SPARTAN

SPondyloArthritis Research & Treatment Network

Volume 3 Issue 3

SPARTAN NEWS

Greetings!

Happy New Year! I am looking forward to seeing you at our Annual Meeting in Cambridge, MA and encourage you to register for the meeting. The SPARTAN Education Committee, chaired by Joerg Ermann and along with Maureen Dubreuil, Mark Fisher, Asim Khan, and Philip Mease, has created another outstanding program of scientific sessions as well as pre-meeting trainee symposium. We will also have a CLASSIC investigator meeting as we move towards finalizing the details on this exciting and important study.

A reminder that the SPARTAN seed fund application deadline is March 31. We are excited to provide this opportunity for early career investigators who are working in the field of Axial Spondyloarthritis. The goal is to support the early stages of a research project or career to generate preliminary data that will support grant applications to funding agencies such as the NIH. Up to 2 grants will be supported in the 2018-2019 cycle (One basic/translational project and one clinical project). A maximum of $10,000 will be allocated per project per year for a total of $20,000. All the details are here.

The Governance Committee is preparing an announcement of vacancies on the next SPARTAN Board. I hope that members interested in SPARTAN leadership will consider submitting an application. Watch your inbox next week for all the details.

All the best,
Lianne

Lianne Gensler, MD
Chair, SPARTAN

Summary of Literature

1. Kristensen LE, Jorgensen TS, Christensen R, Gudbergsen H, Dreyer L, Ballegaard C, Jacobsson STH, Strand V, Mease PJ, Kjelberg J. Societal Costs and Patients' Experience of Health Inequities Before and After Diagnosis of Psoriatic Arthritis. Ann Rheum Dis 2017; 76: 1495-1501
2 . Egeberg A, Kristensen LE, Thyssen JP, Gislason GH, Gottlieb AB, Coates LC, Jullien D, Gisondi P, Gladman DD, Skov L, Mallbris L. Incidence and Prevalence of Psoriatic Arthritis in Denmark;a Nationwide Register Linkage Study. Ann Rheum Dis 2017;76: 1591-1597.
3 . Ogdie A. The Preclinical Phase of PsA: A Challenge for the Rheumatologist. 2017;76: 1481-

Psoriatic Arthritis (PsA) is an elusive subject for prevalence studies because of the absence of diagnostic criteria and its possible overlap with other articular and even non-articular disorders. Considerable variation [KJ1] in prevalence and incidence occurs in the literature. Two new PsA studies dealing with the same population and an accompanying editorial are reviewed together because they highlight the ability to address PsA on a population level, advancing our understanding of this condition without the case-selection ascertainment bias that appears to be present in medical center-based cohort studies.

A nationwide register linkage study was performed in Denmark to address the question of incidence and temporal trends for PsA that occur in the general population. The key here is that all Danish citizens are assigned a unique personal identification number linked to a system that records inpatient and outpatient consultations that contain all primary and secondary diagnoses. In addition, this system is linked to a pharmacy database that records the use of biological and non-biological therapies in this population. The authors observed the incidence of PsA to increase between 1997 and 2011, in contrast to that of PsO which remained stable. This increase was observed mostly among older individuals with a female predominance. Overall, the prevalence of PsA was calculated to be 0.22%, but it was lower when the diagnosis was made only by rheumatologists[KJ2] . The use of systemic therapies also increased over time in this population, likely reflecting targeted educational initiatives[KJ3] by pharmaceutical companies.

In a companion article utilizing the same population, the investigators examined the hypothesis that PsA patients face healthcare inequities (by comparison to the general population) [KJ4] because they have a greater number of co-morbidities. They compared the healthcare costs, employment status, and personal income of patients both 5 years before and 10 years after the diagnosis of PsA. They studied 10,525 patients with PsA and 20,777 matched controls and found, not surprisingly, that increased healthcare costs, lower income, higher unemployment rates, higher disability risk, and more comorbidities existed in PsA patients as compared to the general population, both in the period prior to diagnosis and after diagnosis. These data suggest that the increased occurrence of the above factors prior to the diagnosis might contribute to the development of PsA rather than being the result of PsA as is typically assumed to be the case.

Alexis Ogdie, in a thoughtful and comprehensive editorial, addresses

the challenge posed by epidemiologic studies that attempt to identify a 'pre-clinical' phase of a chronic rheumatic disease such as PsA where we do not know when the disease begins. She points out that assigning a starting date for PsA is confounded by the presence of preexisting skin psoriasis which itself could produce systemic inflammation that might result in the health inequity cycles described in Denmark[KJ5] . She points out a key issue in these types of analysis that could cause a bias by the assignment of a "risk factor" to a condition that might, by itself, be part of the disease as opposed to something truly causal[KJ6] . In other words, there is confusion when distinguishing between clinical features that might be causal and those clinical manifestations that permit earlier disease identification. She further addresses the potential bias caused by the concept of 'depletion of the susceptibles' when examining the risk of development of comorbidities among patients with PsA. For example, she points out if a study of new cases in a population is started at the time when PsA is diagnosed, we may incorrectly assume a lower incidence of comorbidities because patients who had pre-existing comorbidities would be excluded from the calculations. Consider the analogy that if we want to identify the true population at risk for GI bleeding after taking an NSAID, we cannot exclude those who had taken an NSAID in the past and did not bleed.

Dr. Ogdie made an excellent comment describing the strengths of a population-based, large, generalizable, physician diagnosed PsA [KJ7] registry-linkage study that records important covariates with several years of follow-up. However, she did urge caution in attempting to infer causality when studying the epidemiology of patients in the so-called 'pre-clinical phase' because of methodological challenges sorting out what is an attributable risk from what is already a disease manifestation. The more we know about PsA the more we have become concerned about long term health outcomes from a societal perspective. Like all well-done epidemiologic studies, these two studies of PsA should generate questions [KJ8] about co-morbidities for our translational colleagues to address.

- Michael H. Weisman, MD

2017 ACR HIGHLIGHTS

In this year's annual ACR meeting, the following presentations and abstracts revealed interesting and important aspects of ankylosing spondylitis (AS):

1.Increased risks of cardiovascular accidence (CVA), pulmonary embolism (PE), and deep venous thrombosis (DVT) in patients with AS: In this large population-based study, 7,190 individuals with newly diagnosed AS were identified as having an increased risk of CVA, but not for Myocardia infarcts (MI). A separate study from the same study population indicates an increased risk of PE and DVT in patients with AS. This study was done at Vancouver, BC, Canada.

2.Differences in demographic and clinical characteristics between radiographic and non-radiographic axial AS: A higher prevalence of females and lower level of acute phase reactants in non-radiographic axSpA (nr-axSpA) have been reported in national observational studies, mostly from Europe. This analysis compared

demographic and clinical characteristics of patients (pts) with nr-axSpA and radiographic axSpA (ankylosing spondylitis, AS) in a large multinational cohort of pts with recently diagnosed axSpA. A prospective observational study evaluating clinical and radiographic outcomes in axSpA pts in rheumatology clinical practice in 29 countries showed that there were a few differences between nr-axSpA and AS pts in this PROOF cohort. Clinical constellation of female sex, low CRP, enthesitis, psoriasis, and IBD in nr-axSpA pts appears to reflect a phenotype less prone to structural damage in the sacroiliac joints. However, clinical burden of disease was comparable between the two subgroups of axSpA. Investigators from Canada, Germany, Turkey, and Spain have participated in this study.

3.Opioid uses in ankylosing spondylitis AS patients: The use or misuse of opioids has become a major public health issue in the USA. In this study an initial analysis was attempted to assess the use of opioids in patients with AS. 56,236 patients with AS were identified in the Truven MarketScan® database during the period 2011 to 2016, 27,347 (48.6%) had ≥1 opioid claim during the follow-up period. Among this subset of opioid-exposed AS patients, 9,808 (35.9%) also had a claim for a TNFi, 17,539 (64.1%) had a claim for an NSAID, and 20,449 (74.8%) received an NSAID and/or a TNFi during the follow-up period. Opioid use is common among patients with AS. Of the AS patients using opioids in this analysis, approximately one-quarter were using only opioids and no medications recommended in treatment guidelines. This study was carried out by researchers by UCB Pharma in NC and GA.

4.Possible prevention of AS using microbial Faecalibacterium Prausnitzii A2-165? Data from AS research in children tilted as Children with Treatment-Naive Enthesitis-Related Arthritis Have Decreased Fecal Abundance of Faecalibacterium Prausnitzii A2-165 and Bacteroides Fragilis: A Multi-Center Collaborative Study suggested that decreased fecal abundance of a regulatory strain of F. prausnitzii may be at least partly responsible for the pathogenesis of SpA, possibly due to decreased production of butyrate, and suggests that efforts to replenish it in patients with SpA may be a potential therapeutic avenue. Investigators from several states (CA, AL, PA, MA, CT, OH) in the USA have contributed to this study.

- Lan Chen, MD PhD
Penn Presbyterian Medical Center

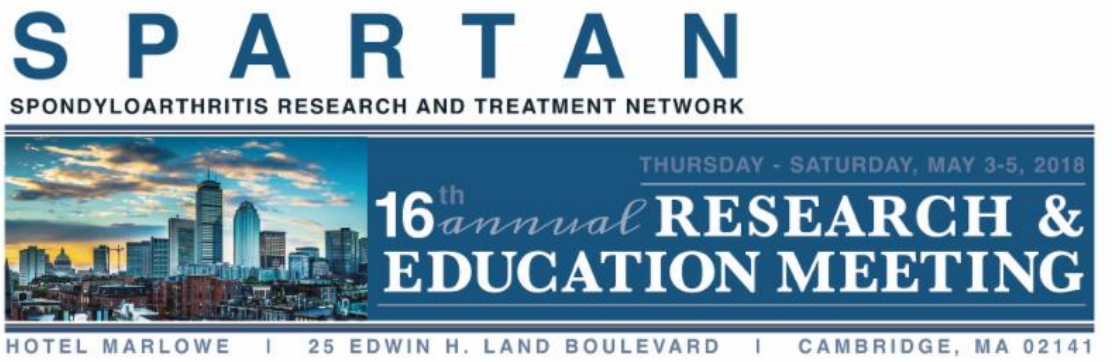
FUNDING OPPORTUNITIES

SPARTAN Seed Grant

SPARTAN Early Investigator Seed Grants are intended to support early career investigators working in Axial Spondyloarthritis (AxSpA). Specifically, these seed grants should facilitate research projects that generate the preliminary data necessary to support grant applications to funding agencies such as the National Institutes of Health. The overarching goals are to accelerate research in the field of AxSpA and improve the care of patients with AxSpA. **Learn more and apply here...**

Bruckel Early Career Investigator Award in Axial Spondyloarthritis

The Spondylitis Association of America hopes to encourage new, upcoming rheumatologists and researchers to focus on the future of treatment and research in ankylosing spondylitis and related diseases. This $20,000 Spondyloarthritis Research Grant recognizing outstanding contributions to the care and understanding of patients with spondyloarthritis. This is an annually awarded, unrestricted research grant toward axial spondyloarthritis research. **Learn more and apply** [apply here](#)**....**



[REGISTRATION IS OPEN](#)

UPCOMING SPONDYLOARTHRITIS EVENTS

SAVE THE DATES!

SPARTAN
May 3-5, 2018
Boston, MA

EULAR
June 13-16, 2018
Amsterdam

GRAPPA
July 12-14, 2018
Toronto

International Congress on Spondyloarthritis
October 4-6, 2018
Ghent, Belgium

ACR
October 19-24, 2018
Chicago, IL

www.spartangroup.org

SPARTAN
PO Box 55491
Portland, OR 97238
lisa@spartangroup.org