Ανασκόπηση ACR 2018

Ρευματοειδής Αρθρίτιδα-Σ. Sjogren

Ντελής Κων/νος MD, PhD

Γ.Ν. Πατρών «Άγιος Ανδρέας»

ΣΥΓΚΡΟΥΣΗ ΣΥΜΦΕΡΟΝΤΩΝ

Καμία για αυτή την παρουσίαση

PA

- Παθοφυσιολογία
- Biomarkers
- Πρόληψη
- Συννοσηρότητες
- Θεραπευτική στρατηγική
- Νέες θεραπείες

PA

Αναγνώριση ενός υποπληθυσμού ινοβλαστών στην PA σε τριπλάσιο αριθμό σε σχέση με την ΟΑ, με έντονα φλεγμονώδη χαρακτηριστικά και “proliferative invasive phenotype”

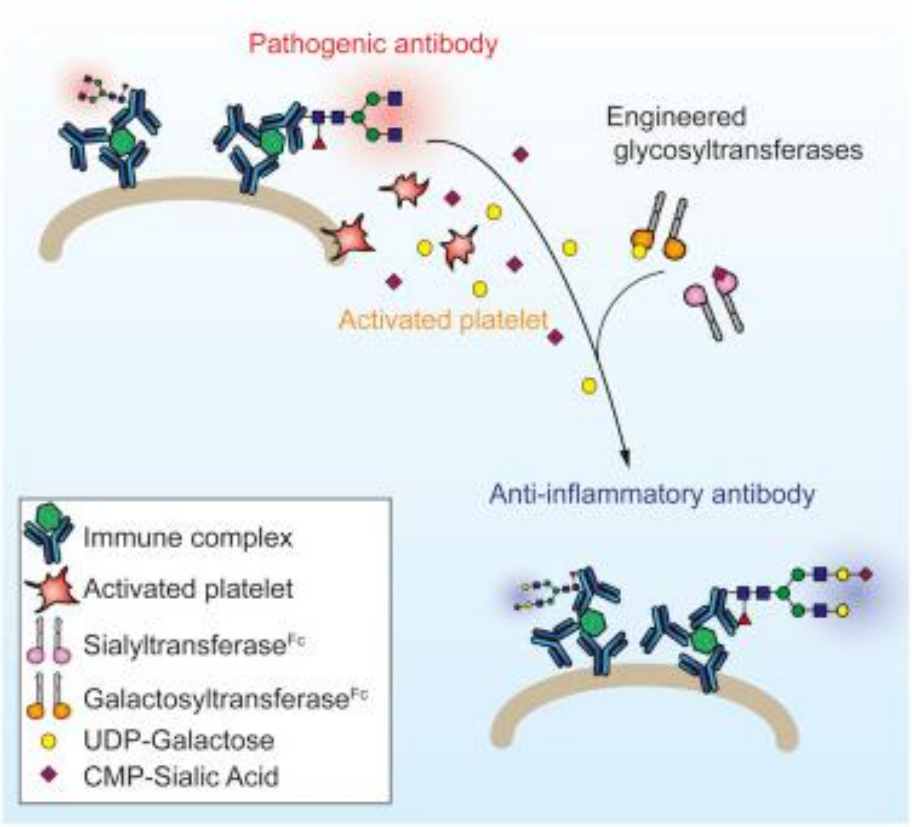
nature COMMUNICATIONS

Article | OPEN | Published: 23 February 2018

Functionally distinct disease-associated fibroblast subsets in rheumatoid arthritis

Fumitaka Mizoguchi, Kamil Slowikowski, Kevin Wei, Jennifer L. Marshall, Deepak A. Rao, Sook Kyung Chang, Hung N. Nguyen, Erika H. Noss, Jason D. Turner, Brandon E. Earp, Philip E. Blazar, John Wright, Barry P. Simmons, Laura T. Donlin, George D. Kalliolias, Susan M. Goodman, Vivian P. Bykerk, Lionel B. Ivashkiv, James A. Lederer, Nir Hacohen, Peter A. Nigrovic, Andrew Filer, Christopher D. Buckley, Soumya Raychaudhuri & Michael B. Brenner

PA



Cell

CellPress

Volume 172, Issue 3, 25 January 2018, Pages 564-577.e13

Article

Engineered Sialylation of Pathogenic Antibodies *In Vivo* Attenuates Autoimmune Disease

Jose D. Pagan [1, 2], Maya Kitaoka [1, 2], Robert M. Anthony [1, 3]

PA

Immunity

Volume 48, Issue 6, 19 June 2018, Pages 1220-1232.e5

CellPress

Article

Autoimmune Th17 Cells Induced Synovial Stromal and Innate Lymphoid Cell Secretion of the Cytokine GM-CSF to Initiate and Augment Autoimmune Arthritis

Keiji Hirota [1, 5], Motomu Hashimoto [2, 9], Yoshinaga Ito [3, 9], Mayumi Matsuura [3], Hiromu Ito [2, 4], Masao Tanaka [2], Hitomi Watanabe [5], Gen Kondoh [5], Atsushi Tanaka [1], Keiko Yasuda [1], Manfred Kopf [6], Alexandre J. Potocnik [7], Brigitta Stockinger [8], Noriko Sakaguchi [1], Shimon Sakaguchi [1, 3, 10]

- Arthritogenic Th17 cells stimulated fibroblast-like synoviocytes via interleukin-17 (IL-17) to secrete the cytokine GM-CSF and also expanded synovial-resident innate lymphoid cells (ILCs)
- Activated synovial ILCs produced abundant GM-CSF
- Loss of GM-CSF production by either ILCs or stromal cells prevented Th17 cell-mediated arthritis.
- **Thus, a cellular cascade of autoimmune Th17 cells, ILCs, and stromal cells, via IL-17 and GM-CSF, mediates chronic joint inflammation and can be a target for therapeutic intervention.**

PA

RA-Biomarkers

Abstract Number: 1863

Anti-Cyclic Citrullinated Protein Antibody at Multiple Cutoff Levels and in Combination with Rheumatoid Factor IgM and Serum Calprotectin Is Highly Specific for the Development of Rheumatoid Arthritis within 3 Years

Leah F. Bettner[1], Lindsay B. Kelmenson[1], M. Kristen Demoruelle[1], Ted R. Mikuls[2], Jess Edison[3], Elizabeth A. Mewshaw[4], Mark C. Parish[1], Marie L. Feser[1], Ashley A. Frazer-Abel[1], LauraKay Moss[1], Michael Mahler[5], V. Michael Holers[6] and Kevin D. Deane[1], [1]Division of Rheumatology, University of Colorado Denver, Aurora, CO, [2]Internal Medicine, Division of Rheumatology, VA Nebraska-Western Iowa Health Care System and University of Nebraska Medical Center, Omaha, NE, [3]Division of Rheumatology, Walter Reed National Military Medical Center, Bethesda, MD, [4]Walter Reed National Military Medical Center, Bethesda, MD, [5]Research and Development, Inova Diagnostics, San Diego, CA, [6]Division of y, University of Colorado School of Medicine, Aurora, CO

ABSTRACT NUMBER: 171 • **2015 ACR/ARHP Annual Meeting**

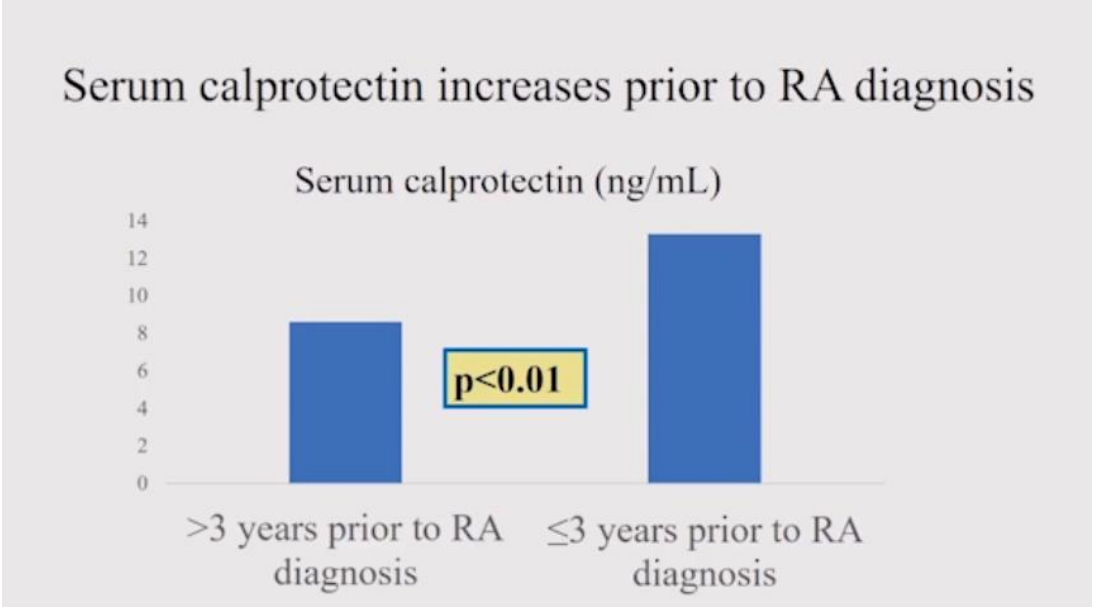
Serum Calprotectin Levels Correlate with Ultrasonographic Synovitis in Rheumatoid Arthritis Patients

Jana Hurnakova[1], Jakub Zavada[1], Petra Hanova[1], Hana Hulejová[1], Martin Klein[1], Herman F Mann[1], Olga Sleglova[1], Marta Olejarova[1], Šárka Forejtová[1], Olga Ruzickova[1], Martin Komarc[2], Jiri Vencovsky[1], Karel Pavelka[1] and Ladislav Senolt[1], [1]Institute of Rheumatology and Department of Rheumatology, 1st Faculty of Medicine, Charles University, Prague, Czech Republic, Prague, Czech Republic, [2]Institute of Biophysics and Informatics of the First Faculty of Medicine, Charles University, Prague, Czech Republic

ABSTRACT NUMBER: 651 • **2016 ACR/ARHP Annual Meeting**

Calprotectin Serum Levels Strongly Predict Disease Flare in RA and Psa Patients with Low Disease Activity Treated with TNF Inhibitors. a One-Year Prospective Cohort Study

Jose Inciarte-Mundo[1], M. Victoria Hernández[1], Virginia Ruiz-Esquide[1], Sonia Cabrera-Villalba[1], Julio Ramirez[1], Andrea Cuervo[1], Mariona Pascal[2], Jordi Yagüe[2], Juan D. Cañete[1] and Raimon Sanmarti[1], [1]Rheumatology Department, Hospital Clínic de Barcelona, Barcelona, Spain, [2]Immunology Department, Hospital Clinic de Barcelona, Barcelona, Spain



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RA-Biomarkers

- A phase characterized by the presence of specific autoantibodies and arthralgias in the absence of clinically evident synovial inflammation
- BCR sequencing
- Individuals were labelled BCR-positive if peripheral blood at study baseline showed ≥ 5 dominant (beyond 0.5%) BCR clones.

Abstract Number: 835

Identifying Individuals with High Risk for Imminent Onset of Rheumatoid Arthritis

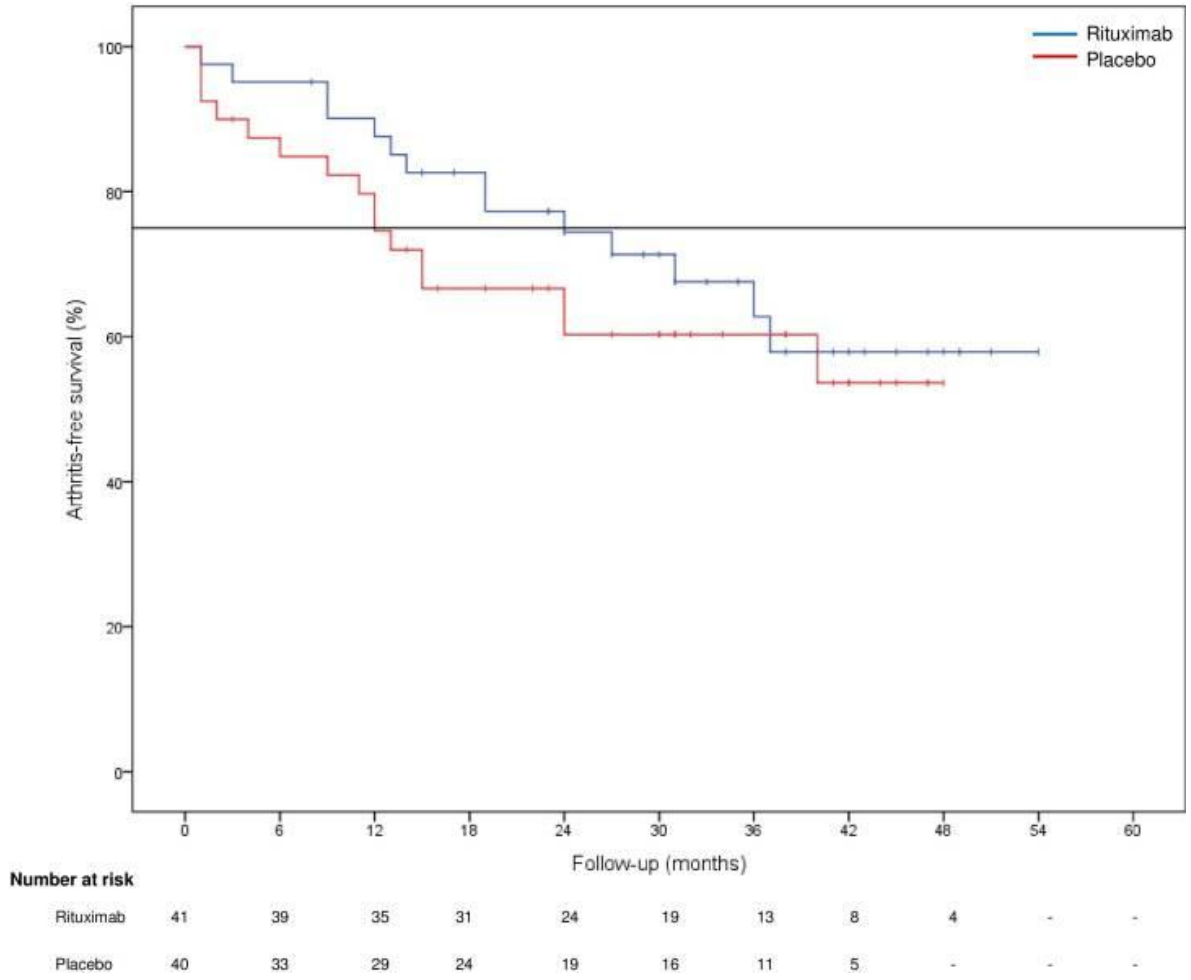
Anne Musters[1], Marian van Beers-Tas[2], Marieke E. Doorenspleet[1], Paul L. Klarenbeek[3], Barbera C.D. van Schaik[4], Antoine H.C. van Kampen[4], Frank Baas[5], Dirkjan van Schaardenburg[6] and **Niek de Vries**[1], [1]Amsterdam Rheumatology and immunology Center | Academic Medical Center / University of Amsterdam, Amsterdam, Netherlands, [2]Amsterdam Rheumatology and Immunology Center | Reade, Amsterdam, Netherlands, [3]Amsterdam Rheumatology & immunology Center | Department of Experimental Immunology, Academic Medical Center/University of Amsterdam, Amsterdam, Netherlands, [4]Bioinformatics Laboratory, Department of Clinical Epidemiology, Biostatistics and Bioinformatics, Academic Medical Center/University of Amsterdam, Amsterdam, Netherlands, [5]Genome Analysis, Academic Medical Center/ University of Amsterdam, Amsterdam, Netherlands, [6]Amsterdam Rheumatology and immunology Center, Reade, Amsterdam, Netherlands

- Within 3 years none of the BCR-negative RA-risk individuals developed arthritis
- 71% of the BCR-positive individuals did
- estimated RR: 120.1

PA

PA-ΠΡΟΛΗΨΗ

- The PRAIRI study
- 80 subjects enrolled
- ACPA (+), RF (+), CRP (+)
- Intervention: a single infusion of RTX 1000mg



Results: Rituximab delayed onset of RA by ≈12 months

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RA-Πρόληψη

- Ongoing studies aiming to block autoimmunity in the preclinical stage of RA aiming to delay or prevent the disease onset

Ongoing RA prevention trials

Acronym	Inclusion	Intervention	Primary Outcome	Location
StopRA	ACPA >2x	Hydroxychloroquine x 1 year	RA 2010	USA
APIPPRA	RF+ACPA or ACPA >3x and arthralgia	Abatacept x 1 year	RA 2010	UK
StapRA	RF+ACPA or ACPA >3x and arthralgia	Atorvastatin 40 mg x 1 year	RA 2010	Dutch
TreatEarlier	Arthralgia and subclinical joint inflammation on MRI	MTX x 1 year, initial dose of IM methylprednisolone	RA 2010	Europe

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ΡΑ-ΚΑΡΔΙΑΓΓΕΙΑΚΟΣ ΚΊΝΔΥΝΟΣ

- Western Denmark Heart Registry
- *42,257 patients*
- *For both CO (combined outcome) and MACE (major cardiovascular events) an increased risk was seen in RA compared to non-RA*

ABSTRACT NUMBER: 213

Excessive Risk of Major Cardiovascular Events in Sero-Positive Rheumatoid Arthritis and in Patients with Active Disease

Annette de Thurah[1,2], Ina Trolle Andersen[3], Andreas Bugge Tingaard[4], Josephine Therkildsen[5], Anders Hammerich Riis[3], Morten Böttcher[5] and Ellen-Margrethe Hauge[6,7], [1]Department of Rheumatology, Aarhus University Hospital, Århus C, Denmark, [2]Department of Clinical Medicine, Aarhus University, Aarhus, DK, Aarhus N, Denmark, [3]Department of Clinical Epidemiology, Aarhus University Hospital, Aarhus, Denmark, [4]Department of Cardiology, Regional Hospital of Herning, Herning, Denmark, [5]Cardiology, Regional Hospital of Herning, Herning, Denmark, [6]Department of Rheumatology, Department of Rheumatology, Aarhus University Hospital, Aarhus, Denmark, [7]Department of Clinical Medicine, Aarhus University, Aarhus C, Denmark

HR: 1.35 for RA and non-RA
HR: 1.80 for patients who received GCI more than one time during 3 years
HR: 1.42 for patients with sero-positive RA

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RA -DVT

- Retrospective cohort study of patients with RA

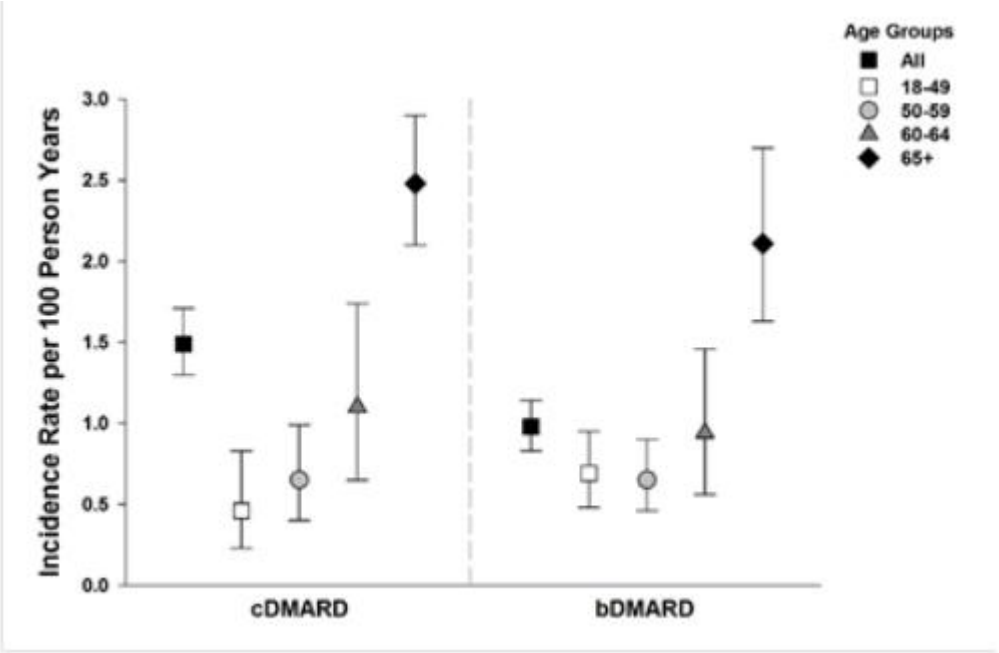
Incidence Rates:
1.49 per 100 person-years for subjects on treatment with csDMARDs
0.98 per 100 person-years for subjects on treatment with biologics

Age and sex were identified as the most important risk factors

Abstract Number: 2455

Risk of Venous Thromboembolism in Rheumatoid Arthritis Patients Treated with Biologic and Non-Biologic Dmards

Judith Maro[1], Talia Menzin[2], Kenneth Hornbuckle[3], **Jon T. Giles**[4], Arthur Kavanaugh[5], Thomas Dörner[6], David Martin[7], Jane Huang[1] and Claudia A. Salinas[3], [1]Harvard Medical School, Boston, MA, [2]Harvard Pilgrim Health Center, Boston, MA, [3]Eli Lilly and Company, Indianapolis, IN, [4]Columbia University, New York, NY, [5]University of California, San Diego, School of Medicine, La Jolla, CA, [6]Charité Universitätsmedizin Berlin, Berlin, Germany, [7]Food and Drug Administration, Indianapolis, IN



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ΑΛΛΕΡΓΙΑ ΚΑΙ PA

ABSTRACT NUMBER: 204

Investigating Asthma, Allergic Disease, Passive Smoke Exposure, and Risk of Rheumatoid Arthritis

Vanessa L. Kronzer[1], Cynthia S. Crowson[2], Jeffrey A. Sparks[3], Robert Vassallo[4] and John M. Davis III[5], [1]Internal Medicine, Mayo Clinic, Rochester, MN, [2]Health Sciences Research, Mayo Clinic College of Medicine and Science, Rochester, MN, [3]Division of Rheumatology, Immunology and Allergy, Brigham and Women's Hospital, Boston, MA, [4]Pulmonary and Critical Care Medicine, Mayo Clinic, Rochester, MN, [5]Division of Rheumatology, Mayo Clinic College of Medicine and Science, Rochester, MN

- 1,149 RA cases and 3,441 controls
- Asthma was associated with RA
- History of allergic disease was also associated with RA
- Passive home smoke exposure duration and pack-years were modestly associated with development of RA

PA

ΥΠΟΔΟΡΙΑ ΜΤΧ ΚΑΙ ΣΥΜΜΟΡΦΩΣΗ

- Subcutaneous (SC) MTX can lead to improved efficacy and bioavailability
- APRiM is a prospective, observational, multicenter study (n=433)
- Adherence of patients to sc MTX

ABSTRACT NUMBER: 630

Is Treatment Adherence of RA Patients to Injectable MTX Influenced By Previous MTX Route of Administration?

René-Marc Flipo[1], Eric Senbel[2], Sonia Tropé[3], Elena Zinovieva[4], Agnès Courbeyrette[5] and Hélène Herman-Demars[4], [1]Hôpital Roger Salengro, Lille, France, [2]Rheumatology office, Marseille, France, [3]149 avenue du Maine, ANDAR, Paris, France, [4]Medical Department Nordic Pharma, Paris, France, [5]Medical Departement, Nordic Pharma, Paris, France

- PRiM revealed that less than 50% of patients are perfectly adherent to injectable MTX treatment
- When patients were asked, they reported 80% no missing shot

PA

ΒΙΟΛΟΓΙΚΑ-DMARDs

- Metaanalysis of 144 articles
- Comparison of LEF vs MTX efficacy in combination with biologics

Abstract Number: 2822

Should We Prefer Leflunomide to Methotrexate in Combination with Biologics? a Systematic Review and a Meta-Analysis

Guillaume Decarriere[1], Thomas Barnetche[2], Cédric Lukas[3], Cécile Gaujoux-Viala[4], Bernard Combe[5], Jacques Morel[6] and Claire I. Daien[7], [1]Department of Rheumatology, CHU Lapeyronie, Montpellier, France, [2]Rheumatology Department, FHU ACRONIM, Bordeaux University Hospital, Bordeaux, France, [3]Rheumatology, CHU Lapeyronie and EA2415, Montpellier University, University of Montpellier, France, [4]Rheumatology, Nîmes University Hospital and EA2415 Montpellier University, Nîmes, France, [5]Rheumatology, University Hospital Lapeyronie, Montpellier, Montpellier, France, [6]Department of Rheumatology, University Hospital Lapeyronie, Montpellier, Montpellier, France, [7]Department of rheumatology, Lapeyronie Hospital and Montpellier University, Montpellier, France

- In the RTX group, those treated with LEF had a higher EULAR good response rate than those treated with MTX (RR=1.46)
- The risk of adverse events also tended to be lower in RTX group while on LEF
- In TNF group, those receiving MTX had a higher response rate than those treated with other csDMARDs (RR=0.88)
- The risk ratio of discontinuing therapy due to adverse events at 6 months and the risk ratio of serious adverse events were similar between MTX and other csDMARD.

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MTX-Paternal exposure

- Less is known about paternal MTX exposure
- Current treatment recommendations advocate that men should discontinue MTX three months before conception.
- Total 265 fathers exposed to MTX and 1,004,834 controls.

ABSTRACT NUMBER: 1853

Paternal Use of Methotrexate (MTX) and Congenital Malformations – a Systematic Review and Meta-Analysis

Thomas Bo Jensen[1], Mikkel Bring Christensen[1,2] and Jon Trærup Andersen[1,2], [1]Department of Clinical Pharmacology, Copenhagen University Hospital Bispebjerg, Copenhagen, Denmark, [2]Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark

- Odds ratio for major malformations was 1.02
- Odds ratio for all malformations was 0.86
- No association was found

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ΒΙΟΛΟΓΙΚΑ-ΚΑΡΚΙΝΟΣ

- 431 patients with RA of which 111 received bDMARDs at various times after a cancer diagnosis
- Comparison between patients who received bDMARDs or cs DMARDS regarding overall survival (OS).

Abstract Number: 1522

Time Dependent Effect of Biologic Therapy on Overall Survival in Patients with Rheumatoid Arthritis and Cancer

Xerxes Pundole[1], Natalia Zamora[2], Harish Siddhanamatha[3], Jean Tayar[4], Cheuk Hong Leung[5], Heather Lin[6] and Maria Suarez-Almazor[7], [1]Section of Rheumatology and Clinical Immunology, Department of General Internal Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, USA, Houston, TX, [2]Reumatologia, Instituto de Rehabilitación Psicofísica, Buenos Aires, Argentina, Buenos Aires, Argentina, [3]The University of Texas Health Science Center, School of Biomedical Informatics, Houston, TX, USA, Houston, TX, [4]Department of General Internal Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, USA, Section of Rheumatology and Clinical Immunology, Department of General Internal Medicine, The University of Texas MD Anderson Cancer Center, Houston, Texas, USA, Houston, TX, [5]Department of Biostatistics, Department of Biostatistics, The University of Texas MD Anderson Cancer Center, Houston, TX, USA, Houston, TX, [6]Biostatistics, Department of Biostatistics, The University of Texas MD Anderson Cancer Center, Houston, TX, USA, Houston, TX, [7]Section of Rheumatology and Clinical Immunology, Department of General Internal Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX

The HR regarding OS between subgroups were not statistically significant (p=0.58)
HR=0.67 for patients on TNF-DMARDs
HR= 1.10 for patients on non-TNF-DMARDs

A subgroub of 175 breast cancer patients was analysed
Patients on biologics had inferior survival (HR=1.86), but the difference was not statistically significant (p=0.75)
More research is necessary to evaluate the effects of bDMARDs in a larger sample of cancer patients

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JAK-ΚΑΚΟΗΘΕΙΕΣ-ΛΟΙΜΩΞΕΙΣ

- Thirty-six trials were analyzed
- 15,602 patients

- Patients receiving the combination of JAK inhibitor plus methotrexate or JAK inhibitor monotherapy had higher rates of malignancies, compared with methotrexate
- OR 1.92
- OR 1.40
- Difference did not reach statistical significance

Malignancies and Serious Infections in Randomized Controlled Trials of Janus Kinase Inhibitors in Patients with Rheumatoid Arthritis: A Systematic Review and Meta-Analysis

Maria A. Lopez-Olivo[1], Jean Tayar[2], Natalia Zamora[3], Gregory Pratt[4] and Maria Suarez-Almazor[5], [1]Section of Rheumatology and Clinical Immunology, Department of General Internal Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, [2]Department of General Internal Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, USA, Section of Rheumatology and Clinical Immunology, Department of General Internal Medicine, The University of Texas MD Anderson Cancer Center, Houston, Texas, USA, Houston, TX, [3]Reumatologia, Instituto de Rehabilitación Psicofísica, Buenos Aires, Argentina, Buenos Aires, Argentina, [4]Research Medical Library, The University of Texas MD Anderson Cancer Center, Houston, TX, USA, Houston, TX, [5]Department of General Internal Medicine, The University of Texas MD Anderson Cancer Center, Section of Rheumatology and Clinical Immunology, Department of General Internal Medicine, The University of Texas MD Anderson Cancer Center, Houston, Texas, USA, Houston, TX

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IL inhibitors-ΚΑΚΟΗΘΕΙΕΣ-ΛΟΙΜΩΞΕΙΣ

- **Increased risk** of serious infections (OR=1.92), and a significantly increased risk of candidiasis (OR 5.41)
- **No significant** difference between patients who received IL-inhibitors or placebo in terms of the risk of malignancies (OR 1.07

Abstract Number: 237

The Risk of Serious and Opportunistic Infections in Rheumatologic Patients on Interleukin Inhibitors: A Systematic Review and Meta-Analysis

Adam Berlin[1] Jawad Bilal[2], Abdullah Alhifany[3], Warda Faridi[4] and C. Kent Kwoh[5], [1]Department of Internal Medicine, U... Tucson, AZ, [2]Internal Medicine, University of Arizona, Tucson, AZ, [3]Department of Pharmacy, I... AZ, [4]Department of Hematology/Oncology, University of Arizona, Tucson, AZ, [5]Medicine, ...ona School of Medicine, University of Arizona Arthritis Center, Tucson, AZ

Abstract Number: 238

IL Inhibitors Therapy in Rheumatic Diseases and the Risk of Malignancies: Systematic Review and Meta-Analysis of Rare Harmful Effects in Randomized Controlled Trials

Jawad Bilal[1], Irbaz Bin Riaz[2], Adam Berlinberg[3], Abdullah Alhifany[4], Gilbert Ortega[5] and Warda Faridi[6], [1]University of Arizona, Tucson, AZ, [2]Mayo Clinic, Richestor, MN, [3]Department of Internal Medicine, University of Arizona, Tucson, AZ, [4]Department of Pharmacy, University of Arizona, Tucson, AZ, [5]Internal Medicine, University of Arizona, Tucson, Tucson, AZ, [6]Department of Hematology/Oncology, University of Arizona, Tucson, AZ

PA

TNF vs triple therapy

- 1388 ασθενείς υπό MTX+SSZ+HCQ vs 45,305 ασθενείς υπό anti-TNF
- The risk of serious infection was similar after starting a TNFi versus triple therapy adjusted for baseline confounding.

ABSTRACT NUMBER: 218

Risk of Serious Infection Associated with TNF Inhibitor Versus Triple Therapy in Rheumatoid Arthritis Patients

Yinzhu Jin[1], Eun Ha Kang[2], Rishi J. Desai[3], Angela Tong[1] and Seoyoung C. Kim[4,5], [1]Division of Pharmacoepidemiology and Pharmacoeconomics, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, [2]Division of Rheumatology, Department of Internal Medicine, Seoul National University Bundang Hospital, Gyeonggi-do, Korea, Republic of (South), [3]Division of Pharmacoepidemiology and Pharmacoeconimics, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, [4]Division of Pharmacoepidemiology and Pharmocoeconomics, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, [5]Rheumatology, Immunology and Allergy, Brigham and Women's Hospital, Boston, MA

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PA-ΕΜΒΟΛΙΑ

- RA patients have 2.75 fold increased risk of influenza
- Double-blind, active-controlled trial in adult seropositive RA patients (n=279)
- DMARDs, anti-cytokine therapy (G2), anti-B-cell therapy and small molecules
- High dose trivalent inactivated influenza vaccine (HD-TIV) vs the standard vaccine (SD-QIV)

ABSTRACT NUMBER: 837

Efficacy of High-Dose Versus Standard-Dose Influenza Vaccine in Seropositive Rheumatoid Arthritis Patients

Ines Colmegna[1], Mariana Useche[2], Katherine Rodriguez[3], Marie Hudson[4], Sasha Bernatsky[5], Hacene Nedjar[3], Elham Rahme[6] and Brian Ward[7], [1]The Research Institute of the McGill University Health Centre, Division of Rheumatology, Department of Medicine, McGill University, Montreal, Quebec, Canada, Montreal, QC, Canada, [2]Medicine, The Research Institute of the McGill University Health Centre, Montreal, QC, Canada, [3]The Research Institute of the McGill University Health Centre, Montreal, QC, Canada, [4]Division of Rheumatology, Jewish General Hospital, Lady Davis Institute for Medical Research, Montreal, QC, Canada, [5]Divisions of Rheumatology and Clinical Epidemiology, The Research Institute of the McGill University Health Centre, Montreal, QC, Canada, [6]Epidemiology, The Research Institute of the McGill University Health Centre, Montreal, QC, Canada, [7]Infectious Diseases, The Research Institute of the McGill University Health Centre, Montreal, QC, Canada

- Overall responses to vaccination were consistently higher with the HD-TIV

- H3N2: OR 2.84
- B/Bris : OR 1.91
- H1N1 : OR 2.33

PA

JAK-PELFICITINIB

ABSTRACT NUMBER: 888

Efficacy and Safety of the Novel Oral Janus Kinase (JAK) Inhibitor, Peficitinib (ASP015K), in a Phase 3, Double-Blind, Placebo-Controlled, Randomized Study of Patients with RA Who Had an Inadequate Response to Methotrexate

- Superiority vs placebo in patients with inadequate response to MTX

Result	Peficitinib 150 mg/day
ACR20, n/N (%)	137/174 (78.7)***
ACR50, n/N (%)	103/174 (59.2)***
ACR70, n/N (%)	70/174 (40.2)***

ABSTRACT NUMBER: 887

Efficacy and Safety of the Novel Oral Janus Kinase (JAK) Inhibitor, Peficitinib (ASP015K), in a Phase 3, Double-Blind, Placebo-Controlled, Randomized Study of Patients with RA Who Had an Inadequate Response to Dmards

- Superiority vs placebo in patients with inadequate response to MTX
- Similar response rates with etanercept

Result at 12 weeks/ET	PBO	Peficitinib 100 mg/day	Peficitinib 150 mg/day	Etanercept 50mg/week (open-label arm)
ACR20[1], n/N (%)	31/101 (30.7)	60/104 (57.7)***	76/102 (74.5)***	167/200 (83.5)
ACR50[1], n/N (%)	9/101 (8.9)	32/104 (30.8)***	43/102 (42.2)***	105/200 (52.5)
ACR70[1], n/N (%)	1/101 (1.0)	14/104 (13.5)[2,3]	28/102 (27.5)***	61/200 (30.5)

PA

JAK-UPADACITINIB

- Superiority vs placebo in patients with inadequate response to MTX
- Similar response rates with adalimumab

Abstract Number: 889

Upadacitinib As Monotherapy: A Phase 3 Randomized Controlled Double-Blind Study in Patients with Active Rheumatoid Arthritis and Inadequate Response to Methotrexate

Josef Ahm... Cohen[2], Paul Emery[3], William F C Rigby[4], Yoshiya Tanaka[5], Ying Zhang[6], Alan Friedman[6], Med... and Aileen L. Pangan[6], [1]Division of Rheumatology, Department of Medicine 3, Rhe... Metroplex Clinical Research Center, Dallas, TX, [3]Leeds Inst of of ... United Kingdom, [4]Dartmouth College, Hanover, NH, [5]Univ ... North Chicago, IL

Abstract Number: 890

A Phase 3, Randomized, Double-Blind Study Comparing Upadacitinib to Placebo and to Adalimumab, in Patients with Active Rheumatoid Arthritis with Inadequate Response to Methotrexate

Table 1. Efficacy Endpoints at Weeks 12 and 26

Endpoint	WEEK 12			WEEK 26		
	PBO N=651	UPA 15MG QD N=651	ADA 40MG EOW N=327	PBO N=651	UPA 15MG QD N=651	ADA 40MG EOW N=327
ACR20, %	36.4	70.5*** #	63.0	35.6	67.4*** ##	57.2
ACR50, %	14.9	45.2*** ###	29.1	20.9	53.9*** ###	41.9
ACR70, %	4.9	24.9*** ###	13.5	9.5	34.7*** ###	22.9
DAS28CRP ≤3.2, %	13.8	45.0*** ###	28.7	18.0	54.7*** ###	38.5
DAS28CRP <2.6, %	6.1	28.7*** ###	18.0	9.2	40.9*** ###	26.9
CDAI ≤10 (LDA), %	16.3	40.4*** ##	30.0	22.1	52.7*** ###	38.2
CDAI ≤2.8 (CR), %	3.1	13.4*** ##	7.6	5.5	23.0*** ###	13.8

EFFICACY ENDPOINTS AT WEEK 14*

	cMTX N=216	UPA 15 MG N=217	UPA 30 MG N=215
ACR20 (%)	41.2%	67.7% ***	71.2% ***
DAS28-CRP≤3.2 (%)	19.4%	44.7% ***	53.0% ***
ACR50 (%)	15.3%	41.9% ***	52.1% ***
ACR70 (%)	2.8%	22.6%***	33.0% ***
DAS28-CRP<2.6 (%)	8.3%	28.1% ***	40.5% ***

RA- anti-GM-CSF

Clinical endpoint at Week 12	Placebo (N=37)	180mg (N=37)	
	LS mean change from baseline (SE)		Difference from placebo (95% CI)
DAS28(CRP)	-0.60 (0.23)	-1.87 (0.23)	-1.27 (-1.91, -0.63, p<0.001)
CDAI	-6.59 (2.66)	-23.23 (2.60)	-16.63 (-23.97, -9.30, p<0.001)

Endpoint at Week 12	Placebo (N=11)	180mg (N=28)	
DAS28(CRP)	-0.04 (0.56)	-1.29 (0.30)	-1.26 (-2.54, 0.03)
CDAI	-2.44 (7.35)	-16.71 (3.70)	-14.26 (-30.98, 2.45)

ABSTRACT NUMBER: 2510

A Phase IIa Mechanistic Study of Anti-GM-CSF (GSK3196165) with Methotrexate Treatment in Patients with Rheumatoid Arthritis (RA) and an Inadequate Response to Methotrexate

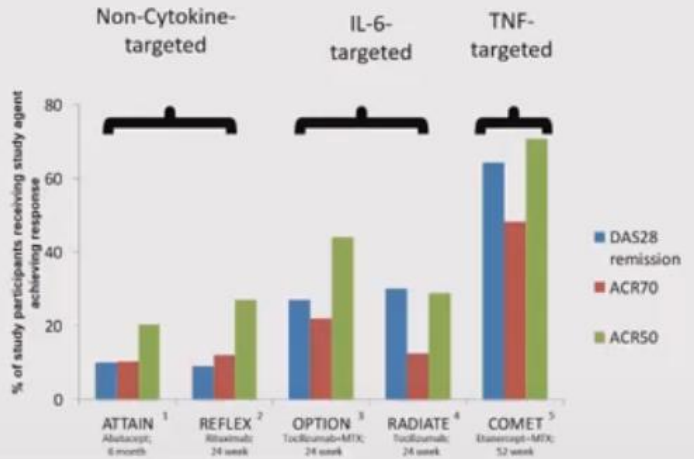
ABSTRACT NUMBER: 1938

A Phase IIb Dose-Ranging Study of Anti-GM-CSF with Methotrexate Treatment in Patients with Rheumatoid Arthritis (RA) and an Inadequate Response to Methotrexate

- GSK3196165 was well-tolerated, AEs were similar across both arms. No SAEs, significant infections and/or pulmonary events were observed.
- **Further studies are now required to confirm the additional clinical benefit expected with increased exposure from weekly dosing of GSK3196165 in patients with RA.**

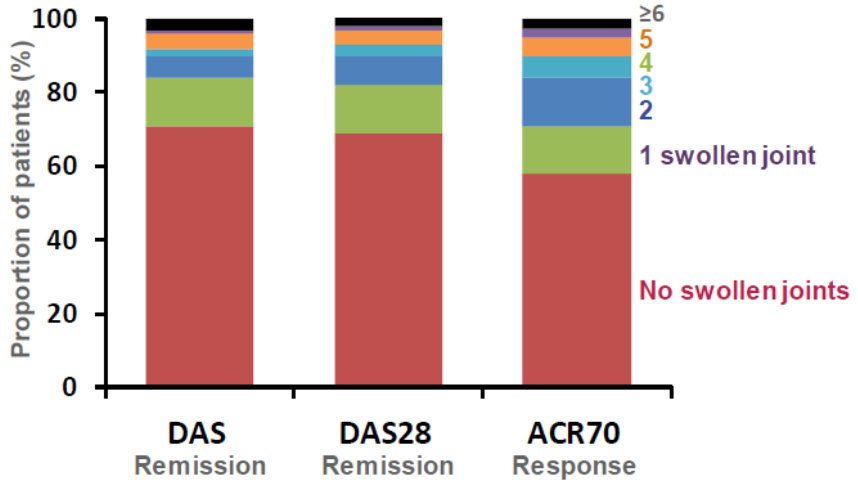
PA

DAS28 remission rates depend not only on efficacy but also on the type of intervention

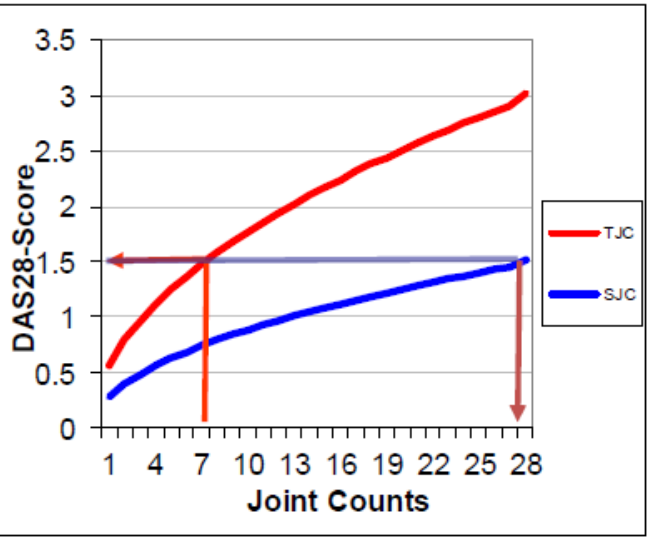


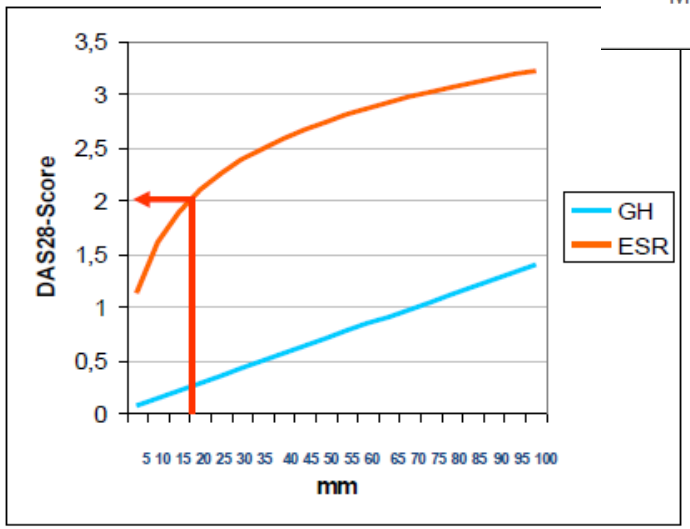
1. Genovese et al. N Engl J Med. 2005;353(11):1114-23. 2. Cohen et al. Arthritis Rheum. 2006;54(9):2793-806. 3. Smolen et al.

DAS28 Remission does not reflect true remission



van der Heijde D et al. Ann Rheum Dis. 2005;64:1582–1587





Remission is the therapeutic goal in RA and has been standardized by the ACR/EULAR (Boolean/SDAI/CDAI).

- Boolean are slightly more stringent than SDAI/CDAI criteria
- **The DAS/DAS28 has several problems when it comes to remission**

Σ.Sjogren

n–3 Fatty Acid Supplementation for the Treatment of Dry Eye Disease

The Dry Eye Assessment and Management Study Research Group* = DREAM

N ENGL J MED MAY 3, 2018

- **Question:**
  - Does supplementation with oral n-3 (omega 3) fatty acids improve ocular symptoms in patients with dry eye disease?
- **Design and Methods:**
  - Randomized, double-blind, placebo-controlled trial of oral n-3 FAs for patients with moderate-severe dry eye disease (including Sjögren's syndrome)
  - 349 patients in FA group; 170 in placebo group
  - Primary outcome: mean change in the 12-item Ocular Surface Disease Index (OSDI) at 12 months

DREAM Trial

- **Main Results:**
  - No difference between study groups in OSDI

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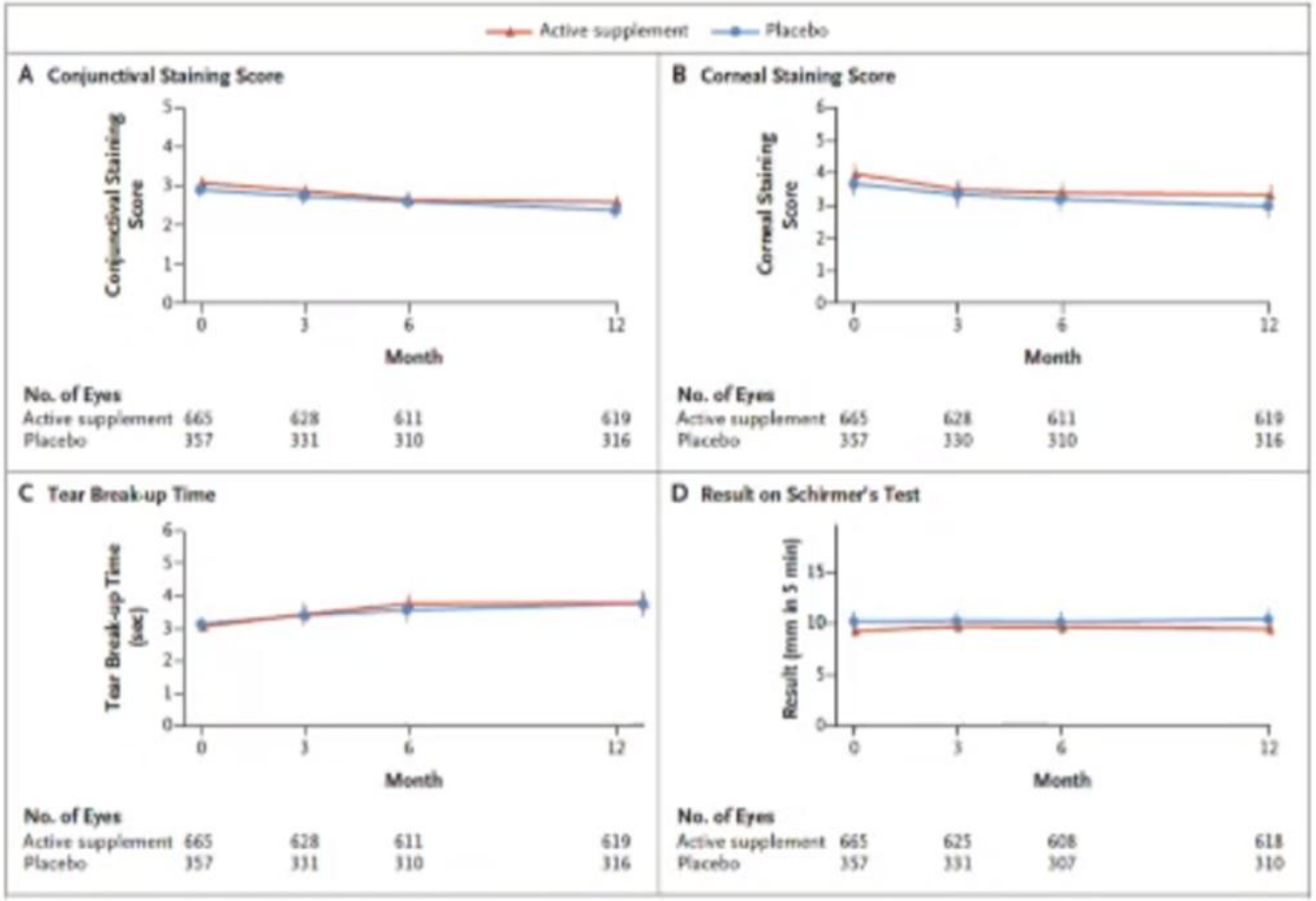
DREAM Trial

- Main Results:
  - No difference between study groups in other specific outcomes



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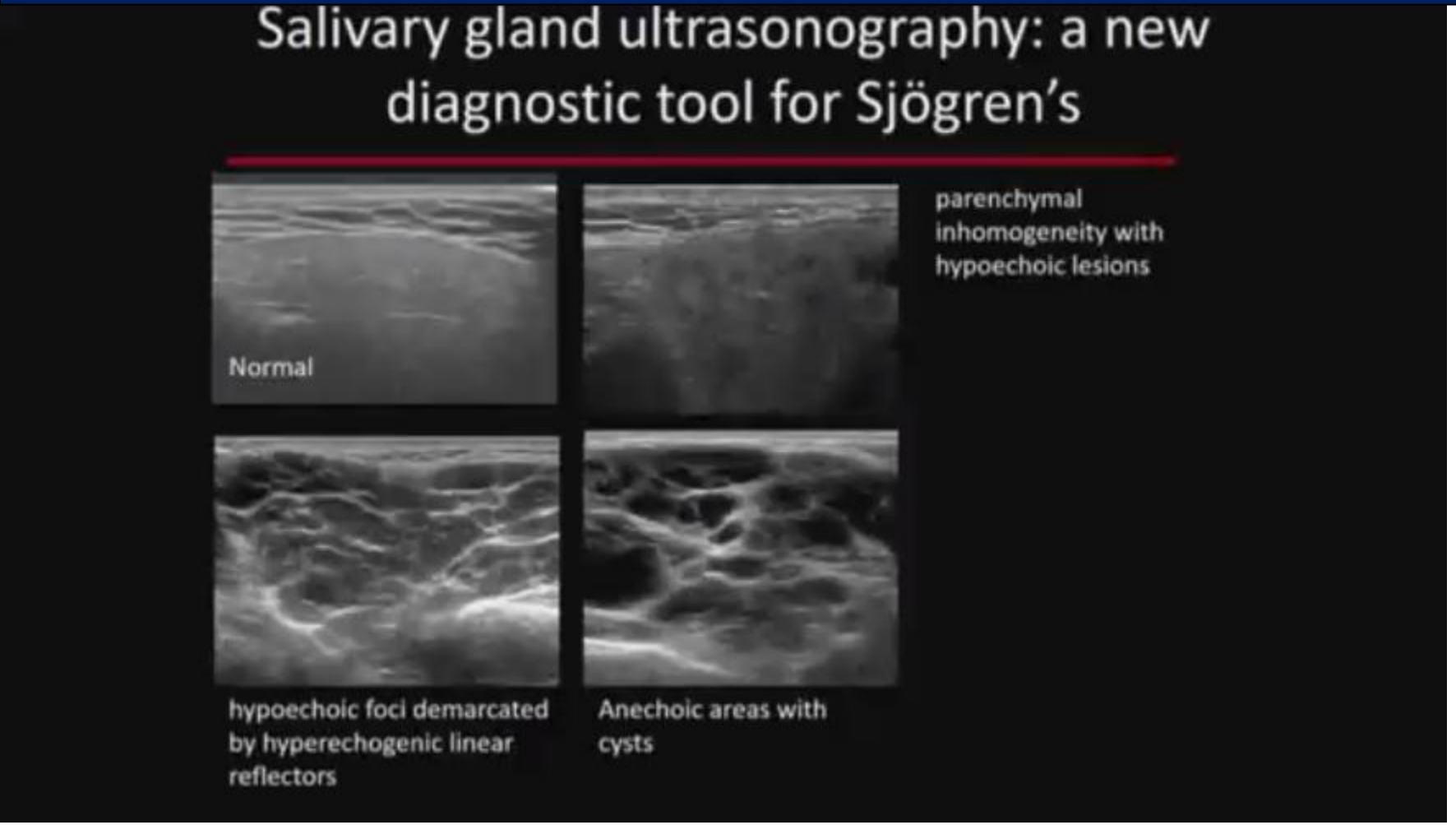
Salivary gland ultrasonography: a new diagnostic tool for Sjögren's
Normal
parenchymal inhomogeneity with hypoechoic lesions
hypoechoic foci demarcated by hyperechogenic linear reflectors
Anechoic areas with cysts

Sjogren

Salivary gland ultrasonography: sensitivity and specificity

Study	No. of patients	Cut-off	Sensitivity (%)	Specificity (%)
Hočevar et al, 2005	68 SS, 150 non-SS	Score 17 (0-48)	59	99
Salaffi et al, 2008	77 SS, 79 non-SS	Grade 6 (0-9)	75	84
		Grade 8 (0-9)	55	98
Milic et al, 2009	107 SS, 28 non-SS	Grade 19 (0-48)	87	91
Milic et al, 2010	159 SS, 86 non-SS	Grade 6 (0-12)	95	90
Cornec et al 2013	78 SS, 80 non-SS	Grade 2 (0-4)	63	95
Takagi et al, 2014	364 SS, 217 non-SS	Grade 1 (0-4)	81	86
		Grade 2 (0-4)	66	93
Theander et al, 2014	105 SS, 57 non-SS	Grade 2 (0-3)	52	98
Mossel et al, 2017	49 SS, 47 non-SS	Score 15 (0-48)	67	91

Arthritis Rheum 2013; 65:216; Scand J Rheumatol 2010; 39:160; Rheumatology 2005; 44:768; 2008; 47:1244; 2014; doi:10.1093; J Rheumatol 2009; 36:1495

Sjogren

The Novel Anti-CD40 Monoclonal Antibody CFZ533 Shows Beneficial Effects in Patients with Primary Sjögren's Syndrome: A Phase IIa dbpc Trial

Fisher B. et al. Arthritis Rheumatol. 2017; 69 (suppl 10)

- ***Period 1:*** 12 weeks. 4 doses. ESSDAI ≥ 6.
  - 3mg/kg sc (8 patients) vs placebo (4 patients)
  - 10 mg/kg iv (21 patients) vs placebo (11 patients)

RESULTS:

- Improvement in ESSDAI 6.35 in the 10 mg/kg i.v. group compared to 1.27 in the placebo group
- Δ ESSDAI=5.64 (95% CI=1.02 – 10.58) strongly favoring the CFZ533 i.v. treatment

- ***Period 2:*** 12 weeks open label 3mg/kg sc or 10mg/kg iv for safety. No major issues.

Abstract Number: L10

Clinical Efficacy of Leflunomide/Hydroxychloroquine Combination Therapy in Patients with Primary Sjogren's Syndrome: Results of a Placebo-Controlled Double-Blind Randomized Clinical Trial

Timothy R.D.J. Radstake[1], Eefje H.M. van der Heijden[2], Frederique M. Moret[3], Maarten R. Hillen[4], Ana P. Lopes[5], Toine Rosenberg[6], Nard Janssen[6], Aike A. Kruize[7] and Joel A.G. van Roon[3], [1]Department of Rheumatology & Clinical Immunology, University Medical Center Utrecht, Utrecht, Netherlands, [2]Department of Rheumatology and Clinical Immunology, Laboratory of Translational Immunology, University Medical Center Utrecht, Utrecht, Netherlands, [3]Rheumatology & Clinical Immunology/ Laboratory of Translational Immunology, University Medical Center Utrecht, Utrecht, Netherlands, [4]Rheumatology & Clinical Immunology, University Medical Center Utrecht, Utrecht, Netherlands, [5]Laboratory of Translational Immunology, University Medical Center Utrecht, Utrecht, Netherlands, [6]Department of Oral-Maxillofacial Surgery, University Medical Center Utrecht, Utrecht, Netherlands, [7]Department of Rheumatology and

Active Trials on Clinical Trials.Gov

Title of Study	Intervention Agent	Site
Study of **Iguratimod** in Sjogren's Syndrome	an **NF-KB activation inhibitor**	Beijing, China
A Study of **INCB050465** in Primary Sjogren's Syndrome	a **PI3Kδ inhibitor**	Advanced Pharma, Miami; Georgia
Safety, Pharmacokinetics and Preliminary Efficacy Study of **CFZ533** in Patients with Priimary Sjogren's Syndrome	a **CD-40 inh**ibitor	Novartis. Boston ,New York, Oklahoma
Safety and Efficacy Study of Subcutaneous **Belimumab** and Intravenous **Rituximab** Co-Administration in Subjects with Primary Sjogren's Syndrome	**Belimumab, Rituximab**	GSK
Safety and Efficacy Study of **Filgotinib, GS-9876 and Tirabrutinib** in Adults with Active Sjogren's Syndrome	Filgotinib (**JAK1 inh**), GS-9876 (a **SYK inhibitor**), Tirabrutinib (**Tyrosine Brutinine Kinase inh**)	Multicenter
Efficacy and Safety of **Abatacept** in Patients with Primary Sjogren's Syndrome	**Abatacept SC**	Multicenter
A Study of **LY3090106** in Participants with Sjogren's Syndrome	Tibulizumab, an **anti-BAFF** IL-17A monoclonal antibody	Eli Lilly, Johns Hopkins

Sjogren

Sjogren-Lymphoma

Abstract Number: 1559

Development of Lymphoma in Patients with Sjogren's Syndrome

Nicolas Lloves[1], Anastasia Secco[2], Marta Mamani[3], Silvia Beatriz Papasidero[4], Cecilia Asnal[5], Lida Santiago[6], Paula Pucci[5] and Soledad Retamozo[7], [1]Rheumatology Department, Hospital Rivadavia, Buenos Aires, Argentina, [2]Rheumatology Section, Hospital Bernardino Rivadavia, CABA, Argentina, [3]Hospital Bernardino Rivadavia, Buenos Aires, Argentina, [4]Rheumatology Section, Hospital General de Agudos Dr. Enrique Tornú, CABA, Argentina, [5]Rheumatology, Hospital Alemán, Buenos Aires, Argentina, [6]Hospital Bernardino Rivadavia, Ciudad Autónoma de Buenos Aires, Argentina, [7]Rheumatology Unit, Hospital Privado Universitario de Córdoba, Institute University of Biomedical Sciences University of Córdoba IUCBC, Cordoba, Argentina

- 708 patients
- The incidence rate of lymphoma was 0.47 per 100 patient-years
- The prevalence of lymphoma was 2.12%
- Recurrent parotidomegaly was the main predictor of the development of this cancer

Sjogren

Abstract Number: 1567

The Risk Factors and Prognosis of Interstitial Lung Disease Associated with Primary Sjogren's Syndrome: A Multi-Center Cohort Study

Ziwei Liu[1], Mengtao Li[2], Qian Wang[1], Yan Zhao[3], Dong Xu[1] and Xiaofeng Zeng[4], [1]Peking Union Medical College Hospital, Beijing, China, [2]Department of Rheumatology and Clinical Immunology, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China, [3]Rheumatology, Peking Union Medical College Hospital, Beijing, China, [4]Rheumatology, Peking Union Medical College and Chinese Academy of Medical Sciences, Peking Union Medical College Hospital, Beijing, China

- 184 patients enrolled, 90.2% were female,
- NSIP was the most common HRCT pattern
- Steroid was administrated in 123 (66.8%) patients
- Intensive immunosuppressive treatment included cyclophosphamide (32.6%), mycophenolate mofetil (9.2%), and azathioprine (3.3%).

Patients with older age, late onset of pSS, and positive anti-Ro52 antibody were more likely to complicate ILD

Sjogren

New diagnostic markers from the saliva

- The level of salivary siglec-5/14 was significantly higher in pSS patients compared with HCs or sicca patients **(P<0.001**)
- The levels of salivary sSEMA4D were increased in patients with SS compared to healthy controls, **p = 0.002**). The sSEMA4D from sicca patients with non-SS (was similar to that of HC **(p = 0.123**).
- In sicca controls there were saliva reactivities not detectable in the serum:8/13 were Ro+, 6/13 La+, 3/13 Sm+ and 3/13 smRNP+.

Abstract Number: 1577

Soluble Siglec-5 Is a Novel Salivary Biomarker for Primary Sjogren's Syndrome

Jennifer I [illegible] Hong-Ki Min[2], Ji-Won Kim[3], Seung-Ki Kwok[4] and Sung-Hwan Park[5], [1]Rheumatology, Seoul St. Mary's Hospital, [illegible] The Catholic University of Korea, Seoul, Korea, Republic of South, [2]Division of Rheuma[illegible] Medicine, College of Medicine, The Catholic University of Korea, Seoul, Korea, Republi[illegible]tology, Department of Internal Medicine, Seoul St. Mary's Hospital, College[illegible] Korea, Republic of South, [4]Seoul St. Mary's Hospital, The Catho[illegible]Division of Rheumatology, Department of Internal Medi[illegible] of Korea, Seoul, Korea, Republic of Soul[illegible]

Abstract Number: 1576

Soluble Semaphorin 4D/CD100 Is Increased in the Saliva of Sjögren's Syndrome

Shin Eui Kang[1], Jeong Seok Lee[2], Ji Soo Park[1], Ji Hye Lee[2], Jeong Yeon Kim[1], Hyun Jung Yoo[2], Young Lee[4], Eun Bong Lee[2] and Yeong Wook Song[1,5], [1]Department of Molecular Sciences, Graduate School of Convergence Science and Technology, Seoul [illegible], South, [2]Division of Rheumatology, Department of Internal [illegible], Republic of South, [3]Division of Rheumatology, Department of Internal Medicine, Hospital, Gyeonggi-do, Korea, Republic [illegible], National University College [illegible], Hospital, Seoul, Ko[illegible]

Abstract Number: 1574

Autoantibodies Present in Saliva from Sjogren's Syndrome and Non-Sjogren's Sicca Patients Are Not Detectible in Serum

Kristi A. Koelsch[1,2,3], Joshua Cavett[3,4], Kenneth Smith[3], Jacen Maier-Moore[5], Astrid Rasmussen[3], David M. Lewis[6], Lida Radfar[7], Biji T. Kurien[2,4,8], Judith A. James[3,9], Kathy L. Sivils[10], A. Darise Farris[11] and R. Hal Scofield[2,11,12], [1]Section of Endocrinology and Diabetes, University of Oklahoma Health Sciences Center, Okalahoma City, OK, [2]U.S. Department of Veterans Affairs Medical Center, Oklahoma City, OK, [3]Arthritis and Clinical Immunology Program, Oklahoma Medical Research Foundation, Oklahoma City, OK, [4]College of Medicine, University of Oklahoma Health Sciences Center, Oklahoma City, OK, [5]Clinical Laboratory Science, University of Texas at El Paso, El Paso, TX, [6]Department of Oral and Maxillofacial Pathology, University of Oklahoma College of Dentistry, Oklahoma City, OK, [7]Department of Oral Diagnosis and Radiology, University of Oklahoma College of Dentistry, Oklahoma City, OK, [8]Arthritis and Clinical Immunology, Oklahoma Medical Research Foundation, Oklahoma City, OK, [9]University of Oklahoma Health Sciences Center, Oklahoma City, OK, [10]Arthritis and Clinical Immunology Program, Oklahoma Medical Research Foundation, Oklahoma, OK, [11]Arthritis and Clinical Immunology Research Program, Oklahoma Medical Research Foundation, Oklahoma City, OK, [12]Medicine, University of Oklahoma Health Sciences Center, Oklahoma City, OK

Ευχαριστώ

kosdelis@gmail.com