Spring 2026, Volume 36, Number 1

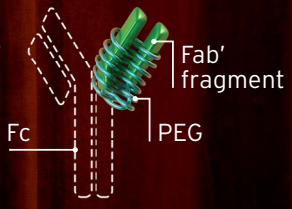
CRAJ SCR

The Journal of the Canadian Rheumatology Association

Spotlight on: Planetary Health and Rheumatology

All Fab' fragment

CIMZIA® – a **PEGylated** antibody fragment – is the only anti-TNFα that does not contain an Fc region, normally present in a complete antibody.*



Over 15 years of clinical experience combined across all indications in:†

Rheumatoid arthritis (RA) – 2009; Psoriatic arthritis (PsA) – 2014; Ankylosing spondylitis (AS) – 2014; Plaque psoriasis (PsO) – 2018; and Non-radiographic axial spondyloarthritis (nr-axSpA) – 2019[1,2]

CIMZIA (certolizumab pegol) in combination with MTX is indicated for:

- reducing signs and symptoms, including major clinical response, and reducing the progression of joint damage as assessed by X-ray, in adult patients with moderately to severely active RA.

CIMZIA alone or in combination with MTX is indicated for:

- reducing signs and symptoms and inhibiting the progression of structural damage as assessed by X-ray, in adult patients with moderately to severely active PsA who have failed one or more DMARDs.

CIMZIA is indicated for:

- reducing signs and symptoms in adult patients with moderately to severely active RA who do not tolerate MTX.
- reducing signs and symptoms in adult patients with active AS who have had an inadequate response to conventional therapy.
- the treatment of adults with severe active nr-axSpA with objective signs of inflammation as indicated by elevated CRP and/or MRI evidence who have had an inadequate response to, or are intolerant to NSAIDs.
- the treatment of adult patients with moderate to severe PsO who are candidates for systemic therapy.

Consult the product monograph at https://www.ucbcanada.com/en/cimzia for important information about:

- Contraindications in active tuberculosis or other severe infections such as sepsis, abscesses, and opportunistic infections; and moderate to severe heart failure (NYHA Class III/IV)
- The most serious warnings and precautions regarding serious infections and malignancy
- Other relevant warnings and precautions regarding worsening congestive heart failure and new onset CHF; hepatitis B virus reactivation; hematological reactions; neurologic reactions; use in combination with other biologic medicines; monitoring for patients in surgery and those being switched to another biologic DMARD; hypersensitivity symptoms; latex sensitivity; formation of autoantibodies; administration of live or live-attenuated vaccines; use in patients with severe immunosuppression; possible erroneously elevated activated partial thromboplastin time (aPTT) assay results in patients without coagulation abnormalities; women of childbearing potential; pregnancy and breastfeeding; caution in infants exposed in utero; caution in geriatric patients
- Conditions of clinical use, adverse reactions, drug interactions and dosing instructions

The product monograph is also available through Medical Information Services at 1-866-709-8444.

* Comparative clinical significance unknown.
† Clinical significance unknown.
CHF: congestive heart failure; CRP: C-reactive protein; DMARDs: disease-modifying anti-rheumatic drugs; Fc: Fragment-crystallizable; MRI: magnetic resonance imaging; MTX: methotrexate; NSAIDs: nonsteroidal anti-inflammatory drugs; NYHA: New York Heart Association; PEG: polyethylene glycol; TNFα: tumour necrosis factor alpha

1. CIMZIA® Product Monograph. UCB Canada Inc. November 13, 2019.
2. Health Canada Notice of Compliance Database. Available at https://health-products.canada.ca/noc-ac/?lang=eng. Accessed January 9, 2025.

CA-CZ-2500021E

REVIEWED BY PAAB

cimzia® (certolizumab pegol)

Longevity: Three Rheumatology Aspects

By Philip A. Baer, MDCM, FRCPC, FACR

"The quality, not the longevity, of one's life is what is important." – *Martin Luther King, Jr.*

"Live long and prosper." – *Spock, Star Trek*

"May you live to be 120." – *Traditional Jewish blessing*

Longevity, healthspan, "blue zones" (places where many centenarians are found) and biohacks are having their moment on both traditional and social media. These are not entirely new concepts. My interest was piqued by three connections to rheumatology I discovered as I explored the subject.

Dr. James Fries, a pioneering rheumatologist at Stanford, is remembered for creating the ARAMIS (Arthritis, Rheumatism and Aging Medical Information System) database funded in 1975 by the National Institute of Health (NIH). He also developed the original Health Assessment Questionnaire (HAQ), which we all use in our clinics in modified format to this day. His 1980 *New England Journal of Medicine (NEJM)* article[1] and 1982 keynote address to the Institute of Medicine[2] discussed the plasticity of aging, natural death, senescence and the concept of "the compression of morbidity," with the aim to improve healthspan more so than lifespan. He theorized that healthy behaviours—exercising, eating well, quitting smoking, getting regular medical checkups and receiving early treatment—could shift an individual's health trajectory from poor health and chronic disease for many years to good health until close to the end.[3]

Practicing healthy behaviours is all well and good, but it is human nature to look for shortcuts. Unfortunately, as I learned from attending a lecture given by Dr. Coleen Murphy recently, and by reading her book *How We Age: The Science of Longevity*, there really are no shortcuts. However, there is no shortage of those who have other ideas. I was gifted a book called *Outlive: The Science and Art of Longevity* by Dr. Peter Attia, a longevity guru recently disgraced by his appearance in the Epstein files. I liked the advice on exercise and emotional health, but I don't plan to start taking metformin or rapamycin for their potential longevity benefits.

Meanwhile, Dr. Michael Roizen, the Chief Wellness Officer at the Cleveland Clinic and former Chief Medical Consultant on The Dr. Oz Show, wrote *The Great Age Reboot* on this topic. He has now partnered with others to launch Lifespan Edge, with clinics offering Therapeutic Plasma Exchange (TPE), indicated as "a breakthrough longevity therapy that filters harmful molecules from your bloodstream—like inflammatory proteins, antibodies, and toxins—and replaces your plasma with a clean, sterile solution. Think of it as a "system refresh" at the cellular level."[4]

I will leave TPE to the tech billionaires, as well as stem cell injections, but the firehose of information continues to gush.

In December 2025, I attended a Zoom lecture presented by the Royal College of Physicians and Surgeons of Canada, featuring their 2025 Professor-in-Residence, Dr. Bertalan Mesko. He is known as The Medical Futurist, and is a physician based in Budapest specializing in artificial intelligence (AI) and digital health technologies. His lecture was one of the best I have ever attended on the topic. I then started following him on LinkedIn, where I came across his post "Inside the World's Most Comprehensive Longevity Package."[5] The CEO of a company called MediPredict reached out to offer Dr. Mesko their full longevity and health prevention package, normally costing 20,000 Euros. He could not resist. The company offers a "broad portfolio of services, including full genome sequencing, microbiome metagenomics, metabolomics, extensive laboratory parameters and imaging diagnostics." What did that entail over a month of testing? All of the following, plus four consultations to review the results:

Full genome sequencing (with special analyses such as cancer or cardiovascular diseases, based on family history), blood tests (over 300 markers, from hormones and vitamins to tumour markers and blood glucose tolerance test), microbiome testing, abdominal ultrasound, body composition analysis (DEXA), coronary computed tomography (CT) angiography, cranial magnetic resonance (MR) angiography, osteodensitometry, whole-body magnetic resonance imaging (MRI), ambulatory

Continued on page 5

CRAJ EDITORIAL BOARD

Mission Statement. The mission of the *CRAJ* is to encourage discourse among the Canadian rheumatology community for the exchange of opinions and information.

The editorial board has complete independence in reviewing the articles appearing in this publication and is responsible for their accuracy. The advertisers exert no influence on the selection or the content of material published.

PUBLISHING STAFF

Mark Kislingbury
Executive Editor

Jyoti Patel
Managing Editor

Catherine de Grandmont
Senior Medical Editor (French)

Virginie Desautels
Junior Editor (French)

Donna Graham
Production Manager

Dan Oldfield
Design Director

Mark Kislingbury
Publisher

Please address requests for subscriptions and correspondence to: THE JOURNAL OF THE CANADIAN RHEUMATOLOGY ASSOCIATION, 6500 Trans-Canada Highway, Suite 310, Pointe-Claire, Quebec, H9R 0A5.

Longevity: Three Rheumatology Aspects

Continued from page 3

blood pressure monitoring, cardio electrocardiography (ECG) patch, exercise tolerance test, biological age test from blood, resting and exercise ECG, sleep test, diet diary, spirometry, continuous glucose monitoring, semen analysis, physical examinations (Dermatology, Ear, Nose and Throat (ENT), Gastroenterology, Internal Medicine, Neurology, Ophthalmology, Urology), gastro- and colonoscopy, and a toxin test! This required up to four tests/day, and was not only physically but emotionally taxing, particularly regarding what Dr. Mesko labelled FOFO (the fear of finding out, if the results were cause for concern).

What were the results? Some genetic variants of possible significance turned up, and positive rheumatoid factor and anti-dsDNA tests, likely of no significance in a healthy asymptomatic 41-year-old male. When you order this many tests in someone with low pre-test probability of a rheumatic disease, some will be positive, as every rheumatologist knows. The dietary advice after all this testing: "reduce overall fat consumption and slightly lower carbohydrates, with sustained attention to protein quality rather than quantity, limit deep-fried foods, excessive fat, rapid or high-volume alcohol intake, large single-dose protein loads, and heavily processed meats. Fibre intake and hydration were highlighted as areas to maintain or increase." I could have provided that common-sense advice without any expensive testing.

What were some of Dr. Mesko's conclusions?

1) Longevity requires a LOT of effort, time, privacy, and money.
2) Dealing with longevity comes with a LOT of health anxiety.
3) The burden of noise (incidental findings) in the data is an issue.
4) Lifestyle is still the strongest longevity intervention. Despite all this high-tech testing, the most impactful actions remain movement/exercise, nutrition, sleep, stress management, social connectedness and avoiding harmful exposures.

An editorial in the *British Medical Journal (BMJ)* Christmas 2025 issue on the science of longevity medicine reinforced the same ideas. "Despite the hype around emerging longevity therapies, the strongest evidence for extending healthspan remains in structured lifestyle medicine interventions . . . Lifestyle medicine covers factors such as diet, sleep, exercise, social connection, relaxation, and avoidance of harmful habits . . . Overemphasis on speculative interventions risks distraction from robust evidence-based lifestyle measures. Sustainable changes in diet, activity, sleep and social connection consistently outperform pharmacological alternatives."[6]

Can you access longevity medicine clinics with a rheumatology twist in Canada? Yes, you can. Two Ontario rheumatologists, Dr. Saeed Shaikh and Dr. Derek Haaland, have opened the Precision Longevity Medical Clinic in St. Catharines, Ontario.[7] The promise: "Through our deep screening, extensive datasets, and personalized holistic action plans, optimize your healthspan and unlock your longevity potential." The catchphrases are now familiar to me, and the testing ranges from a fibroscan to whole body MRI, full genome DNA analysis and liquid biopsy multi-cancer early detection blood tests. Longevity pharmaceuticals are apparently available depending on the level of longevity programming selected. It all sounds very interesting. Let me know if you try it. I can assure you that you won't be meeting me in the clinic's waiting room.

Philip A. Baer, MDCM, FRCPC, FACR
Editor-in-chief, CRAJ
Toronto, Ontario

References:

1. Fries JF. Aging, Natural Death, and the Compression of Morbidity. *N Engl J Med.* 1989; 303:130–35.
2. Fries JF. The Compression of Morbidity. *Milbank Q.* 2005 Dec;83(4):801–823. doi: 10.1111/j.1468-0009.2005.00401.x
3. Goldman B. Stanford Medicine professor James Fries, proponent of healthy aging, dies at 83. Available at *https://med.stanford.edu/news/all-news/2021/12/james-fries-obituary.html.* Accessed February 1st, 2026.
4. The Science of Feeling Better, Longer. Available at *https://lifespan-edge.com/services/*. Accessed February 1st, 2026.
5. Inside the World's Most Comprehensive Longevity Package. Available at *https://medicalfuturist.com/inside-the-worlds-most-comprehensive-longevity-package*. Accessed February 1st, 2026.
6. Joshi M, Singh S, Rowley N. Science of longevity medicine. *BMJ.* 2025; 391 doi: https://doi.org/10.1136/bmj.r2536 (Published 12 December 2025)
7. Precision Longevity. Available at *https://precisionlongevity.ca/*. Accessed February 1st, 2026.

Digital ^{18}F-FDG PET/CT as a First-Line Diagnostic Tool for Cranial Giant Cell Arteritis

By Aubert Roy, PGY-4; Nandini Dendukuri, PhD; Jean-Paul Makhzoum, MD, FRCPC; Marie Hudson, MD, MPH, FRCPC; Michael Stein, MD, FRCPC; Étienne Rousseau, MD, FRCPC; Patrick Liang, MD, FRCPC; Leonard Levin, MD, PhD, FRCPC; Christian Pineau, MD, FRCPC; and Gad Abikhzer, MD, FRCPC

With the support of a CIORA grant, we conducted an international prospective study to address a persistent challenge in rheumatology: the accurate diagnosis of giant cell arteritis (GCA). While temporal artery biopsy and ultrasound remain standard diagnostic tests, they have limitations regarding sensitivity and operator dependence. While ^{18}F-FDG PET/CT has been established for detecting large vessel inflammation, it was not recommended as a first-line test for cranial GCA because older analogue devices lacked the resolution to visualize small cranial arteries. Modern PET/CT systems employing digital technology benefit from significantly improved resolution, allowing for the potential detection of smaller lesions, such as active inflammation in the vessels of the head and neck. The aim of our study was to investigate the diagnostic accuracy of these digital devices compared to ultrasound in patients with suspected GCA.

We enrolled patients aged 50 or older presenting with classical GCA symptoms across five centers in Canada, France, and the Netherlands, imaged with ^{18}F-FDG PET/CT within 3 days of starting corticosteroid therapy. The cohort included 84 patients in the analysis, with a final clinical diagnosis serving as the reference standard after six months of follow-up. Images were interpreted by blinded expert readers using standardized visual grading scales.

The results demonstrated that digital ^{18}F-FDG PET/CT offers superior diagnostic performance. When integrating assessment of the cranial vessels, now a reliable possibility with digital PET/CT devices, sensitivity was 86%, with a specificity of 100% for the diagnosis of GCA. In comparison, Doppler Ultrasound (DUS) demonstrated a sensitivity of 68%, with specificity 93%. Furthermore, Bayesian analysis indicated a 98% probability that digital PET/CT outperforms ultrasound in sensitivity.

This study validates that digital ^{18}F-FDG PET/CT is a highly accurate, non-invasive technique for diagnosing GCA, particularly in patients presenting with cranial symptoms. By enabling an integrated assessment of both cranial and large vessels, digital PET/CT can now be considered a viable first-line diagnostic modality. By validating the accuracy of digital PET/CT, this study provides the evidence needed to favour high-resolution imaging as a first-line modality, potentially making invasive biopsies less frequent in standard GCA care.

Building Momentum Together: CRAF's Strategic Path to 2030

The Canadian Rheumatology Association Foundation (CRAF) continues to build momentum as it supports research, education, and advocacy to strengthen care for people living with rheumatic diseases across Canada.

Established in 2022, CRAF was created to provide a national charitable platform that complements the work of the CRA. Its purpose is simple but important: to create meaningful opportunities for philanthropy that help rheumatology professionals advance care, training, and discovery. Guided by the vision (*curing rheumatic diseases, enabled by you*), the Foundation is entering an exciting new phase of growth.

2025 was a year of important progress. The inaugural Rally for Rheumatology brought together rheumatologists, trainees, patients, and allies from across the country, raising over $85,000 while building a sense of shared purpose and momentum. At the same time, CRAF continued to deliver the Summer Studentship Program, supporting researchers, mentors, and students from coast to coast. The year also saw the launch of the Community Research Fund, expanding opportunities to support community-based and system-level research. Behind the scenes, CRAF undertook a thoughtful review of the Canadian Initiative for Outcomes in Rheumatology cAre (CIORA), listening closely to funders and stakeholders to ensure the program continues to reflect the needs and priorities of the rheumatology community.

Looking ahead, 2026 is focused on building on this strong foundation. Plans include launching a refreshed CIORA program, growing Rally for Rheumatology as a signature national campaign, and expanding support for students, community research, and education. CRAF will also continue to strengthen partnerships with industry, foundations, and government, while increasing national visibility through coordinated communications and storytelling.

As CRAF looks toward 2030, the focus remains on working together—building trust, sharing impact, and creating opportunities for the rheumatology community and its supporters to help shape a stronger future for patient care and research. Learn more at *crafoundation.ca*.

Springing Forward Together: Sustainability in Rheumatology

By Stephanie Tom, MD, FRCPC, on behalf of the CRA Planetary Health Taskforce

The Canadian Rheumatology Association (CRA) Planetary Health Taskforce was launched in 2024, with taskforce members including Drs. Philip Baer, Claire Barber, Sasha Bernatsky, Molly Dushnicky, Beth Hazel, Fergus To and Stephanie Tom (Chair). We launched a bilingual sustainability toolkit in spring 2025 after input from additional rheumatologists, allied health professionals and patient groups, with over 500 toolkit downloads in the first 9 months. In fall 2025, we circulated Around the Rheum podcasts in both English and French. In the past year, we have accumulated thousands of impressions on the CRA's LinkedIn and X social media accounts.

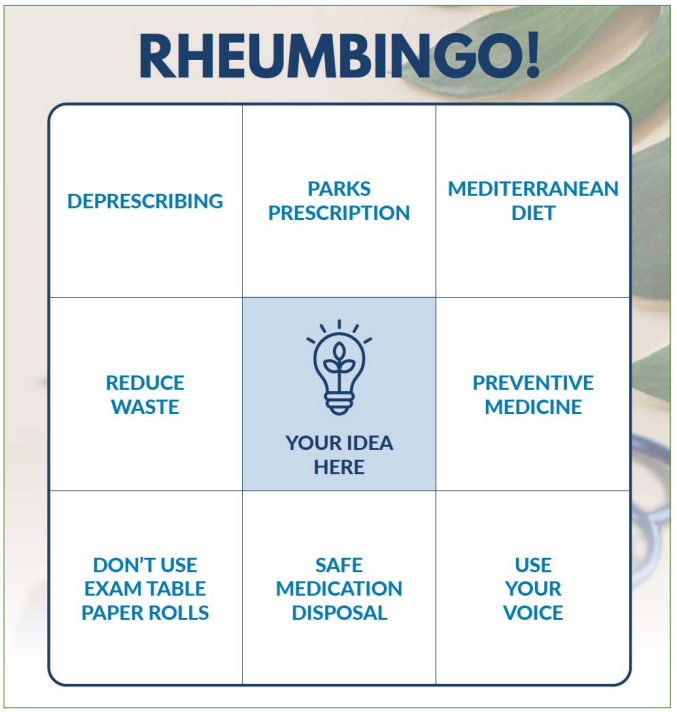
We've shared our work through REACTRheum, the Canadian Coalition for Green Healthcare, the Canadian Association of Physicians for the Environment, the CASCADES network, the Royal College of Physicians and Surgeons of Canada, multiple university rounds, the Australian Rheumatology Association, the American College of Rheumatology, and Choosing Wisely conferences in Winnipeg (2025) and in Toronto (2026). We are grateful to the CRA for its support and communication assistance, as well as grants from the Royal College Foundation and Choosing Wisely Canada. To wrap up our taskforce activities for 2026, we're launching RheumBingo! as a gamification tool to implement the top actionable steps in rheumatology offices to reduce our own carbon footprint.

Inspired by our annual scientific meeting's RheumJeopardy, points will be awarded to Team West or Team East. Teams will be evenly matched, with Ontario serving as the dividing line. The West includes London, Kitchener, Waterloo, Guelph, Hamilton and westward, and the East includes Oakville, Mississauga, Toronto and eastward. The point categories are Gold (9/9 tasks below completed; worth 3 points), Silver (6-8 tasks/2 points) and Bronze (4-5 tasks/1 point). This is a self-reporting event, and points are awarded per CRA member. Thus, if a team of 3 rheumatologists in a shared clinic all participate, you receive triple the points for your team. For submissions and further questions, you can reach out to *info@rheum.ca*.

1. **Deprescribing:** Two-thirds of the healthcare sector's carbon footprint is related to the supply chain, which involves the medications and equipment we use. By reducing polypharmacy, we also chip away at the life cycle of manufacturing, transportation, utilization and disposal of products (e.g. taper advanced therapies when clinically appropriate with shared decision-making with patients or reduce unnecessary lab testing).[1,2,3]

2. **Reduce waste:** Most medical waste can be safely sent to landfills, though anything considered biohazardous must be incinerated, which results in higher carbon emission compared to landfills.[4] By ensuring proper sorting at the user level, we reduce clinic costs for waste disposal (e.g., hand hygiene over gloves in certain clinical contexts where there are no infection control concerns or invasive procedures). Encourage patients to bring their own suitable clothing for physical examinations.

3. **Safe medication disposal:** Medications sent to landfills or flushed down toilets end up in groundwater and other sources. You can direct patients to return unused medications to their pharmacies for safe disposal.[5]



4. **Preventative medicine:** Smoking cessation (due to the link between cigarette smoking and autoimmune disease flares) and recommending vaccines (i.e., seasonal flu vaccines) could reduce risks of hospitalizations and ER visits.[6]

5. **Exercise or nature prescribing:** Encouraging physical activity (based on patient interests, access and disease status) improves function.[7] Any healthcare provider (physician, nurse, occupational or physiotherapist) can prescribe one free Parks Canada pass monthly via the PaRx program.[8]

6. **Don't use exam table paper rolls:** Evidence shows that high touch surfaces are the sides of the table.[9] If surfaces need to be sanitized, consider washable cloths and 70%+ ethyl or isopropyl alcohol-based solutions.[10]

7. **Mediterranean diet and plant-forward options:** There is evidence that the Mediterranean diet improves autoimmune diseases and cardiovascular health. Plant-forward diets generally have a much lower carbon footprint than diets high in red meat. Diet options should recognize cultural diversity, costs, and travel distances of food supplies.[11,12]

8. **Use your voice:** Advocate for green supplier options; mention the importance of reduced single use plastics and less packaging for medication (there is a preliminary study from France that indicates prefilled syringes have much lower emission costs than autoinjectors); check out workshops or consider QI projects on the impact (planetary and/or cost) of environmental changes.[13,14]

9. **Insert your idea here!** Pick an idea of your choice and tell us what you did. For further ideas, check out the CRA sustainability toolkit *https://rheum.ca/resources/planetary-health-for-rheumatology/* (English) or *https://rheum.ca/fr/resources/la-sante-planetaire-et-la-rhumatologie/* (French).

Stephanie Tom, MD, FRCPC
Vice-President, Canadian Rheumatology Association (CRA)
Chair, CRA Planetary Health Task Force
Trillium Health Partners
Mississauga, Ontario

References:

1. Tennison I, Roschnik S, Ashby B, et al. Health care's response to climate change: a carbon footprint assessment of the NHS in England. *Lancet Planet Health.* 2021;5(2):e84-e92.
2. Hazlewood G, Jung M, Kaminska E, et al. One-Year Outcomes After Decision Aid-Led Tapering of Advanced Therapy in Rheumatoid Arthritis. *Journal of Rheumatology.* 2025;52(2):26-27.
3. Ulijn E, den Broeder N, Bevers K, et al. Long-Term Routine Laboratory Toxicity Monitoring of Immunomodulatory Drugs in Rheumatoid Arthritis: A Retrospective Cohort Study. *Annals of Internal Medicine.* 2025;178(10):1400-1408.
4. Duong D. Improper disposal of medical waste costs health systems and the environment. *CMAJ.* 2023:195(14):E518-519.
5. Health Products Stewardship Association. Available at *healthsteward.ca.* Accessed January 24, 2026.
6. Bass A, Chakravarty E, Akl E, et al. 2022 American College of Rheumatology Guideline for Vaccinations in Patients With Rheumatic and Musculoskeletal Diseases. *Arthritis Care & Research.* 2023;75(3):449-464.
7. Andonian B and Lassell R. Physical Activity for Human and Planetary Health: Incorporating Green Exercise in the Management of Rheumatic Disease. *Rheumatic Disease Clinics of North America.* 2026;52(1):163-180.
8. PaRx. Available at *https://www.parkprescriptions.ca/en-ca.* Accessed January 24, 2026.
9. Chiarlitti N, Graves Z, Lavoie C, Reid RER. Does Examination Table Paper Use Mitigate the Risk of Disease Transmission in a Family Medicine Clinic? *Ann Fam Med.* 2024;22(3):230-232.
10. Public Health Ontario Infection Prevention and Control for Clinical Office Practice. 2015. Available at *https://www.publichealthontario.ca/-/media/documents/B/2013/bp-clinical-office-practice.pdf.* Accessed January 24, 2026.
11. England B, Smith B, Baker N, et al. 2022 American College of Rheumatology Guideline for Exercise, Rehabilitation, Diet, and Additional Integrative Interventions for Rheumatoid Arthritis. *Arthritis Care & Research.* 2023;75(8):1603-1615.
12. Katsumoto TR, Sung LH, Shah NS. Food as Medicine for Rheumatic Diseases and Planetary Health. *Rheum Dis Clin North Am.* 2026;52(1):181-201.
13. Moninot I, Chapurlat R, Feurer E, et al. Abstract Number 0995: What Is the Carbon Footprint of Adalimumab Originator and Its Various Biosimilar Drugs? American College of Rheumatology Convergence 2024.
14. Sustainable quality improvement & patient safety. CASCADES Available at *https://cascadescanada.ca/action-areas/quality-improvement-patient-safety/.* Accessed January 24, 2026.

The Environmental Footprint of Rheumatologic Medications: What Prescribers Should Know

By Neha Mathur, MD, and Myles Sergeant, MD, FCFP

Each and every prescription we provide as physicians carries a hidden journey through the processes of production and supply chains that often span international borders, unknown to patients and providers alike. One example of this is highlighted in our "Journey of a Pill," which provides a detailed look at the global path of a single pill of clonazepam, a frequently prescribed treatment for various medical conditions such as insomnia, anxiety, and seizure disorders.[1] As we follow the path through extraction, manufacturing, shipping, distribution, and elimination, we estimate that each pill commonly travels over 52,000 km before even reaching the patient (Figure 1). This global journey is not unique to clonazepam; it reflects the broader environmental footprint embedded in nearly every medication we prescribe.

Procurement describes the process by which systems acquire essential supplies and services necessary for patient care and represents one of the largest sectors of greenhouse gas (GHG) emissions by the healthcare system. Medications account for around 25% of GHG emissions in healthcare systems, according to assessment by the UK's National Health Service.[2] Pharmaceuticals are inordinately high impact due to the complex supply chains and globalization of manufacturing. Importantly, so-called "legacy medications" — the drugs we prescribe steadily for years or even decades — often become the most environmentally consequential because their cumulative production and distribution footprints grow over time. This poses a key opportunity for involvement by physicians, as judicious and thoughtful prescribing can meaningfully reduce environmental impact.

Rheumatologic medications have many unique characteristics that may disproportionately increase their environmental impact. For example, patients with rheumatologic conditions are often on legacy therapies, many starting at a young age. Especially early in disease courses, it may take many trials with different medications before finding a stable medication regimen, whether due to non-medical switching, dose adjustments, or fragmented care. When therapies are often long-term and resource-intensive to produce and distribute, prescribing stability reduces unused medication, minimizes cold-chain trans-

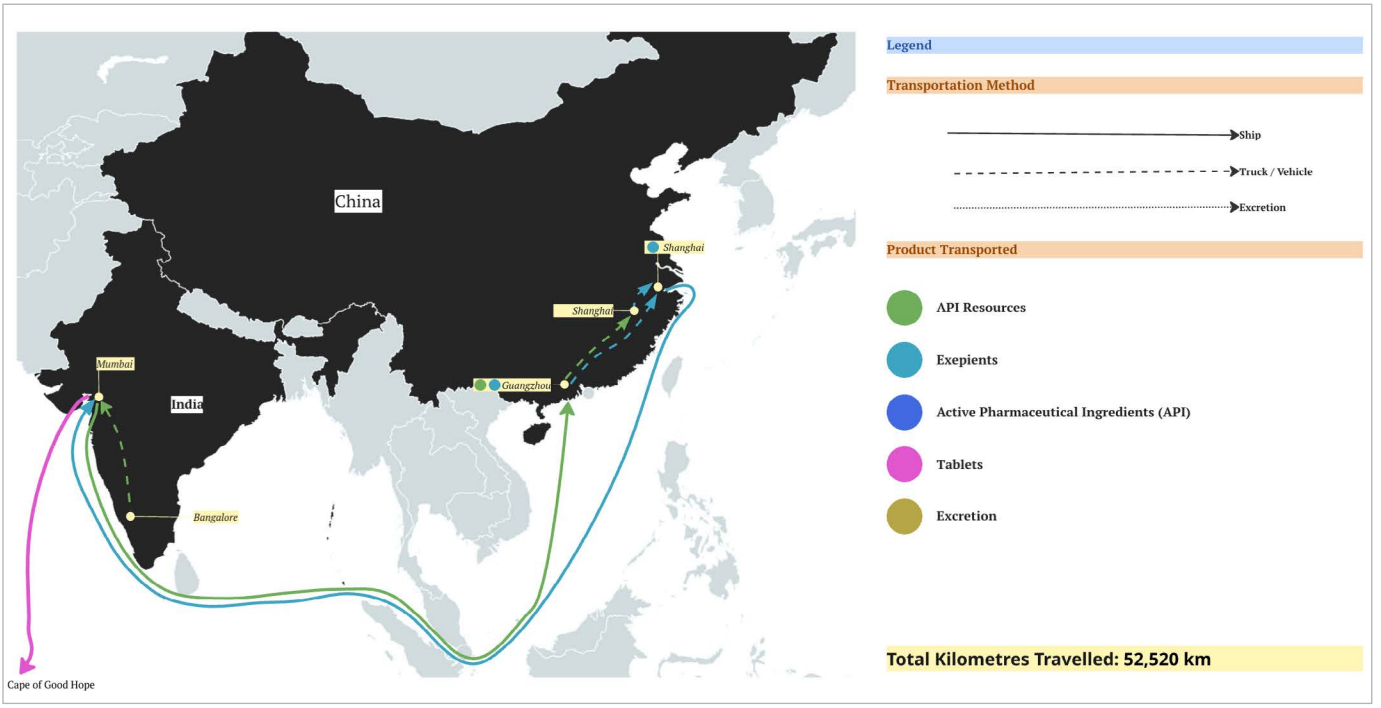


Image created by Yusra Naqvi.

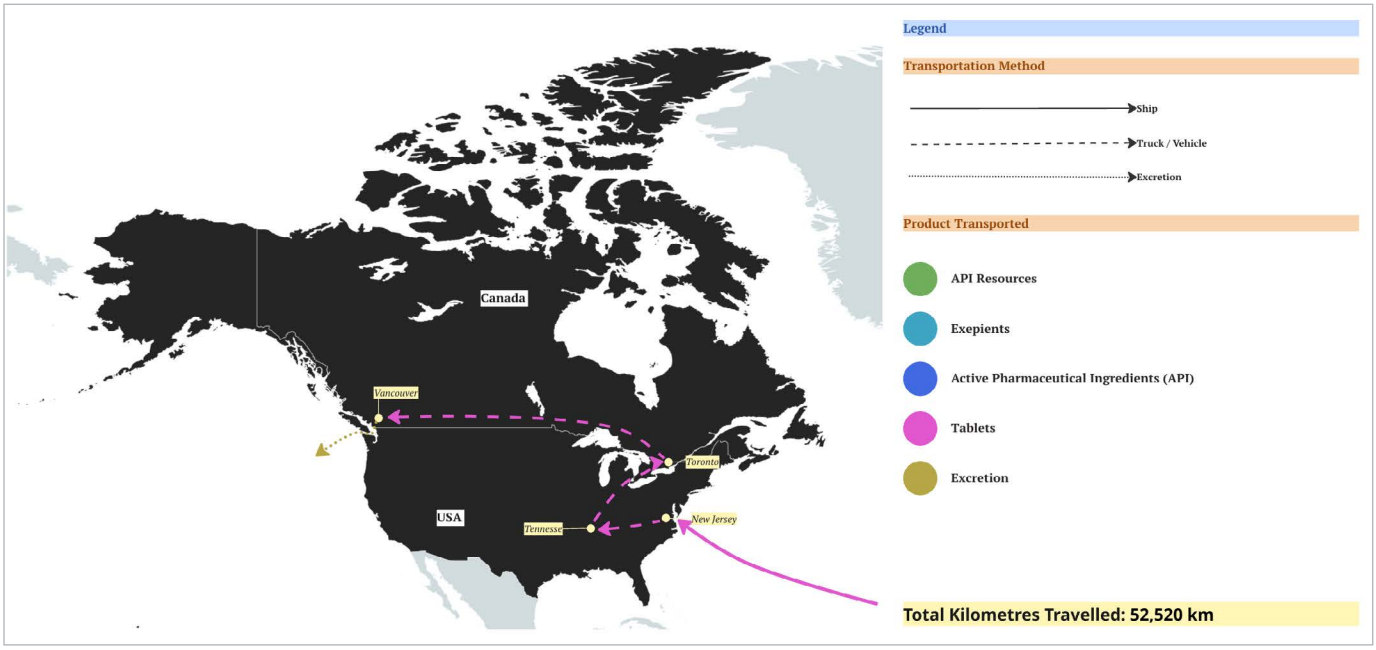


Image created by Yusra Naqvi.

port and urgent shipments, and allows supply chains to operate more efficiently. Additionally, the field of rheumatology has seen the rise in use of biologic medications, which include their own unique characteristics when it comes to environmental impact, as they often have high environmental footprints in the manufacturing process. As highlighted in "Sustainable Health Care: An Implementation Guide for Rheumatology," biologic and targeted synthetic therapies also generate substantial downstream waste through delivery devices, sharps disposal, and infusion-related consumables.[3] This makes waste reduction strategies such as reusable sharps container programs and appropriate medication disposal particularly relevant in this specialty. In addition, thoughtful coordination of medication changes and biosimilar transitions can help avoid parallel prescribing, stockpiling, and unnecessary medication disposal, preserving both environmental and system resources.

Bearing in mind the journey each prescription takes, as prescribers there are many ways we may consciously have an impact on the environmental footprint our care creates. For example, advocating within hospital systems, offices, and pharmacies to carefully consider the impact of the suppliers that are chosen is important. Influencing procurement decisions with the clinical expertise we bring can lead to more sustainable upstream choices. Appraising our own prescribing practices and deprescribing or stably prescribing when clinically appropriate can further reduce waste. Engaging trainees early in their education to instill these concepts can have meaningful downstream effects and lead to a culture shift towards considering sustainability in everyday patient care decisions. Understanding the hidden journey of our medications reminds us that sustainability is not an add-on to clinical care — it is woven into every prescribing decision we make.

Neha Mathur, MD
Internal Medicine Resident,
Western University

Myles Sergeant, MD, FCFP
Family Physician,
Hamilton Health Sciences and Shelter Health Network
Executive Director,
Canadian Coalition for Green Healthcare

Images created by:
Yusra Naqvi, MSc
Research Assistant,
McMaster University

References:
1. Kaur H, Parascandalo F, Krantzberg G, Ko E, Mathur N, Gill AS, Razack F, & Sergeant M. Journey of a pill. *Canadian family physician Medecin de famille canadien.* 2025;71(4):263–269. *https://doi.org/10.46747/cfp.7104263.*
2. Areas of focus. London, UK: National Health Service England. Available at *https://www.england.nhs.uk/greenernhs/a-net-zero-nhs/areas-of-focus.* Accessed January 29, 2026.
3. Tom S, Barber C, Bernatsky S, Hazel E, Dushnicky M, Baer P, To F, Mendel A, Kaminski J, Sypus A & Waddington K. (2025). Sustainable Healthcare: An Implementation Guide for Rheumatologists. Canadian Coalition for Green Health Care & Canadian Rheumatology Association.

Advocacy in Planetary Health

By Claire E.H. Barber, MD, PhD, FRCPC

Climate change has been called a "code red" emergency for humanity by the Canadian Medical Association alongside other organizations. This framing helps to highlight the significant health impacts that climate change has on humanity alongside the urgency of the problem. Indeed, a growing proportion of Canadians are experiencing significant health impacts of climate change including direct displacement due to wild fires, floods and other extreme weather events, and elevated health risks from poor air quality during wildfire season and from extreme heat. Indigenous communities have been disproportionately impacted by these events. Similarly, individuals who are vulnerably housed, older adults, children, pregnant persons and those with chronic diseases are more vulnerable to the health impacts of climate change. Lastly, the mental health impacts of climate change are at epidemic proportions, especially among youth.

On a personal note, I have lived in Alberta since 2011, and my province has experienced some of the worst climate disasters in Canadian history, including massive wildfires, hailstorms, drought and flooding. Each spring, I watch as the river beside my home swells and worry whether this will be the year it floods again. In summer, I worry whether I can take my young daughter to play outside. I worry about travelling into the mountains with my family when the forest fire risk is high, as they have been predicting that the famous Bow Valley region may go up in flames for some time. My family has vacationed in recent years to several areas that burned to the ground the very next year—including Jasper National Park. In 2023, my daughter swam in a lake in interior BC as water bombers collected water from it to put out fires we could see nearby. This situation isn't normal. I have a lot of anxiety about the world we are leaving for future generations. Compounding this stress is the reality that many government policies continue to prioritize industry interests and profits over long-term environmental strategy. This short-sightedness threatens the health of our planet and is costly for human health and well-being.[1] One evidence-based strategy for handling climate-based anxiety is climate action. Over the last several years I have been increasingly active on multiple personal and professional fronts to address climate change and one of them is advocacy.

Physicians have long been at the forefront of advocating for health and, indeed, this is a central tenet of competency for physicians in the CanMEDS framework.

Dr. Barber at a climate protest held during the World Petroleum Conference in downtown Calgary (the mask wearing was part of a performance piece led by one of the groups).

Physicians don't need to be climate scientists; we can use our knowledge of the health impacts of climate change in the populations we care for to create evidence-based advocacy infused with storytelling and impact. This is what creates a powerful message for change.

How does climate change impact you and your family?

How are your patients impacted?

Who are you going to tell to make a difference?

While becoming an advocate in the space of climate change and health can seem daunting, there is lots that can be done — both big and small. Every little bit helps. Here are some ideas:

1. **Write a letter to the editor.**

a. Pro tip: collaborate with friends or medical students to make this more fun.

Dr. Barber moderating a panel of experts at a Science and the Cinema event held at the Calgary public library to discuss the movie Plastic People.

b. View the links below for examples:
   - *https://www.nationalobserver.com/2024/11/12/opinion/op-ed-alberta-coal-power-mine-expansion*
   - *https://healthydebate.ca/2024/09/topic/fossil-fuels-ban-ads-greenwash/*

2. **Start or join an existing campaign:** This can be as easy as signing a petition or personalizing and forwarding a letter to your MLA or other government representative.

a. Want to do something right now? Check out active campaigns at these organizations
   - *https://www.forourkids.ca*
   - *https://davidsuzuki.org/*
   - *https://cape.ca/*
   - *https://cpaws.org/take-action/*
   - *https://www.coalpetition.ca/*

3. **Ask to meet with a governmental representative:** Go prepared with simple messaging and a clear request. Ask if you can leave them a policy brief or a 1-pager so they can spread the message, and whether you can follow up.
4. **Join a local committee or national organization:** This can be as simple as joining a mailing list to ensure you are up to date with existing campaigns. You may want to attend monthly meetings and become more involved with local events. The bonus is making new friends and knowing you aren't alone in your fight for climate action.
5. **Support communication to the public:** This can be through 1:1 conversations with patients, family, and friends, or through sharing or creating posts for social media on relevant evidence-informed topics relating to the health impacts of climate change. Regional or local organizations may also sponsor different events you can join or volunteer at to engage the public such as movie screenings with expert panels, or other community events.
6. **Attend a climate action protest:** When the World Petroleum Congress or the G7 Summit comes to your city, let them know how you feel. Gather some friends, get your kids to help you make some signs and join a peaceful protest.
7. **Donate:** If you are too short on time to do any of the above, consider donating to a group that does work in this space.

Reference:
1. Canadian Climate Institute. The Costs of Climate Change: A Series of Five Reports (2020). Available at *https://climateinstitute.ca/reports/the-costs-of-climate-change/*. Accessed March 5th, 2026.

Claire E.H. Barber, MD, PhD, FRCPC
Associate Professor,
Department of Medicine
Department of Community Health Sciences
Associate Vice Chair of Planetary Health,
Department of Medicine
Cumming School of Medicine
University of Calgary

Sustainability in Medical Education

By Beth Hazel, OLY, MDCM, FRCPC, MM

Planetary health is on everyone's minds. We worry about the future of our planet and try to make individual changes to improve outcomes, but we all recognize that broad-based changes are the most impactful.

It is not surprising that the Royal College of Physicians and Surgeons of Canada's new strategic plan features a section on championing planetary health and sustainable health care. It calls upon its members to promote environmentally sustainable health care as part of our responsibility to future generations and to the long-term stability of Canada's health system. They recognize that specialist physicians and health care teams can play a unique role as stewards of sustainable health care and advocates for the health of populations, including systemically marginalized groups who may be more significantly impacted by climate change.

To support planetary health and sustainable health care, the Royal College's goals include:

- Development and curation of planetary health and sustainable health care learning resources
- Collaboration with other organizations to define and support the role of specialist physicians in planetary health

To this end, they have recognized the importance of adding planetary health and sustainable health care to the academic curriculum of residency programs. In the new version of the CanMEDs framework, teaching and assessment of competencies related to environmental stewardship will be embedded as training requirements and will be subject to accreditation surveillance.

Within the Royal College's own mission to support planetary health and sustainable health care, they are reviewing the impacts of exam delivery and are considering how to minimize travel and reduce the carbon footprint associated with conducting formal exams. In addition, they are working to improve stewarding of resources by reviewing their corporate social responsibilities with the goal of developing a corporate social responsibility framework.

They have curated some practical steps specialists like us can take to reduce environmental harm at work and produced a series of YouTube Videos called "This planet has two minutes."

Finally, the Royal College is looking to support passionate groups, like our own CRA Taskforce, by sponsoring projects and contributing to a planetary health coalition of members and partner organizations.

When we teach a new skill to our trainees, we say that the key to mastery is to "see one, do one, teach one." When it comes to saving our planet that same philosophy applies, but we are all students, teachers and role models. And this is part of our lifelong learning journey.

Elizabeth M. Hazel, OLY, MDCM, FRCPC, MM
Division Director, Rheumatology,
McGill University Health Centre
Assistant Dean, PGME, CBME
Associate Professor of Medicine,
Division of Rheumatology,
McGill University

Environmental Exposures and Autoimmune Risk: Implications for Rheumatology

By Sasha Bernatsky, MD, PhD; and Autumn Neville, BA

For well over a decade, I have had a strong interest in air pollution's association with immune dysregulation and the development of rheumatic diseases. When the *Journal of the Canadian Rheumatology Association (CRAJ)* invited me to write about my research in this area, I was thrilled! Of course, in rheumatology we know that environmental exposures, alongside genetic susceptibility, likely play key roles in disease initiation and progression. However, many exposures that are strong triggers for certain autoimmune rheumatic diseases (such as respirable silica) are relatively uncommon. Air pollution, on the other hand, is something everyone is exposed to.

Using large data sets from Canada (and the United States), my group examined fine particulate matter (air particles that are less than 2.5 μ in diameter, PM2.5) and other common air pollutants in relation to both autoantibodies and clinical rheumatic disease. A key theme of this research is identifying pre-clinical markers of autoimmunity (such as autoantibodies) that may be influenced by environmental exposures long before patients present for rheumatology care.

Several studies have suggested links between air pollution and autoantibodies. In one large Ontario-based analysis, we demonstrated that long-term exposure to PM2.5 was associated with the presence of antinuclear antibodies (ANA) in the general population. We also found that exposure to industrial air pollution, including sulfur dioxide and PM2.5, was strongly correlated with the presence of anti-citrullinated protein antibodies (ACPA) in a Quebec cohort. Because ANA and ACPA positivity can precede the onset of systemic autoimmune disease by years, these findings support the hypothesis that air pollution may act early in the autoimmune disease pathway, potentially contributing to immune system activation.

More recent work has extended these findings to disease incidence. Leveraging administrative health databases, we examined long-term exposure to ambient PM2.5 and systemic autoimmune rheumatic diseases (SARDs) and rheumatoid arthritis (RA) onset. PM2.5 exposure was associated with an increased risk of incident disease, even after accounting for key sociodemographic factors. Collectively, these studies strengthen the biological plausibility that inhaled particulates from air pollution promote systemic inflammation and immune dysregulation relevant to rheumatologic disease.

A constant challenge in this kind of research has been methodological rigor, including refined exposure assessment, sensitivity analyses, and attention to potential confounders. While these studies are observational, their convergence across outcomes (autoantibodies and disease incidence) underscores the relevance of air quality as a modifiable environmental exposure when it comes to rheumatic disease burden.

Parallel to this research agenda, rheumatologists across North America (and beyond) have worked to promote knowledge translation and clinician engagement through REACTRheum (which stands for Rheumatology Engaged in Action for Climate Health). REACTRheum is an international consortium of rheumatologists, researchers, trainees, and allied health professionals interested in planetary health, exploring the intersections of climate change, air pollution, and rheumatic disease. This initiative provides educational resources, webinars, and supports dialogue on how environmental health considerations can be incorporated into rheumatology practice and research.

Recent REACTRheum topics have ranged from pollution-related health impacts to sustainable approaches to clinical care, with the broader goal of empowering the rheumatology community to engage in evidence-based action and advocacy.

In summary, recent research reinforces the relevance of air pollution as a potential contributor to autoimmunity and systemic rheumatic disease, while initiatives such as REACTRheum help translate these insights into education, advocacy, and action within the rheumatology community. I hope you will join us! More information and resources are available at *https://reactrheum.org*.

Sasha Bernatsky, MD, PhD
James McGill Professor of Medicine,
Department of Medicine, McGill University
Senior Scientist,
Centre for Outcomes Research and Evaluation
The Research Institute of the McGill University Health Centre

Autumn Neville, BA
Research Coordinator,
Centre for Outcomes Research and Evaluation
The Research Institute of the McGill University Health Centre

BIMZELX® IS THE **FIRST AND ONLY** IL-17A AND IL-17F INHIBITOR.*[1,2]

AN OPPORTUNITY TO CHALLENGE PSA AND AXSPA WITH BIMZELX

BIMZELX is indicated for the treatment of adult patients with:[1]

- active psoriatic arthritis. BIMZELX can be used alone or in combination with a conventional non-biologic disease-modifying antirheumatic drug (cDMARD) (e.g., methotrexate)
- active ankylosing spondylitis who have responded inadequately or are intolerant to conventional therapy
- active non-radiographic axial spondyloarthritis with objective signs of inflammation as indicated by elevated C-reactive protein (CRP) and/or magnetic resonance imaging (MRI) who have responded inadequately or are intolerant to nonsteroidal anti-inflammatory drugs (NSAIDs)

For more information:

Consult the Product Monograph at ucb-canada.ca/en/bimzelx for important information about:

- Relevant warnings and precautions regarding inflammatory bowel disease, serious hypersensitivity reactions, vaccinations, infections, including tuberculosis, pregnant or nursing women, and women of childbearing potential
- Conditions of clinical use, adverse reactions, drug interactions and dosing information

The Product Monograph is also available by calling 1-866-709-8444.

* Comparative clinical significance is unknown.

1. BIMZELX Product Monograph. UCB Canada Inc. December 12, 2025. **2.** Data on file, UCB Canada Inc.

Inspired by patients. Driven by science.

REVIEWED BY PAAB

Pr Bimzelx® (bimekizumab injection)

Over 15 years of clinical experience combined across all indications in:†

Rheumatoid arthritis (RA) – 2009; Psoriatic arthritis (PsA) – 2014; Ankylosing spondylitis (AS) – 2014; Plaque psoriasis (PsO) – 2018; and Non-radiographic axial spondyloarthritis (nr-axSpA) – 2019[1,2]

CIMZIA (certolizumab pegol) in combination with MTX is indicated for:

- reducing signs and symptoms, including major clinical response, and reducing the progression of joint damage as assessed by X-ray, in adult patients with moderately to severely active RA.

CIMZIA alone or in combination with MTX is indicated for:

- reducing signs and symptoms and inhibiting the progression of structural damage as assessed by X-ray, in adult patients with moderately to severely active PsA who have failed one or more DMARDs.

CIMZIA is indicated for:

- reducing signs and symptoms in adult patients with moderately to severely active RA who do not tolerate MTX.
- reducing signs and symptoms in adult patients with active AS who have had an inadequate response to conventional therapy.
- the treatment of adults with severe active nr-axSpA with objective signs of inflammation as indicated by elevated CRP and/or MRI evidence who have had an inadequate response to, or are intolerant to NSAIDs.
- the treatment of adult patients with moderate to severe PsO who are candidates for systemic therapy.

† Clinical significance unknown.
CHF: congestive heart failure; CRP: C-reactive protein; DMARDs: disease-modifying anti-rheumatic drugs; Fc: Fragment-crystallizable; MRI: magnetic resonance imaging; MTX: methotrexate; NSAIDs: nonsteroidal anti-inflammatory drugs; NYHA: New York Heart Association; PEG: polyethylene glycol; TNFα: tumour necrosis factor alpha

Consult the product monograph at https://www.ucbcanada.com/en/cimzia for important information about:

- Contraindications in active tuberculosis or other severe infections such as sepsis, abscesses, and opportunistic infections; and moderate to severe heart failure (NYHA Class III/IV)
- The most serious warnings and precautions regarding serious infections and malignancy
- Other relevant warnings and precautions regarding worsening congestive heart failure and new onset CHF; hepatitis B virus reactivation; hematological reactions; neurologic reactions; use in combination with other biologic medicines; monitoring for patients in surgery and those being switched to another biologic DMARD; hypersensitivity symptoms; latex sensitivity; formation of autoantibodies; administration of live or live-attenuated vaccines; use in patients with severe immunosuppression; possible erroneously elevated activated partial thromboplastin time (aPTT) assay results in patients without coagulation abnormalities; women of childbearing potential; pregnancy and breastfeeding; caution in infants exposed in utero; caution in geriatric patients
- Conditions of clinical use, adverse reactions, drug interactions and dosing instructions

The product monograph is also available through Medical Information Services at 1-866-709-8444.

1. CIMZIA® Product Monograph. UCB Canada Inc. November 13, 2019.
2. Health Canada Notice of Compliance Database. Available at https://health-products.canada.ca/noc-ac/?lang=eng. Accessed January 9, 2025.

CA-CZ-2500021E

REVIEWED BY PAAB

CIMZIA® (certolizumab pegol)

Choosing Wisely: Survey Results

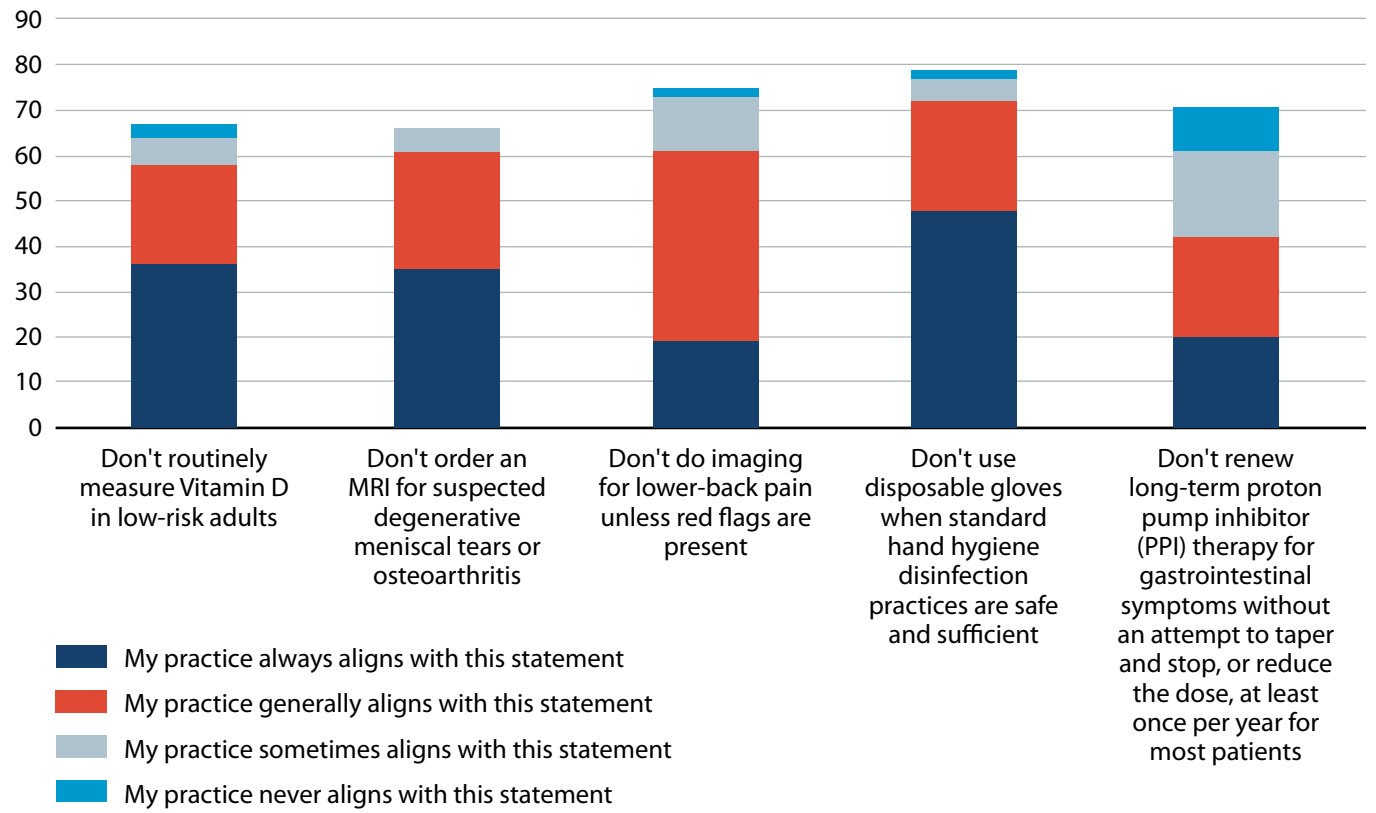
Aligning with Other Societies' Choosing Wisely Statements

This edition's Joint Count survey examined CRA members' perspectives on Choosing Wisely guidelines from other specialties. The goal of the survey was to raise awareness in the rheumatology community about other societies' recommendations that the Choosing Wisely Subcommittee found to be relevant to rheumatology. A total of 79 survey responses were submitted from nine of 10 provinces, and from both adult and pediatric rheumatologists.

We asked, "How often do the following Choosing Wisely statements align with your practice," and the results are shown in Figure 1. For several statements, most respondents reported that their practice always or generally aligned, including "don't do imaging for lower-back pain unless red flags are present" (81.3%); "don't routinely measure vitamin D levels in low-risk adults" (86.6%); "don't order an MRI for suspected degenerative meniscal tears or osteoarthritis" (92.2%); and "don't use disposable gloves when standard hand hygiene disinfection practices are safe and sufficient" (91.2%).

There was considerably more variability in the response rates for the statement "don't renew long-term proton pump inhibitor (PPI) therapy for gastrointestinal symptoms without an attempt to taper and stop, or reduce the dose, at least once per year for most patients" (58.3%). While generally safe and effective, PPIs are often prescribed for a longer duration or at a higher dose than guidelines recommend (reference 1). It is recommended to optimize PPI use by prescribing them only when indicated, using the recommended dose and duration, and deprescribing when unnecessary. Deprescribing PPIs could lead to lower risk of side effects like

Figure 1. **How often do the following Choosing Wisely statements align with your practice? (Adult)**



lower calcium absorption and osteoporosis, polypharmacy, reduce environmental impact, and cost savings. Choosing Wisely Canada has created a toolkit for PPI prescribing/ deprescribing (link: *https://choosingwiselycanada.org/wp-content/uploads/dlm_uploads/2025/07/CWC_Toolkit_AskWhyPPI_2025.pdf*).

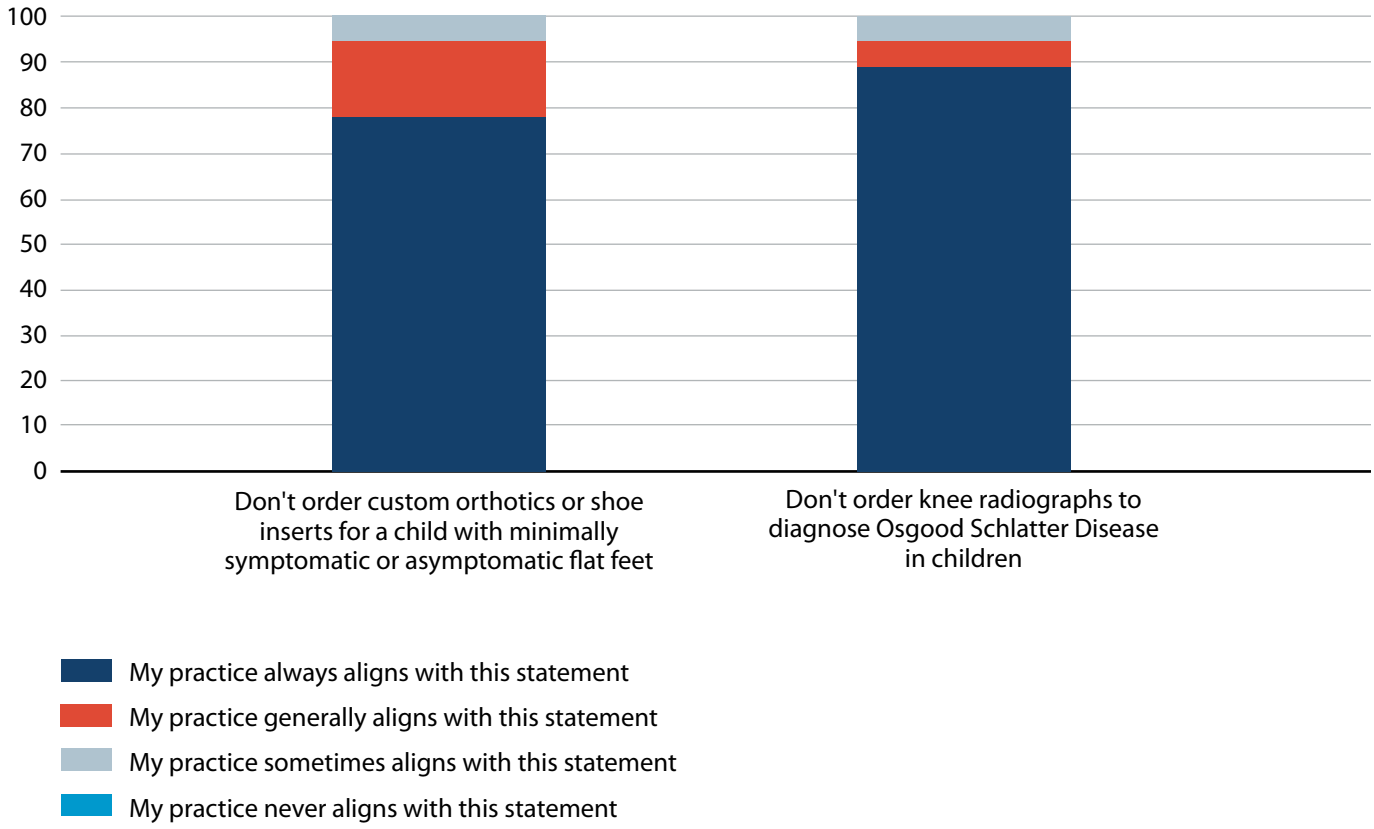
Regarding the pediatric-specific recommendations, the bulk of respondents agreed that they do not "order custom orthotics or shoe inserts for a child with minimally symptomatic or asymptomatic flat feet" (94.4%) and "don't order knee radiographs to diagnose Osgood Schlatter Disease in children" (94.4%), though the overall numbers of respondents for whom these statements were relevant was low (17). See Figure 2 for further details.

General comments centered around ensuring that the guidelines are not applied in an overly broad fashion, highlighting that some rheumatology patients may not be the target population of these statements. It was also astutely pointed out that "It would be good to have a mechanism that resulted in behaviour change. As statements, the Choosing Wisely list is more advisory than actionable." We look forward to continuing to disseminate information from the Choosing Wisely guidelines while looking at mechanisms to help implement them for applicable populations in rheumatology practices across Canada. For any questions or feedback, please reach out to *info@rheum.ca*.

References:

Choosing Wisely Canada. "Ask Why for PPIs" *https://choosingwiselycanada.org/wp-content/uploads/dlm_uploads/2025/07/CWC_Toolkit_AskWhyPPI_2025.pdf*. Accessed January 28, 2026.

Figure 2. **How often do the following Choosing Wisely statements align with your practice? (Pediatrics)**



Key Takeaways from the 13th International Conference on Reproduction, Pregnancy and Rheumatic Diseases

By Shahin Jamal, MD, MSc, FRCPC; and Stephanie Keeling, MD, MSc, FRCPC, on behalf of Maeve Gamble, MD, FRCPC; Dharini Mahendira, MD, MScCH, FRCPC; Viktoria Pavlova, MD, FRCPC; Thanu Ruban, MD, FRCPC; and Jenny Shu, MD, FRCPC

The 13th International Conference on Reproduction, Pregnancy and Rheumatic Diseases was held in May 2025, in beautiful Vienna and attended by rheumatologists from across Canada. This collaborative meeting included physicians and allied health professionals from around the world with a variety of perspectives including fertility medicine, rheumatology, neonatology, obstetrics and gynecology, and internal medicine.

Some of the key takeaways which are relevant to Canadian rheumatologists are outlined below.

Fertility

Despite a decline in ovarian reserve with age, there are an increasing number of births in women over age 35. This is partly due to changes in social norms and advances in technology including use of frozen eggs and egg donation. In women with rheumatic diseases, chronic inflammation, gonadotoxic medications, and auto-antibodies targeting ovarian function can all impact fertility. In men with rheumatic diseases, chronic inflammation and gonadotoxic medications can impact sperm count and motility. Well-controlled rheumatic diseases are usually not the cause of infertility, and a thorough work-up should be done to exclude other causes. These can include hormonal factors and anatomical factors. Interdisciplinary evaluation and counselling is key. Remember that chronic exposure to nonsteroidal anti-inflammatory drugs (NSAIDs) can lead to subfertility and delay time to pregnancy.

Cryopreservation

Cryopreservation is most successful in younger people. In females, it should ideally be initiated at least 7 days prior to and not more than 2-3 weeks after exposure to cytotoxic medication. Gonadotropin-releasing hormone (GnRH) analogues may not be sufficient to protect fertility during cyclophosphamide induction. In men, sperm should be collected and stored prior to cytotoxic drug exposure. Ensure careful counselling on the risks and legal considerations prior to embarking on cryopreservation therapy.

Pregnancy Counselling in Rheumatic Disease

A helpful framework for approach to pregnancy:

- DISCUSS – planning/management of pregnancy and breastfeeding
- DAMAGE – consider pre-existing comorbidities
- DISEASE activity – maintain control
- DRUG safety – continue compatible medications

In 2024, the EULAR task force of 27 experts presented updated Points to Consider for use of anti-rheumatic drugs in reproduction, pregnancy and lactation.[1,2] These points included over-arching principles, an update on compatible drugs for males, females (before and during pregnancy) and lactation, and recommendations on infant vaccines. The over-arching principles include (A) early and regular counselling, (B) treatment before, during and after pregnancy should aim at low disease activity or remission, (C) drug therapy should balance fetal risk against the risk of untreated maternal disease, (D) women should NOT be discouraged from breastfeeding while taking compatible medications and (E) the choice of treatment before, during and after pregnancy should be shared with the patient. Drugs compatible with pregnancy in women include hydroxychloroquine, sulfasalazine, azathioprine, cyclosporine, tacrolimus, colchicine, and biologic disease-modifying antirheumatic drugs (bDMARDs), including non-tumour necrosis factor inhibitors (TNFi). NSAIDs and glucocorticoids should be used selectively. In lactation, compatible drugs include azathioprine, celecoxib, chloroquine, colchicine,

From left to right: Drs. Thanu Ruban, Viktoria Pavlova, Stephanie Keeling, Shahin Jamal, Maeve Gamble, Jenny Shu, and Dharini Mahendira at the 13th International Conference on Reproduction, Pregnancy and Rheumatic Diseases, held in May 2025, in Vienna, Austria.

cyclosporine, hydroxychloroquine, intravenous immune globulin (IVIG), methylprednisolone pulses, non-selective NSAIDs, prednisone, prednisolone, tacrolimus, and bDMARDs. In males, compatible options include azathioprine, colchicine, cyclosporine, hydroxychloroquine, IVIG, leflunomide, methotrexate (< 25mg/wk), mycophenolate, NSAIDs, prednisone, sildenafil, sulfasalazine, tacrolimus, and bDMARDs.

With new and emerging therapies, the UK Teratology Information Service (UKTIS) (*uktis.org*) has up-to-date, evidence-based information on medication, vaccine, chemical and radiological exposures in pregnancy. This can be used by health care providers and patients.

Pregnancy Outcomes and Rheumatic Diseases

Pregnancy outcomes in patients with rheumatic diseases have improved over the past ten years, partly associated with higher use of pregnancy and safe conventional and biological therapies. Despite advances, patients with rheumatic diseases continue to have overall higher rates of Caesarian section. Furthermore, patients with lupus and systemic sclerosis have more pre-eclampsia and miscarriages, and patients with Sjogrens have higher early fetal loss. Poor adherence to treatment in pregnancy is associated with adverse pregnancy outcomes. Patient counselling, education and shared decision making is vital to optimize outcomes.

Key Takeaways from the 13th International Conference on Reproduction, Pregnancy and Rheumatic Diseases

Continued from page 21

Obstetrical Anti-phospholipid Antibody (APLA) Syndrome:

The most common treatments in obstetrical APLA syndrome include enteric-coated acetylsalicylic acid (ASA) and low molecular weight heparin. Despite these therapies, high-risk pregnancies carry adverse event rates of 20-40%. Other treatments which have been used include hydroxychloroquine, pravastatin, intravenous immune globulin (IVIG) and systemic glucocorticoids. There is emerging data on the use of biologics in pregnancy with positive animal studies and small case series successfully using rituximab, belimumab and TNFi inhibitors.

The Improve Pregnancy in Antiphospholipid Syndrome (APS) with Certolizumab Therapy (IMPACT) study was published in 2025 and included 45 very high-risk patients (clinical APS, + lupus anticoagulant) who were treated with certolizumab pegol from gestational weeks 8 through 28.[2] Based on historical controls, the adverse pregnancy outcome rate was predicted to be 40%. In this open label study, however, neonatal survival rate was 93%, suggesting that certolizumab may be effective in preventing placental-mediated adverse outcomes in high-risk patients with APLA syndrome.

Menopause and Rheumatic Diseases

Immune changes associated with menopause include increased inflammatory cytokines, decreased circulating B cells and antibody release, shift of immunity to the Th1 axis, and increased cytotoxic activity of NK cells. Based on changes in immunity, there is increased risk of rheumatoid arthritis after menopause, with higher female involvement and more severe disease. On the contrary, systemic lupus erythematosus (SLE) after menopause is lower risk and less severe. Symptoms of menopause can mimic those we see in patients with connective tissue diseases and include hot flashes, joint aches and pains, cognitive changes and depression. Hormone replacement therapy can be used safely in the majority of our patients, but should be used carefully in those with antiphospholipid antibodies and previous thrombosis. In addition, menopause may increase the risk of osteoporosis, depression and cardiovascular disease in patients with rheumatic diseases.

Inclusion of Pregnant Women in Research

Traditionally, pregnant and lactating women have been excluded from clinical trials, particularly in trials evaluating new medications. Very few drugs actually have a label for safe use in pregnancy, even though they are commonly used for pregnancy associated symptoms. Over the past few years, there has been increased advocacy on including pregnant and lactating women in clinical trials with the sentiment that the harm of not including them outweighs the fear of including them. During the COVID pandemic, pregnant patients were included in some of the vaccine trials. With the formalization and growth of obstetrical medicine, it is hoped that pregnant and lactating women will start being included in clinical research. For further information on advocacy and research, this is an excellent resource: *https://www.bridgeforwocba.org/recommendations-report*.

The Canadian Pregnancy and Rheumatic Disease Consortium is a national database for the prospective observational study of pregnant patients with rheumatic disease, with sites expanding to many centers across Canada.

References:

1. Förger F, Pluma Sanjurjo A, Rüegg L, et al. AB1439 Update of the EULAR points to consider for use of antirheumatic drugs in reproduction, pregnancy and lactation. *Ann Rheum Dis.* 2024;83:2075-2076.
2. Rüegg L, Pluma A, Hamroun S, et al. EULAR recommendations for use of antirheumatic drugs in reproduction, pregnancy, and lactation: 2024 update. *Ann Rheum Dis.* 2025 Jun;84(6):910-926. Available at *https://ard.eular.org/article/S0003-4967(25)00818-0/fulltext.*
3. Branch DW, Kim MY, Guerra MM, et al. Certolizumab pegol to prevent adverse pregnancy outcomes in patients with antiphospholipid antibody syndrome and lupus anticoagulant (IMPACT): results of a prospective, single-arm, open-label, phase 2 trial. *Annals of the Rheumatic Diseases* 2025: 84 (6); 1011-1022.

Shahin Jamal, MD, MSc, FRCPC;
Stephanie Keeling, MD, MSc, FRCPC
Maeve Gamble, MD, FRCPC;
Dharini Mahendira, MD, MScCH, FRCPC;
Viktoria Pavlova, MD, FRCPC;
Thanu Ruban, MD, FRCPC; and
Jenny Shu, MD, FRCPC

Top 10 Research Breakthroughs Funded by Arthritis Society Canada

Arthritis Society Canada is proud to share its Top 10 Research Advances of 2025, highlighting discoveries that are advancing how arthritis is diagnosed, treated and prevented.

From identifying critical windows for early treatment to uncovering new disease connections, research funded by Arthritis Society Canada is paving the way toward more effective, personalized care.

For children with non-systemic juvenile idiopathic arthritis (JIA), starting biologic medication earlier can significantly improve treatment success, according to a study by Dr. Susanne Benseler from the University of Calgary and Dr. Rae Yeung from The Hospital for Sick Children, as part of the UCAN CAN-DU and UCAN CURE consortia. They found that 83% of children who received early treatment achieved inactive disease, compared to 57% who started treatment later. This research brings an important message — early diagnosis and timely treatment can make a life-changing difference.

A study by Dr. Anthony Perruccio from the Schroeder Arthritis Institute at University Health Network discovered that women with osteoarthritis (OA) had a 90% higher risk of developing cardiovascular disease within 6 years compared to women of the same age without OA. This finding highlights that systemic inflammation may link OA to heart health, especially in women, making early awareness and prevention critical to better protect women's long-term health.

These advances are deepening our understanding of arthritis and bringing us closer to a pain-free future.

Explore the full list of Top 10 Research Advances of 2025 at *arthritis.ca/top10research*.

Assessing for Stroke from Giant Cell Arteritis

By Mats Junek, MD, MSc, FRCPC

Case Presentation

You are asked to see a previously healthy 74-year-old gentleman in follow up for a diagnosis of giant cell arteritis (GCA). He initially presented to the emergency department with new onset headache, scalp tenderness, jaw and tongue claudication, and a C-reactive protein of 137.2 mg/L. He was started on 60 mg of prednisone. You see him four weeks later at which point he has improved clinically, and an ultrasound of the temporal arteries is reported as showing evidence of GCA. Shortly before this visit, he reports experiencing new onset of blurry vision in his right eye. He saw an ophthalmologist who found no evidence of ocular GCA but had concerns for a stroke. An urgent computed tomography (CT) angiogram did not show any vasculitis or stroke. When seen in follow up, a magnetic resonance imaging (MRI) scan demonstrated persistent inflammatory changes of the temporal arteries as well as a small, subacute left cerebellar stroke.

How would you manage this case?

Strokes are one of the most feared but uncommon consequences of GCA, seen in 2-6% of individuals.[1] They can be caused by vasculitis of the vertebral, carotid, and/or intracranial arteries, causing either direct occlusion and ischemia or acting as a nidus for a thromboembolic event.

The key considerations when assessing and managing a possible stroke in GCA are:

1) Confirm a diagnosis of giant cell arteritis

Neurologic symptoms, headache, constitutional symptoms, and elevated inflammatory markers can indicate a variety of autoimmune diseases including GCA. While the presence of more specific symptoms (e.g. ischemic ocular disease, jaw claudication) is suggestive of GCA, a broad assessment for other etiologies should be considered, such as pachymeningitis causing headache and vision changes. The foremost alternative diagnoses to consider include IgG4 related disease, anti-neutrophil cytoplasmic antibody (ANCA)-associated vasculitis, primary central nervous system vasculitis (PCNSV), sarcoidosis, Behcet's, and infectious vasculopathy (most notably varicella zoster vasculopathy).

Dedicated imaging with ultrasound, magnetic resonance angiography (MRA), and/or other imaging modalities should suggest large vessel vasculitis and should be performed as soon as possible; glucocorticoid exposure can decrease imaging sensitivity from 90% to 70% within a week of use.[2] Temporal artery biopsies may be helpful. However, in cases of GCA with stroke, non-temporal arteries are often affected and imaging is the cornerstone investigation.

2) Confirm that neurologic symptoms are attributable to stroke

Individuals with neuroinflammatory diseases can present with other neurologic manifestations in addition to stroke which suggest other diagnoses. As such, all neurological symptoms should be able to be readily localized to the location of the infarct and/or hemorrhage. Unexplained symptoms should be evaluated for other neurologic processes with comprehensive serologic and imaging assessments, as well as a low threshold for testing cerebrospinal fluid.

Strokes attributable to GCA typically occur before treatment or within the first 1-2 weeks of treatment before a complete response. If strokes occur outside of this window, other etiologies should be considered. Particular attention should be directed to localize the cause of visual symptoms, as GCA can cause ischemic retinal syndromes, optic nerve perineuritis demonstrated on imaging, and/or posterior stroke. Up to 80% of strokes are in the posterior circulation and are attributed to vertebral vessel involvement, likely reflecting the vessels' smaller calibre.[3,4] Glucocorticoids can also cause visual symptoms and complications that may mimic persistent disease activity early in treatment.

3) Confirm disease location and extent of GCA

Understanding disease extent and severity helps determine treatment. Temporal artery ultrasound is insufficient to assess those with stroke; computerized tomography and/or preferably MRA with vessel wall imaging is

needed. Vertebral, carotid, and intracranial vessels should be carefully interrogated by an experienced neurovascular radiologist to assess for the extent of GCA and the presence of intracranial involvement. Of note, between 14-25% of individuals with GCA can have asymptomatic intracranial disease without stroke; it is unclear if these individuals require additional treatment or monitoring.[5,6]

4) Treat based on disease severity and extent

All individuals with ischemic stroke in the context of GCA should be treated with aspirin and undergo a comprehensive assessment for other secondary prevention measures including smoking cessation and blood pressure control as appropriate. After completing a workup, if a diagnosis of stroke in the context of active GCA is confirmed, there are typically three treatment scenarios:

a. **Individuals with a single stroke and no intracranial disease:** These individuals can be treated the same as those with severe presentation GCA without stroke (i.e. with ischemic optic neuropathy) with glucocorticoids and tocilizumab. There is no data informing whether these individuals benefit from intravenous (IV) glucocorticoids.
b. **Individuals with intracranial vasculitis and stroke:** These individuals are considered to have the most severe phenotype of GCA and may have an overlap with PCSNV. There is limited data concerning treatment; IV cyclophosphamide followed by tocilizumab or tocilizumab with methotrexate have both been used with intravenous followed by oral glucocorticoids.[3]
c. **Individuals with multiple strokes without intracranial vasculitis:** These individuals are often presumed to have intracranial disease not detected on imaging either due to technical considerations or partial treatment with glucocorticoids before image acquisition and are typically treated as though they have intracranial disease.

5) Consider outcomes of stroke in GCA

Cohort studies suggest that there is a higher risk of death in the first two years after a diagnosis of GCA that may return to normal after this time.[7] This may be partially explained by the elevated stroke risk. Increased risk of infections due to immunosuppression and other thromboses are other potential contributors. Those with symptomatic intracranial disease were found to have mortality of up to 32.6%, indicating they have a particularly poor prognosis that likely requires aggressive therapy.[3]

KEY MESSAGES:

1. Stroke is uncommon but serious in GCA; most commonly affects posterior circulation and should be suspected in those with new neurologic findings and/or non-resolving visual changes not explained by ocular GCA.
2. Extracranial GCA with stroke can be treated similarly to those with vision loss in GCA.
3. Intracranial GCA and/or those with multiple strokes likely carry a poor prognosis; tocilizumab with methotrexate and cyclophosphamide are possible treatment options.
4. Individuals with GCA and stroke should receive comprehensive cardiovascular assessments and appropriate secondary preventative measures.

How this case was managed

The patient's MRI was re-assessed by a neurovascular radiologist who found near occlusion of the right vertebral artery not previously reported, as well as involvement of the occipital and maxillary arteries. There was no intracranial disease, and no suggestion of any other diagnosis.

The patient was started on ASA and sent to a stroke clinic where a complete workup was unremarkable. He was started on tocilizumab with an excellent response to treatment. As there was no intracranial involvement nor ongoing symptoms, the patient was continued on tocilizumab and was able to taper off prednisone completely.

References:
1. Bonnan M, Debeugny S. Giant-cell arteritis related strokes: scoping review of mechanisms and rethinking treatment strategy? *Front Neurol.* 2023;14:1305093.
2. Hauenstein C, Reinhard M, Geiger J, et al. Effects of early corticosteroid treatment on magnetic resonance imaging and ultrasonography findings in giant cell arteritis. *Rheumatology (Oxford).* 2012;51(11):1999-2003.
3. Patel S, Okaj I, Scott J, et al. Intracranial GCA: a comprehensive systematic review. *Rheumatology (Oxford).* 2025;64(8):4517-24.
4. de Boysson H, Liozon E, Larivière D, et al. Giant Cell Arteritis-related Stroke: A Retrospective Multicenter Case-control Study. *J Rheumatol.* 2017;44(3):297-303.
5. Siemonsen S, Brekenfeld C, Holst B, et al. 3T MRI reveals extra- and intracranial involvement in giant cell arteritis. *American Journal of Neuroradiology.* 2015;36(1):91-7.
6. Junek ML, Riaz S, Garner S, et al. Added diagnostic yield of temporal artery magnetic resonance angiography in the evaluation of giant cell arteritis. *Rheumatology (Oxford).* 2023;62(6):2197-202.
7. Hill CL, Black RJ, Nossent JC, et al. Risk of mortality in patients with giant cell arteritis: A systematic review and meta-analysis. *Semin Arthritis Rheum.* 2017;46(4):513-9.

Mats Junek, MD, MSc, FRCPC
Rheumatologist & Clinical Scholar,
McMaster University

Patient Perspective: Lucy Kovalova-Woods

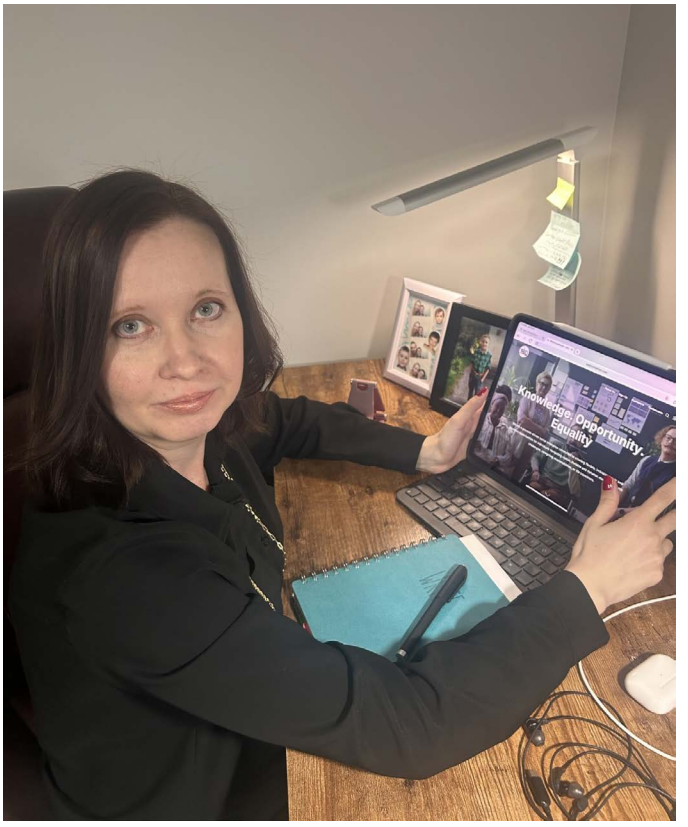
My journey with rheumatoid arthritis and fibromyalgia did not begin with clarity. It began with confusion—subtle pain, intermittent swelling, and a deep fatigue that slowly dismantled the life I once recognized. At first, I convinced myself that I was simply stressed, tired, or "overworked." I tried to push through, hoping it would pass. But when everyday tasks began requiring extraordinary effort, I knew something was very wrong. It was a quiet kind of loss, one that others could not see. At times, it felt difficult even to share it with my husband.

The hardest part was invisibility—I was not ill in the eyes of others. Invisible and dynamic disabilities come with an added layer of frustration. I often heard, "But you look fine." Those words can feel heavier than symptoms themselves. They make you second-guess your own reality before you learn to advocate for yourself. When pain flares but leaves no visible trace, you learn to live between the seen and the unseen—a space where your body knows the truth, even when the world does not.

Adjusting to chronic illness meant more than managing physical changes—it meant rethinking identity. Before illness, I spent my career helping businesses and entrepreneurs build strategies and operations. Suddenly, I could not complete a single task, my cognitive function was so badly compromised. I had to learn a new pace, a new way of finding myself and accept that rest is not failure, but a tool. It took me more than two years, and only now am I rebuilding myself and my business, but this time with deeper purpose and a stronger voice.

Living in this fragile state between ability and limitation helped me see what so many patients truly need: flexibility—not only in healthcare, but also in work, and community. That realization led me to develop WKG Foundation, a disability inclusion initiative focused on helping people with visible, invisible, and dynamic disabilities access meaningful employment and self-realization.

Today, I am honoured to serve on the Board of the Canadian Arthritis Patient Alliance (CAPA). This has been a pivotal chapter in my life. Advocacy gave me not only connection, but direction. Working with patient partners, researchers, and healthcare professionals helped me find a voice that illness once silenced. CAPA reminded me that being a patient does not end our contribution—it reshapes it. Advocacy turned isolation into community, and fear into meaningful action.



Living with multiple chronic conditions has reshaped my life, but it had also expanded it. I learned that identity could evolve, strength can be quiet, and purpose can grow from challenge.

Through lived experience, I have learned the value of compassion, collaboration, and inclusive systems.

Illness changed the way I move—but it strengthened the way I stand:

For inclusion and for the belief that everyone deserves a chance to thrive.

Lucy Kovalova-Woods
Calgary, Alberta
Patient Partner, serving on the Board of Directors at CAPA and WKGfoundation.com

Read my new book on disability and career transition: *https://www.amazon.ca/dp/B0G3M9FNQT*

Dr. Cheryl Barnabe – *Awarded the 2025 Killam Annual Professorship*

Dr. Cheryl Barnabe, Professor of Medicine and Community Health Sciences and Director of the McCaig Institute for Bone and Joint Health at the University of Calgary, was selected as a 2025 Killam Annual Professor. This honour recognizes excellence in research and teaching, and service to the university and the wider academic community. The nomination recognized Dr. Barnabe's commitment to addressing disparities in arthritis care that exist for Indigenous persons. Achievements include her research program centered on innovations in health service delivery, teaching in relational communication skills, advocacy, and mentorship of Indigenous graduate students. Leadership activities include co-authoring the Cumming School of Medicine's Indigenous Health Dialogue which has now been adopted fully in the school's strategic plan, in addition to her contributions to the Canadian Rheumatology Association, the Canadian Institutes of Health Research, and the Royal College of Physicians and Surgeons of Canada.

Dr. Erkan Demirkaya – *Appointed Executive Chair of TARN and ex-officio member of the ERN-RITA*

Congratulations to Dr. Erkan Demirkaya on his appointment as Executive Chair of the Translational Autoinflammatory Research Network (TARN) and as an ex-officio member of the European Reference Network for Rare Immunodeficiency, Autoinflammatory and Autoimmune Diseases (ERN-RITA).

Dr. Demirkaya is a globally recognized leader in pediatric rheumatology, with a particular focus on autoinflammatory disease research. He brings more than two decades of experience as a clinician-scientist, academic educator, and international network builder. As Professor of Pediatrics and Epidemiology & Biostatistics at Western University, and President of the International Society of Systemic Auto-Inflammatory Diseases (ISSAID), he has led national and global initiatives that continue to shape clinical care, education, and research worldwide. He also launched the ISSAID Early Career Program, including its inaugural Global Summit in 2025, and is a highly respected mentor to the next generation of researchers.

As founder and Executive Chair of TARN, Dr. Demirkaya has led the development of a global, multicentre initiative integrating genomics, registries, biobanking, and clinician- and patient-reported outcomes across more than 70 institutions and in collaboration with six patient organizations worldwide. His work has focused on defining genotype–phenotype correlations, developing and validating clinical outcome measures in systemic autoinflammatory diseases (SAIDs), and co-creating consensus-based management tools with international partners, including the National Institutes of Health, the Paediatric Rheumatology European Society (PReS), the American College of Rheumatology, and the European Alliance of Associations for Rheumatology (EULAR).

With his new role as an ex-officio member of ERN-RITA, Dr. Demirkaya's leadership is expected to further strengthen collaboration between Europe and North America, particularly in advancing research and care for rare and ultra-rare disorders.

His current efforts focus on enhancing clinical trial readiness, modernizing outcome measures, advancing translational research and quality improvement, and expanding collaborative networks to improve outcomes for patients with systemic autoinflammatory diseases.

Dr. Lynn Hamilton – *Recipient of the ORA Distinguished Member Award*

I am honoured to receive the Ontario Rheumatology Association (ORA) Distinguished Member Award.

I feel lucky to have had a career which was always interesting, challenging and satisfying.

From the time I completed my Rheumatology and Metabolic Bone Disease fellowships at University of Toronto, there has been enormous progress in therapeutics in our field.

Not only has the specialty been fascinating but there is now so much we can offer our patients.

Dr. Gillian Hawker – *Recipient of the 2025 ACR Master Award*

At the American College of Rheumatology's Convergence Meeting in Chicago in November 2025, Dr. Gillian Hawker was awarded the American College of Rheumatology (ACR) Master designation. The designation of ACR Master is conferred on members who have made outstanding contributions to the field of rheumatology through service to the American College of Rheumatology/Association of Rheumatology Professionals (ARP); and advancements in research, practice, education, and/or advocacy.

Dr. Hawker is a Professor of Medicine and Rheumatology in the Department of Medicine, and a Clinician Scientist/Health Services Researcher and Staff Rheumatologist at Women's College Hospital, at the University of Toronto. Her research is focused on identifying, understanding and addressing disparities in access to and outcomes of care for people living with osteoarthritis (OA). This research has helped redefine OA as a serious disease with multifaceted impacts, advanced understanding of how OA pain affects sleep, mood, comorbidities, and health care costs, documented sex- and gender-based disparities in OA care and demonstrated the importance of patient preferences and values in surgical outcomes. She has over 500 co-authored publications including original research, reviews, white papers, and book chapters. Her impact on the field has been recognized through numerous honours, including the Canadian Rheumatology Association Distinguished Investigator Award (2011), the Queen Elizabeth II Diamond Jubilee Medal (2012), Fellowship in the Canadian Academy of Health Sciences (2014), and the Osteoarthritis Research Society International (OARSI) Clinical Research Award (2022). Dr. Hawker has held many leadership positions within the national and international rheumatology/OA communities. Nationally, she previously co-led the Arthritis Alliance of Canada and national standards of care for OA. Internationally, she has served as Chair of the ACR Quality of Care Subcommittee on Classification & Response Criteria, Board Member of OARSI, and co-leader of international efforts to develop classification criteria for RA (the first ever ACR/EULAR collaboration) and early-stage OA for OARSI. Dr. Hawker has also been recognized for her leadership in advancing inclusive excellence in academic medicine. She has supervised and mentored numerous trainees and received honours for exceptional mentorship.

Dr. Hawker's quote on this honour:

"It is so special to know that others you respect and admire feel your contributions have been useful. I am indebted to the outstanding colleagues who nominated me and to those who decided I was worthy."

Dr. Catherine Ivory – *Recipient of the ORA Early Career Rheumatologist Award*

Dr. Catherine Ivory received the Ontario Rheumatology Association (ORA) Early Career Rheumatologist award in May 2025. She is currently an Assistant Professor at the University of Ottawa, practicing at the Ottawa Hospital. She has been a member of the board of directors of the ORA since 2022, representing Eastern Ontario. This award highlights Dr. Ivory's commitment to the priorities of the ORA, dedication to engaging early career rheumatologists with the ORA, as well as helping recruitment to rheumatology with the RheumOpps committee.

Dr. Shahin Jamal – *Recipient of the BC Society of Rheumatology/UBC Award for Teaching*

Congratulations to Dr. Shahin Jamal on being the recipient of the BC Society of Rheumatology/University of British Columbia (UBC) Award for teaching. This award is voted on by rheumatology residents and recognizes excellence in teaching and commitment to education. Dr. Jamal is a Clinical Professor at the University of British Columbia and a Clinician Investigator at Arthritis Research Canada. She is past Program Director of Adult Rheumatology at UBC and current co-director of the CRA RheumReview Course. She is the co-principal investigator of CanRIO, the Canadian Research Group of Rheumatology in Immuno-Oncology. She is honoured to receive this award, particularly as it was voted on by the residents. She enjoys teaching and mentoring students at all levels and feels privileged to have had the opportunity to work with so many talented trainees, many of whom are now esteemed colleagues.

Dr. Brent Ohata – *Recipient of the VMDAS Award for Community Excellence*

Dr. Brent Ohata was recently awarded the 2025 Vancouver Medical, Dental and Allied Association (VMDAS) Community Excellence Award, in recognition for the impact he has had beyond his Burnaby community practice to rural regions across British Columbia (BC), Indigenous communities, and Vancouver's Downtown Eastside. He is most proud of the deep relationships he has formed as the rheumatologist for the Nisga'a Nation and Carrier Sekani Family Services. He has launched numerous programs with the First Nations Health Authority, Doctors of BC, and BC Pathways to improve specialist access to care for rural and Indigenous communities in BC. He is also the co-founder and director of Mary Pack Arthritis Centre's Downtown Eastside Rheumatology clinic, providing rheumatologic care to patients experiencing extreme poverty. He has involved UBC rheumatology residents through all these endeavours, inspiring a new generation to incorporate advocacy and equity into their future careers.

AB

News from Calgary

By May Choi, MD, MPH, FRCPC; and Nicole Johnson, MD, FRCPC

Members of the Division of Rheumatology at the 2025 CRA Meeting in Calgary, Alberta. (Photo courtesy of Dr. Steven Thomson)

Calgary's division has continued to grow tremendously over the last few years. This includes the appointment of our new Division Chief for Adult Rheumatology, Dr. Maggie Larché, as well as our Interim Division Chief for Pediatric Rheumatology, Dr. Jaime Blackwood. We have also added several new faculty members, including Drs. Azin Rouhi, Syed Bukhari, and Ambika Gupta, and welcomed back our fellows following post-graduate training, Eugene Krustev and Alexandra Kobza. In 2025, the pediatric team welcomed Dr. John Storwick, who will incorporate point-of-care ultrasound in the pediatric clinics. A couple of years ago, Dr. Jeanine McColl joined the team and continues her scholarly work in transition care. This new generation of rheumatologists brings diverse expertise and skill sets that strongly complement our division, particularly in the areas of lupus, myositis, and psoriatic arthritis.

We celebrated the retirement of Dr. Gary Morris last year after stepping down as Interim Division Chief. Dr. Frank Jirik also retired from clinical practice but continues to work on exciting research at the University. We were deeply saddened by the passing of Dr. Ray Lewkonia, whose contributions to the division and to the care of patients were highly valued and will be long remembered.

We also saw three wonderful rheumatologists, Drs. Jason Lee, Ali Shams, and Greg Koller, leave the city to pursue clinical practice opportunities elsewhere in the country. The Pediatric team saw transitions as well. Dr. Paivi Miettunen has assumed the position of Consultant Rheumatologist at Cambridge University Hospitals in the United Kingdom. Similarly, Dr. Susa Benseler transitioned to the role of Chief Academic Officer and Head of Paediatric Health Affairs, Children's Health Ireland. Their dedication, expertise, and collegiality made a meaningful impact on our division, and we wish them continued success in their future endeavours. They will be greatly missed, and we wish them every success in the next chapter of their lives.

May Y Choi, MD, MPH, FRCPC
Associate Professor,
Division of Rheumatology
Department of Medicine
Cumming School of Medicine
University of Calgary

Nicole Johnson, MD, FRCPC
Associate Professor,
Pediatric Rheumatologist,
Clinical Associate Professor,
University of Calgary

The Latest in Edmonton

By Stephanie Keeling, MD, MSc, FRCPC

For better and for worse, lots has changed in Edmonton in the post-COVID era.

Dr. Steven Katz was formally appointed in 2023 as the Divisional Director of Rheumatology and Edmonton Zone Rheumatology Section Lead for Alberta Health Services. Steven continued to grow the division over his time as our Division Head, fostering growth by recruiting new rheumatologists, mentoring trainees, and working with our colleagues at the University of Calgary (e.g., Dr. Claire Barber) to promote initiatives to improve electronic medical records, triage and access to care. This culminated in Steven's 2026 CRA award for leadership which was very well deserved. For family reasons, Steven left in the fall of 2025 to join the Division of Rheumatology at Queen's University and is becoming their Division Head. He leaves behind enormous shoes to fill. Frankly, my feet are wide but not quite so big (I am currently the interim Divisional Director in his place).

We have seen successes by our colleagues. Dr. Carrie Ye was awarded the 2024 Canadian Institutes of Health Research (CIHR) Early Career Investigator Award in Cancer, as well as two CIHR grants in immuno-oncology and artificial intelligence in rheumatology. Dr. Mo Osman has continued his work in scleroderma, inflammatory myopathies, long COVID and lupus with many accolades, including winning the 2025 Lupus Canada Catalyst award and 2026 CRA Early Career Investigator Award.

Drs. Dylan Johnson and Whitney Hung have joined the University of Alberta Division of Rheumatology and have assumed many responsibilities, from teaching of multi-level learners to improving our huge wait times with their clinical acumen. Dr. Justin Smith also returned to the Division and joined the Lupus Clinic of Northern Alberta (LUNA) after spending a year with Dr. Zahi Touma and colleagues at the Toronto Lupus Clinic with a Geoff Carr Lupus fellowship. Our community colleagues continue to support northern Alberta, and we have welcomed Dr. Oke Anuoluwapu from the United Kingdom to join the division.

While her life was commemorated in the spring 2025 issue of the Journal of the Canadian Rheumatology Association, the November 2024 loss of Daniah Basodan, Pediatric Rheumatologist at the University of Alberta, devastated the entire rheumatology community, including patients from the University of Alberta and beyond. Our colleagues in Pediatric Rheumatology (Drs. Dax Rumsey, Tara McGrath, Audrea Chen, Lillian Lim) continue to feel the depth of this loss but have worked tirelessly to continue to help the pediatric rheumatology patients of northern Alberta.

For the better — several colleagues and trainees have been blessed with healthy new babies in 2025-2026, including Drs. Shahad Al-Matar, Dr. Lillian Lim and Dr. Latifa Aljabar.

So, in grief and goodbyes we have also found joy and support amongst colleagues and remained unified — even in the province of Alberta.

Stephanie Keeling, MD, MSc, FRCPC
Interim Divisional Director,
Professor of Medicine,
University of Alberta

The University of Alberta's Division of Rheumatology at the Farewell Party for Dr. Steven Katz in June 2025.

BIMZELX® IS THE **FIRST AND ONLY** IL-17A AND IL-17F INHIBITOR.*[1,2]

AN OPPORTUNITY TO CHALLENGE PSA AND AXSPA WITH BIMZELX

BIMZELX is indicated for the treatment of adult patients with:[1]

- active psoriatic arthritis. BIMZELX can be used alone or in combination with a conventional non-biologic disease-modifying antirheumatic drug (cDMARD) (e.g., methotrexate)
- active ankylosing spondylitis who have responded inadequately or are intolerant to conventional therapy
- active non-radiographic axial spondyloarthritis with objective signs of inflammation as indicated by elevated C-reactive protein (CRP) and/or magnetic resonance imaging (MRI) who have responded inadequately or are intolerant to nonsteroidal anti-inflammatory drugs (NSAIDs)

For more information:

Consult the Product Monograph at ucb-canada.ca/en/bimzelx for important information about:

- Relevant warnings and precautions regarding inflammatory bowel disease, serious hypersensitivity reactions, vaccinations, infections, including tuberculosis, pregnant or nursing women, and women of childbearing potential
- Conditions of clinical use, adverse reactions, drug interactions and dosing information

The Product Monograph is also available by calling 1-866-709-8444.

* Comparative clinical significance is unknown.

1. BIMZELX Product Monograph. UCB Canada Inc. December 12, 2025. **2.** Data on file, UCB Canada Inc.

Inspired by patients. Driven by science.

REVIEWED BY PAAB

Pr Bimzelx® (bimekizumab injection)