Fall 2021, Volume 31, Number 3

CRAJ SCR

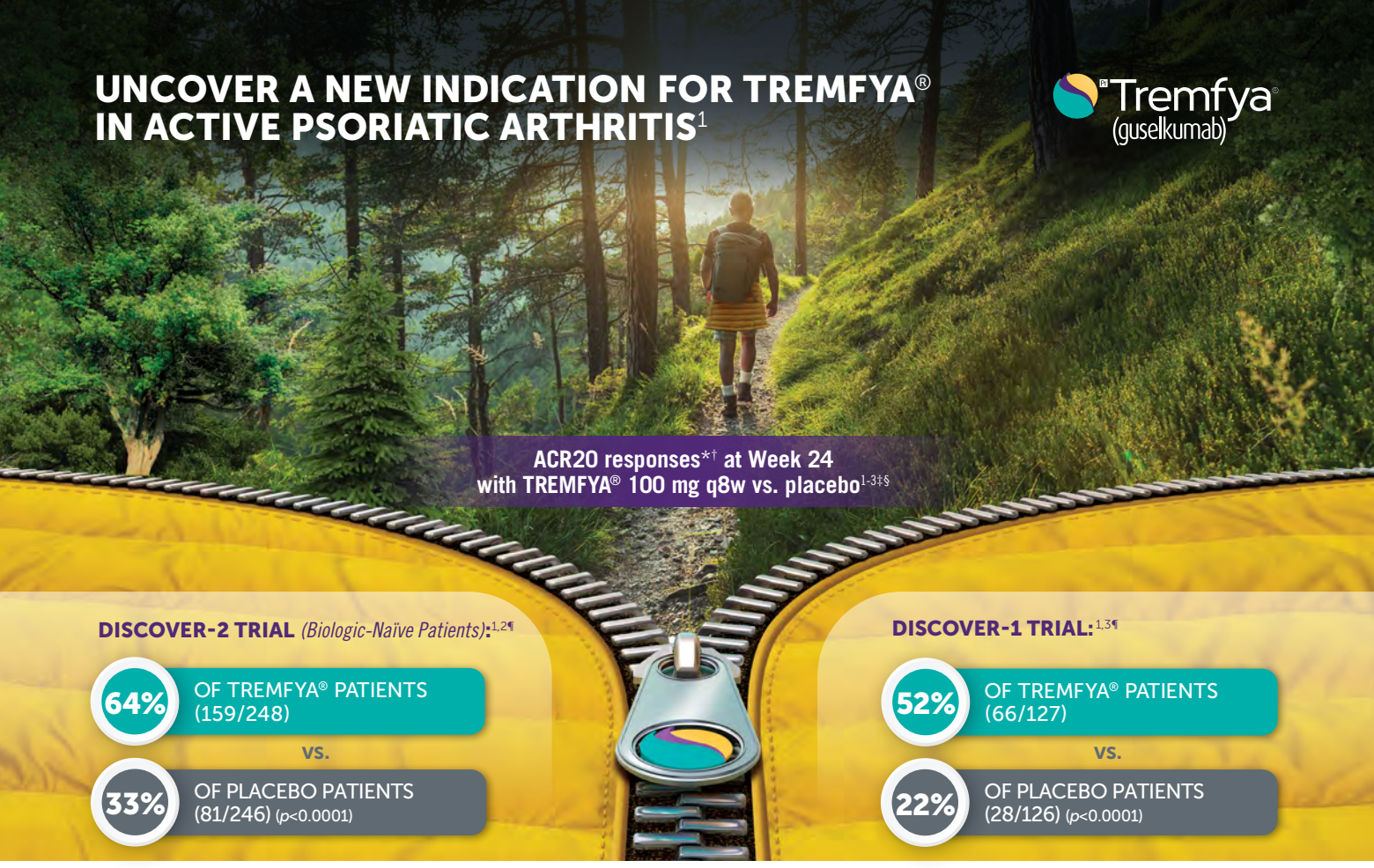
The Journal of the Canadian Rheumatology Association

Focus on:
Equity, Diversity and Inclusion

The CRAJ is online! You can find us at: *www.craj.ca*

UNCOVER A NEW INDICATION FOR TREMFYA® IN ACTIVE PSORIATIC ARTHRITIS[1]

Tremfya® (guselkumab)



ACR20 responses*† at Week 24 with TREMFYA® 100 mg q8w vs. placebo[1-3‡§]

DISCOVER-2 TRIAL *(Biologic-Naïve Patients)*:[1,2¶]

64% OF TREMFYA® PATIENTS (159/248)

VS.

33% OF PLACEBO PATIENTS (81/246) (p<0.0001)

DISCOVER-1 TRIAL:[1,3¶]

52% OF TREMFYA® PATIENTS (66/127)

VS.

22% OF PLACEBO PATIENTS (28/126) (p<0.0001)

Demonstrated improvements in HAQ-DI and SF-36 PCS from baseline with TREMFYA® 100 mg q8w at Week 24 vs. placebo[1-3*†]

- Mean change in HAQ-DI score: -0.32 vs. -0.07 (DISCOVER-1) and -0.37 vs. -0.13 (DISCOVER-2) (p<0.001, both trials)
- Mean change in SF-36 PCS: 6.1 vs. 2.0 (DISCOVER-1; p<0.0001) and 7.4 vs. 3.4 (DISCOVER-2; p=0.011)

Indications and clinical use:

TREMFYA®/TREMFYA ONE-PRESS™ (guselkumab injection) is indicated for the treatment of adult patients with active psoriatic arthritis. TREMFYA®/TREMFYA ONE-PRESS™ can be used alone or in combination with a conventional disease-modifying antirheumatic drug (cDMARD) (e.g., methotrexate).

TREMFYA®/TREMFYA ONE-PRESS™ is also indicated for the treatment of adult patients with moderate-to-severe plaque psoriasis who are candidates for systemic therapy or phototherapy.

Relevant warnings and precautions:

- Do not initiate treatment in patients with any clinically important active infections until the infection resolves or is adequately treated
- Discontinue treatment if patient develops a serious infection or is not responding to standard therapy for infection
- Evaluate patients for tuberculosis infection prior to therapy and monitor for active tuberculosis during and after treatment
- Consider completion of all immunizations prior to treatment
- Concurrent use with live vaccines is not recommended
- Discontinue treatment in cases of serious hypersensitivity reactions, including anaphylaxis, urticaria and dyspnea, and institute appropriate therapy
- Women of childbearing potential should use adequate contraception
- Use during pregnancy only if clearly needed
- The benefits of breastfeeding should be considered along with the mother's clinical needs
- Effect on human fertility has not been evaluated
- Safety and efficacy in pediatric patients have not been evaluated
- Data in patients ≥65 years of age are limited

For more information:

Please consult the Product Monograph at www.janssen.com/canada/products for important information regarding adverse reactions, drug interactions, and dosing and administration that has not been discussed in this piece.

The Product Monograph is also available by calling 1-800-567-3331.

HAQ-DI=Health Assessment Questionnaire-Disability Index; SF-36 PCS=Short Form (36-item) Physical Component Score; qw8=every 8 weeks; ACR20=American College of Rheumatology 20% improvement from baseline; TNFα=tumour necrosis factor alpha; CI=confidence interval.

* Patients with <5% improvement from baseline in both tender and swollen joint counts at Week 16 were qualified for early escape and were permitted to initiate or increase the dose of concomitant medications, including NSAIDs, oral corticosteroid, and cDMARD, and remained on the randomized study treatment. At Week 16, 19.0% and 3.1% (DISCOVER-1) and 15.4% and 5.2% (DISCOVER-2) of patients in the placebo and TREMFYA® 100 mg q8w groups, respectively, met early escape criteria.

† Patients with missing data at Week 24 were imputed as non-responders. Patients who initiated or increased the dose of cDMARD or oral corticosteroids over baseline, discontinued study or study medication, or initiated protocol-prohibited medications/therapies for PsA prior to Week 24 were considered treatment failures and non-responders. At Week 24, 16.7% and 5.5% (DISCOVER-1) and 6.9% and 4.8% (DISCOVER-2) of patients in the placebo and TREMFYA® 100 mg q8w groups, respectively, met treatment failure criteria.

‡ DISCOVER-2: Multicentre, double-blind, randomized, placebo-controlled phase 3 study in biologic-naïve adults with active psoriatic arthritis (PsA) (≥5 swollen joints, ≥5 tender joints, and a C-reactive protein [CRP] level of ≥0.6 mg/dL) who had inadequate response to standard therapies (e.g., conventional disease-modifying antirheumatic drugs [cDMARDs], apremilast, or nonsteroidal anti-inflammatory drugs [NSAIDs]), a diagnosis of PsA for ≥6 months, and a median duration of PsA of 4 years at baseline. Patients were randomly assigned to receive subcutaneous injections of TREMFYA® 100 mg at Weeks 0, 4, then q8w, or placebo. Primary endpoint was the percentage of patients achieving an ACR20 response at Week 24.

§ DISCOVER-1: Multicentre, double-blind, randomized, placebo-controlled phase 3 study in adults with active psoriatic arthritis (≥3 swollen joints, ≥3 tender joints, and a CRP level of ≥0.3 mg/dL). Eligibility criteria also included inadequate response to standard therapies (e.g., cDMARDs, apremilast, or NSAIDs), a diagnosis of PsA for ≥6 months, and a median duration of PsA of 4 years at baseline. About 30% of study participants could have received one or two anti-TNFα agents. Patients were randomly assigned to receive subcutaneous injections of TREMFYA® 100 mg at Weeks 0, 4, then q8w, or placebo. Primary endpoint was the percentage of patients achieving an ACR20 response at Week 24.

¶ Treatment differences, 95% CIs and p-values were based on Cochran-Mantel-Haenszel test stratified by baseline non-biologic cDMARD and either prior CRP (<2.0, ≥2.0 mg/dL) (DISCOVER-2) or prior anti-TNFα agents (DISCOVER-1).

References: 1. TREMFYA®/TREMFYA ONE-PRESS™ (guselkumab injection) Product Monograph. Janssen Inc. September 4, 2020. **2.** Mease PJ, Rahman R, Gottlieb AB, *et al.* Guselkumab in biologic-naïve patients with active psoriatic arthritis (DISCOVER-2): a double-blind, randomized, placebo-controlled phase 3 trial. Published online March 13, 2020 https://doi.org/10.1016/S0140-6736(20)30263-4. **3.** Deodhar A, Helliwell PS, Boehncke W, *et al.* Guselkumab in patients with active psoriatic arthritis who were biologic-naïve or had previously received TNFα inhibitor treatment (DISCOVER-1): a double-blind, randomised, placebo-controlled phase 3 trial. Published online March 13, 2020 https://doi.org/10.1016/S0140-6736(20)30265-8.

Tremfya® (guselkumab) | Tremfya® (guselkumab) One-Press™ | JANSSEN BIO ADVANCE® Program

The image depicted contains models and is being used for illustrative purposes only.

Janssen Inc. 19 Green Belt Drive | Toronto, Ontario | M3C 1L9 | www.janssen.com/canada

MEMBER OF INNOVATIVE MEDICINES CANADA

REVIEWED BY PAAB

janssen PHARMACEUTICAL COMPANIES OF Johnson & Johnson

Managing Uncertainty

By Philip A. Baer, MDCM, FRCPC, FACR

"We crave explanations for most everything, but innovation and progress happen when we allow ourselves to embrace uncertainty."
– Simon Sinek, author and inspirational speaker

Two referrals came in this week on patients I had seen before. Patient #1 had been seen four years ago with an isolated stably high CK[1] in the hundreds, not on statin therapy, not hypothyroid, with no rash, weakness or muscle atrophy. I provided reassurance and sent them back to their primary care provider. Patient #2 had been seen 10 years ago, with a positive ANA[2] test 1/640 speckled/homogeneous, a relative with rheumatoid arthritis (RA), and mild fatigue and arthralgias. The patient was hypothyroid, the most likely cause of her positive ANA, in my view. Everything else on history and examination was negative. The patient was reassured, a few extra tests were done and found to be negative (RF[3], ENA[4], anti-dsDNA[5] and urinalysis), and the patient was sent back to primary care. In neither case did I suggest serial testing of the abnormal lab parameters.

I don't lose sleep over isolated lab abnormalities, but patients and primary care physicians seem to be more troubled by the perceived uncertainty engendered by red numbers on the lab results tab in the electronic medical record (EMR). Patient lab portals have led to increased queries about abnormalities of the RDW[6], MCH[7], and other tests which are not specifically requested, but for which results are received nevertheless. The lab macro that accompanies every positive ANA doesn't help: "could be a sign of …"

Medicine is all about dealing with uncertainty, as is life in general. The effects of a treatment, good or bad, are based on probabilities. Evidence-based medicine is great, but what about all the situations where there is no evidence (rare disease, no randomized controlled trials) or the evidence is in conflict (just look at recent COVID-19 vaccine guidelines, for instance)? Patients still need to be treated in the here and now, and decisions need to be made.

Can the "uncertainty principle" help us? Heisenberg's uncertainty principle in its standard form describes how precisely we may measure the position and momentum of a particle at the same time — if we increase the precision in measuring one quantity, we are forced to lose precision in measuring the other. Well, that may be true in quantum mechanics, though hotly debated. No help with our patients.

If ordering a test won't change what you do, don't order it. Good advice. Once ordered and abnormal, that lab result is like an itch that must be scratched, it seems. Whether driven by the patient or the physician, that ANA or CK is going to be repeated, often for no good reason.

Patient #2 turned up first. She had changed family doctors and had complained again of mild fatigue and arthralgias. The ANA recheck was positive again at a lower titre of 1/160 speckled/homogeneous. I could see that readily from my old records, and the general practitioner (GP) could have found that in the government lab database if they had looked. Nothing else had changed, and my conclusion was the same. More reassurance provided ("likely related to your thyroid; positive ANA is seen in 13-15% of the general population"), no need to repeat the ANA in future ("it will be positive for life"), and my usual offer to reassess ("your family doctor can call me with any questions; I am happy to see you again if the need arises"). Interestingly, shortly before seeing me, the patient had seen another rheumatologist, whose workup included negative MRIs of both hands, which would not have occurred to me, but every generation of rheumatologists has their favourite test.

Patient #1 also eventually returned with their high CK. Still asymptomatic, not on any medication, no link to strenuous exercise, no family history of myopathy or neurologic disorders, and no weakness, rash or interstitial lung disease. Maybe this patient's high CK was a function of gender and race/ethnicity, though I am increasingly suspect of that explanation, given all the recent revelations about correcting eGFRs[8] and PFTs[9] based on such criteria. Another round of reassurance for the GP, as the patient was sure they were healthy and didn't seem to need my opinion on that matter.

As a counterexample, recent Patient #3 was a 51-year-old man referred by their GP on the advice of an orthopedic surgeon, who evaluated the patient for recurrent ankle and foot pain and found nothing to operate on. The history was classic for gout, but the patient said that had been ruled out by their GP, as the uric acid level was always normal. Well, of course, it could be normal during an acute attack, but the lab database revealed levels of 530, 484 and 465 μmoles/L over the last few years. The only problem was that the lab had set the upper limit of normal at 512, nowhere near the optimal or treat-to-target value of 360. So, in the EMR, the 484 and 465 values were shown in black ("normal"), not red. The patient was relieved to find out he was no longer a "medical mystery."

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

Paul F. Brand
Executive Editor

Jyoti Patel
Managing Editor

Catherine de Grandmont
Senior Medical Editor (French)

Donna Graham
Production Manager

Dan Oldfield
Design Director

Robert E. Passaretti
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.

Managing Uncertainty *continued from page 3*

Similarly, Patient #4 was referred for worsening osteoporosis. A recent BMD[10] provided sequential results between 2000 and 2018. Interestingly, the actual BMD in grams/cm^2 was virtually the same at the start and end of this long observation period. However, the column labelled "BMD change" showed an unrelenting series of minus signs. Obviously, something had gone wrong in the algorithm. Otherwise, this would be analogous to the imaginary Penrose stairs made popular by the artist MC Escher and the movie "Inception," a staircase in which the stairs make four 90-degree turns as they ascend or descend yet form a continuous loop, so that a person could descend them forever and never get any lower. I earned my consult fee for figuring that out and congratulated the patient on maintaining the same BMD despite aging by 18 years. No treatment required!

A typical week at the office: uncertainty mitigated for the first two patients, and certainty provided for the last two patients. Medicine is always interesting.

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

Glossary:
1. CK: Creatine kinase
2. ANA: Antinuclear antibody
3. RF: Rheumatoid factor
4. ENA: Extractable nuclear antigen
5. Anti-ds DNA: anti-double-stranded DNA
6. RDW: Red Cell Distribution Width
7. MCH: Mean corpuscular hemoglobin
8. eGFR: Estimated glomerular filtration rate
9. PFT: Pulmonary function test
10. BMD: bone mineral density

WELCOME TO THE RHEUM

Welcome to the following new CRA members:

Samar Aboulenain, Toronto, ON
Amani Albijadi, Toronto, ON
Nicole Beckett, Halifax, NS
Audrea Chen, Toronto, ON
Aoife Cox, Toronto, ON
Lauren Glick,Toronto, ON
Janete Dabague Guzman, Ottawa, ON
Amanda Hu, London, ON
Allyson Jones, Edmonton, AB
Deborah Koh, Hamilton, ON
Amanda Marsden,Vancouver, BC
Maryam Obaidallah, Toronto, ON
Azin Rouhi, Edmonton, AB
Orit Schieir, Montreal, QC
Alaa Shehab, Toronto, ON
Chen (Emma) Tang, Kingston, ON
Barbara E. Walz, Mississauga, ON
Madina Weiler, London, ON

NOTE: Based on feedback we received, we have added some clarification regarding the article "How to Get More Buck for Your Bang! The Ins and Outs of SR&ED credits," published in the Spring 2021 issue of the *CRAJ*. Please visit *craj.ca* to view the article and the clarification.

CIORA ICORA
CANADIAN INITIATIVE FOR OUTCOMES IN RHEUMATOLOGY CARE
INITIATIVE CANADIENNE POUR DES RESULTATS EN SOINS RHUMATOLOGIQUES

2021 CIORA Grant Award Recipients

By Janet Pope, MD, MPH, FRCPC

The CRA is pleased to announce that its granting division will be funding five two-year grants and one one-year grant for a total of $631,151 CDN to projects that will enhance access to and innovation in rheumatology care.

Funding is provided as part of the Canadian Initiative for Outcomes in Rheumatology cAre (CIORA) 14th annual grant competition. CIORA has funded 109 projects and provided $8,009,854 CDN in research funding since 2006.

CIORA provides funding based on various pillars; this year's grants include projects that promote:

- Awareness/Advocacy/Education (2 awards)
- Multi-disciplinary Care Teams
- Health Economics/Sustainability of Health Care/Quality Improvement
- Early Access for Rheumatic Disease Patients
- Community Rheumatology (new)

Janet Pope, MD, MPH, FRCPC
Professor of Medicine, Division Head, Division of Rheumatology, Department of Medicine, St. Joseph's Health Care, Western University, London, Ontario

Pillar	Title	Principal Investigator	Award
Awareness/Advocacy/ Education	Supporting Equitable Outcomes in Diverse Populations with Rheumatoid Arthritis Through Appropriate Guideline Implementation, Practice and Policy Approaches	Barnabe, C.	$99,796
	Going Beyond Pain: Expansion of the JIA Option Map to Support Young People and Their Families to Manage Juvenile Idiopathic Arthritis in Their Daily Lives	Toupin-April, K. Stringer, E	$119,865
Community Rheumatology	A Community-based Adaptation of the Small Changes Behavioural Weight Loss Treatment Approach for Psoriatic Arthritis Patients with Comorbid Obesity	Teo, M.	$57,795
Early Access for Rheumatic Disease Patients	The Impact of the COVID-19 Pandemic on Access to Rheumatology Services and Treatment – A Population-based Approach	Widdifield, J.	$115,000
Health Economics/ Sustainability of Health Care/ Quality Improvement	Biosimilars of Rituximab in ANCA-associated Vasculitis compared to the Originator (BRAVO): a CanVasc Multi-centre Study	Mendel, A. Barra, L. Pagnoux, C.	$119,792
Multi-Disciplinary Care Teams	Adapting and Evaluating an Evidence-based Online Behavioural Intervention to Manage Insomnia in Patients with Rheumatoid Arthritis	Da Costa, D.	$118,903

Congratulations to the 2021 grant recipients! A listing of all current and previous recipients is available to view at ***https://rheum.ca/research/2021-grant-awards/.***

A special thanks to our sponsors for their continued support:

$125,000 to $150,000
GlaxoSmithKline
Pfizer Canada Inc.

$100,000 to $125,000
AbbVie Corporation

$75,000 to $100,000
Boehringer Ingelheim
Novartis-Sandoz

$50,000 to $75,000
Gilead Sciences Canada Inc.

CIORA is issuing another call for grants in 2022!

CIORA Online Grant Application System opens **January 24, 2022.**
Letter of Intent must be submitted by **February 25, 2022.**
CIORA Online Grant Application submission deadline is **April 8, 2022.**

The Time Is Now for the Canadian Rheumatology Community To Lead the Way in Equity, Diversity and Inclusion!

By Nicole Johnson, MD, FRCPC

The year 2020 was the beginning of the COVID-19 pandemic, but also the beginning of a new consciousness of the ongoing oppression of Black people in society. The inhumane and violent death of George Floyd was captured on video and became viral on social media. There was an immediate response globally to acknowledge and address the injustices experienced by Black individuals. Our own Canadian Rheumatology Association (CRA) leadership addressed our membership with a President's message[1] followed by a call for volunteers to form a Task Force on diversity and inclusion.

The Equity, Diversity, and Inclusion Task Force was established in August 2020, and consists of Drs. Tooba Ali, Maysoon Eldoma, Aurore Fifi-Mah, Natasha Gakhal, Nicole Johnson (Chair), Ambreen Khan, Manisha Mulgund, Trudy Taylor and our invaluable CRA coordinator, Kevin Baijnauth.

Our volunteers on the Task Force are avid advocates of the equity, diversity and inclusion (EDI) initiative and wish to guide the CRA to become a leader as an inclusive and innovative Canadian subspecialty organization. Quotes from some of our members are as follows: "I identify as an Afro-Caribbean woman with a multicultural upbringing, being born on a French island where diversity is the norm. After moving to Canada, I struggled with the lack of diversity in leadership roles. Becoming a member of the EDI Task Force Committee is a unique opportunity to provide guidance and inform the important changes necessary to implement EDI pillars in the CRA," says Dr. Aurore Fifi-Mah. "I am passionate about EDI in all spaces and am excited to see it being embraced in an explicit and thoughtful way by the CRA. I want to be a part of that, both to help shape the values that guide the operation of our organization and for personal growth and education," says Dr. Trudy Taylor.

Our focus to date has been identifying key diversity and inclusion priorities for the CRA Board. One of these priorities entailed defining Equity, Diversity and Inclusion (EDI) as it pertains to the CRA organization.[2] It was important to the Task Force members that the CRA efforts for EDI were not limited to racial differences, but to encompass all equity-deserving groups. These additional groups include, but are not exclusive to, age, gender, sexual orientation, religion and varied abilities. As with many organizations with a strong commitment in EDI, we strive to move beyond a statement on equity to having our day-to-day operations reflect the principles of EDI.[3,4]

The next steps will be to establish, in conjunction with the CRA board, organizational values that will incorporate EDI concepts. These values will be central to all functions and decisions of the CRA and will be an integral force behind the priorities of the organization as the CRA works with its membership, staff and stakeholders. In addition, through the newly established links to other CRA committees, for example the Communications, Education, Human Resources and Annual Scientific Meeting Planning Committees, the Task Force hopes to highlight EDI across the organization. An early example of these efforts was a well-received session on EDI in the LEAP (CRA leadership) program.

Our future aspirations include seeing opportunities to enhance EDI skills in our CRA members through awareness, education, and policies which will ultimately influence our daily activities in advocacy, leadership, sponsorship and justice for equity-deserving populations. The time is now to make changes in our healthcare systems. Racism, be it individual, interpersonal, institutional or systemic in nature, is a social determinant of health.[5] We can no longer turn a blind eye to this reality. The year 2021 has shown us the devastating impact of COVID-19 on various populations in Canada, including our rheumatology patients, and highlighted health inequalities across the country.[5] In addition, the recent discovery of unmarked graves of Indigenous children in Canada has brought increased awareness of the effects of systemic racism and its long-term impact on the mental and physical health of the generations of survivors of residential schools and their families, some of whom are our neighbours, colleagues, and patients. We need to take

continued on page 8

The Time Is Now *continued from page 7*

responsibility for the lasting intergenerational impact of residential schools in Canada,[6] by addressing health inequalities as health providers. These inequities leave us with a renewed commitment to take responsibility as colleagues, educators, rheumatology providers, researchers and global citizens to be part of the change towards health equality and justice for all. As a rheumatology community, we would like to be at the forefront of this transformation, and we welcome new members to the Task Force to be part of the change.

Nicole Johnson, MD, FRCPC
Pediatric Rheumatologist,
Evaluation coordinator, Pediatric Clerkship
Calgary, Alberta

References:
1. President's message on Diversity. Canadian Rheumatology Association. Avaiiable at *rheum.ca* Accessed August 30, 2021.
2. Definitions of EDI. Available at *rheum.ca.* Accessed August 30, 2021.
3. 15 Ways to Improve Diversity and Inclusion in the Workplace. *Socialchorus.* Available at *https://socialchorus.com/blog/15-ways-to-improve-diversity-and-inclusion-in-the-workplace/.* Accessed July 26, 2021.
4. Awake to Woke to Work: Building a Race Equity Culture. National Human Services Assembly. Available at *https://www.nationalassembly.org/resources/awake-to-woke-to-work-building-a-race-equity-culture/.* Accessed August 16, 2021
5. Social Determinants of Health. U.S. Department of Health and Human Services. Available at *https://health.gov/healthypeople/objectives-and-data/social-determinants-health.* Accessed August 16, 2021.
6. Hanson E, et al. The Residential School System. *Indigenous Foundations.* First Nations and Indigenous Studies UBC. 2020. Available at *https://indigenousfoundations.arts.ubc.ca/the_residential_school_system/.* Accessed August 16, 2021.

Bridging the Gap: Learning Spanish To Better Help My Patients

By Nancy Keesal, MD, FRCPC

I've always been a lover of languages. I was born in Montreal, and I attended a Jewish elementary school and high school and learned French, English, Hebrew and Yiddish, not to mention sign language as I had two grandparents who were deaf-mutes. That being said, when I moved to Toronto for my residency, facing the multiculturalism of the city was daunting, and I soon came to see that translation was a fundamental and often frustrating part of medical practice. No matter how good your translator is, you know you are never getting the full story, and that your patient is not getting the best of you because of it.

When I started in private practice as a rheumatologist, I spent part of my time in an area of Toronto dominated by Portuguese and Spanish patients. Every second patient required a translator, and it was time-consuming and tiring, so I signed myself up for a Spanish class. I have been seeing patients without a translator for years now. It has even helped me learn some Portuguese, not enough to not require a translator, but enough to know when I am not being translated well. It is frightening to realize how often the information we share or the questions we ask our patients are incorrectly conveyed.

Because of my Spanish, I decided to travel to one of the poorest parts of Guatemala with a non-governmental organization (NGO) and offered my services there. The "clinic" was crude, and we barely had any medical supplies. It was publicized through the village that a "bone doctor" was in town. I snuck in a lot of Depo-Medrol in my suitcase (I found out that to bring it in legally would require the mayor of the town writing a letter on my behalf and 10 pages of paperwork, so I hid it in my luggage). I listened to many stories and gave a lot of cortisone injections that week. I had to ignore the patient with a breast mass I saw, because she had no money for medical care, and the lice on a newborn, passed on to her by the only midwife in the village. There was nothing to do because they can't wash all their clothes with clean water.

There are so many barriers to equity; so many cultural differences that lead to separation instead of celebration. At the core of relationships within medicine is the ability to communicate with ones' patients. Language, at the very least for me, helps me to cross the first fundamental barrier at least with some of my patients. Language has brought a richness and joy to my life and has helped me expand my world, and now I am trying to teach that to my children.

Nancy Keesal, MD, FRCPC
Rheumatologist,
Toronto, Ontario

Overcoming Challenges, Seizing Opportunities, and Driving Change

By Grace C. Wright, MD, PhD, FACR

It was 1983. As a first-year medical student, I entered a class of bright-eyed trainees, unaware that this was the start of a journey of creating inclusion and bending the arc of diversity in rheumatology and medicine. Living in New York City, I was in a melting pot, rich in diverse cultures, cuisines, languages, religions, ethnicities, races. . . Despite this, I was the only Black woman in my class. The only "foreign" student. The first MD-PhD in my category of one. And, while this can be considered a significant personal accomplishment, it is also a reflection of the unequal inclusion and limited representation of minorities, particularly females, not only in rheumatology but in medicine and other industries.

The socioeconomic challenges and barriers faced by under-represented communities as they try to seek, access, and/or afford opportunities and services have resulted in centuries of inequality that are still palpable today, despite increased social awareness and movements towards inclusion and equality. In a 2018 survey conducted by the Association of American Medical Colleges (AAMC), 56% of surveyed US-based active physicians identified as White, compared to 5% who identified as Black or African American.[1] Interestingly, demographic data of 2019 medical school students showed that, while most students identified as White (47%), the proportion of students identifying as other racial/ethnic minorities increased,[2] suggesting a shift towards diversification in the medical workforce. In fact, among young physicians, more women identified as non-White compared to their male counterparts.[3]

Rheumatology (and medicine in general) has experienced a gender shift over the past decade, with increasing numbers of female health providers working in community practices and academia[4] and, in 2025, 56% of adult rheumatologists are expected to be female. This stands in stark contrast to the few women in leadership positions such as associate or full professors, chiefs of rheumatology departments, editors of academic journals, recipients of research and federal grants, etc.[5-7] Furthermore, female rheumatologists are also estimated to earn less than male counterparts with lower salaries, more time spent per patient (resulting in fewer patients seen per day) and reduced working hours due to family or lifestyle demands.[8]

"Looking back, those years of creating conversations, building community, bridging cultural divides were the preparation for a lifelong commitment to equity, inclusion and diversity not only in the way we care for patients but also within our own practices, workflows, policies, and leadership."

As healthcare professionals, we are aware of the deep inequalities that exist in healthcare and the implications of these inequalities on patient outcomes and healthcare costs. But within these disparities, these challenges, and frustrations, there is also opportunity to implement initiatives to encourage women, and under-represented groups to advance in medicine, and to ensure that they will have equal career advancement opportunities. One such initiative is the Association of Women in Rheumatology (AWIR) which is dedicated to increasing equity, diversity and inclusion in rheumatology.[9]

Grace C. Wright, MD, PhD, FACR
President & CEO, Grace C. Wright MD PC
President, Association of Women in Rheumatology
New York, New York

References:
1. AAMC. Diversity in Medicine: Facts and Figures 2019. Available at *https://www.aamc.org/data-reports*. Accessed July 29, 2021.
2. AAMC. Undergraduate Medical Education Data Available at *https://www.aamc.org/data-reports*. Accessed July 30, 2021.
3. AAMC. US Physician Workforce. Available at *https://www.aamc.org/data-reports*. Accessed July 20, 2021.
4. Battafarano DF, Ditmyer M, Bolster MB, et al. 2015 American College of Rheumatology Workforce Study: Supply and Demand Projections of Adult Rheumatology Workforce, 2015-2030. *Arthritis Care Res (Hoboken)*. 2018; 70(4):617-626.
5. Jorge A, Bolster M, Fu X, et al. The Association Between Physician Gender and Career Advancement Among Academic Rheumatologists in the United States. *Arthritis Rheumatol*. 2021; 73(1):168-172. doi: 10.1002/art.41492. Epub 2020 Nov 8.
6. Mayer AP, Blair JE, Ko MG, et al. Gender distribution of U.S. medical school faculty by academic track type. *Acad Med*. 2014; 89(2):312-7.
7. Bagga E, Stewart S, Gamble GD, et al. Representation of Women as Authors of Rheumatology Research Articles. *Arthritis Rheumatol*. 2021; 73(1):162-167.
8. The Rheumatologist. Rheumatology & The Gender Pay Gap. Available at *https://www.the-rheumatologist.org/article/rheumatology-gender-pay-gap/?singlepage=1*. Accessed July 29, 2021.
9. Association of Women in Rheumatology. Available at *https://awirgroup.org*. Accessed July 29, 2021.

Glass Ceilings, Implicit Bias, Imposter Syndrome and the Matilda Effect

By Janet Pope, MD, MPH, FRCPC

The theme of this issue of the *Journal of the Canadian Rheumatology Association* is an important one: equity, diversity, and inclusion. Over the course of my career, I have witnessed subtle differences in the "treatment" of colleagues and patients who are perhaps thought to be a minority based on various characteristics (sex, gender identification, ethnicity, different beliefs, etc.). Often the differences are subtle—not including or recognizing an individual solely on their merit, or the "glass ceiling" where in academia and elsewhere, fewer women are top leaders relative to their representation in institutions such as hospitals and universities. The reasons for attrition are subtle, but lack of mentoring and other biases may self-select that women don't apply for these positions.

In science, there is a phenomenon called the Matilda effect. It is a bias against acknowledging the achievements of women whose work is attributed to their male colleagues, named after Matilda Gage who was a suffragist and wrote about men taking the credit for female peers' work or, I would also add, unequal credit between the sexes for equal achievements, with men receiving more "kudos" than women. This can lead to uncertainty regarding a successful woman's talents and less productivity/recognition over time. Women more than male counterparts can also experience the imposter syndrome which consists of doubting your abilities and feeling like a fraud. It disproportionately affects high-achieving people, who find it difficult to accept their accomplishments. Valerie Young divided the imposter syndrome into different categories such as perfectionist, superwoman/man, natural genius, soloist, and expert. You may identify yourself in one of these types.

We do need to be aware that we all have biases. There are obvious (overt) biases that we are aware of, but more insidious are the unconscious biases which we all have, such as believing stereotypes about certain groups of people that individuals hold but are unaware of. This leads to unintentional discrimination and fewer points of view, reducing options or squelching ideas. In general, more points of view expand possibilities and innovation. Biases are held by men and women. For example, there is a riddle about a child who comes with his father to the emergency room in a rural center, after a car accident, and both are unconscious, and then the child is operated on by his parent. We want to solve the problem saying that the father is a surgeon and woke up and treated his child as no other surgeons were available. But there is another solution. (The surgeon is his mother, if I have to tell you the answer). Both men and women including physicians are equally likely to have this unconscious bias. There are implicit bias tests that I urge all of us to take. It helps to "know thyself."

So, in late 2021 and onward, what do we as a rheumatology community and as individuals need to do? Take the implicit bias tests. They are free and validated and remind you of your blindspots. Be aware of decisions you make and deliberately include diversity in your clinic staff, research teams, etc. Help patients who are marginalized get the care they need through advocacy, access to other professionals (social work, nursing staff, allied health professionals, case workers); practice giving positive but critical feedback and acknowledging accolades of people around you. It will make us better healthcare providers and people.

Janet Pope, MD, MPH, FRCPC
Professor of Medicine, Division Head,
Division of Rheumatology, Department of Medicine,
St. Joseph's Health Care, Western University,
London, Ontario

Suggested readings:

Glass Ceilings. Wikipedia. Available at *https://en.wikipedia.org/wiki/Glass_ceiling.* Updated August 2021. Accessed August 2021.

Matilda effect. Wikipedia. Available at *https://en.wikipedia.org/wiki/Matilda_effect.* Accessed August 2021.

Matilda Gage. Wikipedia. Available at *https://en.wikipedia.org/wiki/Matilda_Joslyn_Gage.* Accessed August 2021.

Overcoming Imposter Syndrome. Hbr.org. Available at *https://hbr.org/2008/05/overcoming-imposter-syndrome.* Updated May 2008. Accessed August 2021.

Imposter Syndrome (video clip). Available at *https://impostorsyndrome.com.* Accessed August 2021.

Unconscious Bias. Vanderbilt.edu. Available at *https://www.vanderbilt.edu/diversity/unconscious-bias/.* Accessed August 2021.

Implicit Bias Tests. Harvard.edu. Available at *https://implicit.harvard.edu/implicit/canada/takeatest.html.* Accessed August 2021.

The Evolution of the Rheumatology Workforce in Jamaica

Local Talent Assisted by the University of Toronto

By Taneisha K. McGhie, BSc (Hons), MBBS, DM

Jamaica's longest-serving rheumatologist, Dr. Karel De Ceulaer, arrived in Jamaica in 1979 as a recruit of Dr. Graham Hughes, who had spent a year in Jamaica in 1975 during which he had documented Jamaican neuropathy, an acute transverse myelitis which he later discovered to be caused by anti-phospholipid antibodies. At the time Dr. De Ceulaer arrived in Jamaica, Dr. Wendell Wilson had established a rheumatology clinic at the University Hospital of the West Indies (UHWI), the main teaching hospital in Jamaica. Unfortunately, after six months, Dr. Wilson emigrated, and the rheumatology service was to be attended by a single rheumatologist for the next 25 years. The rheumatology clinic was limited in the number of patients who could be seen. The waiting list for new patients was usually close to one year. While there was a reasonable rheumatology service at the UHWI, rheumatology patients in the rest of the country continued to be seen by internists. As they were not specifically trained in the use of disease-modifying antirheumatic drugs (DMARDs), patients with rheumatoid arthritis mainly received prednisone and non-steroidal anti-inflammatory drugs (NSAIDs), while all lupus patients would be put on high-dose prednisone for many months, if not years. The fear of ocular toxicity associated with hydroxychloroquine (HCQ) only compounded the excessive use of steroids.

Rheumatology continued to limp along until 2009 when new rheumatologists arrived. Dr. Desiree Tulloch-Reid became the first graduate of the University of Toronto (U of T), where she received advanced training in lupus through the Geoff Carr Lupus Fellowship. She became the trailblazer by establishing the first truly public rheumatology clinic at the Kingston Public Hospital (KPH) in downtown Kingston in 2009. Inspired by her exposure to multi-disciplinary clinics during training, she went on to establish a combined nephrology/rheumatology clinic and a pediatric rheumatology clinic in tandem with the Bustamante Hospital for Children. The latter clinic filled the void created by the lack of a practising pediatric rheumatologist in Jamaica.

Thanks to the University Health Network (UHN)-based G. Raymond Chang Caribbean Subspecialty Fellowship, Dr. Karlene Hagley and I completed fellowship training in adult rheumatology between 2016 and 2017. Our return led to the establishment of rheumatology clinics and in-patient consulting services in the public health system, outside of the capital Kingston. Dr. Hagley established rheumatology services at the Spanish Town Hospital in St. Catherine, and I established my practice at Cornwall Regional Hospital in Montego Bay, St. James.

The full-time stationing of all three of us in the public health system within the most populous areas of Jamaica has greatly impacted access to specialized rheumatology care, as some 90% of the population are users of the Jamaican public health system where, in most cases, services are free of charge.

Beyond increased access to specialized care, our return has led to the empowerment of our patients living with lupus through education, support and advocacy. Dr. Tulloch-Reid has increased the impact of the Lupus Foundation of Jamaica (LFJ), a volunteer-run, charitable organization established in 1984, by creating physical and virtual spaces to support education. Through the advocacy work of LFJ to have lupus be recognized as a major chronic illness, HCQ was added to the National Health Fund which subsidizes the cost of this drug, which now has patient uptake of over 95%. Diagnostics has been impacted by the donation of an upgraded microplate reader and consumables for antibody profiling, along with teaching microscopes to the Renal Pathology Unit at the University of the West Indies (UWI). Each of us has extended the impact of LFJ by creating a regional support group or by contributing to the educational content delivered.

As Associate Lecturers of UWI, the U of T rheumatology alumni have increased the exposure of medical students and residents to the field of rheumatology. Also, through regular symposia and continuing medical education meetings, primary care physicians and other specialists have also benefitted similarly.

There are currently six adult rheumatologists serving a population of 2.975 million Jamaicans. This rheumatologist to patient ratio, though significantly improved over

continued on page 12

The Evolution of the Rheumatology Workforce in Jamaica *continued from page 11*

the past 12 years, is far from ideal as available workforce studies in rheumatology in the United States, Canada, and Europe indicate that the ideal ratio is around 2 per 100,000 adults (0.7–3.5 rheumatologists per 100,000 population).[1] Therefore, lengthy wait times for new patient consultations still prevail, but are markedly reduced from the one-year time frame that predated us, and triage has ensured those who need to be seen sooner are facilitated.

Undoubtedly, the U of T training of Jamaican physicians has forever changed the landscape of rheumatology care in Jamaica. It is our hope that we will receive more well-needed graduates from this noble institution in the near future.

Taneisha K. McGhie, BSc (Hons), MBBS, DM
Consultant physician,
Internal Medicine & Rheumatology, Cornwall Regional Hospital, Montego Bay, Jamaica
Associate lecturer, Department of Medicine, University of the West Indies, Mona

Reference:
1. Dejaco C, Rheumatology Workforce Planning in Western Countries: A Systematic Literature Review. *Arthritis Care Res (Hoboken).* 2016; 68(12):1874-1882.

Overcoming the Extra Hurdles in Training

By Anwar Albasri, BMBCh, FRCPC

Getting accepted into training in Canada was a dream come true for me. The Kuwaiti physicians I had encountered who had graduated from Canadian programs seemed to me to be possessed of a unique skillset. I wanted to learn their secrets. My passion was enough for me to momentarily minimize some of the many hurdles international medical graduates (IMGs) experience along the way. I call them hurdles because I was able to overcome them. Some I overcame with difficulty, some more easily, but in every instance with a lot of help. As I list some of the greatest hurdles I faced, I want to point out that I did not encounter each of them asynchronously.

1. Language Barriers: English is not my first language nor was I familiar with Canadian culture and so, inevitably, there were times early on when my relationships with patients were not very smooth. I also had to spend extra time editing my clinical notes after hours. This was very discouraging. Over time, having nonjudgmental staff and colleagues explain things to me in a kind manner helped me overcome this particular hurdle.

2. Religious Identity: As a practicing Muslim who wears a hijab I was very visible. Patients and physicians would sometimes inappropriately bring up my faith, my hijab, or ask questions such as whether my religion allowed me to examine male patients. I am not sure people from other religious groups would have faced these questions. Although I am very sociable by nature, I was nervous about attending social events with people from work where I might be repeatedly offered alcohol. As a result, I missed opportunities to connect with experts in rheumatology. Small interventions, like delaying a team dinner by a few hours so I could eat with the rest of the team during Ramadan, made a huge impression on me, helped me get past this anxiety, and made me feel like I belonged.

3. Motherhood: Motherhood should not have to be a hurdle, but unfortunately it is often made to be one. During fellowship, I had two kids under the age of five and a husband who worked on a different continent. Being a mother and a resident who was "trying to do it all" was not easy. It meant planning ahead, pairing tasks, and swallowing my pride asking for help when I needed it. On the occasions that I couldn't balance motherhood and residency, motherhood came first. I am thankful my program gave me time off when I needed it. However, I often wonder whether I would have been more successful, particularly academically, had I had greater or different support.

Each of us faces different hurdles during residency beyond the clinical side. The kindness and compassion that we exhibit towards each other is just as important as what we exhibit towards patients. Simple words and gestures which the members of my program displayed, such as assuring me that they would be there for me no matter where in the world my career would take me, are just one example where I was made to feel like I belonged. Kindness is simple to demonstrate, and most hurdles can be overcome with the right support; the problem often lies in recognizing which hurdles residents need help with.

Anwar Albasri, BMBCh, FRCPC
Rheumatologist,
Toronto, Ontario

The Welcoming Practice

Creating an Environment that Promotes Cultural Safety for Indigenous Patients

By Cheryl Barnabe, MD, FRCPC, MSc

It is a privilege of our specialty to have longitudinal engagement with the patients in our practice, and I suspect we are all adept at communication skills that nurture and maintain these relationships. The Canadian Rheumatology Association Indigenous Health Initiative sessions are devoted to discussing and practicing communication approaches specifically for our interactions with Indigenous community members. These approaches are needed to rebuild trust in Western health systems and healthcare providers, as Indigenous patients have historically experienced punishment for pursuing traditional health practices, suffered from harm in residential schools and Indian hospitals, and continue to face racism in health systems. Here are some suggestions we share during the sessions on how to establish a culturally safe clinical environment for Indigenous patient care. (If you have other ideas, please email me, and we will include these in our teaching materials.)

Personal and Staff Preparation: The sources of the inequities that Indigenous peoples face in society and their consequences are complex and take time to understand; engage in your personal learning and provide opportunities for your staff to do so as well. Be cognizant that misinformation and misrepresentation of facts is a strategy that has been used by colonial governments and societies to retain privilege, so choose learning resources wisely. Start using nonjudgmental questions in clinical interactions so that they become your default approach. As an example, rather than asking "Are you taking your medications regularly?" you could instead ask "Are there circumstances that have interfered with you taking your medications regularly?" Become knowledgeable about resources available to Indigenous community members that could support their rheumatic disease management, such as local allied health supports, or how to connect them to traditional healing practices if requested. Identify colleagues in other specialties with expertise in the care of Indigenous patients that you can preferentially refer to when indicated.

Appointment Scheduling and Notification: Have your staff gather multiple ways of contacting patients about appointments and also notify the primary care provider — due to resource limitations Indigenous patients may not have access to the communication methods that we take for granted. Appointment times and days may need to align with the patient's transportation arrangements rather than the rheumatologist's preferred scheduling. It is important to book an appropriate appointment length to allow for conversation and relationship building which leads to trust. You may offer telephone or virtual appointments to patients rather than relying only on in-person assessments; also consider providing a walk-in option for times when urgent concerns arise. Missed appointment fees should be waived, and patients should not be discharged from a practice for a missed appointment; these approaches will only discourage a patient from returning to your practice. Instead, take the extra step to connect with the primary care provider, who may be able to provide the reason for a missed appointment, and who could be the liaison for care until a new appointment is secured.

The Clinic Environment: Ensure comfort and space for the patient and any accompanying family members or friends. It is a cultural norm for family and friends to support those who are ill, and they will facilitate the visit by supplementing symptom review and helping make treatment decisions. Some participants from the CRA Indigenous Health Initiative have shared they have put up art work purchased from local Indigenous artists as a demonstration of their support for the community.

Your Approach: Be aware of authoritative body language and actions. It is best to not wear your white coat, and to ensure you are seated when speaking with the patient (and positioning your chair a little lower than the patient's seat). Accept if they decline to have a learner in the room. Be prepared to first visit with the patient and learn more about them, and to offer to share a little about yourself before proceeding to the reason for the visit. While we all have time pressures in our practices, these few minutes are critical to building trust for longitudinal care. At the time of the physical exam, explain first what you will be doing and why, and seek permission before proceeding. Follow through on promises made to connect the patient to resources.

If Something Does Not Go Well: Cultural humility goes beyond the simple understanding or knowledge of a culture or its norms; it includes elements of personal re-

continued on page 14

The Welcoming Practice *continued from page 13*

flection on our interactions with Indigenous patients, and longitudinal growth through learning from them. Be attentive to the patient's body language and, if you perceive tension or discomfort, then stop and inquire. Respectfully ask if you have done something to offend the person. Listen intently, apologize if needed and commit to learning from the interaction. This can be where personal discomfort arises in the learning process, but is an important step forward to providing better quality rheumatology care to Indigenous patients.

Cheryl Barnabe, MD, FRCPC, MSc
Professor, University of Calgary,
Calgary, Alberta

Leading the Way for Change

By Tooba Ali, MBBS, FRCPC

I am a visibly Muslim woman of colour. I have been an immigrant in this country for fewer than 10 years. I am a rheumatologist serving a predominantly rural community east of the Greater Toronto Area (GTA). My practice is not very diverse in terms of racial and ethnic background—fairly typical for rural Canada in my experience. My patients range from retired university professors to firefighters, registered nurses, farmers, beekeepers and small business owners.

Islam teaches universal equality and justice. Imam Ali AS said "A person is either your brother in faith, or your equal in humanity." My religion demands I demonstrate excellence in equity and inclusion every day. It preaches tolerance for alternative points of view. As a physician I have an obligation to treat everyone under my care with respect and dignity and to honour their autonomy.

In this age where differences in race, sexual orientation and religion continue to be focal points of strife in our communities, we can all choose to be agents of change. We can participate in active fashion by contributing to organizations, collective mobilization and demonstrations against injustice. Or we can act in passive yet important ways — learning more about what we don't know regarding an alternative point of view, and being the change that we would like to see in the world.

Often, as I step into an exam room to meet a patient for the first time, I wonder what they think of me when they see me — a visibly Muslim woman of colour. Sometimes I can spot the hastily covered-up expressions of surprise on their faces — I wonder if they were expecting a white male doctor instead. Some patients are bold enough to outright say so. However, invariably, once the conversation begins we are both reminded that despite the differences between what we look like or what we may believe of the world, the human-ness that connects us is deeper. My ability to listen respectfully, to offer sincere advice and demonstrate true concern can be a more powerful catalyst of changing stereotypes about people who look like me than any public relations (PR) campaigns.

While historically medicine was the work of the privileged few — the demographics of doctors have changed dramatically across Canada. I am avidly aware of my privileges every day. That a little girl born across the world in a society not keen on the education of young girls gets to be a rheumatologist in Canada within 30 years of life is no small privilege — given to me by God and the hard work of my parents. We each have a life of privilege in some way — we each have a responsibility to create a better, more just society for others. We have heard that diversity is a great strength of our country — let us demonstrate that by welcoming voices different than our own in conversations around us.

While some days I tire of the burden of always being identified as an ambassador of my faith, I remind myself of my duty to God, to be the change I wish to see in the world. I am a member of the Equity, Diversity and Inclusion (EDI) Task Force of the CRA, an organization run by enthusiastic physicians across Canada — working to improve the culture of the CRA and to dismantle systemic racism that may have crept into our organization. I am humbled to see the work and efforts put in by my colleagues on this task force as they each work to be the change they wish to see in the world.

I invite everyone to learn more about EDI and how it can affect those around them, and I invite everyone to participate in the EDI Task Force at the CRA — either by being a member, attending a workshop or just sending us your thoughts on the subject. Let us all work on being agents of change in our own capacity.

Tooba Ali, MBBS, FRCPC
Rheumatologist,
Oshawa, Ontario

Establishing the Canadian Rheumatology Association Foundation

By Evelyn Sutton, MD, FRCPC, CRA President;
John Wade, MD, FRCPC, CRA Secretary/Treasurer;
Ahmad Zbib, MD, CPHIIMS-CA, CEO of the CRA

At the CRA Annual General Meeting in 2020, we advised our membership of the intention to establish the Canadian Rheumatology Association Foundation (CRAF). This move will allow the CRA to establish an entity with a charitable status in support of our mission: helping our members provide optimal care to their patients.

The CRA Board has been working with Carter's Law Firm (*carters.ca*) over the past two years to move our application forward with the Canadian Revenue Agency. We have hired fundraising consultants, The Dennis Group Inc. (*thedennisgroup.ca*), in June of this year to assist with the operationalization of the Foundation and development of a robust and vanguard fundraising operation. The Discovery Group (*thediscoverygroup.ca*), a firm which specializes in governance, has been engaged to define our value proposition as we plan for the future.

"Having a charity focused on supporting our efforts to deliver optimal care for patients with rheumatic conditions will enhance our collective capacity to serve our community. This charity is ten years in the making, and I am excited to share that we are close to making that vision a reality."

– Evelyn Sutton, MD, FRCPC,
CRA President

The establishment of the CRAF will help to fund current activities of the CRA such as the CIORA, the Annual Scientific Meeting, and research projects. In fact, members should not experience a change in their engagement as the Canadian Rheumatology Association will continue to be the organization that serves the members and will remain the voice of rheumatologists in Canada.

We estimate the process of implementation will take up to one year. The mission of the new charity will be set at the time of its creation. Although it will have its own independent board of directors, our mission and vision for the future will be very aligned and synergistic.

Stakeholder engagement remains a top priority for the CRA. As we roll out our new plan, we intend to work closely with our partners. Our objectives are to create an organization that allows us to build capacity to fund activities that are in line with our mission, which is focused primarily on serving and representing rheumatologists in their pursuit of delivering optimal care. We continue to believe in building strong, synergistic partnerships with aligned charitable health and patient organizations so we can all better reach our collective goals.

"The CRAF is a dream to ensure that Canadian rheumatologists have the ability to be world leaders in research and education, and to ultimately provide outstanding clinical care for both present and future generations. It is the vehicle for providing the guidance and resources to make sure that the ideas and hard work of rheumatologists are not lost because of financial constraints."

– John Wade, MD, FRCPC
CRA Secretary/Treasurer

"We are excited to be working on launching the new charitable organization, the Canadian Rheumatology Association Foundation (CRAF) which will focus on building sustainable sources of revenues to support and fund programs serving the rheumatology community."

– Ahmad Zbib, MD, CPHIIMS-CA
CEO, CRA

At this pinnacle in the establishment of the CRA Foundation we welcome member participation and involvement. For more information on the process or how you might be able to support the CRAF, please contact Ahmad Zbib (email: *azbib@rheum.ca*; phone: 905-952-0698 ext. 8).

PrXELJANZ® XR
(tofacitinib citrate)
extended release • 11 mg tablets

CONVENIENT ONCE-DAILY FORMULATION IN RA | 11 mg QD[1]

XELJANZ XR is not indicated in PsA and UC.

RHEUMATOID ARTHRITIS

PrXELJANZ®/PrXELJANZ® XR (tofacitinib) in combination with methotrexate (MTX), is indicated for reducing the signs and symptoms of rheumatoid arthritis (RA), in adult patients with moderately to severely active RA who have had an inadequate response to MTX. In cases of intolerance to MTX, physicians may consider the use of XELJANZ/XELJANZ XR (tofacitinib) as monotherapy.

Use of XELJANZ/XELJANZ XR in combination with biological disease-modifying anti-rheumatic drugs (bDMARDs) or potent immunosuppressants such as azathioprine and cyclosporine is not recommended.

PSORIATIC ARTHRITIS

PrXELJANZ® (tofacitinib) in combination with methotrexate (MTX) or another conventional synthetic disease-modifying anti-rheumatic drug (DMARD), is indicated for reducing the signs and symptoms of psoriatic arthritis (PsA) in adult patients with active PsA when the response to previous DMARD therapy has been inadequate.

Use of XELJANZ in combination with biological disease-modifying anti-rheumatic drugs (bDMARDs) or potent immunosuppressants such as azathioprine and cyclosporine is not recommended.

ULCERATIVE COLITIS

PrXELJANZ® (tofacitinib) is indicated for the treatment of adult patients with moderately to severely active ulcerative colitis (UC) with an inadequate response, loss of response or intolerance to either conventional UC therapy or a TNFα inhibitor.

Use of XELJANZ in combination with biological UC therapies or with potent immunosuppressants such as azathioprine and cyclosporine is not recommended.

Pfizer

PrXELJANZ® (tofacitinib citrate) 5 mg tablets

PrXELJANZ® XR (tofacitinib citrate) extended release • 11 mg tablets

Pr XELJANZ®
(tofacitinib citrate)
5 mg tablets

XELJANZ is the #1 dispensed JAK inhibitor in Canada[2*]

VAST GLOBAL EXPERIENCE COMBINED ACROSS ALL 3 INDICATIONS

RA 2014 • PsA 2018 • UC 2018

>15,000 CANADIANS
have enrolled into XELJANZ's support program[2†]

>1,000 CANADIAN PHYSICIANS
have prescribed XELJANZ through its patient support program (79% repeat prescribers)[2‡]

>260,000 PATIENTS WORLDWIDE
have been prescribed XELJANZ, in over 80 countries[2]

Consult the **XELJANZ/XELJANZ XR** Product Monograph at http://pfizer.ca/pm/en/XELJANZ.pdf for important information about:

- Contraindications during pregnancy and breastfeeding, and in patients with severe hepatic impairment.
- Most serious warnings and precautions regarding risk of serious infections, malignancies and thrombosis.
- Other relevant warnings and precautions regarding risk of infection and immunosuppression when co-administered with potent immunosuppressants, women of reproductive potential, hypersensitivity reactions, risk of viral reactivation, being up to date with all immunizations in accordance with current vaccination guidelines, live zoster vaccine, risk of malignancies, lymphoproliferative disorder, and nonmelanoma skin cancer, risk of lymphopenia, neutropenia, anemia, and lipid elevations, patients with hepatic and/or renal impairment, patients undergoing hemodialysis, liver enzyme elevations, patients with pre-existing severe gastrointestinal narrowing that are administered XELJANZ XR, patients with a risk or history of interstitial lung disease (ILD), pediatric patients, the elderly and patients with diabetes, patients with a history of chronic lung disease, lymphocyte counts, Asian patients, patients with risk of gastrointestinal perforation, increases in creatine kinase, decrease in heart rate and prolongation of the PR interval, patients that may be at an increased risk of thrombosis, patients with symptoms of thrombosis and dosing considerations in patients with ulcerative colitis (use XELJANZ at the lowest effective dose and for the shortest duration needed to achieve/maintain therapeutic response).
- Conditions of clinical use, adverse reactions, drug interactions and dosing instructions.

The Product Monograph is also available through our medical information department. Call 1-800-463-6001.

JAK = Janus kinase; PsA = Psoriatic arthritis; QD = Once daily; RA = Rheumatoid arthritis; UC = Ulcerative colitis

* Comparative clinical significance is unknown

† XELJANZ's patient support program was formerly known as the eXel™ patient support program. While the eXel™ program was for patients prescribed either XELJANZ or XELJANZ XR, the enrollment numbers presented are exclusive to patients taking XELJANZ, and not XELJANZ XR. The eXel™ program has now been replaced with PfizerFlex.

‡ Prescription and physician data were obtained from eXel™ support program enrollment forms collected from June 2014 to November 2018 and from the PfizerFlex Patient Support Program which replaced the eXel™ program from 2018 onwards.

References:

1. Pfizer Canada ULC. XELJANZ/XELJANZ XR Product Monograph.

2. Pfizer Inc. Data on file. 2021.

MEMBER OF INNOVATIVE MEDICINES CANADA

REVIEWED BY PAAB

PP-XEL-CAN-0641-EN

Gender Inequity in Canadian Rheumatology

By Jessica Widdifield, PhD; and Cory Baillie, MD, FRCPC

The gender diversity of the Canadian rheumatology workforce has significantly improved over the last 25 years. In 1995, females accounted for less than one third of rheumatologists. Parity was reached in 2015, with an upward trajectory since then.[1] Unfortunately, however, there are many aspects of gender equality that have yet to be achieved. Consistent with other specialties, female rheumatologists earn less,[2] advance more slowly in their careers,[3] and face higher risks of burnout than their male peers.[4] While there are many possible reasons for these disparities, gender bias tends to begin early in the training of physicians. Considering that only 13% of Canada's orthopaedic surgery workforce is female,[5] one could argue that Canada's rheumatology workforce achieved faster parity in gender composition than other specialties as a consequence of the "hidden medical curriculum" that both subtly and overtly encourages women trainees to enter specific, "softer" and often lower-paid specialties. This systemic bias often extends beyond medical school, resulting in discrimination in career opportunities related to hiring, career advancement, clinical care arrangements, referral patterns; mechanisms used to pay physicians including payment models and fee schedules; and societal structures more broadly.[6] In general, women in medicine remain underrepresented in areas like leadership positions,[7] journal editorial boards,[8] and first or senior journal authorship positions.[9-11] They also receive fewer speaker invitations at medical conferences,[12] have lower grant and personnel award success rates,[13] receive lower industry payments,[14] progress more slowly in academic productivity and career advancement,[7] receive lower teaching evaluation scores,[15] are less likely to match to a surgical specialty in residency,[16] and are more likely to experience sexism and sexual harassment during medical school and within their workplace.[17,18]

Recently, greater attention is being placed on the gender pay gap in medicine. An important systemic driver that perpetuates pay inequity experienced by female physicians is the current physician fee-for-service (FFS) remuneration system, which rewards procedural tasks and volume of services over quality of care. Payment models that reward seeing more patients in less time tend to disadvantage female physicians who tend to spend more time with their patients.[19,20] There is also a growing body of evidence that female physicians have more effective communication styles and stronger patient-physician partnerships,[21,22] focus more on preventive health services,[21,23-25] and provide more guideline-concordant care,[24,26,27] which all may be a result of spending more time with their patients. Referral bias towards female specialists[28] and different patient expectations of female physicians[29] can also contribute to female physicians needing to spend more time with their patients and thus contributing to the gender pay gap inherent in the current FFS system. Both the Canadian and American rheumatology workforce surveys, and a recent study of Ontario rheumatologists' FFS billing claims, have reported that, on average, female rheumatologists see fewer patients than their male counterparts, resulting in lower remuneration (median difference of CAD $46,000–102,000 annually).[2,30,31] This gender pay gap in rheumatology cannot simply be explained by women working less, but rather by different practice styles and other factors.

"Detailed actions that various stakeholders can take to close the gender pay gap in Canadian medicine have recently been proposed which address medical curriculum, transparent reporting of physician payments and hiring and promotion practices, and other strategies such as centralized referral systems and improving parental leave programs.[6]"

As gender equity means fairness of treatment for men and women according to their respective needs, in order to achieve gender equity in pay, it would be unfair to place unnecessary expectations on women to simply increase patient volumes, in the same sense that it would be unfair to expect male rheumatologists to lower their patient volumes in order to close the gender pay gap. Moreover, considering the high overhead of running a practice and the lack of funding support for allied health providers (who have been shown to increase practice efficiency, and patient volumes[32-34]), the current FFS remuneration system will continue to exacerbate the gender pay gap in rheumatology if male rheumatologists are more able to fund larger care teams through their higher earnings. While it is true that larger practices have higher operating expenses which impact the net take-home income of physicians (and we

currently do not have data on incomes or operating expenses of Canadian rheumatologists to fully quantify the gender wage gap) even small gender-based pay gaps are associated with substantial differences in lifetime wealth and retirement security.[35]

Further study is needed into identifying all gender disparities (and solutions) affecting rheumatologists, but immediate action is needed in order to help close the gender pay gap in rheumatology. Detailed actions that various stakeholders can take to close the gender pay gap in Canadian medicine have recently been proposed which address medical curriculum, transparent reporting of physician payments and hiring and promotion practices, and other strategies such as centralized referral systems and improving parental leave programs.[6] These actions must include (1) a re-evaluation of pay schedules to rectify gender-based inequities such as the issue of relativity of earnings across various medical and surgical specialties; (2) advocacy for reform to payment schedules, such as time modifiers or complexity add-on codes to more fairly compensate physicians who see patients with challenging conditions and require more time per visit; (3) alternative payment models such as capitation and salary to avoid some of the inequities; and (4) funding to support allied health providers to enhance rheumatology clinical service capacity. We also need to better understand the needs of female rheumatologists to support their clinical capacity to care for their patients. Practice volumes are not a substitute for quality of care and we need to strive towards value over volume. However, we must also remain cognizant that volume of services of the overall workforce remains important (as increasing feminization of Canada's rheumatology workforce may negatively impede access for patients). Thus, it is equally important that population needs are being met and efforts continue with the adoption of alternative models of care to increase capacity. After all, rheumatology patients are disproportionately female, and they are also experiencing gender inequities in timely care.

Jessica Widdifield, PhD
Co-chair, CRA Human Resources Committee
Scientist, Sunnybrook Research Institute, ICES
Assistant Professor, University of Toronto,
Institute of Health Policy, Management & Evaluation
Toronto, Ontario

Cory Baillie, MD, FRCPC
Assistant Professor, University of Manitoba
Past President and Board Chair, Doctors Manitoba
Winnipeg, Manitoba

References:

1. Canadian Medical Association. Rheumatology profile. Ottawa: CMA; 2018.
2. Widdifield J, Gatley JM, Pope JE, et al. Feminization of the rheumatology workforce: A longitudinal evaluation of patient volumes, practice sizes, and physician remuneration. *J Rheumatol.* 2021; 48:1090-7.
3. Jorge A, Bolster M, Fu X, et al. The association between physician gender and career advancement among academic rheumatologists in the united states. *Arthritis Rheumatol.* 2021; 73:168-72.
4. Kulhawy S, Widdifield J, Barber C, CRA HR Committee. CRA workforce and wellness survey results (forthcoming). In press. 2021.
5. CMA. Orthopedic surgery profile. Availabe at *https://www.cma.ca/sites/default/files/2019-01/orthopedic-surgery-e.pdf*; Accessed August 31, 2021.
6. Cohen M, Kiran T. Closing the gender pay gap in Canadian medicine. *CMAJ.* 2020;192:E1011-E7.
7. Reed DA, Enders F, Lindor R, et al. Gender differences in academic productivity and leadership appointments of physicians throughout academic careers. *Acad Med.* 2011; 86:43-7.
8. Ellinas EH, Best JA, Kowalski AM, et al. Representation of women on journal editorial boards affiliated with the association of american medical college's council of faculty and academic societies. *J Womens Health* (Larchmt). 2021; 30(8).
9. Larson AR, Poorman JA, Silver JK. Representation of women among physician authors of perspective-type articles in high-impact dermatology journals. *JAMA Dermatol.* 2019; 155:386-8.
10. Silver JK, Poorman JA, Reilly JM, et al. Assessment of women physicians among authors of perspective-type articles published in high-impact pediatric journals. *JAMA Netw Open.* 2018;1:e180802.
11. Levinsky Y, Vardi Y, Gafner M, et al. Trend in women representation among authors of high rank rheumatology journals articles, 2002-2019. *Rheumatology (Oxford).* 2021.
12. Ruzycki SM, Fletcher S, Earp M, et al. Trends in the proportion of female speakers at medical conferences in the United States and in Canada, 2007 to 2017. *JAMA Netw Open.* 2019; 2:e192103.
13. Burns KEA, Straus SE, Liu K, et al. Gender differences in grant and personnel award funding rates at the Canadian Institutes of Health Research based on research content area: A retrospective analysis. *PLoS Med.* 2019; 16:e1002935.
14. Weng JK, Valle LF, Nam GE, et al. Evaluation of sex distribution of industry payments among radiation oncologists. *JAMA Netw Open.* 2019; 2:e187377.
15. Morgan HK, Purkiss JA, Porter AC, et al. Student evaluation of faculty physicians: Gender differences in teaching evaluations. *J Womens Health (Larchmt).* 2016; 25:453-6.
16. Lorello GR, Silver JK, Moineau G, et al. Trends in representation of female applicants and matriculants in canadian residency programs across specialties, 1995 to 2019. *JAMA Netw Open.* 2020; 3:e2027938.
17. Menon A. Sexism and sexual harassment in medicine: Unraveling the web. *J Gen Intern Med.* 2020; 35:1302-3.
18. Choo EK, van Dis J, Kass D. Time's up for medicine? Only time will tell. *N Engl J Med.* 2018; 379:1592-3.
19. French F, Andrew J, Awramenko M, et al. Why do work patterns differ between men and women gps? *J Health Organ Manag.* 2006; 20:163-72.
20. Franks P, Bertakis KD. Physician gender, patient gender, and primary care. *J Womens Health (Larchmt).* 2003; 12:73-80.
21. Bertakis KD, Franks P, Azari R. Effects of physician gender on patient satisfaction. *J Am Med Womens Assoc (1972).* Spring 2003; 58:69-75.
22. Roter DL, Hall JA, Aoki Y. Physician gender effects in medical communication: A meta-analytic review. *JAMA.* 2002; 288:756-64.
23. Frank E, Harvey LK. Prevention advice rates of women and men physicians. *Arch Fam Med.*1996; 5:215-9.
24. Henderson JT, Weisman CS. Physician gender effects on preventive screening and counseling: An analysis of male and female patients' health care experiences. *Med Care.* 2001; 39:128-92.
25. Baig AA, Heisler M. The influence of patient race and socioeconomic status and resident physician gender and specialty on preventive screening. *Semin Med Pract.* 2008; 11:27-35.
26. Baumhakel M, Muller U, Bohm M. Influence of gender of physicians and patients on guideline-recommended treatment of chronic heart failure in a cross-sectional study. *Eur J Heart Fail.* 2009; 11:299-303.
27. Berthold HK, Gouni-Berthold I, Bestehorn KP, et al. Physician gender is associated with the quality of type 2 diabetes care. *J Intern Med.* 2008; 264:340-50.
28. Boesveld S. What's driving the gender pay gap in medicine? *CMAJ.* 2020; 192:E19-E20.
29. Ganguli I, Sheridan B, Gray J, et al. Physician work hours and the gender pay gap – evidence from primary care. *N Engl J Med.* 2020; 383:1349-57.
30. Barber CEH, Barnabe C, Badley EM, et al. Planning for the rheumatologist workforce: Factors associated with work hours and volumes. *J Clin Rheumatol.* 2019; 25:142-6.
31. Battafarano DF, Ditmyer M, Bolster MB, et al. 2015 American College of Rheumatology workforce study: Supply and demand projections of adult rheumatology workforce, 2015-2030. *Arthritis Care Res (Hoboken).* 2018; 70:617-26.
32. Chehade MJ, Gill TK, Kopansky-Giles D, et al. Building multidisciplinary health workforce capacity to support the implementation of integrated, people-centred models of care for musculoskeletal health. *Best Pract Res Clin Rheumatol.* 2016; 30:559-84.
33. Hooker RS. The extension of rheumatology services with physician assistants and nurse practitioners. *Best Pract Res Clin Rheumatol.* 2008; 22:523-33.
34. Solomon DH, Bitton A, Fraenkel L, et al. Roles of nurse practitioners and physician assistants in rheumatology practices in the US. *Arthritis Care Res (Hoboken).* 2014; 66:1108-13.
35. Rao AD, Nicholas SE, Kachniarz B, et al. Association of a simulated institutional gender equity initiative with gender-based disparities in medical school faculty salaries and promotions. *JAMA Netw Open.* 2018; 1:e186054.

Learning to Find Needles in Haystacks: Fellowship for Advanced Genomics in Rare Diseases

By Jason W. An, MD, MSc, FRCPC

Fifty. That's the number of new autoinflammatory diseases discovered in the past decade. The invention of and rapid developments in genomic sequencing technologies have revolutionized our ability to make molecular diagnoses and ushered in an unprecedented era of precision medicine in rheumatology.

With the introduction of the Genome-wide Sequencing Ontario (GSO) program in April 2021, genetic testing that was previously sent out internationally can now be performed locally in the province. As more genetic studies are performed, we as rheumatologists will have to be prepared to address complex questions. Referring colleagues may inquire on "What is the significance of this heterozygous variant of uncertain significance in the *MEFV* gene, in my patient with unexplained fevers?" Similarly, our patients may ask "Does this *TNFRSF1A* pathogenic variant mean I have tumor necrosis factor receptor-associated periodic Syndrome (TRAPS), and what are the risks of my children developing inflammatory disease?" We will need to read genetic reports that describe a variant's population frequencies, conservation, and in silico prediction scores — and interpret them to manage patients. How are we to make sense of all this information, which we were never taught in medical school or residency? How do we keep up with these rapid advancements in immunology and genetics?

"Finding needles in haystacks is the essence of rare disease medicine."

In 2019, the Department of Clinical and Metabolic Genetics at The Hospital for Sick Children launched the Fellowship for Advanced Genomics in Rare Diseases. Funded by the Canadian Gene Cure Advanced Therapies for Rare Disease (Can-GARD), the fellowship had two aims: First, to promote education and literacy in genetics across all fields of medicine; and second, to equip newly graduated specialists to proficiently manage patients with rare genetic conditions within their own specialty.

As a rheumatologist with an interest in genetically driven inflammatory conditions, I was fortunate to graduate from this unique program in rare diseases. By attending pediatric and adult clinics in genetics, metabolomics, autoinflammation and immunology, I learned approaches to investigating complex genetic conditions. Training in the molecular laboratory taught me the intricacies of analyzing genomic data. Just as it is important to know whether anti-nuclear antibodies were assayed with immunofluorescence or ELISA, it is important to understand the different genetic sequencing technologies with their strengths and limitations in order to interpret the results, counsel patients, and inform management. Indeed, finding needles in haystacks is the essence of rare disease medicine.

The Rare Diseases Fellowship was eye opening and highlighted the discrepancy between the importance of genetic literacy in our future practices and the lack of genetics education in our current residency programs. As genetic testing continues to develop at a rapid pace and becomes increasingly integrated into rheumatology practice, we will need to place greater emphasis on genetics education at all levels, from medical school to subspecialty fellowship training.

The skills I learned in this fellowship will indeed be important as a new staff rheumatologist at St. Michael's Hospital in Toronto. With the continued mentorship of Dr. Ron Laxer and collaborations with the rheumatology-genetics research team at SickKids, we aim to establish a clinic for the investigation and management of adult patients with recurrent fevers and undifferentiated systemic inflammation.

Gone are the days when every recurrent fever syndrome was labelled as Familial Mediterranean Fever (FMF) or "atypical FMF." As we find more needles in the haystack, the 50 monogenic diseases discovered in the past decade may prove to be just the tip of the iceberg.

Jason W. An, MD, MSc, FRCPC
Staff Rheumatologist,
St. Michael's Hospital
Toronto, Ontario

EULAR 2021 Report

By Philip A. Baer, MDCM, FRCPC, FACR

After a full pandemic year, EULAR returned for 2021 again as a virtual e-Congress, instead of occurring physically in Paris. The platform was noticeably improved from 2020, when the conversion from a live to a virtual congress occurred suddenly and unexpectedly. I found the platform stable, with excellent audio and video, even when thousands of participants attended a live session. Navigating between posters was sometimes difficult, and while some posters could be downloaded via QR codes, many others could not. PDFs of the slides for invited lectures would also be an excellent addition for future virtual congresses.

Being based in North America meant some early mornings, but the live events compensated by ending in the early afternoon, with most available for ad hoc playback thereafter. A full roster of events catered to allied health professionals, pediatric rheumatologists, and patients with rheumatic diseases. While I did not find the industry exhibits, there was a full roster of industry-sponsored symposia running in parallel. There were also EULAR trivia games based on knowledge and speed of responses. I tried one and placed seventh, which unexpectedly provided a prize of a EULAR textbook.

I found many presentations focused on safety, though there were no updates on the ORAL Surveillance study which made news earlier in the year. Integrated safety studies on janus kinase (JAK) inhibitors were prominent, as was another instalment of the JAKPOT multi-country registry study, also focused on JAK safety. There were many abstracts on the flavours du jour: COVID-19 and virtual medicine. New GRAPPA recommendations on psoriatic arthritis (PsA) therapy were welcome, now including eight domains. The PsA arena continues to feature novel therapies, from more IL-17 and IL-23 inhibitors to the first of the tyrosine kinase (TYK) inhibitors, deucravacitinib. One hopes the brand name will be easier to pronounce. Axial disease in PsA remains an area of interest regarding both definition and response to therapy, and differences from axial spondyloarthritis (SpA).

Lupus advances were also in the news, including the focus on LLDAS (lupus low disease activity state) as a target for those who cannot reach remission. Further details of studies of belimumab and voclosporin in lupus nephritis were presented.

In rheumatoid arthritis (RA), foci included biosimilars, cardiovascular disease, and comorbidities, including fatigue and mood disorders. Difficult-to-treat RA is another trending topic. Presentations on gout, fibromyalgia, osteoporosis and osteoarthritis rounded out the usual suspects.

Weird science candidates included a negative study on fecal microbiota transplantation as a treatment for psoriatic arthritis (OP0010, also mentioned in the closing clinical highlights session), and a study on the benefits of Argentinean tango practice for patients with inflammatory rheumatic diseases (POS1475-HPR). Oddly, that study was conducted in France!

Another oddity: slides showing a red camera icon (don't photograph) or a green camera icon (OK to photograph). Those red icons were often ignored in the days of live meetings; with the ease of taking screenshots while on any virtual platform, they seem pointless.

For those who prefer summaries of current practice, there were a series of WIN (What Is New) and HOT (How To Treat) lectures spanning the gamut of rheumatology topics, delivered by experts on the various topics.

Despite the lack of Parisian tourist attractions, French food, and in-person interactions, and perhaps because jet lag was not an issue, EULAR 2021 was a winning event. The hope is that in-person EULAR meetings will resume in June 2022 at the Bella Centre in Copenhagen, though a virtual component is likely here to stay.

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

The CRA's 2021 Emerging Investigator: Dr. Zahi Touma

Your research focuses on patients with systemic lupus erythematosus (SLE) and measurement science with a particular interest in the assessment of disease activity, patient-reported outcomes and cognitive function. One of your most significant contributions has been development of the SLE disease activity indices — the SLEDAI Responder Index-50 (S2KRI-50) and SLEDAI-2K Glucocorticoids Index (SLEDAI-2KG). Can you tell us more about your work and the development of these SLE disease activity indices?

My work encompasses clinical, research, teaching and other administrative tasks. Developing a new instrument is always exciting. The first step is to have an understanding of why you need a new instrument and what needs to be measured and in whom, in addition to its benefit to rheumatology.

Each of these instruments brings a new concept in the way you assess disease activity where S2KRI-50 is focused on measuring ≥50% improvement in disease activity over time, while SLEDAI-2KG measures disease activity while accounting for prednisone dosage.

Another major focus of your research is the assessment of cognitive impairment in patients with SLE. You've established the NeuroLupus Program with the goal of developing improved methods of identifying cognitive impairment in SLE and understanding its course over time and impact on health-related quality of life and productivity. Why was creating this program so important and what have you learned so far?

There is an unmet need to improve and standardize the way we measure and define cognitive impairment in SLE in ambulatory settings. Cognitive impairment is highly prevalent among patients with SLE, and we have shown this in our recent systematic review of the literature. More recently, we also highlighted the lack of agreement between studies on tests used to measure cognitive impairment and the way it is defined. The current available measures of cognitive impairment are associated with time and cost burden and our work provides evidence on the validity of new instruments that can facilitate the assessment of cognitive function. Our future projects are focused on identifying different cognitive phenotypes in SLE, studying the role of functional MRI brain images in cognitive assessment and the role of biomarkers.

Having published 117 peer-reviewed manuscripts and several book chapters, you recently also edited the Outcome Measures and Metrics in SLE book, which was published in August 2021. What has your experience as editor of this book been like?

This was a very demanding and lengthy process but very rewarding. It takes a huge amount of work to develop the main theme of the book, the chapters, inviting authors, editing, proofing and finally publishing the material.

Are there other areas of interest you would like to investigate in the future? What projects will you be undertaking this year?

Currently, I am focused on a major project related to the OMERACT SLE working group. We have developed a large international group of lupologists, scientists, patients, and other stakeholders, to revisit the domains and instruments used in the assessment of SLE.

What are some of the highlights and challenges you have experienced thus far in your career? How have you overcome these challenges?

The life of a scientist is full of challenges and achievements, and you have to be dedicated to the science. Ultimately, the goal of improving patients' quality of life is the reward. Only perseverance, hard work, and time will help you achieve your goals.

What has been your proudest accomplishment to date in your research?

Everything plays an equal part in all of my achievements, and currently my biggest joy would be guiding my students and watching them flourish in their careers.

What was your first thought when you learned that you would receive this award?

I am honoured to have my peers recognize my efforts and honour me with this prestigious award.

For those wanting to pursue rheumatology and a career in research, what advice would you give them?
Anyone pursuing rheumatology as a specialty should understand how rewarding it is to help patients and make a difference in their lives. For those pursuing research, it is satisfying to know that you will contribute to knowledge advancement, and this requires a lot of dedication.

If you weren't pursuing research as a career, what would you be doing?
I enjoy clinical work and I would have dedicated all my time to this.

If you had an extra hour in the day, how would you spend it?
I am very artistic so I would enjoy the time painting.

If you could eat one food for the rest of your life, what would it be?
I love Italian cuisine and I would enjoy various pasta dishes and fresh vegetables.

How many cups of coffee does it take to make a productive day?
One is more than enough.

Zahi Touma, MD, PhD, FACP, FACR
Rheumatologist,
Associate Professor of Medicine, Division of Rheumatology
Faculty of Medicine, University of Toronto
Clinician Scientist, Schroeder Arthritis Institute,
Krembil Research Institute, Toronto, Ontario

Raising Awareness and New Patient Resources

By Trish Barbato, President and CEO Arthritis Society

It's an exciting time at the Arthritis Society as we launched a bold new campaign to kick off Arthritis Awareness Month in September to bring much-needed awareness about the fire of arthritis.

I hope you'll join us in raising awareness by setting the record straight whenever you hear "it's just arthritis."

And while we're raising the alarm about the seriousness of arthritis, we're continuing to develop high-quality resources for people living with the disease.

We've added some new "life hack" videos to our library. These videos show tools and tricks to help people navigate everyday activities more easily such as leisure time, working in the kitchen or getting dressed. If you haven't already, we encourage you to share these with your patients. They can be found at *arthritis.ca* or through our YouTube channel.

In June, we released a report on wait times for joint replacement surgeries. We're calling for provincial leadership on the issue and the creation of a Canadian wait times task force to ensure that wait times will be reduced permanently.

We also commissioned a study from the Arthritis Community Research Evaluation Unit that revealed 30% of people living with osteoarthritis were diagnosed before age 45 and the impact of the disease on them is, in many ways, more profound than in older adults.

As always, thank you for sharing our resources with your patients and be sure to watch for our awareness campaign. It's time to be audacious about fighting the fire of arthritis.

CRA SCR AHPA

ANNUAL SCIENTIFIC MEETING | ASSEMBLÉE SCIENTIFIQUE ANNUELLE

CRA & AHPA
ANNUAL SCIENTIFIC MEETING
FEB 2-5, 2022 IN-PERSON & ONLINE

Join us for the 2022 Annual Scientific Meeting, hosted in-person (and virtually) at the Québec City Convention Centre.

Conference delegates can expect to enjoy **unparalleled education** and **networking opportunities** centered around a program that will deliver **leading-edge science**, **interactive programming**, and insights from Canadian and international **experts**.

This year's theme, **Towards Equity: Rheum for Everyone**, will highlight diversity, equity, and inclusion within healthcare systems and the rheumatology workforce.

REGISTRATION OPENS
OCT. 29, 2021

Learn more and register at asm.rheum.ca

DON'T MISS THESE SATELLITE PROGRAMS!

CRA SCR CANADIAN RHEUMATOLOGY ASSOCIATION | SOCIÉTÉ CANADIENNE DE RHUMATOLOGIE

REVIEW COURSE

JAN 28
2022
VIRTUAL

The **CRA Review Course** is for practicing rheumatologists interested in updating their knowledge base with hot topics in the rheumatology world.

» **Register at asm.rheum.ca**

FEB 7-8
2022
VIRTUAL

CANADIAN ARTHRITIS RESEARCH CONFERENCE

Société Arthrite Arthritis Society | CRA SCR | CIHR IRSC Canadian Institutes of Health Research / Instituts de recherche en santé du Canada

The 3rd annual **Canadian Arthritis Research Conference** features presentations, discussions, and networking opportunities with experts, researchers, consumers, and emerging leaders in the community.

» **Register at arthritis.ca/carc**

The safety and well-being of our members, their patients, and the extended rheumatology community is paramount to the CRA. Due to the evolving nature of the COVID-19 pandemic, the CRA is closely monitoring public health guidance and working with our venue to ensure a comprehensive health & safety plan.

Updates from Quebec

Updates from the Adult Rheumatology Team (Division of Rheumatology at *Université Laval*)

By Laëtitia Michou, MD, PhD

- Great news: The Ministry has granted us four additional positions in adult rheumatology at the CHU de Québec–Université Laval. Keep an eye on the postings as we are actively recruiting!
- Dr. Myriam Allen is now the director of our adult rheumatology residency program.
- Our dear colleagues Dr. Angèle Turcotte and Dr. Jacques P. Brown began their well-deserved retirements this spring.
- The increase in the number of rheumatologists in Quebec City has allowed us to regain control of our wait lists, much to the delight of our patients.
- Our clinical research programs are expanding.

News from the Pediatric Rheumatology Team at the *CHU de Québec–Université Laval*

By Julie Couture, MD, FRCPC

Our team is now composed of three dynamic pediatric rheumatologists who are committed to caring for children and adolescents with rheumatological conditions in the Quebec City area and throughout eastern Quebec! In addition, we are currently in the process of recruiting a fourth pediatric rheumatologist.

The Pediatric Rheumatology Team at the CHU Québec–Université Laval, pictured from from left to right: Dr. Anne-Laure Chetaille, Dr. Julie Couture and Dr. Jean-Philippe Proulx-Gauthier

We are involved in teaching pre-clinical, external and resident students at Université Laval and each of us have our own particular clinical and research interests:

- Dr. Anne-Laure Chetaille: auto-inflammatory diseases;
- Dr. Julie Couture: pediatric and neonatal lupus;
- Dr. Jean-Philippe Proulx-Gauthier: joint ultrasonography

Our team is motivated to collaborate with other Canadian centres for the benefit of our precious little patients!

Dr. Ahrari receiving her award from Madam Justice Sunni Stromberg-Stein (left) and Dr. Raheem Kherani (right).

Azin Ahrari, MD, FRCPC – *Howard B. Stein Award*

It is with great pleasure that we introduce the inaugural recipient of the *Dr. Howard B. Stein Award*, Dr. Azin Ahrari.

The *Howard B. Stein Award for Leadership and Contribution to the Program* is presented to a graduating University of British Columbia (UBC) adult rheumatology trainee for providing leadership, dedication, and contribution to the rheumatology program. Dr. Stein created the Division of Rheumatology at St. Paul's Hospital and served as the Division Head. He was well-known as a consummate clinician and teacher.

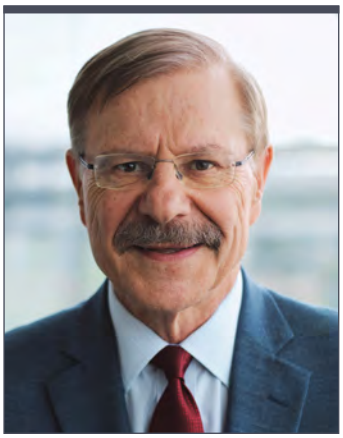
Dr. Ahrari, a graduating trainee of the UBC's Adult Rheumatology Program and the recipient of this award, has shown leadership as a chief resident of the UBC Rheumatology Program. She has been recognized by her co-residents and faculty as a devoted colleague and has demonstrated ongoing dedication and contribution to the rheumatology training program.

Linda Hiraki, MD, FRCPC, ScD – *Tier 2 Canada Research Chair in Genetics of Rare Systemic Inflammatory Diseases*

Congratulations to CRA member, Dr. Linda Hiraki, who was awarded a prestigious Tier 2 Canada Research Chair in Genetics of Rare Systemic Inflammatory Diseases.

Tier 2 Chairs are recognized as exceptional emerging researchers, acknowledged by their peers as having the potential to lead in their field.

Dr. Linda Hiraki is a pediatric rheumatologist in the Division of Rheumatology and a scientist in the Genetics & Genome Biology Program at the Research Institute, SickKids. Dr. Hiraki's research program is focused on identifying genetic changes responsible for lupus, systemic inflammatory diseases, associated symptoms and complications. Her research aims to increase knowledge of the genetics of disease to support personalized care and improved health outcomes.



Robert D. Inman, MD, FRCPC, FACP, FRCP Edin – *Laurentian Rheumatology Roger Demers Award*

I am honoured to be the recipient this year of the *Roger Demers Award* from the Laurentian Conference of Rheumatology.

This annual conference began with a group of rheumatologists in 1947, and in 1965 evolved with the creation of the Laurentian Conference of Rheumatology. For five consecutive years the conference was held in the Laurentians, and after a five-year hiatus, was brought back to life by Dr. Roger Demers in 1974 at Mont Tremblant Lodge. Since then the conference has taken place every year without interruption and has earned a reputation as one of the premier rheumatologic meetings in Canada. Dr. Roger Demers of the Hotel-Dieu Hospital in Montreal was the "tenacious captain" of the meeting throughout the 1970's and 1980's, and his personal commitment was critical in ensuring a high-quality meeting each year. To honour Roger's key role, the Laurentian Conference of Rheumatology established an award in his name to recognize "contributions to the international rheumatology community".

The award also has personal significance for me since the first recipient of the *Roger Demers Award* was Dr. Duncan Gordon. Duncan, who was a valued mentor and a close friend, is remembered with affection by all, and embodied the best of Canadian Rheumatology.

Robert D. Inman is the Co-Director of the Schroeder Arthritis Institute and Deputy Physician in Chief of Research at the University Health Network. He is also a Professor of Medicine and Immunology at the University of Toronto.

AWARDS, APPOINTMENTS, AND ACCOLADES

The *CRAJ* would like to recognize the contributions of its readers to the medical field and their local communities. To have any such awards, appointments, or accolades announced in an upcoming issue, please send recipient names, pertinent details, and a brief account of these honours to *JyotiP@sta.ca*. Picture submissions are greatly encouraged.

Survey Results: Equity, Diversity, and Inclusion

With an ever-evolving and diverse population, equity, diversity, and inclusion (EDI) initiatives are more important than ever before. Addressing gaps in equity, diversity and inclusion is long overdue in many parts of our society as we confront injustices past and present. This past year, the Canadian Rheumatology Association (CRA) created an EDI Task Force with the aim to ensure that the CRA is an inclusive, diverse association reflective of the Canadian population and that issues surrounding health equity are addressed and mitigated.

For this issue's Joint Count survey, the CRA asked its membership for their perspectives on EDI as it relates to the association and the Canadian rheumatology landscape. A total of 75 responses (out of a possible 578) were received, equating to a response rate of approximately 13%.

In the first part of the survey, members were asked to rate the CRA on various aspects of equity, diversity and inclusion. When asked to rate the following "People from all backgrounds and with a range of identities have equitable opportunities to advance their skills and engagement at the CRA", only 43% were in complete agreement (see Chart 1 for a complete breakdown). For a sample of questions on diversity and inclusion, refer to Charts 2 and 3.

When asked "What does equity, diversity and/or inclusion in the context of the CRA mean to you?" one member wrote, "I believe the focus should be on the composition of the CRA. Who are the members? Do they reflect the composition of Canadian society? What about the CRA staff, board and operational committee chairs? Do we run our meetings and events in such a way to promote full participation? Does the HR committee take specific actions in recruitment considering EDI? Do we use inclusive language in CRA communications?"

Other comments highlighted "actively promoting inclusive practices such as Indigenous sensitivity training"; "avoiding only Ontario and Quebec physicians/scientists in all committees"; and "not only including people of traditionally marginalized backgrounds (i.e. ethnicity, gender, language, physical disability) in things like committees or as speakers at events, but rather actively seeking them out to participate. Sometimes it is difficult for marginalized folks to feel comfortable stepping up on their own, so the reaching out step is key as well."

CHART 2:
Survey Results: "The CRA invests time and energy into building diverse teams."

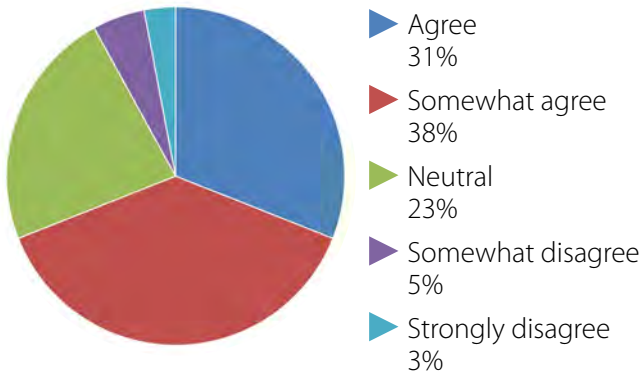


CHART 1:
Survey Results: "People from all backgrounds and with a range of identities have equitable opportunities to advance their skills and engagement at the CRA"

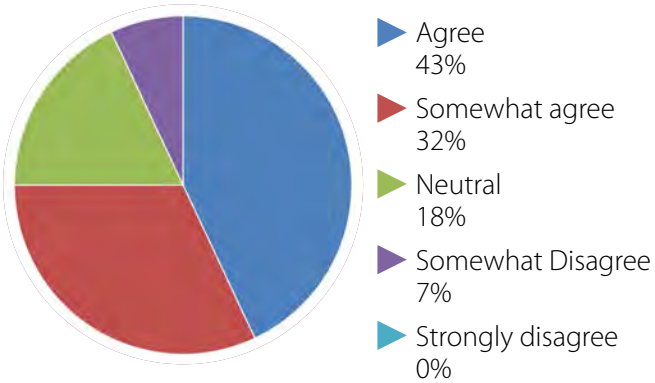
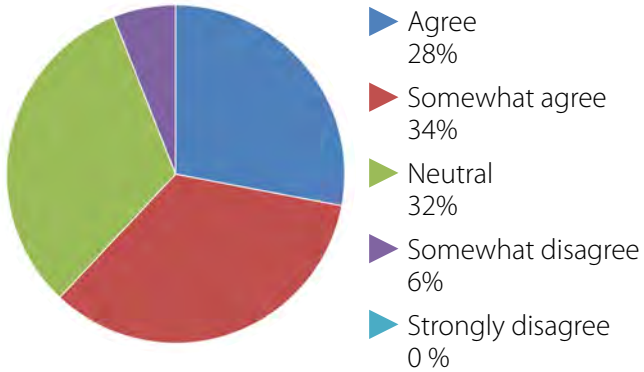


CHART 3:
Survey Results: "I feel my unique background and identity (namely my differences) are valued at the CRA."



What actions do you feel the CRA should take with respect to increasing equity, diversity and inclusion for all members and staff?

With regard to actions that the CRA should take, being transparent was mentioned in multiple comments. A couple of the comments remarked that the CRA is already quite diverse.

Some of the specific actions recommended included:

- Increase transparency and openness to members on the selection process for leadership
- Proactively include varied backgrounds in leadership positions and on committees (in terms of gender, culture, etc.)
- Honour those who are striving to make changes
- Continue to support diversity in training opportunities
- Provide seminars to all members, on a regional basis
- Build on relations with First Nations communities
- Offer scholarships or direct active recruitment of summer studentships to marginalized groups (i.e. BIPOC youth [high school/undergrad], LGBTQS2 youth, and those with physical disabilities or hearing impairments), in addition to traditional groups
- Attempt to attract and train a more diverse pool of new rheumatologists to reflect their representation in society
- Have modules or workshops given by members from marginalized groups to help increase others' awareness and provide strategies for inclusion in their clinics or practice
- Build awareness and identify potential barriers and gaps in implementation
- Ensure language is inclusive of all
- Acknowledge the importance of EDI in the CRA mission statement and include EDI principles in its values

The CRA welcomes your feedback and suggestions on equity, diversity, and inclusion as it relates to the CRA. For any other ideas or recommendations, you may reach out to Kevin Baijnauth at *kbaijnauth@rheum.ca*.

SIMPONI®

Proven efficacy.
Proven safety profile.

SINCE 2009

SINCE 2009

SINCE 2009

SIMPONI®, in combination with MTX, is indicated for reducing signs and symptoms and improving physical function in adult patients with moderately to severely active RA; Inhibiting the progression of structural damage in adult patients with moderately to severely active RA who had not previously been treated with MTX.

SIMPONI® is indicated for: 1) Reducing signs and symptoms, inhibiting the progression of structural damage and improving physical function in adult patients with moderately to severely active PsA. SIMPONI® can be used in combination with MTX in patients who do not respond adequately to MTX alone; 2) Reducing signs and symptoms in adult patients with active AS who have had an inadequate response to conventional therapies; 3) The treatment of adults with severe active nr-Ax SpA 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.

Most common adverse reactions:
Upper respiratory tract infection: SIMPONI® 7%, placebo 6%; Nasopharyngitis: SIMPONI® 6%, placebo 5%

CLINICAL USE:

Pediatrics: The safety and efficacy of SIMPONI® in pediatric patients have not been established.

Geriatrics (65 years of age or older): Caution should be used in treating the elderly.

CONTRAINDICATIONS:

- Severe infections such as sepsis, tuberculosis and opportunistic infections
- Moderate or severe (NYHA class III/IV) congestive heart failure

MOST SERIOUS WARNINGS AND PRECAUTIONS:

Infections:

- Serious infections leading to hospitalization or death, including sepsis, tuberculosis (TB), invasive fungal, and other opportunistic infections, have been observed with the use of TNF antagonists including golimumab. Administration of SIMPONI® should be discontinued if a patient develops a serious infection or sepsis. Treatment with SIMPONI® should not be initiated in patients with active infections including chronic or localized infections.
- Physicians should exercise caution when considering the use of SIMPONI® in patients with a history of recurring or latent infections, including TB, or with underlying conditions, which may predispose patients to infections, who have resided in regions where TB and invasive fungal infections such as histoplasmosis, coccidioidomycosis, or blastomycosis are endemic.
- Tuberculosis (frequently disseminated or extrapulmonary at clinical presentation) has been observed in patients receiving TNF-blocking agents, including golimumab. Tuberculosis may be due to reactivation of latent tuberculosis infection or to new infection.
- Before starting treatment with SIMPONI®, all patients should be evaluated for both active and latent tuberculosis.
- If latent tuberculosis is diagnosed, treatment for latent tuberculosis should be started with anti-tuberculosis therapy before initiation of SIMPONI®.
- Physicians should monitor patients receiving SIMPONI® for signs and symptoms of active tuberculosis, including patients who tested negative for latent tuberculosis infection.

Malignancy:

- Lymphoma and other malignancies, some fatal, have been reported in children and adolescent patients treated with TNF blockers, of which golimumab is a member.

OTHER RELEVANT WARNINGS AND PRECAUTIONS:

- Risk of hepatitis B virus reactivation
- Risk of malignancies

PROVEN EFFICACY

monthly Pr Simponi® golimumab

10+ YEARS EXPERIENCE

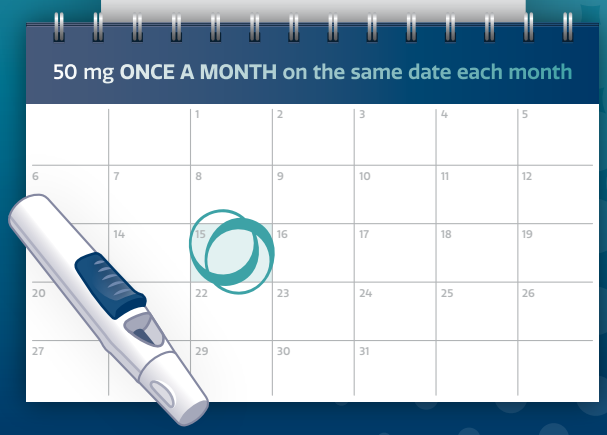
SINCE 2016

nr-Ax SpA

10+ YEARS
of Canadian experience behind us.*

Supporting you and your patients in the years to come.

A SIMPLE Once a Month DOSING SCHEDULE



- Risk of worsening or new onset of congestive heart failure
- Risk of infection with concurrent use of anakinra, abatacept or other biologics; concurrent use is not recommended
- Risk of hematologic reactions
- Risk of hypersensitivity reactions
- Risk of latex sensitivity
- Risk of clinical infections, including disseminated infections, with live vaccines and therapeutic infectious agents; concurrent use is not recommended
- Risk of autoimmunity
- May cause immunosuppression; may affect host defences against infections and malignancies
- Potential for medication errors
- Risk of new onset or exacerbation of CNS demyelinating disorders
- Risk of infection in peri-operative patients
- Adequate contraception must be used to prevent pregnancy in women of childbearing potential for at least 6 months after last treatment
- Not to breastfeed during and for at least 6 months after treatment with SIMPONI®
- Use with caution in patients with impaired hepatic function
- May have a minor influence on the ability to drive due to dizziness following administration

FOR MORE INFORMATION:
Please consult the product monograph at www.janssen.com/canada/products for important information relating to adverse reactions, drug interactions, and dosing information which have not been discussed in this piece. The product monograph is also available by calling 1-800-387-8781.

MEMBER OF INNOVATIVE MEDICINES CANADA

REVIEWED BY PAAB

janssen | PHARMACEUTICAL COMPANIES OF Johnson & Johnson

* across combined indications.

PsA = psoriatic arthritis | AS = ankylosing spondylitis | RA = rheumatoid arthritis | nr-Ax SpA = non-radiographic axial spondyloarthritis | MTX = methotrexate | CRP = C-reactive protein | MRI = magnetic resonance imaging | NSAIDS = nonsteroidal anti-inflammatory drugs

Reference:
1. SIMPONI® Product Monograph. Janssen Inc. June 20, 2019.

Janssen Inc. | 19 Green Belt Drive | Toronto, ON | M3C 1L9
www.janssen.com/canada | CP-203649E

XELJANZ is the #1 dispensed JAK inhibitor in Canada[1*]

PrXELJANZ®
(tofacitinib citrate)

RHEUMATOID ARTHRITIS

PrXELJANZ®/PrXELJANZ® XR (tofacitinib) in combination with methotrexate (MTX), is indicated for reducing the signs and symptoms of rheumatoid arthritis (RA) in adult patients with moderately to severely active RA who have had an inadequate response to MTX. In cases of intolerance to MTX, physicians may consider the use of XELJANZ/XELJANZ XR (tofacitinib) as monotherapy.

Use of XELJANZ/XELJANZ XR (tofacitinib) in combination with biological disease-modifying anti-rheumatic drugs (bDMARDs) or with potent immunosuppressants such as azathioprine and cyclosporine is not recommended.

PSORIATIC ARTHRITIS

PrXELJANZ® (tofacitinib) in combination with methotrexate (MTX) or another conventional synthetic disease-modifying anti-rheumatic drug (DMARD), is indicated for reducing the signs and symptoms of psoriatic arthritis (PsA) in adult patients with active PsA when the response to previous DMARD therapy has been inadequate.

Use of XELJANZ in combination with biological disease-modifying anti-rheumatic drugs (bDMARDs) or with potent immunosuppressants such as azathioprine and cyclosporine is not recommended.

ULCERATIVE COLITIS

PrXELJANZ® (tofacitinib) is indicated for the treatment of adult patients with moderately to severely active ulcerative colitis (UC) with an inadequate response, loss of response or intolerance to either conventional UC therapy or a TNFα inhibitor.

Use of XELJANZ with biological UC therapies or with potent immunosuppressants such as azathioprine and cyclosporine is not recommended.

Consult the XELJANZ/XELJANZ XR Product Monograph at http://pfizer.ca/pm/en/XELJANZ.pdf for important information about:

- Contraindications during pregnancy and breastfeeding, and in patients with severe hepatic impairment.
- Most serious warnings and precautions regarding risk of serious infections, malignancies and thrombosis.
- Other relevant warnings and precautions regarding risk of infection and immunosuppression when co-administered with potent immunosuppressants, women of reproductive potential, hypersensitivity reactions, risk of viral reactivation, being up to date with all immunizations in accordance with current vaccination guidelines, live zoster vaccine, risk of malignancies, lymphoproliferative disorder, and nonmelanoma skin cancer, risk of lymphopenia, neutropenia, anemia, and lipid elevations, patients with hepatic and/or renal impairment, patients undergoing hemodialysis, liver enzyme elevations, patients with pre-existing severe gastrointestinal narrowing that are administered XELJANZ XR, patients with a risk or history of interstitial lung disease (ILD), pediatric patients, the elderly and patients with diabetes, patients with a history of chronic lung disease, lymphocyte counts, Asian patients, patients with risk of gastrointestinal perforation, increases in creatine kinase, decrease in heart rate and prolongation of the PR interval, patients that may be at an increased risk of thrombosis, patients with symptoms of thrombosis and dosing considerations in patients with ulcerative colitis (use XELJANZ at the lowest effective dose and for the shortest duration needed to achieve/maintain therapeutic response).
- Conditions of clinical use, adverse reactions, drug interactions and dosing instructions.

The Product Monograph is also available through our medical information department. Call 1-800-463-6001.

For more information, contact your Pfizer representative.

JAK = Janus kinase; PsA = Psoriatic arthritis; RA = Rheumatoid arthritis; UC = Ulcerative colitis
* Comparative clinical significance is unknown

References: 1. Pfizer Inc. Data on file. 2020. **2.** Pfizer Canada ULC. XELJANZ/XELJANZ XR Product Monograph.

PP-XEL-CAN-0640-EN