

ACR Convergence 2023 Review

By Philip A. Baer, MDCM, FRCPC, FACR

This information is brought to you by the Journal of the Canadian Rheumatology Association (CRAJ) and is not sponsored by, nor a part of, the American College of Rheumatology.

ACR Convergence returned to San Diego this year, running from November 10-15th, 2023. San Diego has been a popular location for ACR (the American College of Rheumatology), with the last meeting there in 2017, which I attended in person. This year, the meeting was again in hybrid format, with some sessions livestreamed, others available on demand, and some only available in person. Overall, 80% of attendees chose to be in person and 20% attended virtually. There were over 240 sessions and thousands of abstracts to choose from.

By popular demand, the in-person poster hall returned to facilitate dialogue and networking. Apparently, the most exciting poster was a late-breaker on a Phase 2b study of TAK-279 in psoriatic arthritis. The poster was purloined from its display board, and searches of the trash bins and closed-circuit TV footage were unrevealing. The data itself is no mystery: the study met its primary endpoint, and the abstract is available online on the ACR abstract website.

I chose to attend virtually. The feed was excellent, and any issues with the stream were more likely at the viewer's end, not at the ACR source. PDFs of slides were available for a number of sessions. Why go virtual? Cheaper, more environmentally friendly, less time missed from work, allows for multi-tasking, etc. I took my cue from many play-by-play sports broadcasters who now call games from a studio in Toronto rather than actually travelling with the team to away games. If it's good enough for Arash Madani and Sharon Fichman, who covered Canada's historic win in the Billie Jean King Cup on the same weekend as ACR, I can manage it as well. I will plan to be at the 2024 CRA and ORA meetings in person, and EULAR no longer offers a virtual option.

The meta-conference also helps ensure you don't miss anything. By this, I refer to the conference feeds on X, LinkedIn, RheumNow, the Cytokine Signalling Forum (CSF) and coverage from Arthritis Consumer Experts (ACE). Key sessions and abstracts are analyzed and deconstructed. The ACR also puts out press releases covering key studies, and all abstracts are available online.

I attended the Global Rheumatology Summit Friday, which was entirely online. Sessions were excellent, inclu-

ding one on Rheumatology and Indigenous Populations featuring our own Dr. Cheryl Barnabe. Saturday included various offerings, with the Review Course the most popular. From eye disease to relapsing polychondritis, spondyloarthritis (SpA) to vasculitis, the lectures were wide-ranging and excellent.

The opening ceremonies featured ACR/Association of Rheumatology Professionals (ARP) Award Winners, including Toronto's Dr. Jorge Sanchez-Guerrero (ACR Master) and Vancouver's Catherine Backman (ARP Master). The keynote speaker was also Canadian: economist Avi Goldfarb from the University of Toronto's Creative Destruction Lab. His talk on artificial intelligence (AI) was thought-provoking and engaging. The cost of prediction is falling, but human judgment will always be required, both to decide on the rules that the AI or large language model follows, as well as what to do with the output. He indicated that health care lags in the adoption of this technology, as it has for many others (we are still trying to "axe the fax", with limited success). Canada is a leader in AI research, as it has been for decades when the field was largely ignored. Amazon is another leader, and if its "Recommended for You" prediction engine improves, the day may come when Amazon ships you what it thinks you want without any order being placed, confident that you will actually want most of what it sends you. The patent for that dates back to 2013. My only quibble was that this lecture did not award any CME credits on the ACR's Credit Tracker. AI also featured in the CPC session "My Oh Myositis."

The meeting began in earnest with the popular Year in Review session. Dr. Philip Seo, former editor of *The Rheumatologist*, did the adult clinical review. Our own Dr. Marinka Twilt chaired the Pediatric Year in Review session. Interestingly, both sessions highlighted DOCK11 deficiency, a rare condition I had never heard of, marked by actinopathy and immune dysfunction. VEXAS was also mentioned as perhaps a more common condition than we have thought. In fact, advice provided in several sessions was that, as a group, rare diseases may not be as rare as we believe and should be considered in patients presenting with seronegative rheumatoid arthritis (RA), ANA-negative lupus (no longer possible with the new systemic lupus erythematosus [SLE] criteria), and other atypical presentations. Other highlights of the Year in Review were further analyses of ORAL-Surveillance, showing risk confined mainly to the over 65 ever-smoker

group, and a prediction for 2050 of the global arthritis burden, showing massive increases in knee osteoarthritis (OA) and OA in general (will GLP-1 receptor agonists change that?), as well as other rheumatic conditions. Job security for rheumatologists in 2050 is certain, while a net-zero world is not. Studies summarized included LODOCO, MAINRITSAN, SAPHYR, and case reports where CAR-T cell therapy failed in myositis and systemic sclerosis, while depletion of TRBV9+ T cells worked in an ankylosing spondylitis (AS) patient who had failed tumor necrosis factor therapy and stem cell transplantation. The Basic Science segment covered novel concepts including ferroptosis.

There were two Great Debates. The adult one posed the question "Should PMR and GCA Be Treated with Advanced Therapies at Disease Onset?" No vote was taken at the end. Debaters were Philip Seo on the "yes" side and Robert Spiera on the "no" side. Dr. Spiera was the principal investigator of the recent SAPHYR study of sarimumab in refractory polymyalgia rheumatica (PMR), and his father Dr. Harry Spiera was apparently the first person to describe PMR in the United States. The pediatric Great Debate revolved around "Combination Therapy vs. Step-up Therapy for Juvenile Idiopathic Arthritis".

Excellent Canadian representation was evident in the plenary sessions. Janet Pope moderated the Plenary 2 and Late-Breaking Abstracts oral sessions, and the final wrap-up "Clinical Year in Preview" session (no manels there, as it was the Janet Pope, Joan Bathon and Jill Buyon show). Dr. Maria Powell presented Abstract 726 at the Plenary 1 session on "Expert Consensus Recommendations for Musculoskeletal Ultrasound Education in Canadian Rheumatology Residency Training Programs". Apparently, 40% of such programs do not offer formalized MSK ultrasound training. Dr. Arielle Mendel from McGill presented Abstract 1584 on "Effect of Trimethoprim Sulfamethoxazole Prophylaxis on Infections During Treatment of Granulomatosis with Polyangiitis with Rituximab: A Population-Based Study."

I also noted the SMART Study on Split-Dose Methotrexate (Abstract #1583). This study evaluated whether split dose methotrexate (MTX) may have better efficacy compared to a single weekly dose of MTX. This randomized, controlled trial randomized 253 RA patients to MTX 25 mg single dose qweek (n=128) vs. split-dose MTX (10 mg QAM, 15 mg QPM qweek; n=125). Patients were allowed to add leflunomide or sulfasalazine at week 16 if they had persistent disease activity. The primary endpoint was a EULAR good response at 24 weeks, which did not show statistical significance. However, at week 16, split dose MTX was superior to placebo (DAS28-ESR, ACR20, ACR50, ACR70) and patients were less likely to have to add another DMARD (35% vs 54.5%, $p=0.005$). There was a higher frequency of transaminitis in the split dose group compared to the single weekly dose group, which had a greater frequency of leukopenia. Implications for

practice: Split dosing of MTX may show better early efficacy compared to single weekly dose; closer monitoring of liver enzymes may be needed with split dosing.

During ACR Convergence 2023, ACR announced the appointment of Deborah Dyett Desir, MD, as the College's 87th president. In this role, Dr. Desir was noted to be the first Black woman to lead the organization for its 90th year. Aileen Ledingham, PT, MS, PhD became the 58th ARP President. The Rheumatology Research Foundation President is now Liana Fraenkel, MD, MPH, a graduate of McGill University, where she earned her bachelor's and medical degrees.

The Daltroy lecture featured Dr. Puja Mehta on the impostor syndrome, which she indicated should be relabeled as testimonial injustice caused by bias. Women and minority groups were the most affected. "Recruiting for growth not fit" was a key take-home message. Dr Kaleb Michaud's ARP Keynote was the most evocative and emotional lecture of the ACR meeting. He traced his life story dating back to his juvenile idiopathic arthritis (JIA) diagnosis at age 3, leading to being treated by the late Dr. Fred Wolfe, with whom he eventually partnered in research using large databases of physician and patient-reported data. His harrowing disease trajectory recalled my professional journey in rheumatology, with therapies ranging from high-dose aspirin and gold salts to the trepidatious use of methotrexate and eventually success with biologics and reconstructive surgery. The discordance between the patient's perception of their disease course and its impact versus that of the treating physician was highlighted.

The most common arthritis, OA, was not forgotten. However, the news was sadly similar to what we have heard before. Dr. Tuhina Neogi, another speaker with a Canadian connection, presented the Rheumatology Research Foundation Memorial Lecture to Memorialize Dr. Roy Altman—"Osteoarthritis: Highlights From The Past Informing the Future". Learnings: There are no breakthroughs in therapy, trial design is an issue, and we should stop using the negative term "non-pharmacologic therapy" and replace it with the longer but more positive "physical, psychosocial, and mind-body approaches." Another session covered "OA Knee: Inject or Not" with a panel of two rheumatologists supporting injections, with repeat injections indicated to be safe and effective, but with no major impact on structural progression. The radiologist panelist reported seeing a succession of post-injection patients with osteonecrosis, rapidly progressive OA, and insufficiency fractures, but these were felt to be relatively rare events by the other clinicians.

Next year ACR Convergence will be held in Washington DC in November shortly after the US election. Mark your calendars!

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