



ACR/ARHP
Annual Meeting
San Diego • 2017

San Diego

ACR 2017 San Diego

Highlights in Systemic Sclerosis

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Επιμελητής Ρευματολογικής Κλινικής
251 ΓΝΑ

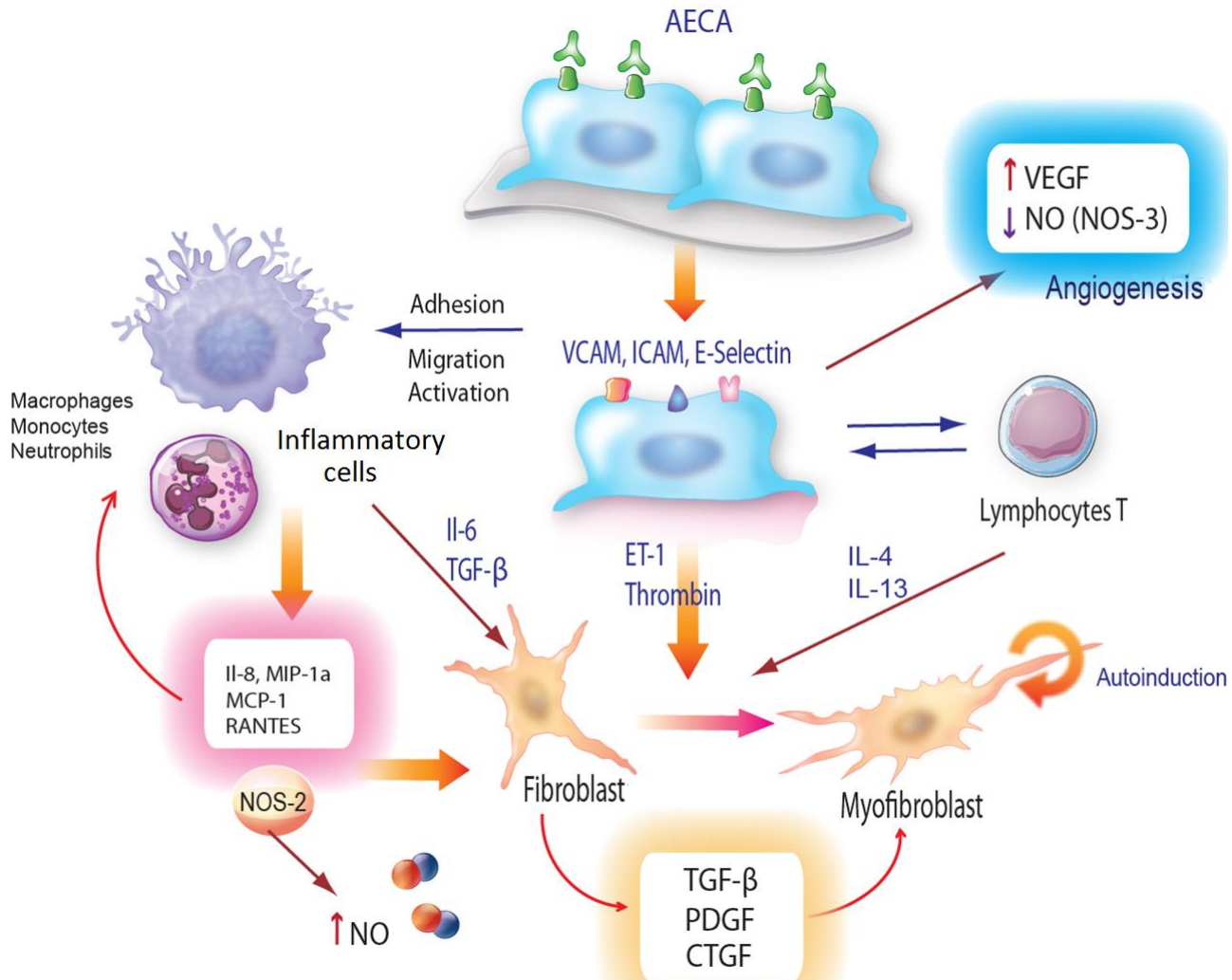
Σύγκρουση Συμφερόντων

Καμία για αυτή την παρουσίαση

Τι ειπώθηκε στο ACR meeting για το Σκληρόδερμα

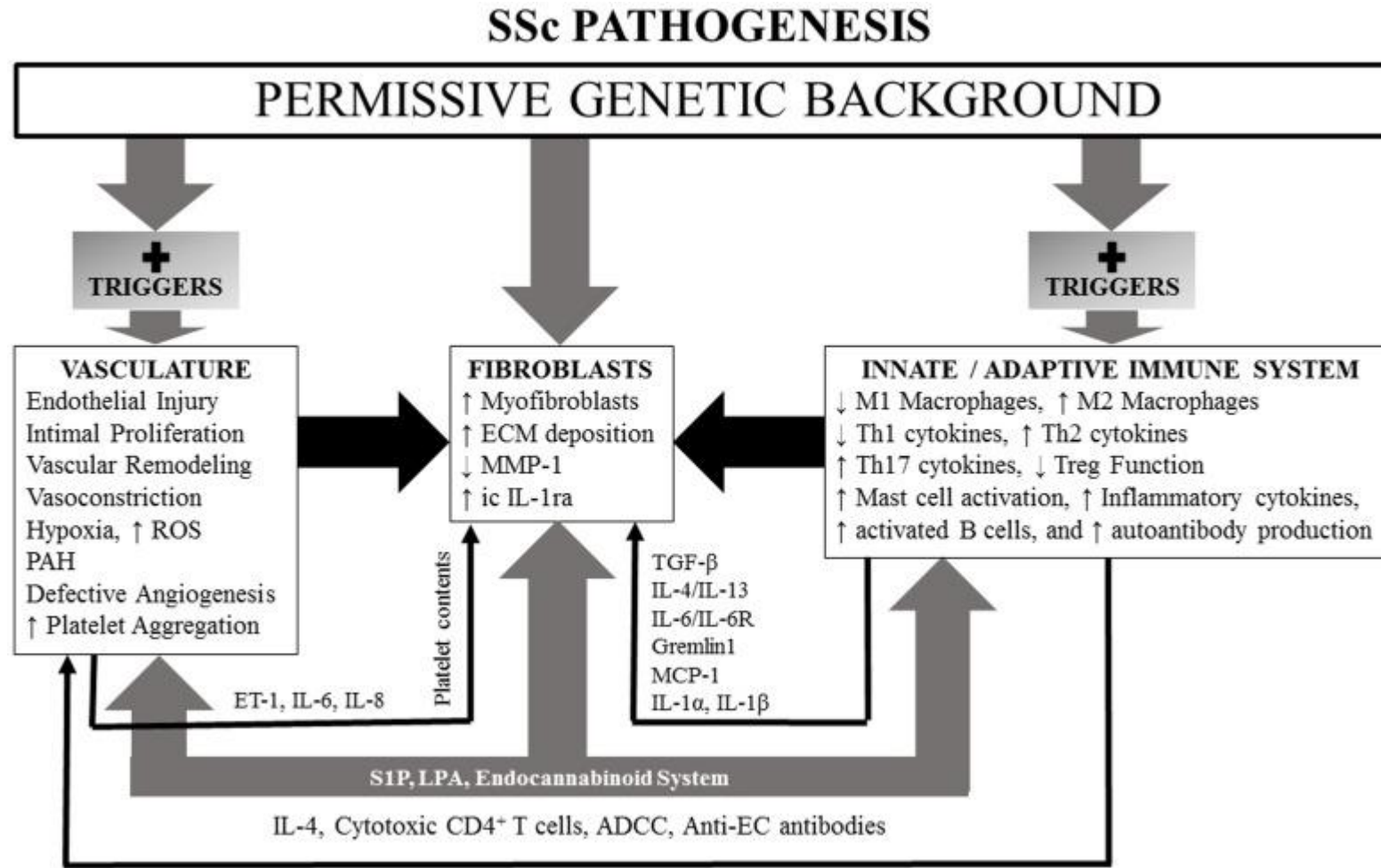
- Παθοφυσιολογία (Basic science)
- Γενετική (Genetics)
- Κλινική πρακτική (Clinical Practice)
- Θεραπεία (Treatment)
- Μελλοντικοί στόχοι (what's next..?)

Παθοφυσιολογία στο Σκληρόδερμα



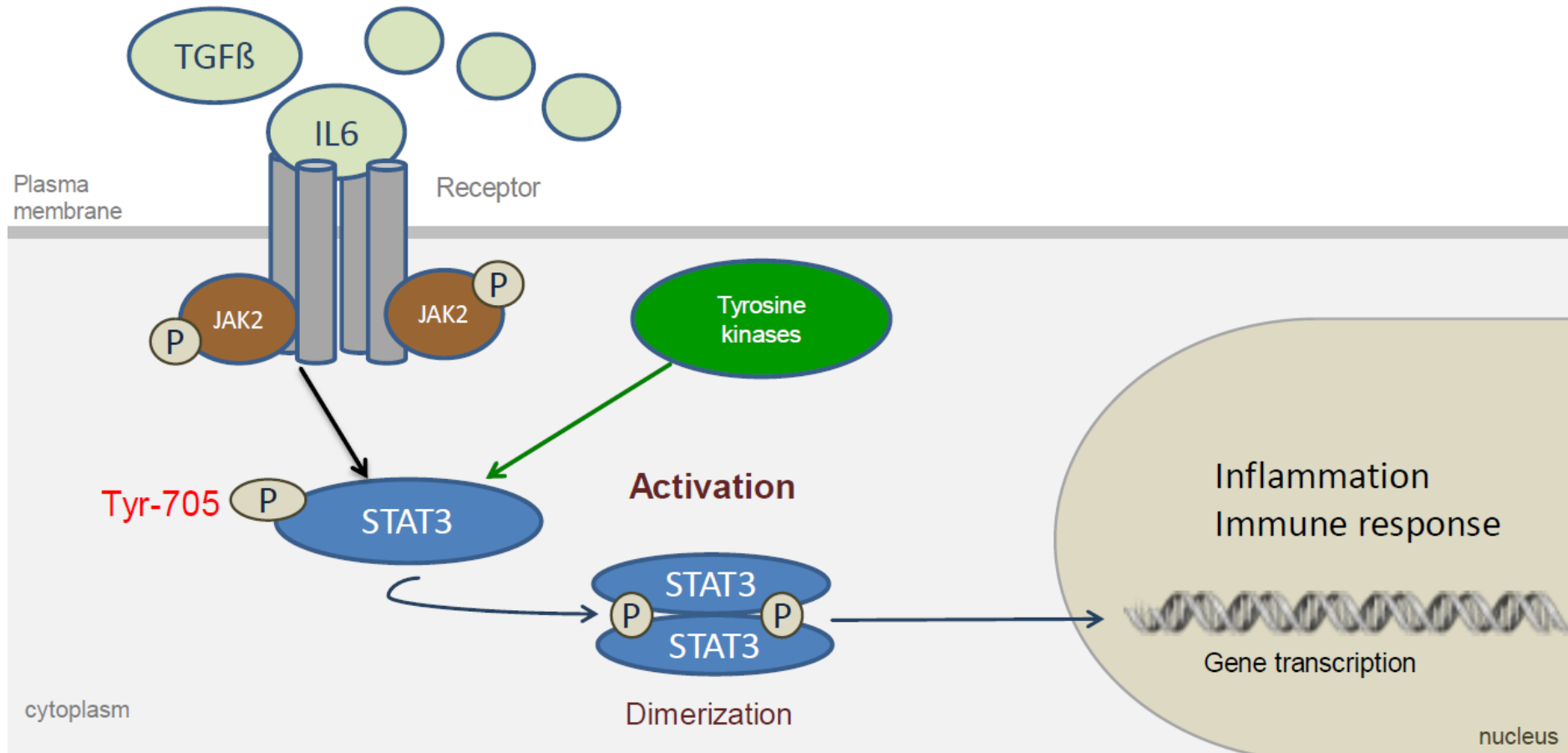
Mediators	Role in fibrogenesis
CTGF	Regulation of fibroblast proliferation and migration
ET-1	Regulation of ECM production and contraction
FGF	Regulation of fibroblast growth
IL-1	Inflammatory mediator
IL-4	Regulation of collagen synthesis
IL-6	Regulation of α -SMA expression in myofibroblasts
IL-10	Anti-inflammatory mediator; lymphocyte B proliferation
IL-12	Regulation of collagen synthesis
IL-13	Induction of TGF- β
IL-17	Fibroblast proliferation
MCP-1	Inflammatory mediator; regulation of collagen synthesis
MCP-3	Regulation of collagen synthesis
PDGF	Induction of TGF- β receptor expression; Recruitment of progenitor cells and fibroblasts
TGF- β	Extracellular matrix (ECM) synthesis; Fibroblast proliferation, activation, and migration
TNF- α	Lymphocyte recruitment, pro-inflammatory et anti-fibrotic effects

Παθοφυσιολογία



STAT3 και «ενεργοποιητές»

STAT3 is a key transcription factor that regulates central processes



Ίνωση

- **AB1730:** [IL-6](#) upregulates expression of IL-4Ra, and stimulation of SSc monocytes with IL-4/IL-13 results in enhanced CCL2 expression in an IL-6-dependent manner
- **AB1725:** [IGFBP-4](#) exerts anti-fibrotic effects by reducing the levels of CXCR4 and pro-fibrotic factor CTGF. Reduced IGFBP-4 levels in SSc lung fibroblasts may contribute fibrotic phenotype
- **AB1718:** [Peripheral blood monocytes](#) are able to differentiate to the functional myofibroblast phenotype (potential sources of pathological tissue myofibroblasts in SSc) with sustained pro-fibrotic cytokines secretion
- **AB1716:** [XIAP](#) is upregulated in SSc fibroblasts in a TGFβ-dependent manner and promotes fibroblast activation by fostering [canonical WNT signaling](#)
- **AB1924:** [RORα](#) as a key checkpoint of TGF-β- and WNT- induced fibroblast activation

Αγγειακή Βλάβη - Αυτοφαγία

- **AB761**: Increased Expression of LIGHT/TNFSF14 and Its Receptor (TNFRSF14) in Patients with Systemic Sclerosis → seem to reflect vascular injury in SSc
- **AB1926**: The TGFβ/fra-2 axis regulates the autophagy process, leading in turn to stromal-to-myofibroblast transition
- **AB1925**: Epigenetic control of autophagy is disturbed by a TGFβ-dependent downregulation of MYST1 in SSc and promotes fibroblast-to-myofibroblast transition and tissue fibrosis

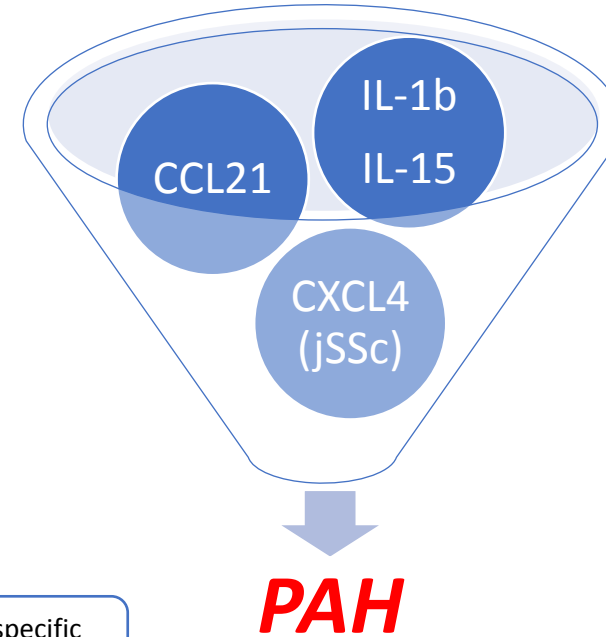
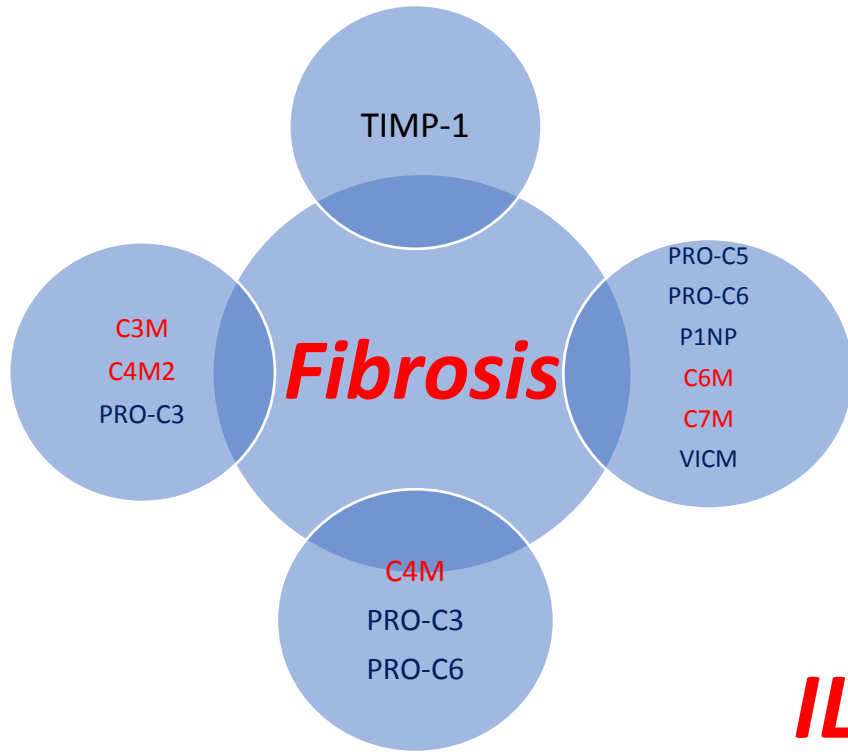
ΓΕΝΕΤΙΚΗ

- **AB1727**: Hypomethylation of type I IFN-associated genes may be involved in the pathogenesis of SSc
- **AB1713**: CTNND2 and GPATCH2L genes identified as candidates for investigation of SRC aetiopathogenesis (antiRNA polymerase III related)
- **AB754**: Numerous ISGs are differentially overexpressed in SSc pulmonary microvascular EC, suggesting that events leading to an interferon response in these cells may play a role in the pathogenesis of SSc lung vasculopathy

Κλινική Πρακτική- Μετρολογία

ACR 2017 Abstract	Δείκτης	Κοορτή	Στόχος/Σκοπός Μελέτης	Αποτέλεσμα
726 2981	CRISS (mRSS,FVC%,HAQ-DI,PT&MD GA)	SLS-(134p) FaSScinate	CYC vs PLB in ILD TCZ vs PLB in Skin (FaSScinate)	Can discriminate (caution on GA)
728	COMPASS-31 (autonomic dysfunction)	J.Hopkins (104p)	Compare according to type of SSc and Abs	GI most important irrespective of type/Abs
734	CRISS (mRSS,FVC%,HAQ-DI,PT&MD GA)	Italy (31p)	Relate CRISS to biomarkers (TIMP-1, PIIINP, HA)	TIMP-1 higher baseline in CRISS responders
735	CPET (cardiopulmonary exercise) (+DETECT)	Italy (39p)	CPET in DETECT eligible for RHC patients	reduce useless invasive RHC (39 to 17), without increasing missed diagnosis rate
1676	mRSS	Retrospect (61p)	Compare finger mRSS to “fingerless” mRSS	“fingerless” mRSS correlates better to change
2662	Scleroid	Multicenter (224p)	Compare Scleroid to SHAQ, EQ5D, SF36	Raynaud, hand function and fatigue: main patient reported drivers of disease impact

Κλινική Πρακτική – Πρόγνωση – Πιθανοί Βιοδείκτες



ILD



the integrin $\alpha\beta 3$ -specific ^{177}Lu -c(RGDfK)-ligand

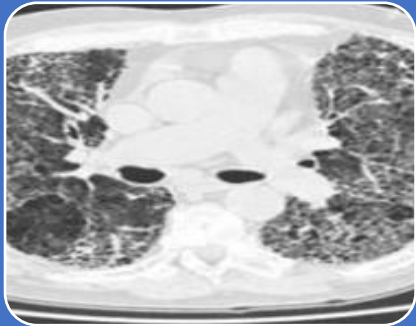
the FR- β -specific ^{18}F -Azafol

the SSTR2-specific ^{177}Lu -DOTA-NOC

^{18}F -FDG-PET and pulmonary CT scan

Κλινική Πρακτική – Θεραπεία: ILD / PAH

ILD



- **Rituximab** (iRTX- “Graz Protocol”) [RTX,500mgx2/3m→500mgx1/3m] → DLCO(~), EScSG(+),mRSS(-)
- **Cyclophosphamide pos** (SLS I,II) → Δεν διατηρείται το αποτέλεσμα μετά τη διακοπή
- **Tacrolimus** (single center, retrospective)→ TAC+χαμηλή δόση ΚΣ μετά CYC διατήρησε την ανταπόκριση σε DLCO,FVC χωρίς σοβαρές ανεπιθυμ. ενεργ.



PAH

- Δεξιά καρδιακή ανεπάρκεια (baseline)→ PAH → αυξημένη θνησιμότητα (απαίτηση για εντατικοποίηση της θεραπείας)
- DETECT follow-up → **40% (1y) PAH επιδεινώθηκε παρά τη θεραπεία** – Συσχέτιση της επιδείνωσης με: PFT, Λειτουργική χωρητικότητα, άρρεν φύλο

Κλινική Πρακτική – Θεραπεία: Δέρμα/Μυοπάθεια

Δέρμα

Tadalafil

ABSTRACT NUMBER: 2885

Tadalafil Reduces Skin Fibrosis and Profibrotic Genes Expression in Patients with Systemic Sclerosis

Sakir Ahmed, Mohit Kumar Rai, Durga Prasanna Misra and Vikas Agarwal, Clinical Immunology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India

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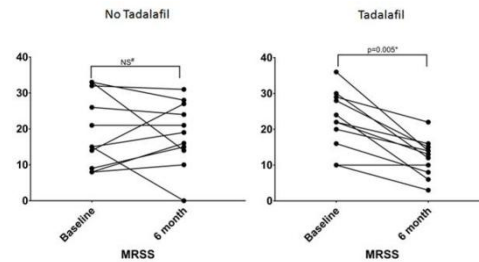


Figure 1: MRSS in patients not receiving and receiving Tadalafil
*Wilcoxon Signed rank (*NS-Not Significant)

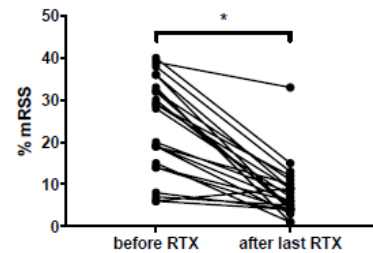
Rituximab

ABSTRACT NUMBER: 2886

Safety and Efficacy of Long-Time Intensified Rituximab Treatment in Patients with Systemic Sclerosis

Hans-Peter Brezinschek¹, Sonja Kielhauser², Winfried Graninger³ and Florentine Moazedl-Fürst², ¹Internal Medicine/Division of Rheumatology and Immunology, Medical University Graz, Austria, Graz, Austria, ²Rheumatology and Immunology, Medical University Graz, Austria, Graz, Austria, ³Rheumatology and Immunology, Medical University of Graz, Graz, Austria

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Μυοπάθεια

ASCS Algorithm

ABSTRACT NUMBER: 948

Application of a Diagnostic Algorithm to Identify Inflammatory Myopathy in Systemic Sclerosis

Vandana Bhushan^{1,2}, Adam Maundrell¹, Charlotte Proudman^{1,2}, Leah McWilliams¹, Llew Spargo¹, Robert Metcalfe¹, Jennifer Walker³, Mandana Nikpour^{4,5}, Wendy Stevens⁴, Vidya Limaye^{1,2} and Susanna Proudman^{1,2}, ¹Rheumatology Unit, Royal Adelaide Hospital, South Australia, Adelaide, Australia, ²Discipline of Medicine, University of Adelaide, South Australia, Adelaide, Australia, ³Flinders University of South Australia, Adelaide, Australia, ⁴St Vincent's Hospital, Melbourne, Victoria, Melbourne, Australia, ⁵Department of Medicine, University of Melbourne, Victoria, Melbourne, Australia

Meeting: 2017 ACR/ARHP Annual Meeting

IVIg (+CS)

ABSTRACT NUMBER: 2888

Corticosteroid-Sparing Benefit of Intravenous Immunoglobulins in Systemic Sclerosis-Associated Inflammatory Myopathy: A Retrospective Study of 54 Patients

Benjamin Chaigne¹, Simao Rodeia², Nouria Benmostefa^{2,3,4}, Alice Bérezné⁵, Pascal Cohen⁶, Alexis Regent⁷, Benjamin Terrier⁸, Nathalie Costedoat-Chalumeau⁹, Loïc Guillemin⁹, Claire Le Jeune⁹ and Luc Mouthon¹⁰, ¹Service de Médecine Interne, Centre de Référence Maladies Systémiques Autoimmunes Rares d'Ile de France, Hôpital Cochin, DHU Authors, Assistance Publique-Hôpitaux de Paris, Paris, France, ²Service de Médecine Interne, Centre de Référence Maladies Systémiques Autoimmunes Rares d'Ile de France, DHU Authors, Hôpital Cochin, Assistance Publique-Hôpitaux de Paris, Paris, France, ³Service de Médecine Interne, Centre de Référence Maladies Systémiques Autoimmunes Rares d'Ile de France, DHU Authors, Université de Sétif 1, Sétif, Algeria, ⁴Faculté de Médecine, Université de Sétif 1, Sétif, Algeria, ⁵Internal Medicine, National Referral Center for Rare Systemic Autoimmune Diseases, Hôpital Cochin, Paris, France, ⁶Service de Médecine Interne, Hôpital Cochin, Centre de référence national pour les maladies systémiques autoimmunes rares d'Ile de France, DHU Authors, Assistance Publique-Hôpitaux de Paris (AP-HP), Paris, France, Paris, France, ⁷National Referral Center for Rare Systemic Autoimmune Diseases, Hôpital Cochin, AP-HP, Université Paris Descartes, Paris, France, ⁸Service de médecine Interne Pôle médecine, Hôpital Cochin, Centre de référence maladies auto-immunes et systémiques rares de l'Ile de France, Paris, France, ⁹Internal medicine, Cochin University Hospital, Paris, France, ¹⁰Service de Médecine Interne, Hôpital Cochin, Centre de référence national pour les maladies systémiques autoimmunes rares d'Ile de France, DHU Authors, Assistance Publique-Hôpitaux de Paris (AP-HP), Paris, France; Université Paris Descartes Sorbonne Paris, Paris, France

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Συνδυασμός MSA+MRI
→ 4πλασια πιθανότητα
για θετική βιοψία μυός

Ασθενείς σε θεραπεία
με IVIG μπόρεσαν να
απογαλακτιστούν
ευκολότερα και
γρηγορότερα από τα ΚΣ

Κλινική Πρακτική– Θεραπεία: Νεφρική κρίση/Raynaud/ΓΟΠΝ



ABSTRACT NUMBER: 2889

Aminaphtone Ameliorates Clinical Symptoms and Increases Skin Blood Perfusion in Patients with Both Primary and Secondary Raynaud Phenomenon: A Six-Month Open Study

Alberto Sulli¹, Maurizio Cutolo², Carmen Pizzorni², Sabrina Paolino², Elisa Alessandri², Emanuele Gotelli² and Barbara Ruaro², ¹Research Laboratory and Academic Division of Clinical Rheumatology, Department of Internal Medicine, University of Genova, IRCCS San Martino, Genoa, Italy, Genoa, Italy, ²Research Laboratory and Academic Division of Clinical Rheumatology, Department of Internal Medicine, University of Genova, San Martino, Genoa, Italy, Genoa, Italy

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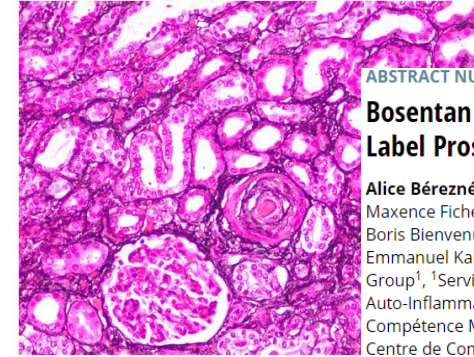
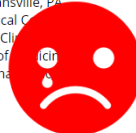


ABSTRACT NUMBER: 1686

Topical Nitroglycerine (NTG) Vs Matching Vehicle in Secondary Raynaud Phenomenon (RP) – a Double-Blind Crossover Study of Subjective and Physiologic Responses to Controlled Cold Challenge

Dinesh Khanna¹, Lorele Mendez², Rajaje Namas³, Mary Ellen Csuka⁴, Paul Caldron⁵, Jerry A. Molitor⁶, Alan J. Kivitz⁷, Philip Waller⁸, Lee Shapiro⁹, Sabeen Najam¹⁰, Amber Khan¹¹, Virginia D. Steen¹², Aneureka Chadha¹³ and James R Seibold¹⁴, ¹University of Michigan, Ann Arbor, MI, ²Medical Research Center of Miami, Miami, FL, ³Department of Medicine (Division of Rheumatology), University of Michigan, Ann Arbor, MI, ⁴Medicine, Medical College of Wisconsin, Milwaukee, WI, ⁵Arizona Arthritis & Rheumatology Research PLLC, Phoenix, AZ, ⁶Rheumatic & Autoimmune Diseases, University of Minnesota, Minneapolis, MN, ⁷Altoona Center for Clinical Research, Duncansville, PA, ⁸Accurate Clinical Research Inc, Houston, TX, ⁹Rheumatology, Albany Medical College, Albany, NY, ¹⁰Accurate Clinical Management LLC, Baytown, TX, ¹¹Accurate Clinical Management LLC, Houston, TX, ¹²Division of Rheumatology, Department of Medicine, MedStar Georgetown University Hospital, Washington, DC, ¹³Austin Regional Medical Center, Austin, TX, ¹⁴Scleroderma Research Consultants LLC, Litchfield, CT

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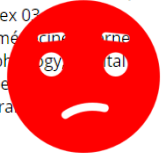


ABSTRACT NUMBER: 2671

Bosentan in Scleroderma Renal Crisis: A National Open Label Prospective Study

Alice Bérezné^{1,2}, Hedy ABDOUL³, Alexandre Karras⁴, Isabelle Marie⁵, Antoine Huart⁶, Maxence Ficheux⁷, Viviane Queyrel⁸, Bernard Imbert⁹, Xavier Puéchal¹, Arnaud Hot¹⁰, Boris Bienvenu¹¹, Elisabeth Diot¹², Bruno Moulin¹³, Thomas Quémener¹⁴, Jean-Emmanuel Kahn¹⁵, Luc Mouthon¹ and Loïc Guillemin for the French Vasculitis Study Group¹, ¹Service de Médecine Interne, Centre de Référence Maladies Auto-Immunes et Auto-Inflammatoires Systémiques Rares, Hôpital Cochin, Paris, France, ²Centre de Compétence Maladies Auto-Immunes et Auto-Inflammatoires Systémiques Rares, Centre de Compétence Eosinophiles CEREO, Hôpital Anecy Genevois, Anecy, France, ³Centre d'investigation Clinique Paris Descartes, Necker-Cochin, Paris, Unité de Recherche Clinique, Paris, France, ⁴Nephrology, HEGP, Paris, France, ⁵Internal medicine, Hôpital Bois Guillaume, ROUEN, France, ⁶Nephrology, Hôpital Rangueil, Toulouse, France, ⁷Néphrologie, Hôpital Clémenceau, CAEN, France, ⁸Internal medicine, Hôpital de l'Arche, NICE, France, ⁹Grenoble, Grenoble, France, ¹⁰Department of Internal Medicine, Edouard Herriot University Hospital, Hospices Civils de Lyon, Lyon cedex 03, France, ¹¹Internal Medicine, Hôpital de la côte de Nacre, Caen, France, ¹²Pôle médecine et gériatrique, pneumologie, Hôpital Bretonneau, Tours, France, ¹³Néphrologie, Hôpital de Strasbourg, STRASBOURG, France, ¹⁴Service de néphrologie, médecine interne, Hôpital de Valenciennes, Valenciennes, France, ¹⁵foch hospital, foch, France

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ABSTRACT NUMBER: 750

Diltiazem Gel As a New Local Treatment for Scleroderma Digital Ulcers

Mohammad Ali Nazarinia¹, Elmira Esmailzadeh² and Saeedeh Shenavandeh³, ¹Shiraz Geriatric Research Center, Shiraz University of Medical Sciences, Shiraz, Iran, Shiraz, Iran (Islamic Republic of), ²Department of Internal Medicine, Division of Rheumatology, Shiraz University of Medical Sciences, Shiraz, Iran., Shiraz, Iran (Islamic Republic of)

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ABSTRACT NUMBER: 1677

Low Baseline Impedance in Proximal Esophagus and Decreased Pspw Index May Related with Pathogenesis of Interstitial Lung Disease in Systemic Sclerosis

Yunseok Kim¹, Hyun-Sook Kim², Joon Seong Lee¹ and Jung Ran Choi³, ¹Internal medicine, Soonchunhyang university Seoul hospital, Seoul, Korea, Republic of (South), ²Soonchunhyang university school of medicine, Seoul, Korea, Republic of (South), ³Department of Internal Medicine, Pohang St. Mary Hospital, Pohang, Korea, Republic of (South)

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ABSTRACT NUMBER: 2676

Reduction of Dico and FVC in Patients with GERD and Systemic Sclerosis

Rodrigo Aguila Maldonado¹, Pterina Sansinanea², Claudia Elizabeth Pena¹, Ana Carolina Costi¹, Ariel Vulcano², Adriana Testi², Mariana Pera³, Lucila Garcia², Valeria Arturi³, Viviana Nagua² and Mercedes Garcia¹, ¹Rheumatology, HIGA General San Martin La Plata, La Plata, Argentina, ²Rheumatology, HIGA General San Martin La Plata, la plata, Argentina, ³HIGA General San Martin La Plata, la plata, Argentina

Meeting: 2017 ACR/ARHP Annual Meeting

ABSTRACT NUMBER: 1678

Pathogenic Mechanisms of Esophageal Peristaltic Dysfunction By High Resolution Manometry in Patients with Systemic Sclerosis

Hyun-Sook Kim¹, Yunseok Kim², Jung Ran Choi³ and Joon Seong Lee², ¹Soonchunhyang university school of medicine, Seoul, Korea, Republic of (South), ²Internal medicine, Soonchunhyang university Seoul hospital, Seoul, Korea, Republic of (South), ³Department of Internal Medicine, Pohang St. Mary Hospital, Pohang, Korea, Republic of (South)

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ABSTRACT NUMBER: 2684

Regional and Whole Gut Transit Times in Patients with Systemic Sclerosis Using the Wireless Motility Capsule

Neetu Balli¹, Isela Valera², Aly Aly³, Jeffrey Conklin⁴, Daniel E. Furst⁵ and Suzanne Kafaja⁶, ¹Pediatric Gastroenterology, Hepatology, and Nutrition, David Geffen School of Medicine at UCLA, Los Angeles, CA, ²Autoimmunity and Tolerance Laboratory, Division of Rheumatology, Department of Medicine, David Geffen School of Medicine at University of California Los Angeles, Los Angeles, CA, ³Chambillon St., Alexandria Faculty of Medicine, Alexandria, Egypt, ⁴Medicine, Division of Digestive Diseases at UCLA, Los Angeles, CA, Los Angeles, CA, ⁵David Geffen School of Medicine at UCLA, Los Angeles, CA, ⁶Department of Internal Medicine, University of California Los Angeles, David Geffen School of Medicine, Division of Rheumatology, Los Angeles, CA

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Connection between GERD, ILD, autonomic dysfunction and fibrosis ??

Or...not!

Κλινική Πρακτική – Τι θα δούμε στο μέλλον;

ABSTRACT NUMBER: 1707

Effect of **Anabasum (JBT-101)** on Gene Expression in Skin Biopsies from Subjects with Diffuse Cutaneous Systemic Sclerosis (dcSSc) and the Relationship of Baseline Molecular Subsets to Clinical Benefit in the Phase 2 Trial

Viktor Martyanov¹, Yolanda Nesbeth², Guoshuai Cai¹, Tammara A. Wood¹, Jake Reder², Scott Constantine³, Barbara White³, Robert F. Spiera⁴ and Michael L. Whitfield¹,
¹Department of Molecular and Systems Biology, Geisel School of Medicine at Dartmouth, Hanover, NH, ²Celdara Medical, LLC, Lebanon, NH, ³Corbus Pharmaceuticals, Inc., Norwood, MA, ⁴Rheumatology, Hospital for Special Surgery, New York, NY

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ABSTRACT NUMBER: 1711

SIRT1 May Protect Against Systemic Sclerosis-Related Pulmonary Fibrosis By Decreasing Pro-Inflammatory and Pro-Fibrotic Processes

Haiyan Chu¹, Shuai Jiang², Qingmei Liu³, Feng Qian⁴, Xiaodong Zhou⁵, Maureen D. Mayes⁶, Li Jin⁷ and **Jiucun Wang**⁸,
¹MOE Key Laboratory of Contemporary Anthropology, State Key Laboratory of Genetic Engineering and Ministry of Education Key Laboratory of Contemporary Anthropology, Collaborative Innovation Center for Genetics and Development, School of Life Sciences, Fudan University, Shanghai, China, ²State Key Laboratory of Genetic Engineering and Ministry of Education Key Laboratory of Contemporary Anthropology, Collaborative Innovation Center for Genetics and Development, School of Life Sciences, Fudan University, Shanghai, China, ³State Key Laboratory of Genetic Engineering and Ministry of Education Key Laboratory of Contemporary Anthropology, Collaborative Innovation Center for Genetics and Development, School of Life Sciences, Fudan University, Shanghai, China, ⁴Ministry of Education Key Laboratory of Contemporary Anthropology, School of Life Sciences, Fudan University, Shanghai, China, ⁵Internal Medicine-Rheumatology, University of Texas McGovern Medical School, Houston, TX, ⁶University of Texas McGovern Medical School, Houston, TX, ⁷State Key Laboratory of Genetic Engineering, Collaborative Innovation Center for Genetics and Development, School of Life Sciences, Fudan University, Shanghai, China, ⁸State Key Laboratory of Genetic Engineering, Collaborative Innovation Center for Genetics and Development, School of Life Sciences, Fudan University, Shanghai, CN

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ABSTRACT NUMBER: 774

The α V Integrin Inhibitor **Abituzumab** Inhibits Myofibroblast Differentiation

Eileen Samy¹, Yin Wu¹, Georgianna Higginbotham², Roland Grenningloh² and Daigen Xu²,
¹TIP Immunology, EMD Serono Research & Development Institute, Inc. (a business of Merck KGaA, Darmstadt, Germany), Billerica, MA, ²EMD Serono Research & Development Institute, Inc. (a business of Merck KGaA, Darmstadt, Germany), Billerica, MA

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ABSTRACT NUMBER: 1720

TGF- β -Induced Tissue Fibrosis in TBR1caCol1Cre Transgenic Mice Is Abrogated By the Second Generation Tyrosine Kinase Inhibitor **SKI-606 (Bosutinib)**

Peter J. Wermuth and Sergio A. Jimenez, Jefferson Institute of Molecular Medicine, Division of Connective Tissue Diseases and Scleroderma Center, Thomas Jefferson University, Philadelphia, PA

Meeting: 2017 ACR/ARHP Annual Meeting

ABSTRACT NUMBER: 1706

Dipeptidyl-Peptidase-4 (DPP4) Promotes Fibroblast Activation and is a Potential Molecular Target for Treatment of Fibrosis

Alina Soare¹, Hermina Györfy¹, Alexandru Matei¹, Clara Dees¹, Chih-Wei Chen¹, Andreas Ramming², Georg Schett³ and Jörg Distler¹,
¹Department of Internal Medicine 3 – Rheumatology and Immunology, Universitätsklinikum Erlangen, Friedrich-Alexander-University Erlangen-Nürnberg (FAU), Erlangen, Germany, ²Friedrich-Alexander-University Erlangen-Nürnberg (FAU), Erlangen, Germany, ³Friedrich-Alexander-University Erlangen-Nürnberg (FAU), Department of Internal Medicine 3 – Rheumatology and Immunology, Universitätsklinikum Erlangen, Erlangen, Germany, Erlangen, Germany

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IL-6 Mediates Activation of Macrophages in Patients with Systemic Sclerosis

Rajan Bhandari¹, Michael Ball², Viktor Martyanov³, Dillon Popovich⁴, Mary A. Carns⁵, Kathleen Aren⁵, Monique Hinchcliff⁶, Michael L. Whitfield⁷ and Patricia A. Pioli⁸,
¹Geisel School of Medicine at Dartmouth, Lebanon, NH, ²Geisel School of Medicine at Dartmouth, Lebanon, NH, ³Department of Molecular and Systems Biology, Geisel School of Medicine at Dartmouth, Hanover, NH, ⁴Geisel School of Medicine at Dartmouth, Hanover, NH, ⁵Northwestern University, Feinberg School of Medicine Scleroderma Program, Chicago, IL, ⁶Rheumatology, Northwestern Medicine, Chicago, IL, ⁷Molecular and Systems Biology, Geisel School of Medicine at Dartmouth, Hanover, NH, ⁸Microbiology and Immunology, Geisel School of Medicine at Dartmouth, Hanover, NH

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ABSTRACT NUMBER: 1705

Inhibition of **EZH2** Stops Fibrosis and Improves Angiogenesis in Scleroderma

Pei-Suen Tsou¹, Phillip L. Campbell², M. Asif Amin³, Patrick Coit¹, David Fox⁴, Dinesh Khanna⁵ and Amr H Sawalha¹,
¹Division of Rheumatology, University of Michigan, Ann Arbor, MI, ²Rheumatology, Division of Rheumatology, University of Michigan Medical Center, Ann Arbor, MI, ³Division of Rheumatology and Clinical Autoimmune Center of Excellence, University of Michigan, Ann Arbor, MI, Ann Arbor, MI, ⁴Department of Medicine [Division of Rheumatology], University of Michigan Medical System, Ann Arbor, MI, ⁵University of Michigan, Ann Arbor, MI

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Και από όλα αυτά τι να κρατήσω...?

- ✓ STAT3, JAK, TGFβ, ενεργοποίηση και «μετατροπή» μακροφάγων
- ✓ Η ίνωση είναι ο νέος θεραπευτικός στόχος
- ✓ Χρειάζεται έγκαιρη διάγνωση και πιθανότερα συνεχής παρέμβαση (ILD και PAH)
- ✓ Rituximab, Tocilizumab, DPP4s, Tadalafil = χρήσιμα
- ✓ Triplex καρδιάς, ΗΚΓφημα για PAH στην κλινική πράξη
- ✓ Aminophytone, Anabasum = άμεσο μέλλον

Ευχαριστώ!

