Summer 2020, Volume 30, Number 2

CRAJ SCR
The Journal of the Canadian Rheumatology Association


# *Spotlight on:* *The CRA ASM* 2020 Vision: A New Decade in Rheumatology

olumiant®
(baricitinib) tablets

An estimated 95,100 patients have received baricitinib worldwide since launch.§

# CONSIDER OLUMIANT IN THE MANAGEMENT OF RHEUMATOID ARTHRITIS (RA)[1]

## In adults who inadequately responded to one or more conventional disease-modifying anti-rheumatic drugs (cDMARDs), Olumiant demonstrated:[1*]

- Significant improvement in ACR20 response rate vs. placebo at Week 12: 66%† vs. 39% (95% CI: 17.6, 35.3; $p \leq 0.05$)[1]
- Improvements in disease activity scores (DAS28-hsCRP <2.6) vs. placebo (type I error not controlled) (secondary endpoints)[1]:
  - Week 12: 26% vs. 9% (95% CI: 10.2, 23.7; $p \leq 0.05$)
  - Week 24: 31% vs. 11% (95% CI: 12.9, 27.2; $p \leq 0.05$)
- Significant improvement in mean change from baseline in HAQ-DI score vs. placebo at Week 24: -0.24† (95% CI: -0.35, -0.14; $p \leq 0.05$) (secondary endpoint) [1,2]

## Convenient once-daily dosing[1]

- Recommended dose: **2 mg once daily**, in combination with MTX
- May be used as monotherapy in cases of intolerance to MTX
- Can be taken any time of the day, with or without food

## Olumiant is a selective and reversible inhibitor of Janus kinase (JAK)[1‡]

**Indications and clinical use:**
- Olumiant (baricitinib), in combination with methotrexate (MTX), is indicated for reducing the signs and symptoms of moderate to severe rheumatoid arthritis (RA) in adult patients who have responded inadequately to one or more disease-modifying anti-rheumatic drugs (DMARDs).
- Olumiant may be used as monotherapy in cases of intolerance to MTX.
- Use of Olumiant in combination with other Janus kinase (JAK) inhibitors, biologic DMARDs or potent immunosuppressants such as azathioprine and cyclosporine is not recommended.
- Geriatrics (≥65 years of age): Use with caution.
- Pediatrics (<18 years of age): Olumiant should not be used in this patient population.

**Contraindications:**
- Patients with known hypersensitivity to baricitinib or any of its components.

**Most serious warnings and precautions:**
- **Serious infections:** Patients treated with Olumiant are at risk for developing serious infections that may lead to hospitalization or death. Most patients who developed these infections were taking concomitant immunosuppressants such as methotrexate or corticosteroids. If a serious infection develops, interrupt Olumiant until the infection is controlled. Reported infections include: active tuberculosis – patients should be tested for latent tuberculosis before initiating Olumiant and during therapy and treatment for latent infection should be initiated prior to Olumiant use; invasive fungal infections including cryptococcosis and pneumocystosis; bacterial, viral and other infections due to opportunistic pathogens. Do not initiate treatment with Olumiant in patients with active infections, including chronic or localized infection. Monitor closely for signs and symptoms of infection during and after treatment with Olumiant.
- **Malignancies:** Lymphoma and other malignancies have been observed in patients treated with Olumiant. Consider the risks and benefits of Olumiant prior to initiating treatment in patients with a known malignancy other than a successfully treated non-melanoma skin cancer, or when considering continuing Olumiant in patients who develop a malignancy.
- **Thrombosis:** An increased incidence of thrombosis, including deep venous thrombosis (DVT) and pulmonary embolism (PE), has been observed in patients treated with Olumiant. In addition, there were cases of arterial thrombosis. Patients with symptoms of thrombosis should be promptly evaluated.

**Other relevant warnings and precautions:**
- Use with caution in patients who may be at increased risk of gastrointestinal perforations.
- Patients presenting with new-onset abdominal symptoms should be evaluated promptly for early identification of gastrointestinal perforation.
- Evaluate liver enzymes before initiating Olumiant and thereafter according to routine patient management. If increases in alanine transaminase (ALT) or aspartate transaminase (AST) are observed and drug-induced liver injury (DILI) is suspected, interrupt Olumiant until diagnosis is excluded.
- Olumiant has not been studied in patients with severe hepatic impairment and is therefore not recommended.
- Combined use of Olumiant with potent immunosuppressants is not recommended.
- Not recommended for use with live vaccines.
- Avoid use of Olumiant in patients with an active infection, including localized infections.
- Closely monitor patients for the development of signs and symptoms of infection during and after treatment with Olumiant.
- Interrupt Olumiant if a patient develops a serious infection, an opportunistic infection, or sepsis.
- Use with caution in elderly and diabetic populations.
- Use with caution in patients with a history of chronic lung disease.
- Patients should be evaluated for latent or active tuberculosis infection prior to administration of Olumiant; the product should not be given to patients with active tuberculosis.
- If herpes zoster develops, Olumiant treatment should be interrupted until the episode resolves.
- Risk of increase in creatine phosphokinase (CPK) within one week of starting Olumiant.
- Avoid initiation, or interrupt Olumiant if hemoglobin <80 g/L.
- Avoid initiation, or interrupt Olumiant if absolute lymphocyte count (ALC) <0.5 x $10^9$ cells/L.
- Avoid initiation, or interrupt Olumiant if absolute neutrophil count (ANC) <1 x $10^9$ cells/L.
- Assessment of lipid parameters should be performed approximately 12 weeks following initiation of Olumiant and as needed thereafter.
- CPK levels should be checked in patients with symptoms of muscle weakness and/or muscle pain for evidence of rhabdomyolysis.
- Not recommended in moderate and severe renal impairment, including end-stage renal disease (ESRD).
- Use with caution in patients with risk factors for, or a history of, interstitial lung disease (ILD).
- Special populations: Should not be used during pregnancy. Women of reproductive potential should take appropriate precautions to avoid becoming pregnant during treatment, and for at least 1 week after the final treatment. Breastfeeding is not recommended during Olumiant treatment.
- Monitoring and laboratory tests: Assess lipid parameters prior to starting Olumiant therapy, approximately 12 weeks after initiation, and periodically thereafter. Liver enzyme tests are recommended. If drug-induced liver injury is suspected, interrupt therapy until this diagnosis has been excluded. Assess renal function prior to starting Olumiant therapy, approximately 4–8 weeks after initiation, and periodically thereafter. Assess lymphocytes, neutrophils and hemoglobin count at baseline, approximately 4–8 weeks after initiation, and periodically thereafter.

**For more information:**
Please consult the Product Monograph at http://pi.lilly.com/ca/olumiant-ca-pm.pdf for important information relating to adverse reactions, drug interactions and dosing that has not been discussed in this piece.

The Product Monograph is also available by calling 1-888-545-5972.

ACR = American College of Rheumatology; CI = confidence interval; DAS28-hsCRP = Disease Activity Score 28-high sensitivity C-reactive protein; HAQ-DI = Health Assessment Questionnaire-Disability Index.

* Phase 3, double-blind, 24-week study of 684 biologic DMARD-naïve patients with moderate to severe RA and inadequate response or intolerance to ≥1 cDMARDs. Patients were assigned 1:1:1 to placebo (n=228) or baricitinib 2 mg (n=229) or baricitinib 4 mg (n=227) once daily. The primary endpoint was American College of Rheumatology 20% response (ACR20) at Week 12 for baricitinib 4 mg.[2] Baricitinib 4 mg is not an approved dose in Canada.[1]

† Type I error controlled.

‡ **Clinical significance unknown.**

§ Estimated patient exposure for baricitinib based on cumulative sales. Clinical significance is unknown.

**References: 1.** Olumiant (baricitinib) Product Monograph, Eli Lilly Canada Inc., August 14, 2018. **2.** Dougados M, van der Heijde D, Chen Y-C, *et al*. Baricitinib in patients with inadequate response or intolerance to conventional synthetic DMARDs: results from the RA-BUILD study. *Ann Rheum Dis* 2017;76:88-95. **3.** Data on file. Eli Lilly Canada Inc.



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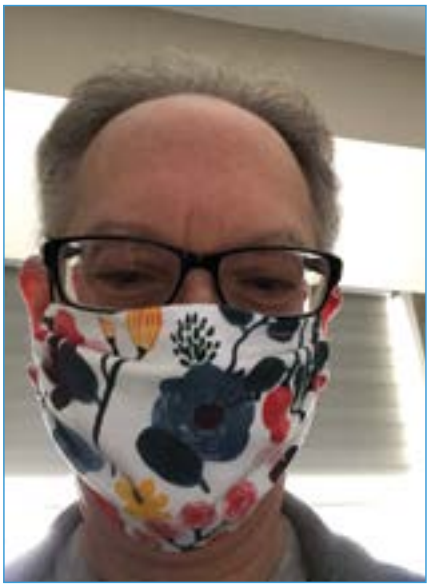
# Virtual Care in Rheumatology: The Sequel – *Thoughts as of March 2020*

By Philip A. Baer, MDCM, FRCPC, FACR

*"Never let a good crisis go to waste."*

– Variously attributed to Winston Churchill, Rahm Emanuel and Saul Alinsky.
(M. F. Weiner Medical Economics 1976: "Don't Waste a Crisis — Your Patient's or Your Own")

I didn't think I would be revisiting this topic so soon, but COVID-19 has changed many plans. Amid all the bad news, the restrictions on face-to-face interaction have upended our working world, potentially with some longer-term benefits to us and our patients.



Fresh off a typically excellent CRA Annual Scientific Meeting, extensively covered in this issue of the *CRAJ*, I had high hopes for March 2020 in real life. My wife and I were booked to speak on a continuing medical education (CME) tour of Morocco for two weeks: that was cancelled with three days to go, preventing us from being stranded in Casablanca when Morocco closed its airspace. I pivoted to attend a medical meeting in Vancouver: cancelled again, after I already had checked in for my flight online. No problem: I obtained a cancellation slot for needed cataract surgery. Again, that was cancelled with less than 24 hours notice due to COVID-19.

Meanwhile, every booked medical meeting, Journal Club, CME, and industry contact has been postponed, cancelled or moved online. With social distancing the new norm, our local Disaster Psychiatry interest group did remind us that emotional connectedness was even more important than usual. In this wired world, that is easier than ever, even when physical separation is necessary. In Ontario, it was gratifying to see our tight-knit rheumatology community working together, in small groups and through the ORA, to support each other in this very unfamiliar environment.

While helping each other, we also were confronted with how to meet the needs of our patients with rheumatic diseases. While many of us are not thrilled with our electronic medical records (EMRs) on a day-to-day basis, the benefits of having one over paper charts in this situation are clear. We can work from anywhere, at least as long as the electricity keeps flowing and the internet is functioning. Provincial governments moved quickly to enable billing for telephone visits, which we last used during SARS in 2003, and expanded the options for video visits to more platforms. With some medical buildings closed, and some physicians healthy but in self-isolation after travel, care could continue to be delivered.

Of course, adjustments are needed in any new work environment. EMR adoption is not synonymous with EMR optimization, as I quickly learned. We had never favoured emailing with patients because of privacy and timeliness of response concerns. Now, we suddenly wanted everyone's emails in order to scan and send them lab requisitions and other documents, as most patients do not have fax access, and snail mail could be eliminated at any moment. E-prescribe options look better than ever when available; for everyone else getting a virtual visit, recording their pharmacy's name and fax number was a new requirement.

My first few telephone visits included this new administrative work, but otherwise went surprisingly well. Routine follow-up visits of stable patients work well in this format, saving some patients long commutes to my office. We also handled patients who were in self-isolation after travel, who would have had to delay their visits. Video visits for the tech-savvy will manage other patients: rashes and obviously swollen joints can be seen; home blood pressure readings can be obtained from patients; but subtler findings will clearly go unrecognized. Patients proved quite adept at doing their own tender joint counts, and our paper Multidimensional Health Assessment Questionnaires (MDHAQs) were replaced by verbal versions.

*Continued on page 5*

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## Virtual Care in Rheumatology: The Sequel

*Continued from page 3*

Issues do persist. Joint injections and biologic infusions cannot be done virtually. Patients who are not doing well require in-person examination in many cases. New consults also are difficult to handle virtually, other than those related to incidental abnormalities on imaging and lab tests, many of which should not have been ordered in the first place. Patients with new-onset vasculitis, rheumatoid arthritis and systemic lupus erythematosus (SLE) must be seen and treated urgently. Lab monitoring intervals can be spaced out, but those tests are still required.

For those visiting the office, there are new realities: Locked office doors, social distancing in the waiting room, restrictions on accompanying persons and drop-in visits, and the use of personal protective equipment when necessary. All patients are now screened based on travel history, contacts with COVID-19 patients, fever, and other worrisome symptoms. My secretary has a new script for reminder phone calls, and the signage on our front door and throughout our medical building is ever evolving.

Tantalizing therapeutic questions remain to be answered. Should ibuprofen be avoided? Will the promise of anti-malarials, baricitinib and IL-6 inhibitors as COVID-19 treatments be realized? Will there be a vaccine? Will this be the last ever pandemic? That one is easy, the answer is NO. What will the new normal look like after this pandemic runs its course? I predict virtual medicine is here to stay. As Canada's chief public health officer Dr. Theresa Tam stated: "People are using innovations to try and get care to people in different ways. That includes . . . having billing codes for physicians who are doing these consultations remotely. So what you're trying to do is increase the maximum . . . capacity for the health system to treat those who have more serious presentations of the COVID virus. They are using telemedicine in a way that I feel to be maybe a legacy of the outbreak itself."

If you have COVID-19 tips, experiences or stories to share, feel free to send them to us at the *CRAJ* for possible publication in print and/or online in future issues.

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

## Congratulations to the Inaugural CRA Master Award Recipients!

The Canadian Rheumatology Association (CRA) has introduced a new *Master* Award in 2020, bestowed upon members aged 65 and older who have made outstanding contributions to the field of rheumatology and excelled in one or more of the following ways: outstanding service to patients, outstanding administrative service, excellence in rheumatology teaching and education, and/or excellence in rheumatology research.

| | | |
|---|---|---|
| Dr. Martin Atkinson | Dr. John G. Hanly | Dr. Kiem Oen |
| Dr. Claire Bombardier | Dr. Boulos Haraoui | Dr. Ross E. Petty |
| Dr. Arthur Bookman | Dr. Manfred Harth | Dr. Alan M. Rosenberg |
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| Dr. Marvin J. Fritzler | Dr. Ronald M. Laxer | Dr. Murray B. Urowitz |
| Dr. Dafna Gladman | Dr. Henri Andre Menard | Dr. Michel Zummer |

# A Multi-disciplinary, Community-based Group Intervention for Individuals with Fibromyalgia: A Pilot Randomized Controlled Trial

By Michelle Teo, MD, FRCPC

When I started my career as a community rheumatologist, I did not see how I could integrate research into my clinical practice. Research requires expertise in a skill set that many of us lack, such as grant writing, ethics applications, statistics; the list goes on. How can the average community rheumatologist expect to be competent in these areas when research is considered an "extra" that we do at the side of our desks in between seeing patients?

If you are a community rheumatologist and see an opportunity to make a positive change through research, you can be successful in obtaining a Canadian Initiative for Outcomes in Rheumatology Care (CIORA) grant. By collaborating with an academic researcher, you create a partnership that allows you to focus your time and energy on your strengths, providing clinical care to patients.

Our team was successful in obtaining a two-year CIORA grant in 2017 for "A Multi-disciplinary, Community-based Group Intervention for Individuals with Fibromyalgia: A Pilot Randomized Controlled Trial." Rheumatologists in underserved communities, such as myself, are frequently unable to see these patients because of our long waitlists. But it does not mean that patients who have fibromyalgia do not deserve appropriate care. Furthermore, given the multitude of health, psychological and societal factors that contribute to fibromyalgia, it is naïve to believe that a rheumatologist can provide the full breadth of treatment or that a patient can access appropriate and integrated resources on his/her own. We developed a 10-week group-based interprofessional integrated care model for patients with a diagnosis of fibromyalgia. The goal was to equip patients with sustainable and effective disease self-management tools. Health care professionals involved included: a kinesiologist, physiotherapist, mental health therapist, dietitian, social worker and rheumatologist. The study group met twice a week for 60 minutes of exercise and weekly for 60-90 minutes of group education. The results of the study revealed improvements to patient perceived quality of care, daily function and attitudes towards pain. The next step of this work is to show how health care utilization changes when fibromyalgia patients have access to such a program.

Patients living with pain deserve opportunities to empower themselves with knowledge of mind-body awareness and self-care. This study is an example of how successful this approach can be in a limited patient population. I also hope it encourages other community rheumatologists to consider collaborating with researchers to improve the lives of our patients.

*Michelle M. Teo, MD, FRCPC*
*Rheumatologist,*
*Penticton Regional Hospital*
*Penticton, British Columbia*

You are invited to submit abstracts for presentation during the 2021 CRA & AHPA Annual Scientific Meeting!

Deadline for submissions is October 9, 2020.

Details will be available at ***asm.rheum.ca.***

# The CRA's Response to COVID-19

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Since the onset of the current COVID-19 pandemic, the CRA team has been monitoring this developing and rapidly evolving situation. We would like to inform members of our initiatives and current measures in place to keep you up to date.

## Drug Shortages

### Position Statements

- The CRA's Therapeutics Committee was able to respond quickly with position statements relevant to Canadian rheumatologists throughout this pandemic. Visit *rheum.ca/covid19/* for more information.

### Stakeholder Engagement

- Hydroxychloroquine (HCQ) Shortage:
  - The CRA remained active on this file, leading the way and connecting with key stakeholders to both inform decision-makers as well as report back to members. This includes active participation in meetings with Health Canada, other professional associations, patient groups and industry to both define the problem and identify solutions for the HCQ shortages.
  - Furthermore, the CRA, through the Stakeholder Engagement Committee Chair, has proactively reached out to the Federal Minister of Health, penning a letter urging the Federal Government to increase Canada's supply of HCQ to meet the higher demand for all patients who need it.

## Keeping You Informed

### Weekly President's Updates

- Beginning in March, the CRA has been deploying weekly updates to all CRA members regarding COVID-19 related information that impacts Canadian rheumatologists.

### Webinars

- The CRA COVID-19 Response Webinar Series has been developed to offer health care providers within the rheumatology community additional educational resources.
  - Recent webinars:
    - "Insights from Italy: A Rheumatologist's Perspective on COVID-19"
    - "Journey of the RA & Rheumatology Patient during COVID-19"
    - And more! Visit *rheum.ca* to view a full listing of COVID-19 webinars."

### Resource Centre

- The CRA has launched a COVID-19 resource centre at *rheum.ca/COVID-19* with information and updates relevant to Canadian rheumatologists.
- CRA members have access to additional content, including webinars and more.

## Staying Connected

### Discussion Forum

- To encourage knowledge sharing amongst our community, the CRA has launched a new discussion forum for members.
- Visit *rheum.ca* to log in to your account and access!

## Programming and Events

### 2020 Annual Scientific Meeting

- The CRA regularly communicated COVID-19 information to all attendees including best practices and implemented a flexible cancellation policy for those who had been feeling ill or did not want to travel.
- Currently, we are proactively planning to deliver another comprehensive Annual Scientific Meeting in 2021 in a safe and effective manner.

### Future Leaders in Rheumatology

- This year's Future Leaders in RheumaTology (FLIRT) meeting scheduled in May 2020 was changed to a successful virtual meeting.

### Summer Studentship Program

- We have made the difficult decision to cancel the Summer Studentship program this year.
- We appreciate the continued support of our members and anticipate the return of our Summer Studentship program in 2021.

## Initiatives

### COVID-19 Global Alliance Registry

- The CRA has endorsed the COVID-19 Global Rheumatology Alliance Registry.
- This registry is an international effort to collect information pertinent to COVID-19 infection in patients with rheumatologic disease.
- Many sites across Canada are ready to participate in the global rheumatology alliance registry, with more being added as we continue to receive interest and ethics approval.

### And Many More Initiatives

- Transitioning Back to In-Person Patient Care Living Resource
- EULAR coverage from a Canadian
- COVID-19 podcast
- Yoga sessions
- And more – visit *rheum.ca* for updates!

# Passing the Torch

## Vandana Ahluwalia
## Past-President of the CRA

Two years ago, I took on the role of the President of the Canadian Rheumatology Association (CRA), and it has been a very rewarding experience. I learned that good things happen when dedicated people work together towards a shared goal. Our volunteer members have accomplished a lot because of their strong professional relationships with one another.

Just before the start of my tenure, our new CEO, Ahmad Zbib, joined our team. In partnership with the board, committee volunteers, and dedicated staff, he has been focused on providing value for all our members, and continually striving towards improving our organization.

I consider myself privileged and proud to have led the final stages of what I believe has been a transformational journey of the CRA. This started several years ago, with the introduction of a new governance model. This journey required a considerable amount of time, energy and commitment. During the last two years we focused on strategic alignment of our resources, as well as planning for a bright and sustainable future. This resulted in a newly minted strategic plan which will set the stage for the next three-to-five years and help us deliver measurable impact. Furthermore, our work on identifying a new organizational structure, through which we can continue to serve our members and the public, will help future-proof our organization.

The *Journal of Rheumatology* has nestled into its home at the CRA very nicely. Our relationship is maturing, built on mutual respect, and is strengthened by open communication. The *Journal* continues to publish internationally renowned articles in rheumatology research. It is expanding globally through its "clinical highlights" publication to inform and educate rheumatologists around the world.

Our flagship activity, the Annual Scientific Meeting, was highly attended in beautiful Victoria, B.C. This year, we featured a new review course for general rheumatologists which was very well received. We also hosted our inaugural Canadian Arthritis Research Conference. This conference brought together the Arthritis Society, CIHR-IMHA, and the CRA to support research that seeks to improve the lives of people with arthritis and rheumatic diseases.

During my tenure at the CRA, I have learned that leadership is not an innate trait, but a skill that can be taught. It is important that we don't forget to nurture those with the potential and motivation to become future leaders of this organization. It has been my honour to work with such an enthusiastic and dedicated Board of Directors who have made my job a pleasure. I am excited to pass the torch to Evelyn Sutton, our incoming president, who will lead us and celebrate with us during our upcoming 75th anniversary in 2021.

*Vandana Ahluwalia, MD, FRCPC, Past-President, CRA*

# Presidential Address

## Evelyn Sutton
## President of the CRA

This past April, my husband and I stood witness to the marriage of a young couple. They exchanged vows on the deck of a deserted marina where there was not a single boat moored. They, the justice of the peace and we made the maximum of five people in a gathering. I used my cellphone to record a video of the event and later, with the help of an individual more tech savvy than myself, uploaded it for their parents and guests to view from around the world. We could not hug the bride or the groom nor go out for a celebratory dinner together so we drove down the coast in our separate vehicles and found a place to take a few more pictures of the happy couple with coastal views in the background. The joy emanating from the young couple was contagious and we could not stop smiling.

"Contagious" is either a poor or an appropriate choice of word right now. Everyone's lives have been affected to varying degrees by a virus we were aware of in February in Victoria at our Annual Scientific Meeting, but whose impact was yet to be felt around the world. I recall hearing attendees looking forward to seeing one another at their upcoming regional meetings or at EULAR, all of course now cancelled.

Like the young couple who married yesterday, we are all being challenged to identify what is truly of importance to us. They did not need the big party, decorations or flowers. They did need the promise that each would be there for the other no matter what the future holds.

The Canadian Rheumatology Association (CRA) is also identifying what is of importance to members including but not limited to: updates on best practices for our patients on biologics, advocacy for evidence-based prescribing of hydroxychloroquine, pressure on government and suppliers to ensure our patients are not left without medication, and advice on assessing patients remotely. Your committees have been busy on your behalf, and I thank them all. A special shout out to Rosie Scuccimarri and the Therapeutics Committee, Carter Thorne for his tireless and tenacious advocacy on hydroxychloroquine, Janet Pope for her webinars and to Ahmad Zbib and the wonderful CRA staff.

On a personal level, I hope you, your families and loved ones are well. I count myself fortunate to be a member of this national network of wonderful, caring professionals, and I have never regretted making the choice to belong to this wonderful organization. I promise you, no matter what the future holds, the CRA will continue to work with and for you. I do hope we can see each other in Quebec City in February 2021, but if not, we will find a way to stay connected. Best wishes to you all. Sincerely,

*Evelyn Sutton, MD, FRCPC*
*President, CRA*

# *RheumJeopardy!* at the 2020 ASM

By Philip A. Baer, MDCM, FRCPC, FACR

*RheumJeopardy!* returned for a fifth consecutive year at the 2020 CRA ASM in Victoria. As per tradition, I created the questions and hosted the event. Questions were also contributed by Dr. Raman Joshi, Dr. John Wade and the CRA Education Committee.

This year, our Chair was last year's winning captain from the East, Dr. Valérie Leclair, who tried to predict the outcome in advance based on the team captains' astrological signs and spirit animals. The East was captained by Dr. Hugues Allard-Chamard, an adult rheumatologist from the University of Sherbrooke. Dr. Lily Lim, a pediatric rheumatologist from the University of Manitoba, captained the West. For the first time this year, captains had the right to overrule their team's answers, but no one dared to take that risk!

Mark Atkinson redid our slide graphics with a fresh new interface, featuring the *Jeopardy!* theme song, and sound effects for correct and wrong answers, as well as a timer function. PollEverywhere and the WiFi network functioned perfectly, ensuring a smooth event. Dr. Jane Purvis also assisted, taking photos and tracking which questions were used.

Categories this year included Pediatric Rheumatology, RA/PMR/CBD, Old Drugs New Tricks, Mainly OA, Sight Diagnosis, and Potpourri. CBD could have referred to cannabidiol, but in fact covered Competency by Design, the new Royal College system for evaluating trainees. I had thought that the Pediatric Rheumatology category would favour Dr. Lim's team, but I learnt that in fact most of the questions covered maternal-fetal medicine, disappointing the pediatric rheumatologists in the audience.

Questions that stumped both teams included:

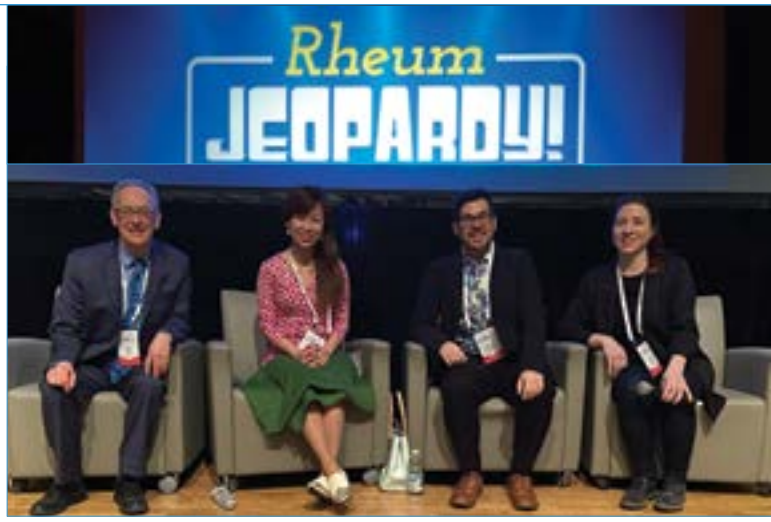
The bone marrow of a healthy adult produces how many new red blood cells per minute? Answer: 100 million

Two sight diagnosis questions: one on rotator cuff tear with massive bruising, and another on hard palate hyperpigmentation caused by antimalarials.

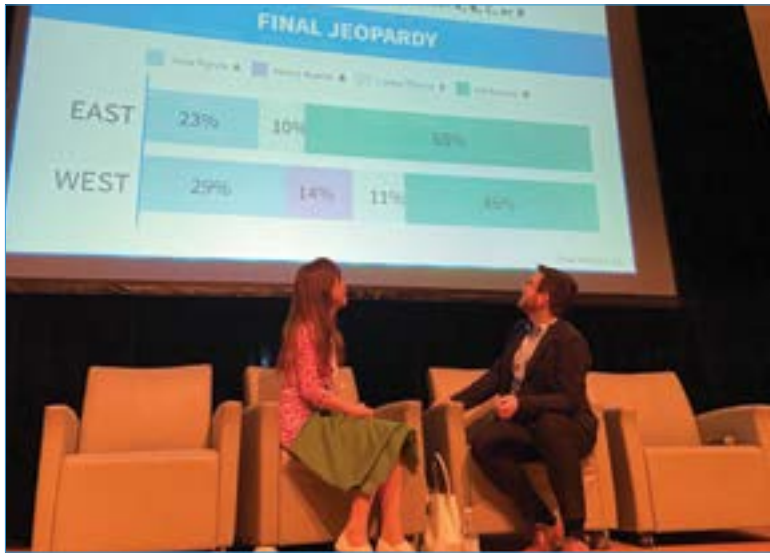
A recent pilot study showed the efficacy of which drug in treating fibromyalgia (FM) pain? Answer: metformin.

A recent UK prospective cohort study showed that glucosamine use lowered the risk of which disease? Answer: cardiovascular disease.

A Swedish study showed, after 17 years of follow-up, that patients with congenital heart block due to Ro/SSA antibodies had which of these outcomes vs. matched controls? Answer: More cardiomyopathy/CHF and more strokes.




Dr. Philip Baer, host of *RheumJeopardy!* 2020, pictured with Dr. Lily Lim (Team Captain of the West), Dr. Hugues Allard-Chamard (Team Capatain of the East) and Dr. Valérie Leclair (Chair of this year's event).



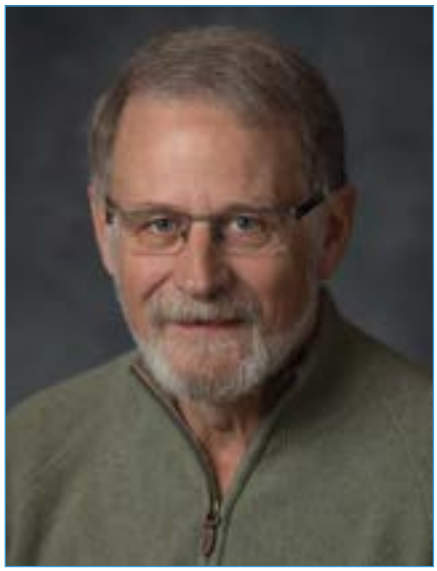

Team Captains Dr. Lily Lim and Dr. Hugues Allard-Chamard view the results of Final Jeopardy.

The battle was neck and neck throughout. At the end of regular *Jeopardy!*, the East led by 200 points, 8,200 to 8,000. Both teams risked everything on one final question, whose topic was once again Famous Canadian Rheumatologists. Artwork created by a former ORA President was shown, with teams choosing between Drs. Jane Purvis, Carter Thorne, Henry Averns and Art Karasik. The correct answer was Dr. Art Karasik (Instagram @karart2016), chosen by both teams, perhap based on his first name. So the final score was East 16,400 and West 16,000.

By the end, it was standing room only at the back of the lecture theatre. With favourable evaluations, *RheumJeopardy!* may return in Quebec City for the 75th anniversary CRA ASM in 2021. Thanks to all who participated.

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

# The CRA's 2020 Distinguished Rheumatologist: Dr. Jamie Henderson



### Why did you become a rheumatologist? What or who influenced you along the way to do so?

My decision to train in rheumatology arose from a discussion with an orthopedic resident who had returned to training after two years in general practice. He indicated that his most useful consults (for himself and patients) were from rheumatologists. I wanted people to say that about my consults!

Dr. Jack Woodbury taught me the language of rheumatology and Dr. Howard Stein showed me how to function as a rheumatologist.

### You have served in various leadership roles within the CRA, including as President, and now as President and Chair of the Board of The *Journal of Rheumatology*. You've also helped organize joint CRA-Mexican College of Rheumatology (MCR) meetings. Why was getting involved so important to you?

I felt that I had something to contribute to the CRA, but really had no idea what that might be. As my involvement got deeper and I joined the board, I thoroughly enjoyed the interactions with the group. I took on the role of Treasurer and that opened the door to a six-year commitment to the executive. The time commitment was significant, but I enjoyed all the time spent.

### How has your work helped shape the field of rheumatology here and elsewhere?

One of the lasting legacies was the Canadian Initiatives for Outcomes in Rheumatology cAre (CIORA). I was involved from day one with Paul Haraoui and Alf Cividino. We were able to transfer CIORA from Abbott to the CRA, and it has proven to be a good springboard for members to get acquainted with applying for and accomplishing research. I am still proud that there were many Mexican/Canadian collaborations that were established that function today.

### What is the greatest professional and organizational challenge you have faced, and how did you address/overcome this challenge?

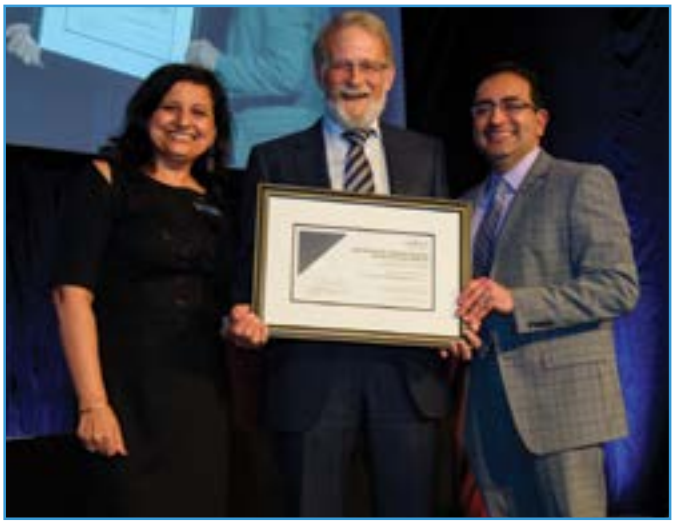
Without question the biggest undertaking was the joint meeting between Canada and Mexico. Luckily, I had Michel Zummer as part of the team, and he had many contacts as well as expertise to share (as well as some comfort in Spanish). It took a full two years to smooth out details and finally bring the meeting to fruition.

### What major changes to the landscape of rheumatology have you witnessed over the course of your career?

What has impressed me the most has been the evolution of treatment options for patients with inflammatory arthritis. I started practice with gold injections, D-Penicillamine and hydroxychloroquine being the mainstays of medical options. The introduction of methotrexate gave us a better weapon, but still didn't stop the damage. Then the biologics revolutionized treatment outcomes. My need for hospital beds vanished and patient outcomes improved significantly, and treatment options have continued to grow. Unfortunately, the cost of these new treatments now has governments and insurance companies looking over our shoulders and questioning our decisions. I found the need for paperwork justifying decisions has become overbearing.

### What do you foresee as challenges to Canadian rheumatologists in the future, and what can individual rheumatologists and the CRA do to meet these challenges?

I am concerned that ultimate decision making on medications is being usurped by insurance companies and governments. Cost savings seems to be taking precedence over best outcomes. Our success in altering long-term outcomes for rheumatoid arthritis (RA) patients may be jeopardized by short-term economic decision making. Many policy decision makers may not remember the devastation that was common in the past. Unfortunately, the CRA and individual rheumatologists may appear self-serving if they protest interference in decision making. I believe that the right way



Dr. Henderson receiving his award from CRA President Dr. Vandana Ahluwalia and Dr. Raheem Kherani.

to proceed may be patient groups taking a stand and demanding less outside interference in medication decisions.

### What advice would you give to new and aspiring rheumatologists?

I would suggest that, when they begin practice, they consider setting aside a three-hour time slot each week that is not booked until the day before. This would allow them to be responsive to new urgent consults on a timely basis. I have found that family physicians were always relieved that patients they have serious concerns about were going to get a rapid evaluation. It helps to establish one's reputation as a "go-to" resource when time is of the essence.

### Why did you decide to retire when you did? What do you enjoy most about retirement?

I was worn out after 35 years on the front lines. Many years of my practice were during times when rheumatologists were in short supply in New Brunswick, and the pressure to see patients was relentless. Retirement has allowed me to take control of my time and pursue activities that give me pleasure (grandkids, fishing, gardening, golf, and exercise amongst others).

### What do you like most about living in the Maritimes?

The Maritimes have been a wonderful place to live. Distances are short to PEI and Nova Scotia, and there is no shortage of beautiful places to visit. Housing costs are quite reasonable, and owning your own home is still quite achievable. My cottage is 15 minutes from my house! Rush hour in Fredericton lasts 15 minutes. Activities for kids were boundless and many extracurricular activities were available and close by. The quality of life has been spectacular, and the people are hospitable and friendly.

### What book would you bring with you on a deserted island?

Currently I am reading *Crime and Punishment*. One book would not suffice. I usually have four or five books downloaded on my iPad from our local library.

### You have proven that a rheumatologist from a smaller centre can be very successful as a leader in national rheumatology. Was being based in Fredericton a help or a hindrance in your career and leadership path? In what way?

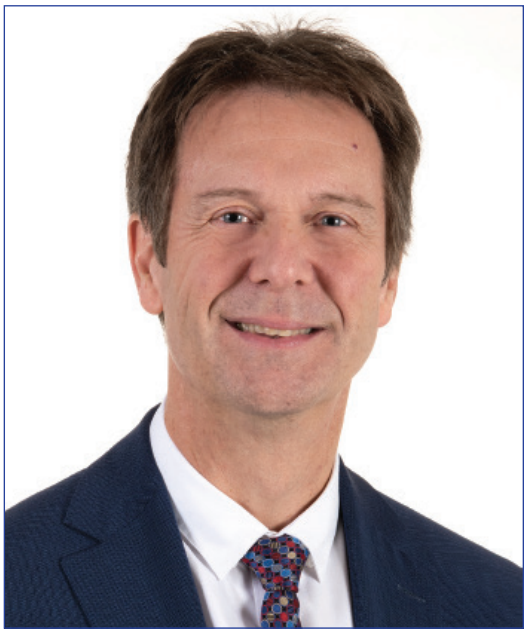
The scale of our community was a plus for me. When I arrived in Fredericton there was one other rheumatologist in the province. I had to get involved in advocacy early in my career. I became comfortable in meeting with Deputy Ministers to get protected beds, approval for biologics, etc. I also got involved with the Arthritis Society as a frequent speaker and ultimately serving as President of the provincial branch. I see now that being able to have a voice early in my career gave me the comfort level to participate in national discussions and bring a local experience that resonated with others.

### You were the medical leader of the Fredericton Clinic. What lessons could you apply from that work to your CRA work? What differences did you find between leading the CRA vs. leading your clinic?

I ran the business end of a privately owned clinic with 90 physicians. This helped me in communicating clearly and transparently. Physicians are very involved when their own finances are at stake. Running meetings became an art form with multiple (sometimes conflicting) viewpoints being expressed. Making sure that all viewpoints had their turn in an environment of acceptance was critical. I found that this skill set served me well when I became involved with the CRA. My first major role was as Treasurer, and understanding the overview of financial statements and being able to communicate this to members was a plus.

*Jamie Henderson, MD, FRCPC*
*Rheumatologist (retired)*
*President, The Journal of Rheumatology – Board of Directors*
*Fredericton, New Brunswick*

# The CRA's 2020 Distinguished Investigator: Dr. Paul Fortin



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

My first thought was "Am I that old already?" as it seemed impossible to me that I had accomplished enough in my career to merit this honour. Then, after regaining my composure and realizing that indeed the years had passed, I felt privileged to receive such a high recognition from my peers.

The importance of feeling that your work has been and remains valid (to use a qualification that clinical researchers love) and valued outside of your immediate circle is of great comfort. This is how I think of the *CRA Distinguished Investigator Award*: an endorsement that my work so far has enough meaning to be recognized by those closest to me and most apt to appreciate what I do, my fellow rheumatologists.

It is too often underestimated how insecure and uncertain the career of a clinical researcher can be. More often than not, we must learn to live with rejections of grants and papers, criticisms for unconventional ideas or propositions that may be outside the norm, challenges to convince others of the value of a research question, methodology or study design, or worst of all, indifference from funding agencies, research institutions or the public. I have spent countless hours – often at the expense of time I should have spent on personal and familial endeavours – securing a research agenda that would reflect my personal value, but most importantly my deep conviction that my research would eventually help one patient one day live a better life with arthritis. That conviction that what I do can make a difference one day in even a single person's life has remained my most powerful motivation to go on when my chances for a future research career appeared bleak.

Surprisingly, others went along with my conviction and I have benefited from the support of family, patients, colleagues and the research community at large. I would have never been able to merit the *CRA Distinguished Investigator Award* without those who supported me and went along with such a risky business! I am so very grateful since this award indirectly recognizes their support as well.

### Why did you become a rheumatologist? What or who influenced you along the way to do so?

It took time for the medical student and resident that I was to become intrigued, then interested and finally enthralled with rheumatology. The intrigue started during a rotation on an internal medicine ward when I trained as a medical student in Quebec City. I had not been exposed until then to patients with systemic autoimmune rheumatic diseases. During my 4-week rotation, I collected and wrote the histories and performed physical examinations on four incredibly wonderful people who lived with rheumatoid arthritis (RA), lupus, and systemic sclerosis. They were all young to middle-aged women who did not let their disease control their lives and were witnesses to the strength and beauty of the human spirit. A reversal of the roles occurred during their hospital stay, as these women became my teachers. One showed me how she had adapted to independently buttoning her blouse despite her deformed thumbs and hands from RA. Another joked about looking younger from her scleroderma skin involvement and shared her plans to return to work after her discharge from hospital. The youngest of the four had just been diagnosed with lupus and was understandably distraught and scared. She nevertheless believed wholeheartedly in getting better and intended to do so. The courage and resilience of these women impressed me profoundly and I realized then that I could see myself accompanying such people throughout their journey with arthritis.

The interest then came from learning more about the immune system and the fascinating phenomenon of autoimmunity. My senior resident during that same internal medicine rotation was my colleague of today, Dr. Charlotte

Dr. Fortin receiving his award from CRA President Dr. Vandana Ahluwalia and Dr. Raheem Kherani.

Grondin. She was an excellent teacher and did not count the number of hours she taught us medical students. She patiently dissected the immune system for us and explained the different clinical manifestations of the systemic autoimmune rheumatic diseases. By the end of that rotation, I wanted to become a clinical . . . immunologist.

This interest in immunology and immunity guided me to McGill University where I trained in internal medicine. McGill offered one of the few clinical programs in immunology to which I wanted to apply for my subspecialty training. I reconsidered my choice, however, after an elective rotation in rheumatology under the direction of Dr. John Esdaile. Dr. Esdaile was just returning from Yale after training in Epidemiology with Dr. Alvin Feinstein. I realized during this rotation that rheumatology offered me all that I deeply desired: the study of the immune system and of autoimmunity, a practice involving long-term care of incredibly courageous patients deserving of our care and a possibility to complement that with research that could one day change one patient's life.

### What do you believe are the qualities of a distinguished rheumatologist?

Distinguished or not, a rheumatologist's most important quality is their humanity. Ours is a discipline that deals with daily sufferings that undermine the body and the soul. Scientific excellence, clinical experience and sound judgement are naturally essential qualities that all health-care professionals share. However, I am convinced that the quality that will serve the rheumatologist most will be humanity. How can you otherwise accompany patients that live with a debilitating disease that menaces not only their physical function but also their emotional and social lives? Giving up is not easy and until recently, arthritis caused patients to give up beyond what would be expected from natural aging. In my practice, heartfelt compassionate listening, prolonged silences, and acknowledgement that this disease "sucks" have served me as much as the wonderful new drugs I prescribe. Although difficult at times, I present myself as an adviser and a guide in the decisions my patients have to take. At times, I have also been their counsellor. I challenge myself to make sure that my patients are in agreement with their treatments and adopt them with the conviction that it is the right thing to do for themselves.

In my mind, humanity is the quality that allows me to connect with my patients and to strengthen the privileged bond of the rheumatologist-patient relationship.

### You have been working to better understand the bio-psycho-social impact of chronic rheumatic diseases such as SLE, RA and other systemic autoimmune rheumatic diseases. How does your research influence the clinical care of patients? What has been the most gratifying aspect of this knowledge translation?

Interestingly, one of the most gratifying experiences in my research career has been what a patient reported to us after a very difficult episode in her life. This person lives with lupus and had been part of the Health Improvement and Prevention Program (HIPP). The HIPP study was a trial that studied a patient-focused intervention managed by a trained nurse practitioner that combined educational classes, health habit modifications including a supervised exercise program and an optional meditation-based stress reduction (MBSR) program. Following her experience with HIPP, the person who wrote to us had carried on with yoga, MBSR, and maintained an exercise program. The following year, she unfortunately developed pneumonia and respiratory failure that required intubation and mechanical ventilation. She then wrote to us that throughout that dreadful experience in intensive care, she had used the tools that she had acquired during the HIPP study. The meditation helped her get through the worst part of this experience and she is convinced that being physically fit, especially related to her respiratory musculature, was what allowed her to make it through and recover fully. This example will not be published in a peer-reviewed journal but it does motivate me to continue my work as it validates what I do in research.

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

So many! In fact, my wife worries that I will never get tired of asking research questions and starting new research projects. However, seriously, one interesting project I will likely never do is what attracted me back home to Quebec City. This is a study of the genetic-environmental interactions that may be associated with systemic autoimmune rheumatic diseases in French-Canadians. The idea would be to pool their genetic and familial data that are well documented and available for research (the founder effect here is unique with a few thousand common ancestors to mil-

lions of French Canadians) with environmental exposures. We would determine these environmental exposures using geospatial analyses. We could then propose genetic and environmental risk factors and interactions between genes and the environment associated with arthritis. This would require a population-based study, working closely with scientists in geography and with population scientists and anthropologists. Wouldn't that be exciting? It would also require lots of money, and quite a convincing investigator to pull this off!

## What is your proudest accomplishment?

My collaborations are my proudest accomplishments with a definite bias in favor of the Canadian Network for Improved Outcomes in SLE or CaNIOS. I came back from my clinical epidemiology training and my exposure to the Robert B. Brigham Multipurpose Arthritis Center in Boston with the conviction that numbers were key to getting answers to our questions. I have been privileged to receive funding over the years from the Arthritis Society, the Canadian Institutes of Health Research (CIHR) and CIORA to proceed with some of these questions. One of my early studies – a randomized controlled trial on the efficacy and safety of methotrexate in lupus – required that we recruit patients in several centers across Canada. John Esdaile guided me through the political maze that permitted the creation of CaNIOS. Its purpose was to perform one study, but it rapidly became obvious that this collaboration led to more interesting possibilities for research. Several other research projects by colleagues such as Ann Clarke, Patricia Dobkin, Debbie DaCosta, Christine Peschken, Joan Wither and others followed. CaNIOS remains active today, 25 years after its creation in 1995 and continues to offer a unique platform of research in lupus.

## What advice would you give to someone looking to pursue a career as an academic rheumatologist?

Follow your instinct and your passion, but over and above all, make sure that you choose what you really like. What will make you wake up early in the morning and long to be already at work! No advanced planning or in-depth strategies here – complete abandonment! Never in a lifetime would I have dreamt of becoming an academic researcher in rheumatology (and one who would receive the *CRA Distinguished Investigator Award* at that). There are no guarantees that you will succeed but, if your instinct dictates that a career in academia is the right choice for you, my second and possibly most important advice is to seek advice. Ideally, you can find a mentor in your environment or at the CRA meetings. I have been personally privileged to have two mentors during my career. Both have been very generous with their time, support and advice. Early on, John Esdaile guided me through the decision of pursuing additional training in clinical research in Boston where I met my second mentor, Matthew Liang. They have both remained close advisers to this day.

## If you had an extra hour in the day, how would you spend it?

I would love to improve my skills at photography – especially at nature photography with a specific interest in birds! I am a birder since my teens and there is nothing more healing and satisfying to me than walking nature trails. I plan to get the right equipment and to start working on these skills in the coming months so that I can prepare for retirement. After all, as I have said at the beginning, receiving the *Distinguished Investigator Award* is a great honour . . . but also a signal that time is passing by!

*Paul R. Fortin, MD, MPH, FRCPC*
*Canada Research Chair on Systemic Autoimmune Rheumatic Diseases*
*Rheumatologist, Division of Rheumatology*
*Researcher, Infectious and immune disease axis*
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*Professor, Department of Medicine*
*Faculty of Medicine, Université Laval*
*Québec City, Québec*

# The CRA's 2020 Emerging Teacher-Educator: Dr. Dharini Mahendira

**You've been recognized and awarded for your teaching and have inspired many residents to become rheumatologists. What was your first thought when you learned that you would receive this award?**

I felt truly humbled to receive this recognition in the company of many superb educators within our rheumatology community. It is wonderful to receive an award for teaching – something that I'm passionate about. I take a lot of pride in seeing my students succeed. Teaching is a team effort, and I am lucky to work with talented and enthusiastic colleagues. Locally, my colleagues at St. Michael's Hospital and the University of Toronto have supported my efforts and fostered collaborative multi-disciplinary learning. Additionally, I have had the privilege of working with wonderful educators from across the country.

I would like to thank the CRA for introducing the Emerging Teacher-Educator Award and recognizing educators who are earlier in their career. At times, measuring impact in medical education can be challenging. The acknowledgment provides positive feedback and encouragement!

**What or who inspired you to become involved in medical education?**

I have been fortunate to have many remarkable teachers throughout my training. In particular, Dr. Heather McDonald-Blumer and Dr. Louise Perlin have played significant roles in my development as a medical educator. I recall working with Heather and being thoroughly inspired by her insightful, skilled and collaborative approach to medical education, as well as her leadership. Louise Perlin has inspired me through her meticulous attention to detail and the importance she places on medical education. I am truly grateful for their invaluable support and guidance.

**What do you believe are the qualities of a good educator?**

The most important quality of a good educator is enthusiasm for learning. In my opinion, that passion translates to the learner and stimulates interest and discussion. Other qualities include being an effective communicator, as well as recognizing and addressing learner needs.

**You are working on a number of exciting education projects, including immunology videos as part of a national immunology curriculum. You've also been the Co-Chair for the National Rheumatology Residents Weekend (NRRW) as well as the CRA Residents' Pre-course. Can you tell us more about these projects?**

I'm very excited to be involved in these projects. I have been working with a talented team at the University of Toronto to develop a series of graphic videos illustrating basic immunology concepts. The aim is to consolidate basic principles of disease pathophysiology and treatment in rheumatology. The video series includes topics such as innate and adaptive immunity, disease-modifying anti-rheumatic drugs (DMARDs) and biologics, as well as pregnancy. Our team is hoping to share this video library with our rheumatology trainees and educators across the country in the near future.

It has been a privilege to co-chair both the National Rheumatology Residents' Weekend and the Residents Pre-Course – two valuable educational initiatives supported by the CRA. Our organizing committees have worked to incorporate engaging topics as well as talented speakers. Both events were successfully held earlier this year and continue to be an excellent networking opportunity for our rheumatology trainees.

Dr. Mahendira receiving her award from CRA President Dr. Vandana Ahluwalia and Dr. Raheem Kherani.

### Where do you see the future of medical education moving?

Adapting to the challenges of delivering quality medical education in the era of COVID-19 was certainly eye-opening. The experience has highlighted the role of digital platforms, and how best to optimize its use for teaching. However, in my opinion, nothing can replace in-person teaching – particularly for physical examination!

### As a respected teacher-educator, what would your advice be to a prospective rheumatologist?

I whole-heartedly recommend that students obtain as much hands-on learning as possible with their supervisors. The art and nuances of rheumatology are something best learned in person. Additionally, I would encourage prospective rheumatologists to explore an interest in medical education with involvement in teaching and educational committees – both local and national. I have grown as a result of accepting opportunities that were outside of my comfort zone – and have been inspired by talented colleagues from across the country as a result.

### If you weren't pursuing rheumatology as a career, what would you be doing?

I was actually set on a career in obstetrics when I began medical school, but fell in love with internal medicine and rheumatology. However, leading the Rheumatic Diseases and Pregnancy Clinic at St. Michael's Hospital allows me to combine my passion for rheumatology and maternal-fetal medicine.

### If you had an extra hour in the day, how would you spend it?

Getting to my spin class on time!

### If you could eat one food for the rest of your life, what would it be?

This would be a tie between my childhood favourites – British chocolate and biscuits. Hence the need for spinning!

*Dharini Mahendira, MD, FRCPC, MScCH*
*Division of Rheumatology,*
*St. Michael's Hospital*
*Assistant Professor, University of Toronto*
*Toronto, Ontario*

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‡ Prescription and physician data were obtained from eXel™ support program enrollment forms collected from June 2014 to November 2018


**References:**
**1.** Pfizer Inc. Data on file. 2019.
**2.** Pfizer Canada ULC. XELJANZ/XELJANZ XR Product Monograph.
**3.** XELJANZ XR Notice of Compliance information.
**4.** XELJANZ RA Notice of Compliance information.
**5.** XELJANZ PsA Notice of Compliance information.
**6.** XELJANZ UC Notice of Compliance information.




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# Spotlight on the 2020 CRA Abstract Awards

## Ian Watson Award for the Best Abstract on SLE Research by a Trainee

*Sponsored by the Lupus Society of Alberta*
Winner: Kimberley Yuen, Queen's University
Abstract Title: Using Classification and Regression Tree Analysis to Determine the Validity of the ANAM in the Assessment of Cognitive Impairment in Patients with SLE Compared to the American College of Rheumatology Neuropsychological Battery
Supervisor: Dr. Zahi Touma

## Phil Rosen Award for the Best Abstract on Clinical or Epidemiology Research by a Trainee

*Sponsored by the Arthritis Society – Phil Rosen Memorial Award*
Winners: Kristina Roche & Eugene Krustev, Memorial University of Newfoundland & University of Calgary
Abstract Title: Development of an Affordable and Remotely Accessible Tool in Joint Injection and Arthrocentesis
Supervisors: Drs. Shaina Goudie, Sam Aseer and Proton Rahman

## Best Abstract by a Rheumatology Resident

*Sponsored by the CRA*
Winner: Dr. Julie Mongeau, Dalhousie University
Abstract Title: Review of Outpatient Referrals to Rheumatology; Adherence to Choosing Wisely Recommendations Regarding Anti-Nuclear Antibody Testing at the Referral Level
Supervisors: Dr. Trudy Taylor

## Best Abstract on Basic Science Research by a Trainee

*Sponsored by the CRA*
Winner: Sonya Kim, University of Ottawa
Abstract Title: Interferon-Induced Cytokines as Surrogate Markers of the Interferon Signature in Asymptomatic and Symptomatic ANA+ Individuals
Supervisor: Dr. Joan Wither

## Best Abstract by a Post-Graduate Research Trainee

*Sponsored by the CRA*
Winner: Carolina Muñoz-Grajales, University of Toronto
Abstract Title: Investigating the Differences in ANA Specificities Between Asymptomatic and Symptomatic ANA+ Individuals
Supervisor: Dr. Joan Wither

## Best Abstract on Quality Care Initiatives in Rheumatology

*Sponsored by the CRA*
Winner: Dr. Arielle Mendel, University of Toronto
Abstract Title: An Initiative to Improve Timely Glucocorticoid Tapering in Vasculitis
Supervisor: Dr. Christian Pagnoux

## Best Abstract by a Medical Student

*Sponsored by the CRA*
Winner: Declan Webber, University of Toronto
Abstract Title: Genetics of Avascular Necrosis in Children and Adults with Systemic Lupus Erythematosus
Supervisor: Dr. Linda Hiraki

## Best Abstract by an Undergraduate Student

*Sponsored by CRA*
Winner: Chloe Lee, University of Calgary
Abstract Title: Development and Pilot of Novel Process Using Machine Learning and Crowdsourcing to Conduct a Living Systematic Review of Rheumatoid Arthritis Drug Therapy
Supervisor: Dr. Glen Hazlewood

## Best Abstract by a Rheumatology Post-Graduate Research Trainee

*Sponsored by CRA*
Winner: Dr. Nancy Maltez, University of Ottawa
Abstract Title: Longitudinal Changes in Health-related Quality of Life in Systemic Sclerosis Treated with Autologous Hematopoietic Stem Cell Transplant Compared to Standard of Care
Supervisor: Dr. Marie Hudson

## Best Abstract on Research by Young Faculty

*Sponsored by the CRA*
Winner: Dr. Lily Lim, University of Manitoba
Abstract Title: Are Patterns of Early Disease Severity Predictive of Grade 12 Academic Achievement in Patients with Childhood-onset Chronic Rheumatic Diseases?

## Best Abstract on Spondyloarthritis Research

*Sponsored by the Canadian Spondylitis Association*
Winner: Anas Samman, University of Toronto
Abstract Title: Differential Expression of Synovial Fluid microRNAs in Psoriatic Arthritis and Osteoarthritis
Supervisor: Dr. Vinod Chandran

# To Diagnose or Not To Diagnose:
## Be It Resolved That It Is Better To Under-diagnose Than To Over-diagnose In Rheumatology Practice

By Volodko Bakowsky, MD, on behalf of Corisande Baldwin, MD; Andrea Knight, MD, MSCE; Kam Shojania, MD; and Amanda Steiman, MD, MSc

Those who attended this year's CRA meeting were on tenterhooks awaiting the outcome of one of the showcase events of the meeting – The Great Debate.

This year we had a youthful and enthusiastic group of debaters join crafty, not yet washed up veteran debater Kam Shojania. The collision of the "In Favour" team (Drs. Shojania and Andrea Knight) with the "Against" Team (Drs. Amanda Steiman and Corisande Baldwin) erupted on the stage like two juggernauts.

Dr. Shojania started off with a discussion of cognitive bias, and the Dunning-Kruger Effect. If you do not know what that is, then it assuredly applies to you! There were some deft illustrations of where the two debating sides exist on a graph of confidence vs. wisdom. He then introduced the categories of the diagnostic grid – true positive, true negative, false positive and false negative – prompting the audience to think deeply about the consequences of misdiagnosis. Dr. Shojania finished off by accusing and convicting opposing team member, Dr. Baldwin, of over-diagnosis with the suggestion that she would look fetching wearing an orange jumpsuit.

Dr. Baldwin was first up for the "Against" team. She used her background as a trainee at the University of British Columbia (UBC) to deftly eviscerate Dr. Shojania and attempt to shred his credibility. The first half of her argument outlined all the biases that can contribute to under-diagnosis, and she corrected the myth that over-diagnosis means misdiagnosis. She subsequently illustrated several examples of the harm that *can* be caused by under-diagnosis – ischemic fingers, saddle nose deformity, arthritis mutilans, to name a few.

Dr. Knight continued where her partner had left off, eliciting the audience's help in placing several lupus-like cases into the categories of the diagnostic grid. Unsurprisingly true positives and true negatives were uncontroversial. She then illustrated some of the harmful consequences of over-diagnosis (false positives) – unnecessary investigations and treatment, adverse mental health effects, labelling and delay or failure to reach the true diagnosis. This was contrasted to the much lesser harm of delay in lupus diagnosis for serologically active, clinically quiescent cases, which might end up being under-diagnosed. In anticipation of the next speaker, Dr. Knight dug out several quotes from Dr. Steiman, including "I am not sure I am qualified to give advice" (ouch!) that would no doubt anticipate and undermine any argument that would follow.

Debaters unwittingly celebrating less than six feet apart from each other.

Drs. "Orange Jumpsuit" Baldwin and Steiman raise their arms in victory. Drs. Knight and Shojania each received a "Certificate of Participation."

Last up was Dr. Amanda Steiman who came out punching. She hit the audience with the startling fact that in the United States, 54% of lawsuits were for failure to diagnose and another 20% were for delayed diagnosis. She also offered a final rebuttal to the other side's position, stating that under-diagnosis was, in fact, a form of misdiagnosis.

It was time for the audience to declare a winner. Without any debate, the audience applause-o-meter clearly determined that the "Against" side were the victors.

In my opinion, however, everyone who attended was actually a winner. We were all treated to an entertaining and spirited event. I want to thank everyone who participated. This year's debate will be a hard act to follow.

*Volodko Bakowsky, MD, FRCPC*
*Interim Division Head/Chief, Associate Professor,*
*Division of Rheumatology, Department of Medicine*
*Dalhousie University, Halifax, Nova Scotia*

# 2020 Practice Reflection Awards
## Steven Katz, MD, FRCPC

GOLD

# Tracking Triage Targets for Rheumatoid Arthritis

The University of Alberta Division of Rheumatology began its Central Triage service in 2009, with the goal of providing timely access to care for patients with inflammatory arthritis and active connective tissue disease, and equal access to care for patients referred for non-inflammatory conditions. We previously published on our success, using the "gestalt" method of triage – rheumatologist's intuition – without any additional requirements beyond what the referring letter provided.[1]

In 2012, our clinic transformed from paper-based to a fully integrated electronic medical system based on Epic Systems. With this change, we took advantage of Epic's triage module, moving from a paper-based Access database triage system to an integrated system within our electronic medical record (EMR). The risk of this move was whether or not we would be able to follow metrics, as being able to analyze the triage system in near real-time to understand where it is working or not, was as important as how the system worked. Fortunately, we were able to work with the local Epic team to develop easy to retrieve metrics around referral volume, physician volume, patient disease mix, and wait times for "soon" and "routine" referrals. This allowed us to constantly suggest subtle changes to our intake to at least try to optimize patient wait times.

Because our triage system is based on a gestalt system, it was important to develop a way to monitor "rheumatologists' intuition" and provide feedback when potential errors were made. Specifically, we wanted to ensure we were seeing our rheumatoid arthritis (RA) patients in a timely manner, triaged with the "soon" urgency. This is what we submitted for the Practice Reflection Award this past year.

We were able to develop an algorithm where we could identify patients who were diagnosed with RA in clinic but were not assigned a "soon" urgency status in triage. We could then identify the triage physician who made this "error" and each year, provide them this list of patients to review. Each rheumatologist could then review both the initial referral and the clinic consult letter in the chart to determine if an error was made and reflect on whether or not they needed to consider changes to their future triage practice.

We have been able to provide this data for our rheumatologists for the last few years, with approximately 50-75 patients (1-2% of total referrals) identified across the group. To date, the feedback from fellow rheumatologists suggests the vast majority were in fact correctly triaged, but rather may have been second opinions or incomplete referrals which did not clearly suggest an inflammatory picture. This provides reassurance to our group that our triage system appears to be functioning as intended.

We have recently upgraded our EMR to a new Epic system, which means re-inventing the wheel so to speak. We are working with our local Epic team to re-establish these useful metrics and benchmarks so we can continue to ensure we are providing the best possible access to rheumatology care in Edmonton and Northern Alberta.

1. Carpenter T, Katz SJ. Review of a rheumatology triage system: simple, accurate, and effective. Clin Rheumatol. 2014 Feb;33(2):247-52. doi: 10.1007/s10067-013-2413-1.

*Steven Katz, MD, FRCPC*
*Associate Professor,*
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*University of Alberta*
*Edmonton, Alberta*

# 2020 Practice Reflection Awards
## Bailey Dyck, MD, PhD, FRCPC

SILVER

# Understanding and Improving Patient Education Regarding Cardiovascular Disease in Psoriatic Arthritis

One of the most striking challenges I've come to appreciate during my time as a rheumatology fellow is the breadth and scope of patient care tasked to the rheumatologist. Prevention and management of cardiovascular disease (CVD) is of particularly notable importance. It has been well established that rheumatoid arthritis (RA) is associated with increased CVD, to which end advances have been made in investigating and improving screening and CVD risk management. Like RA, psoriatic arthritis (PsA) is being increasingly shown to have similar, if not equal, cardiovascular burden. Unlike RA, rheumatologists do not seem to be having these comparable, important conversations with patients with PsA.

Therefore, the aim of my self-assessment project is to explore how well patients are educated by their rheumatologist about cardiovascular risk in PsA. The study will include two information-gathering components – a chart review and a study survey – followed by dissemination of knowledge in the form of a clinical practice tool. The purpose of the retrospective chart review will be to evaluate the frequency and extent of current CVD counselling for patients with PsA. This will include examination of risk factor management and modification, new medication starts or changes, referral for investigations, and ownership patterns between the primary care team versus the rheumatologist. Subsequently, prospective data on patients' knowledge of CVD in PsA will be obtained through clinic surveys.

Ultimately, the findings of the first two components of this project will be synthesized to create a patient education pamphlet on CVD in PsA, and to develop a novel tool for rheumatologists to use to assist in reviewing and modifying CVD in patients with PsA. This tool will be developed in the form of a patient questionnaire to be filled out at each visit, analogous to the Health Assessment Questionnaire (HAQ). Ideally, this will be created both in paper format and via a user-friendly online interface that can be uploaded into an EMR. Patients will answer questions about associated cardiovascular risk factors, new comorbid diagnoses, changes to medications, and associated investigations. The answers to these questions can be reviewed by the rheumatologist, both at the appointment and/or during dedicated administrative time, and appropriate recommendations for follow up with the primary care team can be made. With the generous support of the Canadian Rheumatology Association Practice Reflection Grant, it is my hope that this project will enhance overall patient care in PsA.

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# Glucocorticoid Tapering in Vasculitis

By Arielle Mendel, MD, FRCPC, MSc, on behalf of CanVasc

Treatment of the systemic vasculitides usually requires initial high-dose glucocorticoids (GC), which must be tapered over time to avoid toxicity. Recommendations suggest tapering to 15-20 mg prednisone per day within 2-3 months of therapy in giant cell arteritis (GCA)[1,2] and ANCA-associated vasculitis (AAV).[3] The recently published PEXIVAS trial demonstrated that, in severe granulomatosis with polyangiitis (GPA) and microscopic polyangiitis (MPA), a faster, "reduced-dose" GC tapering protocol (target 7.5-12.5 mg prednisone daily by 3 months), was non-inferior to a "standard" taper (target 15-25 mg daily by 3 months) in terms of global and renal survival, with a lower risk of serious infections.[4]

The purpose of this Joint Count survey was to determine how Canadian rheumatologists taper prednisone in GCA and AAV, and how many have adopted a "reduced dose"[4] tapering strategy in AAV.

Seventy-one Canadian rheumatologists and trainees completed the survey (13% response rate). The majority worked in an academic setting (47%), while 32% worked in the community and 20% in both. Most (73%) have practiced for ≥5 years, and half (49%) saw patients with vasculitis at least once weekly.

The survey presented clinical scenarios of GC tapering in GCA and GPA (refer to the panel on the right). For the GCA scenario, most (76%) tapered prednisone to reach the recommended dose of 15-20 mg daily by 3 months[1,2] and the remainder tapered more slowly. For the GPA scenario, most (85%) tapered prednisone in a similar manner to CanVasc recommendations[3] (67%) or following a "reduced-dose" (PEXIVAS)[4] regimen (18%), while 15% tapered more slowly.

The fact that only a minority of physicians have started to taper GC in GPA/MPA according to the "reduced-dose" PEXIVAS regimen[4] may be due to the recency of the trials' publication and/or concern that the study results may not be generalizable to all severe AAV subgroups. Indeed, respondents ranked "managing the risk of disease flare" as the most challenging aspect of GC tapering in vasculitis. The proportion choosing the "reduced-dose" PEXIVAS vs. other tapering regimens in the GPA scenario did not differ significantly according to practice setting (academic vs. all others), clinical experience (≥ 5 or <5 years in practice), or frequency of seeing patients with vasculitis (at least once weekly vs. less often).

The risk of GC-related harm increases with cumulative GC dose and duration,[5,6] and following a GC tapering schedule is one strategy for minimizing toxicity. The soon-to-be published updated CanVasc recommendations for management of AAV advocate for timely protocolized GC tapering, acknowledging the potential need for modifications according to patients' clinical status.

The results of this survey are reassuring in that most clinicians taper GC in vasculitis according to recommendations. CanVasc would like to thank everyone who participated in this edition of the Joint Count Survey!

*Arielle Mendel, MD, FRCPC, MSc*
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*Toronto, Ontario*

## ☑ Joint Count Survey:

### Clinical Scenarios of GC Tapering in Vasculitis

*Your patient started prednisone 60 mg/day 2 weeks ago for newly diagnosed GCA. Now, symptoms, signs, and laboratory parameters have normalized. How would you proceed with prednisone tapering?*

a. Continue 60 mg prednisone for another 2 weeks, then taper by 5 mg every 2 weeks
b. Taper by 10 mg every 2 weeks until 20 mg, then 2.5-5 mg every 2 weeks
c. Taper by 5 mg every 2 weeks
d. Other _____

*Your patient started high-dose prednisone and cyclophosphamide 1 month ago for PR3+ ANCA vasculitis with pulmonary-renal syndrome. He has now tapered to 50 mg of prednisone/day for the past 2 weeks. Symptoms and signs of active vasculitis have resolved. His creatinine peaked at 300 µmol/L and is now 120 µmol/L. How would you proceed with prednisone tapering?*

a. Taper by 10 mg every 2 weeks until 20 mg, then by 5 mg every 2 weeks until 5 mg
b. Taper to 25 mg now for the next 2 weeks, then taper by 2.5-5 mg every 2 weeks until 5 mg
c. Taper by 5 mg every 2 weeks until on 5 mg
d. Other _____

## References


1. Dasgupta B, Borg FA, Hassan N, et al. BSR and BHPR guidelines for the management of giant cell arteritis. *Rheumatology (Oxford)* 2010; 49(8):1594-7. doi: 10.1093/rheumatology/keq039a [published Online First: 2010/04/08]
2. Hellmich B, Agueda A, Monti S, et al. 2018 Update of the EULAR recommendations for the management of large vessel vasculitis. *Ann Rheum Dis* 2019 doi: 10.1136/annrheumdis-2019-215672 [published Online First: 2019/07/05]
3. McGeoch L, Twilt M, Famorca L, et al. CanVasc Recommendations for the Management of Antineutrophil Cytoplasm Antibody-associated Vasculitides. *J Rheumatol* 2016; 43(1):97-120. doi: 10.3899/jrheum.150376
4. Walsh M, Merkel PA, Peh CA, et al. Plasma Exchange and Glucocorticoids in Severe ANCA-Associated Vasculitis. *N Engl J Med* 2020; 382(7):622-31. doi: 10.1056/NEJMoa1803537 [published Online First: 2020/02/14]
5. Gale S, Wilson JC, Chia J, et al. Risk Associated with Cumulative Oral Glucocorticoid Use in Patients with Giant Cell Arteritis in Real-World Databases from the USA and UK. *Rheumatol Ther* 2018 doi: 10.1007/s40744-018-0112-8.
6. Robson J, Doll H, Suppiah R, et al. Glucocorticoid treatment and damage in the anti-neutrophil cytoplasm antibody-associated vasculitides: long-term data from the European Vasculitis Study Group trials. *Rheumatology (Oxford)* 2015; 54(3):471-81. doi: 10.1093/rheumatology/keu366

# Update from British Columbia

**By Jacqueline Stewart, BSc (Hons), B ED, MD, FRCPC**

Dr. Kun Huang is ready for her shift at Surrey Memorial Hospital.

Dr. Daniel Ennis works at Vancouver General Hospital and St. Paul's Hospital. He is also host of the CRA's podcast, "Around the Rheum."

We are in the midst of the COVID-19 pandemic, and I am delighted to highlight two of our new rheumatologists who, in addition to their busy rheumatology practices, have been involved with the management of COVID-19 patients. This brief snapshot focuses on Dr. Kun Huang and Dr. Daniel Ennis.

Dr. Kun Huang is on staff at Surrey Memorial Hospital and runs a Myositis Subspecialty Clinic as well at the Mary Pack Arthritis Centre. She spends 25% of her time in hospital-based general internal medicine, and also participates in research through the Canadian Inflammatory Myositis Study. Dr. Huang was keen to work on the front line in the battle against COVID and helped the Health Authority make preparations for the emergency response and cared for patients on the COVID ward. Dr. Huang reflects on her recent experience: "The extra donning and doffing and excessive hand washing became routine and easy. You get used to breathing through a mask, seeing through foggy goggles and not being able to sip coffee while rounding. The camaraderie with nurses and other health professionals made the day not only tolerable but fun."

Dr. Daniel Ennis is on staff at Vancouver General Hospital and St. Paul's Hospital. He also works in the vasculitis clinic at the Mary Pack Arthritis Centre and participates in national research initiatives through CanVasc and CanRIO networks. He is also working on the CRA podcast, "Around the Rheum." Of his recent experience, Dr. Ennis says "During the coronavirus pandemic, I have helped in the care of hospitalized COVID-19 patients. I have been humbled by the contributions, sacrifices and kindnesses of our colleagues across the country. They make me proud to be a Canadian rheumatologist in the time of COVID."

# Arthritis Society Tackling COVID-19 Challenges

The entire world is having to adapt to the demands of the COVID-19 pandemic and the Arthritis Society is no different.

Our patient education resources are helping thousands of Canadians stay on top of their arthritis and cope with the challenges of living through a pandemic, including our COVID-19 and arthritis information page (*arthritis.ca/covid-19*), our Arthritis Talks webinars (*arthritis.ca/arthritistalks*) and our weekly flourish newsletters (*arthritis.ca/flourish*).

At the same time, we have been working in partnership with the CRA and other stakeholders to ensure the needs of people with arthritis are not forgotten.

We're pleased these efforts are bearing fruit, from the resolution of the hydroxychloroquine shortage, to the designation of medical cannabis as an essential service, to the inclusion of hospital-based researchers in the federal government's wage subsidy program. These wins are a tribute to the collective will of the arthritis community and our ability to effect critical changes in policy when we work together.

The work doesn't stop there however, as serious issues remain:

- **Surgery backlog:** Some provinces have begun to announce plans to address delayed joint replacement surgeries, but those plans will need funding and coordination, input from patients, and will need to encompass all impacted Canadians.
- **Drug access:** Drugs in addition to hydroxychloroquine may be at risk as the pandemic threatens supply chains. As well, many Canadians have lost their jobs and drug benefit plans. It is critical we ensure adequate supply and continued access to necessary medications.
- **Research funding:** Researcher wages may be protected, but research funding itself is shrinking. While COVID-related research is a current focus, we cannot forget the importance of sustained investments in health and chronic condition innovations that will impact millions of Canadians.

We are calling on everyone in the arthritis community to ask their elected federal and provincial representatives to find collaborative solutions to these challenges. Find out more and show your support at *arthritis.ca/takeaction.*

# Autologous Hematopoietic Stem Cell Transplantation for Systemic Sclerosis in Canada

By Murray Baron, MD, FRCP(C)

Hôpital général juif
Jewish General Hospital

McGill

Autologous hematopoietic stem cell transplant (AHSCT) has become an acceptable treatment option for systemic sclerosis (SSc). Two recently published trials, ASTIS and SCOT, have shown improved survival, more skin softening and improved pulmonary function after AHSCT compared to immunosuppressive therapy.

Canadian and Australian scleroderma experts have developed a new set of inclusion/exclusion criteria that can act as a guide to help Canadian rheumatologists decide if a patient may be a good candidate for transplant. These criteria are included on the Canadian Scleroderma Research Group (CSRG) website at (*canadiansclerodermaresearchgroup.org/stem-cell-transplantation-criteria*). Most of the criteria are based on the results of a large Delphi survey of SSc experts around the world. The cardiac exclusion criteria are based on the opinions of a smaller number of experts and should be considered interim recommendations until a larger number of cardiologists are surveyed.

Our suggestion is that patients being considered for transplant should be assessed by a rheumatologist with specific expertise in the care of SSc. These physicians will also record patient-related data in the Canadian Scleroderma Research Group database and thus facilitate research in the outcomes of transplant. A list of these physicians is also included via the CSRG link (*canadiansclerodermaresearchgroup.org/stem-cell-transplantation-criteria)*.

Currently, not all transplant centers in Canada are performing these transplants. The three major sites are listed but it may be possible that other sites closer to the homes of the patients may also have the capability of doing the transplant. The decision to perform a transplant at an unlisted site should be made after a consultation between a rheumatologist with expertise in SSc and the transplant hematologist.

*Murray Baron, MD, FRCP(C)*
*Chief, Division of Rheumatology, Jewish General Hospital*
*Director, Canadian Scleroderma Research Group*
*Professor of Medicine, McGill University*
*Montreal, Quebec*

# The Arthritis Health Professions Association (AHPA) at the CRA/AHPA Annual Scientific Meeting

By Sue MacQueen, PT, BScPT, ACPAC, Past-President, AHPA

AHPA
ARTHRITIS HEALTH PROFESSIONS ASSOCIATION

The 12th annual AHPA pre-course was held on February 26th, 2020, in conjunction with the CRA/AHPA Annual Scientific Meeting in Victoria B.C. With more than 95 participants and eight educational sessions, the day was a great success! Topics such as the cervical spine in rheumatoid arthritis (RA), vasculitis, the impact of arthritis in the workplace, hand therapy in the age of biologics, update on JAK inhibitors, and sports involvement in children with juvenile idiopathic arthritis (JIA) were nicely balanced with a session on yoga for arthritis and information from the Canadian Spondylitis Association. The day was capped off with a fun review of the sessions in the form of "Family Feud."

During the ASM workshops, we were pleased to have Christopher Hawke present the model of care used in the shoulder and elbow clinic at the University Health Network (UHN); and the team from the Mary Pack Arthritis Program at Vancouver Coastal Health (VCH) presented a workshop on multidisciplinary care.

At the AHPA Annual General Meeting (AGM) awards ceremony, Cara Kaup received the *Clinical Innovation Award* for her submission "3 Questions Tool in Pediatric Rheumatology." The *Carolyn Thomas Award* was presented to Laura Passalent for her abstract submission "Axial Spondyloarthritis: Knowledge, Screening and Referral Practices Amongst Primary Care Providers." Sabrina Cavallo was awarded the *Barbara Hanes Memorial Award* for "Exploring the Vocational Needs of Young People with Juvenile Idiopathic Arthritis and the Provision of Rehabilitation Services in Transition Care." We were pleased to have Trish Barbato, the new CEO and President of the Arthritis Society, present the Arthritis Society/AHPA Research Grant to Susan Bartlett for her study, "Delphi Survey to Assess Medication Side Effects and Concerns in People with Inflammatory Arthritis."

At the ASM gala, the *AHPA Extraordinary Service Award* was presented to Lynn Richards of the Arthritis Society for her work in promoting and advancing the mission of the AHPA. The *AHPA Lifetime Achievement Award* was awarded posthumously to Barbara Stokes who, over her career, made tremendous contributions in the education of health professionals in the field of rheumatology.

AHPA also approved the new Board of Directors: Anne MacLeod, President; Sue MacQueen, Past-President; Kristin Dillon, Treasurer; Jill Hall, Secretary; Denise Jupp, Communications Chair; Jackie Williams Connolly, Membership Chair; Sameer Chunara, Professional and Career Development Chair; Raquel Sweezie, Research Chair; Angelo Papachristos, Sponsorship and Marketing Chair; Nik Harris, Eastern Member-at-Large; and Paul Adam, Western Member-at-Large.

Karen Gordon accepting the *Lifetime Achievement Award* from Sue MacQueen on behalf of Barbara Stokes' family.

Sue MacQueen presenting Lynn Richards with the *Extraordinary Service Award.*

The AHPA is pleased to collaborate with the CRA and we look forward to the coming year!

*Sue MacQueen, PT, BScPT, ACPAC*
*Past-President, AHPA*
*Waterloo, Ontario*

# Top Ten Things Rheumatologists Should (And Might Not) Know About the Physiatrist's Perspective on Rehabilitation Strategies and Interventions for Neuromusculoskeletal Conditions

By Jaime C. Yu, MD, MEd, FRCPC, CSCN(EMG); Brian Rambaransingh, MD, FRCPC, CSCN(EMG), RMSK; and Arun T. Gupta, MD, FRCPC, CSCN(EMG)

Rehabilitation strategies and interventions encompass a broad range of treatment modalities, from activity modification and exercise prescriptions to medication management and interventional procedures. Physical medicine and rehabilitation is a broad specialty, caring for individuals with a wide range of neurological and musculoskeletal disorders. This article provides insight into the physiatrist's perspective regarding neuromusculoskeletal conditions frequently encountered by rheumatologists.

**1.** Low back pain, a leading cause of disability, requires determination of potential pain generators to guide interventional treatments. Non-inflammatory back pain is divided as axial, affecting the back itself, or radicular, with pain radiating to the buttocks or legs. Facet-joint-mediated pain contributes to 40% of axial low back pain and can be successfully treated with radiofrequency denervation techniques. For radicular pain, transforaminal epidural steroid injections can provide significant symptomatic relief and expedite recovery. In refractory cases, neurostimulation is an emerging therapy. Surgical management is usually restricted to patients with progressive neurological deficits.[1-3]

**2.** Greater trochanteric pain syndrome is commonly labelled as bursitis but should instead be considered a tendinopathy affecting the gluteus medius/minimus and iliotibial band. True bursitis is present in only a minority of patients. Gluteal tears can be evaluated using the resisted external derotation test. Ultrasound-guided needle tenotomy, in combination with physiotherapy, can provide reasonable medium- to long-term relief, and represents a better option than corticosteroid injections.[4-6]

**3.** The sacroiliac joint (SIJ) is an important pain localization in non-inflammatory back pain. Pain generators in the SIJ include the joint capsule, surrounding ligaments, and the intra-articular portion of the joint, all innervated by the lateral branches of the S1-S3 nerve roots. Due to this complex anatomy, physical examination maneuvers may not be as accurate and intra-articular injections may not adequately interrogate all pain generators, resulting in false negative diagnoses. Techniques utilizing imaging-guided blocks to the posterior sacral network may represent a new gold standard in diagnosis and management of SIJ-mediated pain.[7-11]

**4.** Myofascial pain syndrome needs to be differentiated from fibromyalgia. Clinical features of palpable taut bands and trigger points are usually present, and the area of pain involvement is more focal, compared to the widespread pain typical of fibromyalgia. Treatment includes targeted stretching and active strengthening exercises of the involved muscles, while techniques such as intramuscular stimulation ("dry needling") and trigger point injections with local anesthetic can be helpful for short-term pain reduction to facilitate active rehabilitation.[12,13]

**5.** Nerve conduction studies (NCS) and electromyography (EMG) testing have technical limitations and knowing when to order them is important. Standard NCS and EMG testing is very useful for identifying abnormalities in the major large-fiber peripheral nerves, such as focal entrapment neuropathies (e.g. carpal tunnel syndrome) or traumatic nerve injuries. EMG studies

are also helpful for distinguishing acute inflammatory myopathies from chronic myopathies. However, pathology involving small-fiber peripheral nerves, a common cause of painful distal polyneuropathies, is more difficult to measure and standard NCS/EMG can be normal in these cases.[14]

**6.** Small-fiber polyneuropathy (SFPN), involving the myelinated Aδ-fibers and unmyelinated C-fibers, is found in approximately 40-50% of patients with fibromyalgia. Symptoms of dysautonomia and paresthesias may predict underlying SFPN, and abnormalities in sural and medial plantar sensory NCS can aid diagnosis. Identifying this overlap is important to rule-out reversible causes of SFPN and identify patients who may respond better to antiepileptics or antidepressants for pain. Opioids are discouraged, but adjuvant treatments including topical local anesthetics, capsaicin, and acupuncture may be helpful.[15-18]

**7.** Complex regional pain syndrome (CRPS) is a rehabilitative emergency, and requires urgent treatment with appropriate analgesic medication, possible oral corticosteroids, and aggressive active rehabilitation strategies. When early treatment is not possible or there is a lack of response, CRPS unfortunately develops into a chronic neurological and pain condition. The key feature of CRPS is regional pain out of proportion to any inciting event, with features of neuropathic pain, skin and temperature changes, and significant loss of functional movement. Level 1 evidence exists for use of oral corticosteroids in early or acute cases, and appropriate analgesia is important to promote participation in active rehabilitation exercises and modalities.[19,20]

**8.** Post stroke joint pain is often complex and may arise from multiple etiologies. Shoulder pain can arise from subluxation due to neuromuscular weakness, rotator cuff tendinopathy or glenohumeral osteoarthritis flare due to altered mechanics, spasticity of the shoulder girdle muscles, or adhesive capsulitis. If hand and shoulder pain is noted, assess for shoulder-hand syndrome, a form of post-stroke CRPS. Post-stroke knee pain is common, due to altered mechanics aggravating underlying knee osteoarthritis or flares of gout from the acute medical event and associated medications. Consider use of functional electrical stimulation (FES), topical NSAIDs, and short courses of oral NSAIDs. Targeted injections of intra-articular corticosteroids are effective in providing medium-term pain relief to promote active rehabilitation for neurological recovery.[21]

**9.** Inflammatory arthritis may remit on the hemiparetic side after stroke, but the pathophysiology of this phenomenon is unclear. Case reports have suggested that inflammatory arthritis resolves on the hemiparetic side following stroke or other significant central nervous system injury. Proposed mechanisms include altered mechanical factors on the hemiparetic side, changes in the autonomic nervous system affecting inflammation, or changes in limb perfusion. Hemiparetic limbs frequently develop autonomic changes such as edema, altered temperature, and altered skin colour and sweat pattern. Further work to elucidate the role of the central nervous system on inflammation will be helpful to understand this anecdotal phenomenon.[22,23]

**10.** Plantar fasciitis is a common cause of heel pain and can be related to systemic inflammatory conditions or specific biomechanical issues. Predisposing factors include pes cavus deformity, limited range of ankle dorsiflexion, tightness of the gastrocnemius and soleus, and excessive foot pronation/supination. Correction of biomechanical abnormalities with measures such as targeted stretching, modified shoe wear, use of orthoses (e.g. heel lift), strengthening of the intrinsic foot muscles, and deep friction massage can resolve this condition. In refractory cases, imaging-guided corticosteroid injections provide short-term relief, allowing rehabilitation techniques to be better tolerated and more effective. Other options include extracorporeal shock-wave therapy, botulinum toxin A intramuscular injections, prolotherapy and autologous platelet-rich plasma, but these interventions have conflicting evidence regarding efficacy. Surgical management is reserved for rare cases.[24-28]

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## References


1. Deyo RA, Rainville J, Kent DL. What can the history and physical examination tell us about low back pain? *JAMA* 1992; 268(6):760-765.
2. Patrick N, Emanski E, Knaub MA. Acute and chronic low back pain. *Med Clin North Am* 2014; 98(4):777-89, xii. doi: 10.1016/j.mcna.2014.03.005 [doi].
3. Hooten WM, Cohen SP. Evaluation and treatment of low back pain: A clinically focused review for primary care specialists. *Mayo Clin Proc* 2015; 90(12):1699-1718. doi: 10.1016/j.mayocp.2015.10.009 [doi].
4. Long SS, Surrey DE, Nazarian LN. Sonography of greater trochanteric pain syndrome and the rarity of primary bursitis. *AJR Am J Roentgenol* 2013; 201(5):1083-1086. doi: 10.2214/AJR.12.10038 [doi].
5. Jacobson JA, Rubin J, Yablon CM, Kim SM, Kalume-Brigido M, Parameswaran A. Ultrasound-guided fenestration of tendons about the hip and pelvis: Clinical outcomes. *J Ultrasound Med* 2015; 34(11):2029-2035. doi: 10.7863/ultra.15.01009 [doi].
6. Reiman MP, Goode AP, Hegedus EJ, Cook CE, Wright AA. Diagnostic accuracy of clinical tests of the hip: A systematic review with meta-analysis. *Br J Sports Med* 2013; 47(14):893-902. doi: 10.1136/bjsports-2012-091035 [doi].
7. Szadek KM, Hoogland PV, Zuurmond WW, De Lange JJ, Perez RS. Possible nociceptive structures in the sacroiliac joint cartilage: An immunohistochemical study. *Clin Anat* 2010; 23(2):192-198. doi: 10.1002/ca.20908 [doi].
8. Schneider BJ, Ehsanian R, Rosati R, Huynh L, Levin J, Kennedy DJ. Validity of physical exam maneuvers in the diagnosis of sacroiliac joint pathology. *Pain Med* 2020; 21(2):255-260. doi: 10.1093/pm/pnz183 [doi].
9. Roberts SL, Burnham RS, Ravichandiran K, Agur AM, Loh EY. Cadaveric study of sacroiliac joint innervation: Implications for diagnostic blocks and radiofrequency ablation. *Reg Anesth Pain Med* 2014; 39(6):456-464. doi: 10.1097/AAP.0000000000000156 [doi].
10. Roberts SL, Burnham RS, Agur AM, Loh EY. A cadaveric study evaluating the feasibility of an ultrasound-guided diagnostic block and radiofrequency ablation technique for sacroiliac joint pain. *Reg Anesth Pain Med* 2017; 42(1):69-74. doi: 10.1097/AAP.0000000000000515 [doi].
11. Cibulka MT, Koldehoff R. Clinical usefulness of a cluster of sacroiliac joint tests in patients with and without low back pain. *J Orthop Sports Phys Ther* 1999; 29(2):83-2. doi: 10.2519/jospt.1999.29.2.83 [doi].
12. Borg-Stein J, Iaccarino MA. Myofascial pain syndrome treatments. *Phys Med Rehabil Clin N Am* 2014; 25(2):357-374. doi: 10.1016/j.pmr.2014.01.012 [doi].
13. Saxena A, Chansoria M, Tomar G, Kumar A. Myofascial pain syndrome: An overview. *J Pain Palliat Care Pharmacother* 2015; 29(1):16-21. doi: 10.3109/15360288.2014.997853 [doi].
14. Chemali KR, Tsao B. Electrodiagnostic testing of nerves and muscles: When, why, and how to order. *Cleve Clin J Med* 2005; 72(1):37-48. doi: 10.3949/ccjm.72.1.37 [doi].
15. Lawson VH, Grewal J, Hackshaw KV, Mongiovi PC, Stino AM. Fibromyalgia syndrome and small fiber, early or mild sensory polyneuropathy. *Muscle Nerve* 2018; 58(5):625-630. doi: 10.1002/mus.26131 [doi].
16. Lodahl M, Treister R, Oaklander AL. Specific symptoms may discriminate between fibromyalgia patients with vs without objective test evidence of small-fiber polyneuropathy. *Pain Rep* 2017; 3(1):e633. doi: 10.1097/PR9.0000000000000633 [doi].
17. Grayston R, Czanner G, Elhadd K, et al. A systematic review and meta-analysis of the prevalence of small fiber pathology in fibromyalgia: Implications for a new paradigm in fibromyalgia etiopathogenesis. *Semin Arthritis Rheum* 2019; 48(5):933-940. doi: S0049-0172(18)30363-9 [pii].
18. Swiecka M, Maslinska M, Kwlatkowska B. Small fiber neuropathy as a part of fibromyalgia or a separate diagnosis? *International Journal of Clinical Rheumatology* 2018; 13(6):353-359. doi: 10.4172/1758-4272.1000210.
19. Shim H, Rose J, Halle S, Shekane P. Complex regional pain syndrome: A narrative review for the practising clinician. *Br J Anaesth* 2019; 123(2):e424-e433. doi: S0007-0912(19)30235-1 [pii].
20. Harden RN, Oaklander AL, Burton AW, et al. Complex regional pain syndrome: Practical diagnostic and treatment guidelines, 4th edition. *Pain Med* 2013;14(2):180-229. doi: 10.1111/pme.12033 [doi].
21. Wiener J, Cotoi A, Viana R, et al. Chapter 11: Hemiplegic shoulder pain and complex regional pain syndrome. In: Teasell R, Cotoi A, Wiener J, Illiescu A, Hussein N, Salter K, eds. The stroke rehabilitation evidence-based review: 18th edition (www.ebrsr.com). Canadian Stroke Network; 2018.
22. Sofat N, Malik O, Higgens CS. Neurological involvement in patients with rheumatic disease. *QJM* 2006; 99(2):69-79. doi: hcl005 [pii].
23. Keyszer G, Langer T, Kornhuber M, Taute B, Horneff G. Neurovascular mechanisms as a possible cause of remission of rheumatoid arthritis in hemiparetic limbs. Ann Rheum Dis 2004; 63(10):1349-1351. doi: 10.1136/ard.2003.016410 [doi].
24. Arnold MJ, Moody AL. Common running injuries: Evaluation and management. *Am Fam Physician* 2018; 97(8):510-516. doi: 13485 [pii].
25. Becker BA, Childress MA. Common foot problems: Over-the-counter treatments and home care. *Am Fam Physician* 2018; 98(5):298-303. doi: 13813 [pii].
26. Cotchett M, Lennecke A, Medica VG, Whittaker GA, Bonanno DR. The association between pain catastrophising and kinesiophobia with pain and function in people with plantar heel pain. *Foot (Edinb)* 2017; 32:8-14. doi: S0958-2592(16)30051-7 [pii].
27. Lai TW, Ma HL, Lee MS, Chen PM, Ku MC. Ultrasonography and clinical outcome comparison of extracorporeal shock wave therapy and corticosteroid injections for chronic plantar fasciitis: A randomized controlled trial. *J Musculoskelet Neuronal Interact* 2018; 18(1):47-54.
28. Petraglia F, Ramazzina I, Costantino C. Plantar fasciitis in athletes: Diagnostic and treatment strategies. A systematic review. *Muscles Ligaments Tendons J* 2017; 7(1):107-118. doi: 10.11138/mltj/2017.7.1.107 [doi].

# Joint Count Survey Results: HCQ and the Risk of Cardiac Toxicity

Amid discussions and controversies surrounding hydroxychloroquine (HCQ) and the risk of torsades de pointes, this Joint Count survey, conducted in January 2020 prior to the COVID-19 pandemic, focused on finding out the perspectives of CRA members on the topic of potential cardiac toxicity of HCQ. The response rate to the survey was 95 out of a possible 500, equating to 19%. More than half of respondents (53%) were academic rheumatologists, with another 39% in community practice and 8% in both. Four respondents specified that they were in residency, and two were fellows.

The first question asked members the following: "Hydroxychloroquine (HCQ) has rarely been reported to cause which of the following cardiac side effects (choose all that apply)." Cardiomyopathy was selected by 82% of respondents; conduction system abnormalities was selected by 72%; and arrhythmia by 67% (see Table 1).

When asked what tests they ordered before starting HCQ, only nine selected a resting ECG and a single person selected an echocardiogram.

Finally, when asked whether they have seen cardiac toxicity related to HCQ in their practice, 33% of respondents answered affirmatively, while 67% said that they had not (see Table 2).

While there may be varying perspectives between other specialists and rheumatologists with regard to HCQ and the risk of cardiac toxicity, it seems that most rheumatologists agree that this is a rare risk and that the benefits of HCQ therapy far outweigh the risks. If you have any additional feedback for the CRA, please contact Kevin Baijnauth at *kbaijnauth@rheum.ca*. A commentary by Dr. Zahi Touma is also available in this issue on page 29.

Table 1.
**Hydroxychloroquine (HCQ) has rarely been reported to cause which of the following cardiac side effects (choose all that apply):**

| | |
|---|---|
| Cardiomyopathy | 82% |
| Conduction system abnormalities | 72% |
| Arrythmia | 67% |

Table 2.
**I have seen cardiac toxicity related to HCQ in my practice:**

| | |
|---|---|
| Yes | 33% |
| No | 67% |

# HCQ and the Heart

By Zahi Touma, MD, PhD, FACP, FACR

Despite much in the media these days about antimalarials (AM) for the treatment of COVID-19, hydroxychloroquine (HCQ) and chloroquine have been used for a long time for the treatment of different rheumatic diseases, and HCQ remains the cornerstone of systemic lupus erythematosus (SLE) therapy. HCQ is preferred because of the lower incidence of adverse retinal effects. The evidence supporting HCQ use in SLE is very compelling and based on a large body of evidence. HCQ controls SLE disease activity and allows glucocorticoid discontinuation, improves survival rates, reduces some traditional cardiovascular risk factors, has antithrombotic effect, reduces damage and risk of flares, and is safe during pregnancy.[1] In rheumatoid arthritis (RA), HCQ is one of the commonly prescribed traditional non-biologic disease-modifying antirheumatic drugs, and triple therapy for RA includes HCQ.[2,3]

AM can cause serious toxicity and are stored long term in different organs including skin, eyes, skeletal muscle, and cardiac tissue. Retinal toxicity is the most discussed adverse effect, but other adverse events can also occur – skin hyperpigmentation, neuromyopathy and cardiotoxicity.

We have recently studied whether cumulative AM use is associated with ECG abnormalities in 453 patients (SLE duration at ECG 19.7 ± 10.4 years).[1] Conduction abnormalities (bundle-branch block, incomplete or complete AV block, QTc-prolongation and consequent torsades de pointes) were slightly more prevalent than ECG features suggestive of structural abnormalities (concentric hypertrophy with biatrial enlargement and biventricular hypertrophy), 16% vs. 13% respectively; 26% of patients had both abnormalities. In this cohort, 56% had cumulative AM dose above the median of 1207 grams at time of their ECG, with 44% at or below the median. While a cumulative AM dose above the median predicted structural ECG abnormalities in univariate analysis, in multivariate analysis the increased risk (OR 1.82; 95% CI: 0.95–3.47) was not statistically significant. More importantly, AM cumulative dose was protective for conduction abnormalities (OR 0.42; 95% CI: 0.22– 0.77, p=0.006). In the nested case-control analysis, the protective effect of AM against conduction abnormalities was also demonstrated (OR 0.36), and an AM dose higher than median was not significantly associated with structural abnormalities.

Other studies found similar prevalence for conduction abnormalities (17%) in SLE after a 10-year follow up.[4] Others confirmed that the prevalence of conduction abnormalities in SLE is similar to the general population.[5] We have also demonstrated a low prevalence of prolonged QTc (3 patients; 0.7%)[1] while others reported a higher prevalence (6.5%) and found an association with anti-Ro/SSA antibodies.[6]

Cardiac AM adverse effects are potentially reversible if detected early and withdrawal of AM is essential. While ECG may be normal or nonspecific, it might allow for early detection and promote further assessment. More specific tests for heart muscle damage (troponin I) might also facilitate screening for cardiotoxicity in patients with elevated creatine kinase.[7] Though cardiac MRI and PET scan can be utilized in the assessment for AM cardiotoxicity, endomyocardial biopsy remains the gold standard test.

Recognition of potential adverse effects and potential risk factors (excessive daily dose by weight, duration of use, cumulative dose, existing renal disease, increasing age, liver disease and other genetic factors) for AM toxicity along with appropriate screening is crucial. Lastly, we recognize that more specific tests for AM cardiotoxicity are needed for appropriate risk stratification.

The COVID-19 pandemic resulted in the unconventional use of HCQ as a therapeutic option in combination with azithromycin. Concerns raised by the media and Health Canada about the potential serious side effects associated with HCQ are based on the fear that some patients may obtain HCQ to prevent or treat COVID-19. Side effects with the unsupervised use of HCQ can occur, but rheumatologists are familiar with this drug and the potential side effects. Rheumatologists have used HCQ for decades without major side effects – we weigh the risks and benefits and, more importantly, we follow patients closely and monitor for HCQ toxicities. This is crucial for the successful management of patients with rheumatic diseases on HCQ.

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References

1. McGhie TK, Harvey P, Su J, Anderson N, Tomlinson G, Touma Z. Electrocardiogram abnormalities related to anti-malarials in systemic lupus erythematosus. *Clinical and experimental rheumatology* 2018 Jul-Aug; 36(4):545-51. PubMed PMID: 29652656.
2. Bykerk VP, Akhavan P, Hazlewood GS, Schieir O, Dooley A, Haraoui B, et al. Canadian Rheumatology Association recommendations for pharmacological management of rheumatoid arthritis with traditional and biologic disease-modifying antirheumatic drugs. *J Rheumatol* 2012 Aug; 39(8):1559-82. PubMed PMID: 21921096.
3. Singh JA, Saag KG, Bridges SL Jr., Akl EA, Bannuru RR, Sullivan MC, et al. 2015 American College of Rheumatology Guideline for the Treatment of Rheumatoid Arthritis. *Arthritis Rheumatol* 2016 Jan; 68(1): 1-26. PubMed PMID: 26545940.
4. Godeau P, Guillevin L, Fechner J, Bletry O, Herreman G. [Disorders of conduction in lupus erythematosus: frequency and incidence in a group of 112 patients (author's transl) Les troubles de conduction au cours du lupus erythemateux. Frequence et incidence dans une population de 112 patients]. *Annales de medecine interne* 1981; 132(4):234-40. PubMed PMID: 7305172.
5. Costedoat-Chalumeau N, Hulot JS, Amoura Z, Leroux G, Lechat P, Funck-Brentano C, et al. Heart conduction disorders related to antimalarials toxicity: an analysis of electrocardiograms in 85 patients treated with hydroxychloroquine for connective tissue diseases. *Rheumatology* (Oxford, England) 2007 May;46(5):808-10. PubMed PMID: 17202178.
6. Bourre-Tessier J, Clarke AE, Huynh T, Bernatsky S, Joseph L, Belisle P, et al. Prolonged corrected QT interval in anti-Ro/SSA-positive adults with systemic lupus erythematosus. *Arthritis Care Res (Hoboken)* 2011 Jul; 63(7):1031-7. PubMed PMID: 21452253.
7. Tselios K, Gladman DD, Harvey P, Akhtari S, Su J, Urowitz MB. Abnormal Cardiac Biomarkers in Patients with Systemic Lupus Erythematosus and No Prior Heart Disease: A Consequence of Antimalarials? *J Rheumatol* 2019 Jan; 46(1):64-9. PubMed PMID: 30068764.

**NEW** INDICATION IN ANKYLOSING SPONDYLITIS

# WE'RE PROUD OF OUR COMMITMENT TO OUR CLINICAL TRIAL PROGRAM IN RHEUMATOLOGY*

## ACTIVE PSORIATIC ARTHRITIS TRIALS

### BIOLOGIC-NAÏVE SPIRIT-P1

### TNFi-EXPERIENCED SPIRIT-P2

**PRIMARY ENDPOINT**

Percent of patients achieving ACR20 at week 24

**SELECTED SECONDARY ENDPOINTS**

ACR50 at week 24
ACR70 at week 24
Leeds Enthesitis Index score at week 24
Modified total Sharp score at week 24 (SPIRIT-P1)

**Indications:**

Taltz is indicated for the treatment of:

- Adult patients with active psoriatic arthritis who have responded inadequately to, or are intolerant to one or more disease-modifying antirheumatic drugs (DMARD). Taltz can be used alone or in combination with a conventional disease-modifying antirheumatic drug (cDMARD) (e.g., methotrexate).
- Adult patients with active ankylosing spondylitis who have responded inadequately to, or are intolerant to conventional therapy.

**Relevant warnings and precautions:**

- Infections including tuberculosis
- Serious hypersensitivity reactions (including anaphylaxis)
- Patients with inflammatory bowel disease
- Immunizations
- Pregnant and nursing women
- Fertility
- Geriatrics

**For more information:**

Please consult the product monograph at www.lilly.ca/taltzpm/en 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 us at 1-888-545-5972.

Pr taltz® (ixekizumab)

**4** PIVOTAL TRIALS

**>1,400** PATIENTS TOTAL[†‡]

## ACTIVE ANKYLOSING SPONDYLITIS TRIALS

### COAST-V **BIOLOGIC-NAÏVE**

### COAST-W **TNFi-EXPERIENCED**

**PRIMARY ENDPOINT**

Percent of patients achieving ASAS40 at week 16

**SELECTED SECONDARY ENDOPINTS**

ASAS20 at week 16

BASDAI50 at week 16

MRI spine SPARCC at week 16

Percent of patients achieving ASDAS <2.1% (low disease activity) at week 16

## CONTACT YOUR TALTZ REPRESENTATIVE OR VISIT LILLY.CA/CONTACT TO LEARN MORE

ACR20/50/70=20%/50%/70% improvement in the American College of Rheumatology criteria; ASAS40=Assessment of Spondyloarthritis International Society 40 response; ASDAS=Ankylosing Spondylitis Disease Activity Score; BASDAI=Bath Ankylosing Spondylitis Disease Activity Index; MRI spine SPARCC=Spondyloarthritis Research Consortium of Canada Magnetic Resonance Imaging Scoring of the Spine (23 discovertebral unit scale); TNFi=tumour necrosis factor inhibitor.

* Clinical significance has not been established.

† Total patient number includes all patients randomized to Taltz, placebo, or adalimumab active control arm (in SPIRIT-P1 and COAST-V).

‡ SPIRIT-P1, N=417; SPIRIT-P2, N=363; COAST-V, N=341; COAST-W, N=316.

**Reference: 1.** Taltz Product Monograph. Eli Lilly Canada Inc., February 4, 2020.



Lilly

# XELJANZ: The first JAK inhibitor in RA, PsA and UC[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 as monotherapy.

Use of XELJANZ/XELJANZ XR 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 antirheumatic 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. 2019. **2.** Health Canada. XELJANZ Notice of Compliance information. **3.** Pfizer Canada ULC. XELJANZ/XELJANZ XR Product Monograph.



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