Sjögren’s syndrome (SS) is defined by lymphocytic infiltration of exocrine glands resulting in secretory dysfunction and classic symptoms of dry eyes and mouth though may affect any body organ or system. Specific pathologic and serologic criteria are required to support a diagnosis. Sjögren’s occurring alone and not in conjunction with another major rheumatological disease (sometimes referred to as primary disease) has a relative frequency of about 1-2% among adult populations similar to rheumatoid arthritis (RA), with a female predominance. Numbers increase when Sjögren’s patients who also have accompanying autoimmune disorders such as systemic lupus erythematosus (SLE), mixed connective-tissue disease (MCTD), scleroderma or RA are included (in which case Sjögren’s then is sometimes referred to as secondary disease). The lung, with its mucosal surface lined with exocrine glands, is often affected by Sjögren’s, most commonly of the upper airways, and infrequently of the lower airways and lung parenchyma. Clinical and radiologic presentation may range from large or small airway centric disease to parenchymal interstitial infiltrates and cysts, with one series classifying overall disease manifestations as early or lymphoproliferative versus late fibrotic or reparative.
is important to distinguish primary SS from secondary SS, as pulmonary manifestations appear to be distinctly different and often more severe when lung disease is arising in the context of Sjögren’s associated with other connective tissue disease.

Older studies reviewing the incidence and prevalence of lung disease associated with Sjögren’s have been inconsistent perhaps because of the inclusion of both primary and secondary disease where lung manifestations may be representative of coinciding rheumatologic or connective tissue disease rather than Sjögren’s. Estimated prevalence of pulmonary disease range from 6-75%, depending on the inclusion criteria and specific definitions used for the physiologic and radiologic manifestations. Initial reviews attempting to delineate pulmonary manifestations of primary from secondary SS suggest that primary disease manifests less common and severe pulmonary findings, with most frequently abnormal gas exchange on PFT and less frequent obstructive airway or parenchymal interstitial disease. Subsequent studies have suggested diffuse interstitial lung disease may be more common and is one of the more severe manifestations of Sjögren’s-related lung disease. In the majority of reviews, patients were younger with a again female predominance reflecting the underlying Sjögren’s demographic.

Clinical Manifestations

Presenting symptoms include dry cough, the so-called ‘xerotrachea cough,’ dyspnea and other systemic manifestations such as fatigue, fever and myalgias. Two studies reviewing primary Sjögren’s suggested approximately 94% of patients had respiratory symptoms of some type, although symptoms of ‘xerotrachea’ or ‘xerostomia’ may be difficult to delineate from those of underlying airway or parenchymal disease. Other studies screening for radiologic features of primary disease note that less than 50% of patients had symptoms. Correlation with severity of sicca symptoms has not been well studied. Duration of disease diagnosis prior to respiratory manifestations also is variable, with one series reporting a range of 1.2 to 9.8 years prior to detection of lung manifestations. Radiologic findings were present in 65% of patients with mean disease duration of 6 years prior to screening.

Underlying interstitial lung disease is known occasionally to pre-date clinical rheumatologic or connective tissue disease. A recent study suggests minor salivary gland biopsy assessment is predictive of possible Sjögren’s in patients with atypically-presenting interstitial lung disease and minimal rheumatologic signs or symptoms. This particular study also found an association of biopsy findings with the SS-A antibody, though nearly a quarter of selected patients had no positive serology. In most series, the majority of patients with pulmonary manifestations had positive ANA and SS-A followed by SS-B.

No extensive studies have correlated the increased likelihood of pulmonary manifestations with degree of autoimmune serology positivity, though one study noted correlation of IgM rheumatoid factor in Sjögren’s patients with increased extravascular findings, including pulmonary disease. Others have noted decreased C3 and C4 levels as being predictive of increased risk of death from a related lymphoproliferative disorder.

Pathophysiology

Prior series reporting biopsy of pulmonary manifestations associated with Sjögren’s suggest a varied range of histopathologic features, ranging from focal non-specific inflammatory infiltrate, both of neutrophilic and lymphocytic predominance, to organizing pneumonia and end-stage fibrosis with non-specific interstitial pneumonia (NSIP) or honeycombing. Lymphocyte-predominant infiltrates have led to concerns of pre-malignant lymphoma, prior studies suggesting increased correlation or association with malignant disease. A strong association with lymphocytic interstitial pneumonia was not confirmed in two recent series, which suggested NSIP as the more common pathologic feature when interstitial disease was present and evaluated by biopsy. Ito et al suggested lower PaO2 and pathologic features of honeycombing as predictive of mortality among primary Sjögren’s patients. Amyloid has been reported pathologically as well as inflammation associated with small airways disease and sarcoid. Some researchers highlight an airway centric pathophysiology to Sjögren’s manifestations and cite

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an infiltrative airway mechanism to Sjögren’s-related cystic lung disease.23-25

**Pulmonary Function Testing**

Both obstructive and restrictive patterns in pulmonary function have been reported.6,7 Restrictive patterns are commonly accompanied by a reduced DLCO,5,9,15 while obstructive patterns have been observed to predominantly involve the small airways with decreased mid-expiratory flow rates (FEF 25-75). Debate remains as to whether Sjögren’s-related lung disease represents a more predominant interstitial restrictive process or airway centric disease with obstruction. Profoundly restrictive disease, particularly with abnormal gas exchange or DLCO, is not common in primary Sjögren’s, though it is seen with secondary disease and may be associated with the underlying concomitant connective tissue disease or some of the pneumotoxic drugs used in these patients. End stage lung fibrosis with a usual interstitial pneumonia (UIP) pattern is uncommon in primary disease as well when compared to secondary SS.26 Physiologic measurements did not appear to clearly correlate with severity of presenting symptoms, biopsy findings or serology.4

**Radiologic Features**

Asymptomatic patients with primary disease screened by computed tomography (CT) commonly had features of small airways disease or bronchiolectasis, cylindrical bronchiectasis, lower lobe peripherally predominant ground glass, consolidation and/or mild fibrosis. The frequency of radiologic findings among asymptomatic patients was as high as 65% in one series14 and found in only approximately a third in a second.21 The presence of progressive lung fibrosis with advanced reticular or honeycomb change appeared to occur less frequently in primary disease as compared to secondary.5,21 One series found NSIP-like CT features most commonly among those with interstitial disease, followed by UIP-like and bronchiolitic or airways disease.9 Cystic lung disease has been well-documented in case reports, now considered in the differential among other cystic lung diseases such as lymphangioleiomyomatosis or pulmonary Langerhans’s cell histiocytosis. It is unclear whether cystic manifestations are often part of an underlying lymphocytic interstitial pneumonia LIP27,28 or a unique manifestation of Sjögren’s.

**Management and Prognosis**

No specific randomized trials or controlled studies exist regarding directed treatment of Sjögren’s-associated interstitial lung disease. One series reviewed the clinical response of 11 patients treated with azathioprine over a 6-month period, noting functional improvement based on serial FVC in seven, with clinical improvement or stability in ten.4 Approximately 2/3rds of patients in one series improved or had stable disease on prednisone or prednisone plus non-steroid immunosuppressant.10 Those with UIP-like CT features or microscopic honeycomb pathology had worse survival and less response to therapy.

A practical approach to the management of lung manifestations in Sjögren’s may begin with assessment for infection and malignancy and ultimately targeting any progressive interstitial lung disease with prednisone and/or additional immunosuppressants. Because patients may be asymptomatic at diagnosis, and pulmonary disease may be slow to progress, a period of observation is reasonable prior to considering empiric therapies. As is true with other rheumatologic or connective tissue disease, pulmonary manifestations may present and progress independently of underlying inflammatory disease and be difficult to treat or control with conventional therapies. Ultimately, for advanced lung disease, lung transplantation could be considered in the exceptional candidate. However, it is important to note that there are no proven therapies as of yet, pointing out the need for centers of expertise and collaboration with patient advocacy groups to further our understanding and advance treatment options for patients with Sjögren’s-associated lung disease. Prognosis appears good overall in Sjögren’s as compared to a normal population cohort in one large study, though malignancy risk and related mortality were increased.18 Mortality from lung manifestations did not appear to be a prominent feature in that same study.

**References**

“Clinical Guidelines” Continued from page 3 ▼


Sjögren’s Pulmonary Clinics

The Sjögren’s Syndrome Foundation is pleased to announce that Sjögren’s Pulmonary Clinics have been established in the following states.

Alabama
Birmingham, University of Alabama at Birmingham

Arizona
Scottsdale, Mayo Clinic-Scottsdale

California
San Francisco, University of California
Los Angeles, UCLA Clinic-Los Angeles
San Jose, Stanford University Medical Center
La Jolla, University of California

Colorado
Denver, National Jewish Health

Florida
Jacksonville, Mayo Clinic-Jacksonville
Miami, University of Miami

Georgia
Atlanta, Emory University School of Medicine

Illinois
Maywood, Loyola University Medical Center

Massachusetts
Boston, Brigham and Women’s Hospital

Michigan
Ann Arbor, University of Michigan

Minnesota
Rochester, Mayo Clinic-Rochester

Missouri
St. Louis, Washington University School of Medicine/Barnes Jewish

New York
New York, Presbyterian/Columbia Rochester, University of Rochester Medical Center

Ohio
Cincinnati, University of Cincinnati Medical Center

Cleveland, Cleveland Clinic

Oregon
Portland, Oregon Health and Science University

Pennsylvania
Philadelphia, University of Pennsylvania

South Carolina
Charleston, Medical University of South Carolina

Tennessee
Nashville, Vanderbilt University Medical Center

Texas
Dallas, University of Texas Southwestern Medical Center
Houston, UTHealth Pulmonary Clinic

Washington
Seattle, Swedish Medical Center

For additional referral and contact information please visit www.sjogrens.org

Rochester, Mayo Clinic-Rochester

For additional referral and contact information please visit www.sjogrens.org
The Sjögren’s community lost one of its sharpest minds and greatest advocates when Elaine Alexander, MD, PhD died on August 22, 2013. Dr. Alexander cared passionately about Sjögren’s and devoted her life to promoting the best and most innovative science, improving management tools for clinicians, and increasing treatment options for patients so that those who suffer from Sjögren’s might have a better quality of life. Dr. Alexander was internationally recognized for her scientific and clinical work in autoimmunity and the neurologic complications of autoimmune and rheumatologic disorders, especially Sjögren’s. She was known to the Sjögren’s Syndrome Foundation extended family as someone who was deeply dedicated to promoting a revolution in our understanding of this disease and acknowledged and appreciated the severity and complexity of Sjögren’s and how its symptoms affected people’s lives.

Dr. Alexander possessed the superb background and experience as well as the drive to bring about change in traditional approaches to such a complex disease. She received her MD with honors from the UCLA School of Medicine and her post-doctoral internal medicine training at Johns Hopkins Medical Institution. Her PhD in cell biology and biochemistry was awarded by the University of Texas at Austin and was followed by a postdoctoral fellowship in immunology at the National Cancer Institute, National Institutes of Health (NIH). Following fellowship training in rheumatology and clinical immunology, she joined the faculty at Johns Hopkins, where she established a multidisciplinary team for diagnosis and management of autoimmune disorders. The first investigator to highlight CNS complications in Sjögren’s and the fact that SS can sometimes mimic multiple sclerosis, she led ground-breaking research that brought this longtime and controversial area to the fore. After a focus on academics, she made her mark in biotechnology and drug discovery, pre-clinical and clinical development of new therapeutics and clinical trial design and implementation.

Dr. Alexander’s contributions to the Sjögren’s Syndrome Foundation were profound. Most recently, she served on the SSF Board of Directors and chaired the SSF Medical and Scientific Advisory Board through a period of exponential growth and the launching of critical initiatives to move research forward. She catalyzed Foundation activity to encourage companies and medical centers to engage in clinical trials in Sjögren’s by launching and chairing the SSF Clinical Trials Consortium. Dr. Alexander chaired the SSF scientific international workshop, “Sjögren’s Syndrome: Transition from Autoimmunity to Lymphoma;” participated in the SSF Clinical Practice Guidelines initiative; and actively served on the Steering Committee for SSF Research Grants and Fellowships. Past leadership roles included Chair of the Government Affairs Committee and Chairman of the Scientific and Research Initiatives Committee which, with Philip C. Fox, DDS and Stuart Kassan, MD, engaged in strategic planning to change the face of research in Sjögren’s. She had been a frequent presenter at annual and regional SSF patient conferences and author of educational articles focusing on brain fog, cognitive dysfunction, CNS involvement, lymphoma and clinical trials.

Dr. Alexander’s brilliance and leadership attracted other high caliber minds to the field of Sjögren’s. Dr. Alexander was a creative and global thinker. She did not shy away from controversy or let it discourage her from her life-long fight to ensure that investigators thought outside traditional parameters to debate the possibilities. She influenced many of today’s leaders in Sjögren’s and the SSF, and she inspired them to focus on Sjögren’s. What better way to acknowledge her contributions than the deluge of emails and phone calls we received upon her passing! A few examples from those who knew her:
Steven Taylor, CEO, Sjögren’s Syndrome Foundation: “Elaine was one of the pioneers and great minds in Sjögren’s, and her loss to the Sjögren’s community and many of us personally is immeasurable. She was a clinician, a researcher and a friend to Sjögren’s and will be sorely missed.”

Theresa Lawrence-Ford, MD, Rheumatology practice in Atlanta, and Member, SSF Board of Directors: “Elaine gave me my very first real clinical introduction to Sjögren’s syndrome. I will remember her always and forever be thankful for her contributions.”

Assif Taki, Biopharmaceutical Consulting, San Diego: “In one’s life, one rarely has the privilege or honor of meeting as unique or self-accomplished a person as Elaine. Indeed, words could never describe how ultra-brilliant Elaine was or how stunningly beautiful she was; or how strong willed and determined she was. After all, she had to be to break through the immense glass ceilings of her time and generation. And until the very end of her life, Elaine retained her sharp wit and incredible sense of humor.”

Barbara Segal, MD, University of Minnesota Medical School, Minneapolis: “Elaine was a brilliant lady whose contributions to Sjögren’s research and support for those with the disease were tireless over many years. She was an inspiration to many people who cared about her work and wanted to follow her.”

Harry Moutsopoulos, MD, National University of Athens, Greece: “Elaine’s loss is a great loss for the Sjögren’s community. We will all remember her and will acknowledge her contributions to understanding Sjögren’s syndrome.”

Denise Faustman, MD, PhD, Harvard Medical School and Chair, SSF Medical and Scientific Advisory Board: “Elaine was a great advocate and strong fighter for Sjögren’s. Her voice, ideas and passion will be deeply missed.”

On a personal note, Elaine Alexander was my friend. She inspired me to continue my longtime devotion to Sjögren’s and the SSF. She made our work in Sjögren’s fun! She flew into Washington, D.C. when the city was in the midst of a major snowstorm and joined me and Donald MacKeen, PhD in walking the halls of Congress (in her California sandals, no less) to advocate for support for Sjögren’s research. We organized meetings with the leadership at the National Institutes of Health (NIH) to ensure NIH support and debate ways to increase interest among investigators in Sjögren’s. Those brainstorming sessions helped change the research landscape for Sjögren’s, benefiting the field in recent years and well into the future. From these discussions, workshops were held on outcome measures and lymphoma in Sjögren’s and brought participants in different specialties and from around the world together, sparking new ideas and leading to important collaborations.

I would be remiss if I didn’t include aspects that I treasured about her beyond her brilliance: She was adventurous and had a zest for life. We kayaked along the eastern shore of Maryland, frequented international restaurants to sample top cuisine, took road trips that led to escapades too numerous to relay. The bottom line is that she was a unique and amazing human being and will be missed by all of us who knew her. And all of us who are connected with Sjögren’s will miss the accomplishments that could have been had she not died much too soon.
The Sjögren’s Syndrome Foundation is pleased to announce its newest research grant recipients. The number of researchers proposing new projects in Sjögren’s continues to increase every year, and the caliber of proposals was exceptionally high. The SSF Research Review Committee placed a priority on the following specific areas when reviewing this year’s grants.

**Innovation**, which is critical for finding new approaches to treatment

**Novel diagnostics**, which is important for helping reach the SSF Breakthrough Goal of reducing the time to diagnosis by 50% in 5 years and also for improving clinical trial design

**Junior investigators**, to encourage new researchers to focus their careers on discovering breakthroughs in Sjögren’s

While it was not required that selected recipients meet all of the criteria, these areas served as a guide for ranking the numerous high quality applications received.

With the above criteria in mind, the review committee set out on the arduous task of determining which of the over two dozen exceptional applications received would be awarded. “With so many talented researchers, it becomes very difficult to choose which ones will, and which ones, unfortunately, will not receive funding,” said Denise Faustman, MD, PhD, SSF Medical and Scientific Advisory Board Chair. “We encourage all of our Sjögren’s Quarterly readers to consider donating to Sjögren’s research. Your giving in this area is critical to our current and future patients as well to keeping investigators in the field.”

Continued on page 8

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This year’s newest research grantees are:

**Ana Paolo Cotrim, DDS, MSc, PhD** – Molecular Physiology Branch, Sjögren’s Syndrome and Salivary Gland Translational Unit, National Institute of Dental and Craniofacial Research (NIDCR), National Institutes of Health (NIH), Bethesda, Maryland

*Immune-phenotyping and iPSC-related Disease Modeling in Sjögren’s Syndrome*

Dr. Cotrim was awarded the first year of a potential two-year SSF grant. SSF research reviewers commented that this research “has the potential to create a very valuable collection of Sjögren’s subjects that will serve as a resource for learning a lot more about Sjögren’s.” And “This is an interesting and novel project. It has the possibility of making an important impact on the understanding of the pathophysiology of Sjögren’s.”

**Christopher Lessard, PhD** – Oklahoma Medical Research Foundation (OMRF), Arthritis and Clinical Immunology Program, Oklahoma City, Oklahoma

*Validation and Characterization of Long Non-coding RNAs in Sjögren’s Syndrome*

Dr. Lessard was awarded the first year of a potential SSF two-year grant. The committee noted the following regarding Dr. Lessard’s proposed research. “This is a young investigator who seems devoted to Sjögren’s. He’s tackling new projects and new ideas and furthermore is doing the project in humans!” And: “Highly interesting approach to understanding genetic aspects of Sjögren’s. His project could eventually lead to a novel diagnostic.”

**Scientific Abstract:**

The human genome contains ~22,000 genes that are expressed as the result of very complex mechanisms that involve both proteins (such as transcription factors) and thousands of long non-coding regulatory RNAs (lncRNAs). Recent work by the ENCODE project has found that ~80% of the human genome is biochemically active while only 3-5% contains protein-coding sequences. In several diseases, such as prostate and breast cancer, lncRNAs have recently been shown to be important diagnostic markers, prognostic indicators and targets for successful therapeutic interventions. Our preliminary RNA-sequencing studies using whole blood from Sjögren’s syndrome (SS) patients have found a substantial number of dysregulated lncRNAs. We propose to validate these candidates in disease-relevant cell types and test potential functional mechanisms. Understanding the role of lncRNAs in SS has significant potential to open completely novel lines of investigation and significantly impact diagnosis and treatment.

*Continued on page 10 ▼*
The following articles published in 2013 were selected as potentially being of particular interest to Sjögren’s professionals. Please note that the list is by no means comprehensive of all Sjögren’s-related publications. Readers are invited to suggest articles they would recommend to colleagues for inclusion in a future In Print. Email recommendations to sq@sjogrens.org.

**Epidemiology, Classification and Outcome Measures**


**Quality of Life**


**Clinical**


Continued on page 10 ▼
**Klaas Max, PhD** - Rockefeller University, New York, New York

Sjögren’s Antigens and Their Role in Stress Granule Formation, Apoptosis, RNA-release and Their Contribution Towards Autoimmunity

Dr. Max was awarded the first year of a potential SSF two-year grant. The committee noted the following regarding his proposed research. “An excellent application by a very talented young investigator;” “Dr. Max has an excellent track record for publications;” “He has established excellent collaborations for the project to move forward;” and “This program is very worthwhile and ambitious!”

**Scientific Abstract:**

Nuclear proteins (NP), major antigens in Sjögren’s syndrome (SS), play important roles in RNA-polymerase-III-based noncoding-RNA biogenesis and quality control. Stress-mediated translocation of SS NP into cytoplasmic stress granules may influence their immunogenic potential and/or influence their release from cells, potentially triggering autoimmunity. Aiming to study effects influencing their localization, dynamics and immunogenicity, we will identify SS NP interaction partners by cross-linking and high-throughput RNA sequencing techniques and mass spectroscopy and compare interactions in patients and healthy controls. Furthermore, we will develop methods to isolate and characterize stress granules and study their dynamics in live cells using GFP-fusion proteins. Interaction partners of SS NP and isolated components from stress granules will be tested for their immuno-stimulatory potential using interferon and cytokine activation assays. Genetic variations detected in SS patients may serve as biomarkers and could provide an enhanced understanding of innate and adaptive immune activation, inflammatory pathways and regulation of tolerance.

The Sjögren’s Syndrome Foundation will accept its next round of new research candidates February 1, 2015. Check www.sjogrens.org as the date draws near to learn more.

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**In Print** Continued from page 9 ▼


**Genetics**

Lessard CJ et al. Variants at multiple loci implicated in both innate and adaptive immune responses are associated with Sjögren’s syndrome. *Nature Genetics*. 2013 Oct; doi:10.1038/ng.2792.


**Cellular and Molecular Immunology**


Yin H et al. BMP6 is associated with exocrine gland dysfunction in Sjögren’s syndrome patients and mice. *Arthritis Rheum*. 2013 Aug 27. PMID: 23982860


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"Research Grantees" Continued from page 8 ▼
Nicox S.A., Immco Diagnostics, Inc., and Trinity Biotech have all been in the news this summer in connection with Immco’s new diagnostic for Sjögren’s.

Immco announced approval of its proprietary diagnostic for Sjögren’s by the New York State Health Department, and Nicox announced the purchase of exclusive rights to promote the Sjögren’s test in dry eye patients in North America – all in June. In July, Immco was acquired by Trinity Biotech, although the Immco management team will remain in place and continue to take the lead on all non-ocular aspects of the test.

Immco, based in Buffalo, New York, reported on their discovery of new Sjögren’s biomarkers at the 2012 SSF Luncheon Meeting during the American College of Rheumatology (ACR) annual conference. The initial biomarker detection was led by Julian L. Ambrus, Jr., MD, and Professor at the University of Buffalo, Department of Medicine, who partnered with Immco to develop the test. The newly identified autoantibodies - salivary protein-1 (Sp-1), parotid-specific protein (PSP) and Carbonic anhydrase VI (CA6) - are localized in the exocrine glands and were shown to occur earlier in the course of the disease than either SSA/Ro or SSB/La. This means the new test could be used for early diagnosis and to diagnose patients who are missed because of non-positivity for SSA/Ro and/or SSB/La.

Nicox is moving forward with the test for dry eye patients, citing a critical need for ophthalmologists and optometrists to identify Sjögren’s patients in their offices. More than 20 million patients suffer from dry eye in the U.S., and one in ten with dry eye symptoms might have undiagnosed Sjögren’s. Nicox is working closely with the Sjögren’s Syndrome Foundation as a Corporate Partner to increase awareness of Sjögren’s, the dry eye that occurs in the disease, and the need for early diagnosis.

Pfizer has nabbed rights to develop a pooled IVIG therapy.

Pfizer has purchased the rights to a preclinical, experimental drug candidate that could replace IVIG therapy. IVIG, or human intravenous immunoglobulin, is used to treat autoimmune diseases including systemic complications and especially neuropathy in Sjögren’s. Gliknik, a Baltimore-based biopharmaceutical company, has developed a recombinant Fc fusion protein that can be used in smaller quantities than IVIG and which the company says has a better therapeutic effect. GL-2045 (Stradomer™) is currently undergoing pre-clinical safety investigations.


An RA and Lupus Drug has been licensed to a U.S. Company

A U.S. company has taken over clinical trials for an anti-interleukin 6-receptor (IL6R) nanobody therapy that demonstrated promising results in rheumatoid arthritis (RA) and systemic lupus erythematosus (SLE) this year. That announcement came in September 2013 stating that Ablynx, in Belgium, licensed development and marketing rights for ALX-0061 to AbbVie, based in the U.S. AbbVie will complete Phase II trials in RA and SLE and oversee Phase III trials and commercialization. Results for a Phase IIa trial were reported in February of this year showing the drug was well-tolerated in 37 RA patients over a 24-week period. A nanobody, a term developed by Ablynx for a single-domain antibody, is one-tenth the size of human antibodies and can more precisely reach disease targets. AbbVie owns the blockbuster RA drug adalimumab (Humira®).
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Black Box Warning Added to Rituximab

Rituximab (Rituxan®) will now contain an added black box warning about the potential for reactivation of the Hepatitis B virus in patients who were previously infected with the disease. While HBV reactivation already was included in the list of potential harms, the increased warning came from the Food and Drug Administration (FDA) in September 2013 after more than 100 cases of HBV reactivation with the use of rituximab were reported to the FDA Adverse Event Reporting System.

Did you Know?

It was announced in August that the ”Food and Drug Administration has required the drug labels and Medication Guides for all fluoroquinolone antibacterial drugs be updated to better describe the serious side effect of peripheral neuropathy. This serious nerve damage potentially caused by fluoroquinolones may occur soon after these drugs are taken and may be permanent.” It was noted that this risk of peripheral neuropathy is associated with fluoroquinolones taken by mouth or injection.

Peripheral neuropathy is a common symptom in Sjögren’s, so healthcare providers need to be aware that this particular antibiotic might independently cause or exacerbate existing neuropathies.

For more information visit: http://www.fda.gov/Drugs/DrugSafety/ucm365050.htm

Upcoming Conferences...

9th International Congress on Autoimmunity
March 26-30, 2014
Nice, France
Abstract Submission Deadline: Nov. 1, 2013
Early Registration Deadline: Jan. 7, 2014
www.kenes.com/autoimmunity

6th Autoimmunity Congress Asia (ACA) 2013
November 20-22, 2013
Hong Kong
www.kenes-group.com/Events/aca-2013-autoimmunity-congress-asia

Announcing the 13th International Symposium on Sjögren’s Syndrome!
May 2015 (Date TBD)
Bergen, Norway
Get The Moisture Seekers Newsletter for your Office

Good patient educational material is an important part of your practice. Keeping patients engaged while they wait is a great opportunity to increase satisfaction and education! The Moisture Seekers newsletter from the Sjögren’s Syndrome Foundation is always filled with useful information for patients. Sjögren’s sufferers can find answers to common questions, get great tips on living well while managing the disease and learn how to connect with other patients and increase awareness of Sjögren’s.

Physician office subscriptions are now being offered at a discounted rate!

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Patient Education Sheet
Tracking Your Symptoms

Tracking Your Sjögren’s Symptoms

Date: ______________________

Additional notes about daily activities/results:

Sleeping Notes
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________________________________________________________________________
________________________________________________________________________
Bed Time: __________________
Hours of Sleep: ______________
Times Getting up for Medication: ______________________

Activity Notes
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Work Sheet

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Key: N = None, S = Slight, M = Moderate, SE = Severe, I = Intense

For more information on Sjögren’s, contact the Sjögren’s Syndrome Foundation at:
6707 Democracy Blvd, Suite 325, Bethesda, MD 20817 • 800-475-6473 • www.sjogrens.org • ssf@sjogrens.org

Clinicians: Please make multiple copies of this Patient Education Sheet and distribute to your patients.
Speaking of Sjögren’s

Are you planning to present on Sjögren’s at a professional conference, grand rounds, or other engagement?

We’d love to hear about it!

The SSF can help you with materials for your program, announce it in *Sjögren’s Quarterly* or *The Moisture Seekers* to share with your colleagues and attract participants. And when you’re done, we’d love to hear how it went and share your success in the newsletter.

Call Michele Champigny at 518-610-5192 or email at mchampigny@sjogrens.org to share your great work and learn more about how we can help!