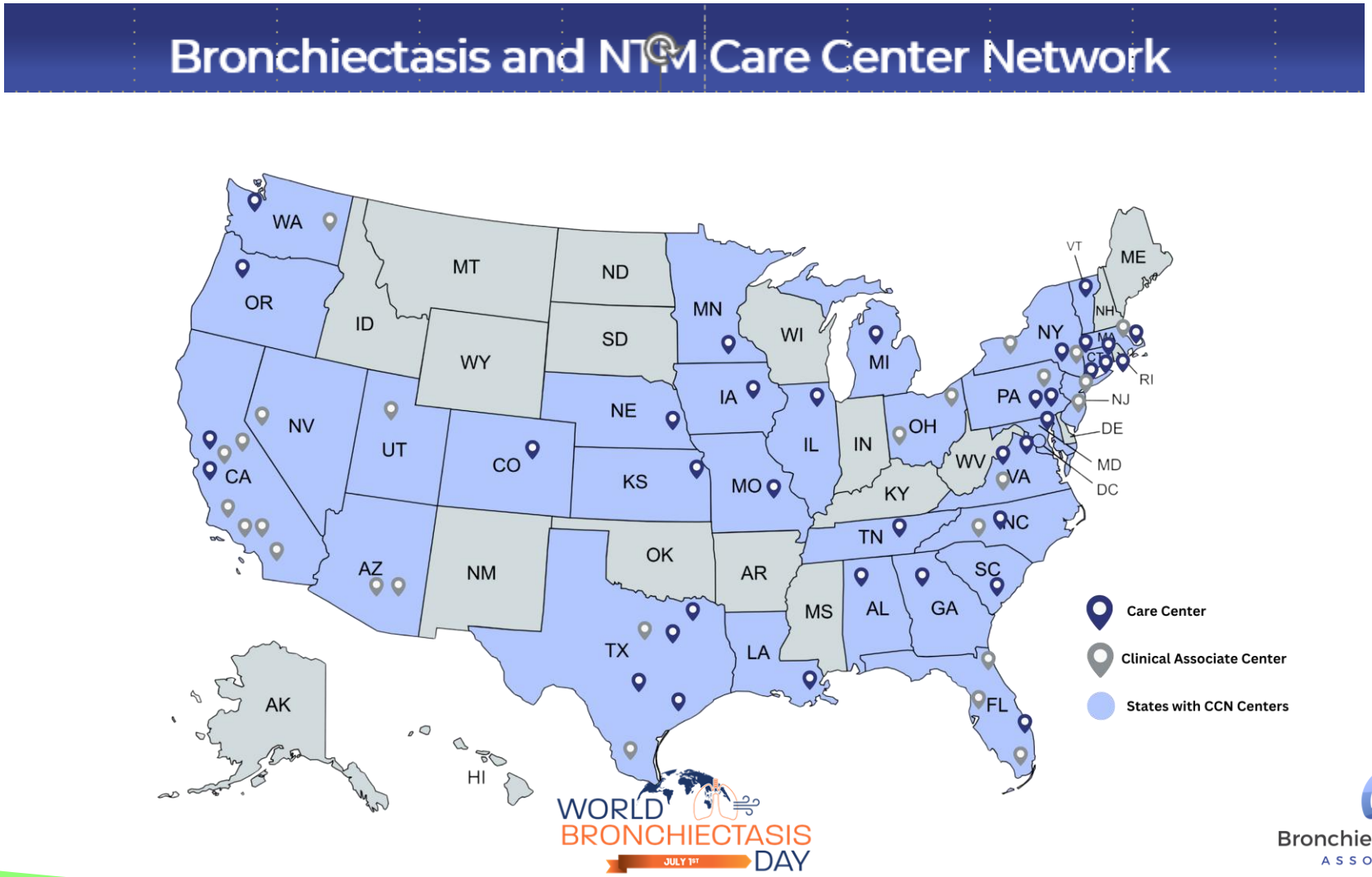
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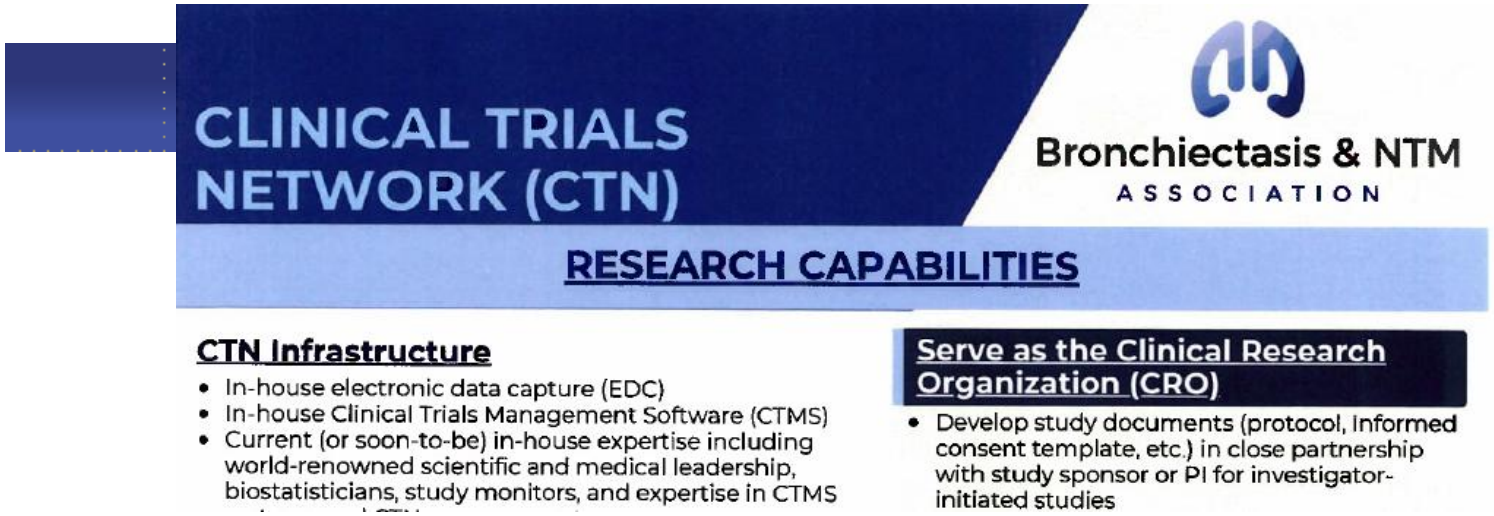
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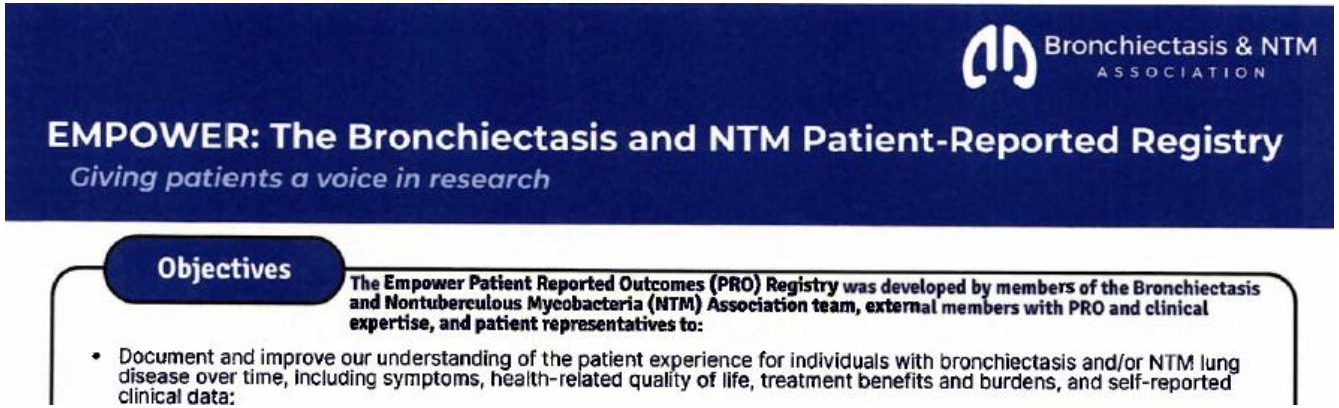


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WORLD BRONCHIECTASIS DAY

JULY 1ST

Join us on July 1 for World Bronchiectasis Day!

World Bronchiectasis Day unites people living with bronchiectasis, caregivers, health care professionals, and advocates to share knowledge, raise awareness, and help more people receive the care they deserve.

Get Involved.
Raise Awareness.
Make an Impact.

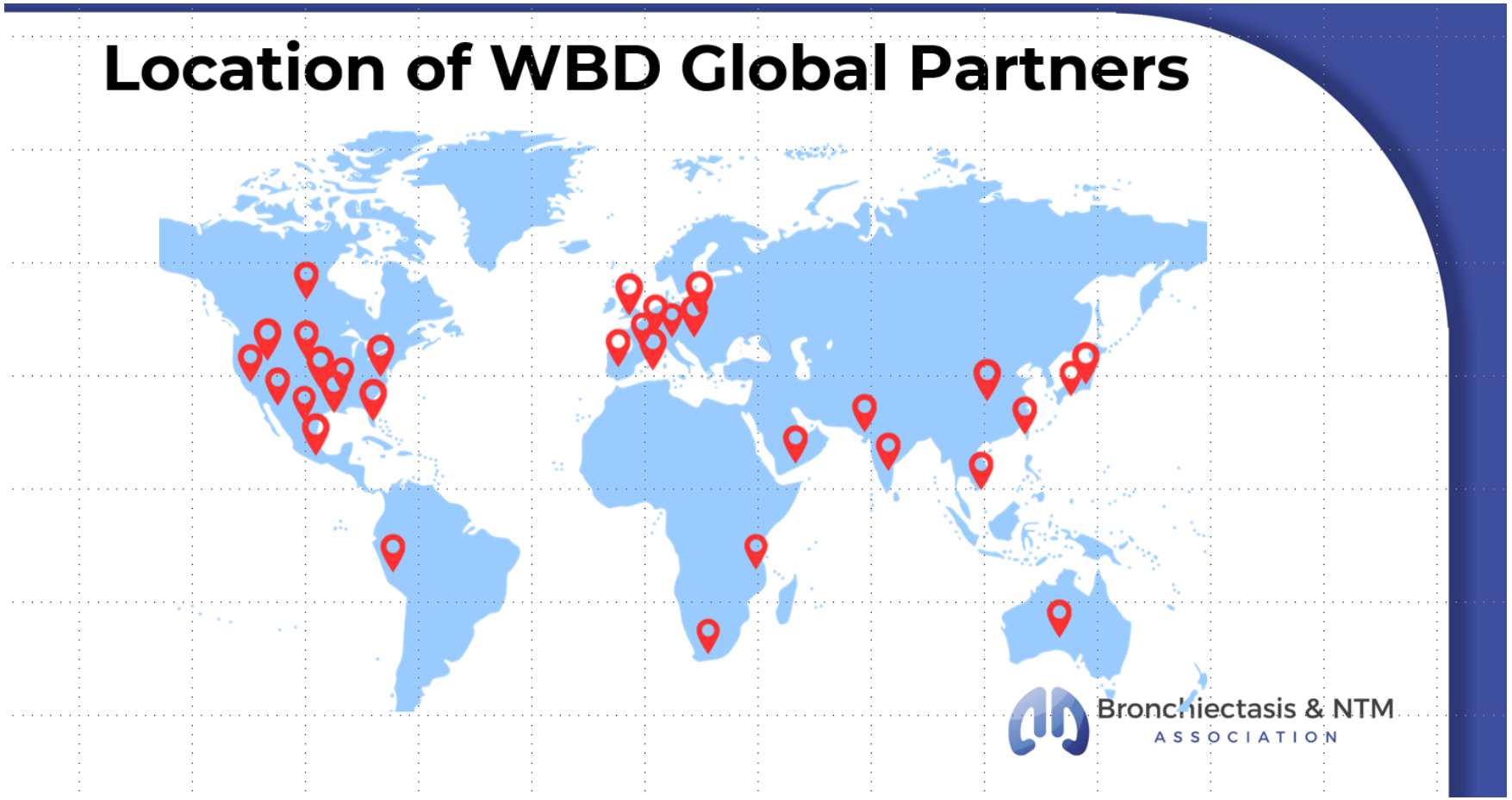


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World Bronchiectasis Day July 1

2025 Reach Metrics

- Event viewers/attendees: 3,600+
- WorldBronchiectasisDay.org web site visitors (May 15-July 15, 2025): 8,900+
- Email Distribution: **254,753**
- Social Media Reach: **343,917***
- Press/Media Reach:**223.83 million**
- Total Reach: **224.17 million**
  - 2024 Reach: 10.67 Million

www.WorldBronchiectasisDay.org



World Bronchiectasis Day July 1

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www.WorldBronchiectasisDay.org



Bronchiectasis, Dysphagia, and Complex Respiratory Care

WBD Global Partner Resources

WORLD BRONCHIECTASIS DAY
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WorldBronchiectasisDay.org

Resources available in:

- English
- Japanese
- Arabic
- German
- Spanish
- Portuguese
- Italian
- French
- Traditional Chinese
- Simple Chinese











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Anti-Infectives: How Do We Set Up for Success?

Use of long-term inhaled antibiotics and macrolides: insights from the four global bronchiectasis registries

Timothy Aksamit[1], Wei-Jie Guan[2,3,4], Miguel-Angel Martinez-Garcia[5]

[1]Department of Respiratory Medicine, Mayo Clinic, Rochester, Minnesota, USA; [2]Department of Allergy and C

- **31433 pts: global registries (4)**
- **Inhaled antibiotics: 1.3% - 11%**
- **Macrolides: 3.7 – 24.4%**

Table 1 Use of IAs and long-term macrolide therapy in relation to the isolation rate of PA in the four largest bro (based on the most recent published data)

Registry	No. patients	Use of long-term IA, %	Use of long-term macrolid	
EMBARC (12)	16,963	7.7	17.3	
UK	1,298	7.6	19.8	22.8
South and East	657	8.5	11.1	26.2
North and West	948	8.9	24.4	31
Central and East	142	1.8	0.9	16
US (13)	2,634	11	29	28
Non-NTM	1,085	9	13	40
NTM	1,549	11	41	19
China (14)	9,641	1.6	3.9	20.8
Lower-middle-income regions	2,765	2.1	3.7	–
Upper-middle-income regions	6,876	1.3	3.9	–
India (15)	2,195	3.6	12.3	13.7

†, isolated *Pseudomonas aeruginosa* as a % of patients with available sputum samples sent for zone. EMBARC, European Multicentre Bronchiectasis Audit and Research Collaboration; IA, inhaled antibiotic; NTM, non-tuberculous mycobacteria; PA, *Pseudomonas aeruginosa*.

J Thorac Dis 2025. doi 10.21037/jtd-2025-1370

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Anti-Infectives: How Do We Set Up for Success?

The Worldwide Puzzle of Bronchiectasis Etiology in Adults

Miguel Angel Martinez-Garcia[a,*], Timothy Aksamit[b], Takanori Asakura[c], Lucy Burr[d], Chang Chia-Ling[e], Rosa Maria Giron[f], Wei-jie Guan[g], Deniz Kizilirmak[h], Yeon-Mok Oh[i], Miguel Penizzotto[j], Felix C. Ringshausen[k,l,m], Anthony de Soyza[n], Christina Thornton[o], Conroy Wong[p,q]

Most frequent etiologies in national and international registries of bronchiectasis.

Registry	Year/date[a]	N°	ID	PI	P-TB	COPD	Asthma	ABPA	PCD	IDF	Others
ARGENTINA	2025	1196	17.4%	26.3%	16.8%	9.9%	9.7%	1.5%	1.8%	2.6%	14%
AUSTRALIA	2025	854	30.8%	39.3%	1.9%	5%	6.8%	4.1%	4.2%	–	–
CANADA	2025	289	33.6%	15.9%	4.5%	14.2%	11.6%	4.4%	7.6%	5.2%	3%
CHINA	2024	10,324	29.6%	43.2%	12.2%	4.9%	1.5%	1.3%	0.6%	0.3%	6.4%
EUROPE	2022	16,963	38.1%	21.2%	4.9%	8.1%	6.9%	2.8%	3%	4.1%	10.9%
GERMANY	2025	2100	35.8%	19.4%	1.8%	14.9%	11.1%	2.7%	9%	4.9%	17.7%
INDIA	2025	2195	21.4%	22.4%	35.5%	5.3%	2.5%	8.9%	<1%	<1%	2%
JAPAN	2024	247	62.3%	11.3%	4.5%	0.8%	–	3.2%	1.6%	0.4%	–
KOREA	2025	1140	36.7%	21.8%	21.3%	4.2%	4.7%	0.5%	0.4%	0.5%	9.9%
NEW ZEALAND	2025	332	44.9%	26.8%	2.7%	3%	2.1%	3.9%	1.2%	3%	12.4%
SPAIN (OLD)	2025	2099	24.2%	30%	18.6%	7.8%	5.4%	0.9%	2.9%	9.4%	0.8%
SPAIN (NEW)	2025	2631	18.5%	39.4%	13.5%	10.9%	7.8%	0.9%	4.2%	4.2%	0.6%
TAIWAN	2025	2753	24.2%	13.9%	14.7%	26.7%	10.1%	0.4%	–	–	9.9%
TURKISH	2025	1035									0.9%
UK	2025	1626									10%
USA	2025	8454									–
TOTAL											
		max	62.3%	43.2%	35.5%	26.7%	26%	8.9%	9%	9.4%	14%
		min	17.4%	3%	1.8%	0%	0%	0.1%	0.4%	0.3%	0.6%
		average	33.8%	25.1%	12.3%	9.1%	7.9%	2.3%	3%	3.2%	6.7%

- **54238 pts: global registries (15)**

Martinez-Garcia, MA , et al. ArchdeBroco doi.org/10.1016/j.arbres.2025.11.012

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