

POSTER SESSION

Poster session will take place in the Poster Area on **Friday, March 15 from 13:30 to 14:30** and on **Saturday, March 16 from 13:00 to 14:00**. Authors have been given a number and must be fixed on the poster board marked with the same number.

Posters can be hanged from 15:00 to 18:00 of Thursday, March 14 and from 07:45 of Friday, March 15 and removed within 16:00 of Saturday, March 16. Velcro to hang poster will be available on each poster board.

Poster panel height is cm 200 and the usable surface in vertical size is cm. 97 (width) and cm. 180 (height).

Authors are kindly asked on Friday 15 and Saturday 16 March to stand by their poster during the Poster Session time for discussion with delegates.

Otherwise please hang a note to inform when you will be available.

01. PATHOGENESIS, CELLULAR & ANIMAL

- P.001 Adipose-Derived Mesenchymal Stromal Cells in a mouse model of systemic sclerosis: impact on disease manifestations and on myeloid cell populations**
[Francois Zimmermann](#), Laura Morin, Severine Loisel, Elise Dessauge, Marie Lelong, Juliette Gauthier, Thomas Lejeune, Céline Delalay, Karin Tarte, Alain Lescoat, Valérie Lecreur
- P.002 The Beta secretase BACE1 drives fibroblasts activation in Systemic Sclerosis through the APP/B-catenin/Notch signalling axis**
 Christopher Wasson, Enrico De Lorenzis, Eva Clavane, Rebecca Ross, Begona Caballero-Ruiz, Rebecca Wells, Paul Meakin, [Francesco Del Galdo](#)
- P.003 Oral tolerance with collagen V alpha 1 chain reduces pulmonary fibrosis and vasculopathy in SSc/IMU-COLV model: a preliminary study**
[Ana Paula Velosa](#), Thays de Matos Lobo, Zelita Aparecida de Jesus Queiroz, Antonio dos Santos Filho, Vitor Daniel Souza, Jaine Almeida, Sandra Fernezlian, Lizandre Ramos da Silveira, Sergio Catanozi, Vera Luiza Capelozzi
- P.004 Systemic S100A4 levels are increased in scleroderma-interstitial lung disease, decrease upon cyclophosphamide/rituximab treatment, and predict the treatment response and progression to early disease**
[Hana Storkanova](#), Lucie Andres Cerezo, Sabina Oreska, Aneta Jirankova, Anna Bobrova, Katerina Bobrova, Barbora Hermankova, Jörg Klingelhöfer, Rizwan I Hussain, Jonas Hallén, Jörg HW Distler, Karel Pavelka, Ladislav Senolt, Jiri Vencovsky, Radim Becvar, Michal Tomcik
- P.005 Do early and late histopathological and radiological findings vary depending on animal species and strains in the bleomycin-induced animal model?**
[Duygu Temiz Karadag](#), Seda Duman Ozturk, Ozgur Cakir, Cuneyt Ozer, Gurler Akpınar, Murat Kasap, Ayten Yazici, Ayse Cefle
- P.006 MiRNAs in systemic sclerosis patients with digital ulcer: markers and effectors**
 Yair Levy, Campochiaro Corrado, Tzipi Hornik-Lurie, Dana Shalmiav, Itzhak Amoyal, Maia Yamila Koho, Liat Drucker, Serena Guiducci, Dilia Giuggioli, Lorenzo Dagna, Marco Marco Maturi Cerinic, [Shelly Tartakover Matalon](#)
- P.007 Mechanotransduction via myosin II isoforms contributes to TGFbeta-driven fibroblast activation**
 Barbara Russo, Maria Shutova, Fanny Noulet, George Romanescu, Nicolo Brembilla, Wolf-Henning Boehncke
- P.008 Leveraging Novel SSc Disease Signatures to Build a Humanized Drug Discovery Funnel**
[Lauren Reinke-Breen](#), Sunhwa Kim, Laura Leys, Lauren Olson, Anastasia Marinopoulos, Jozsef Karman, Chris Butler, Jennifer Van Camp, Lisa Hazelwood
- P.009 Sequencing Patient-Derived Circulating micro-RNAs for Identification of Biomarkers of Systemic Sclerosis**
[James Pritchett](#), Fiona Wilkinson, Leo Zeef, Ben Parker, Sarah Dyball, Ian Bruce
- P.010 JAK/STAT pathway as a potential target of PPAR-gamma activation in the regulation of the pro-fibrotic phenotype of fibroblasts in systemic sclerosis**
[Nicolas Perrard](#), Thomas Machet, Matthias Danes, Manel Jendoubi, Sebastien Sanges, Sylvain Dubucquoi, David Launay, Silvia Specia
- P.011 Effects of crystalline silica exposure in the HOCl-induced systemic sclerosis mouse model**
[Laura Morin](#), Francois Zimmermann, Marie Lelong, Patrice Hemon, Alain Lescoat, Valerie Lecreur
- P.012 Characterization by mass cytometry of immune cell populations in two mouse models of SSc-interstitial lung disease**
[Laura Morin](#), Francois Zimmermann, Marie Lelong, Patrice Hemon, Alain Lescoat, Valerie Lecreur
- P.014 Profiling plasma biomarkers to identify M2 macrophage associated fibrosis signature in early-stage systemic sclerosis**
[Laura Leeves](#), Zestranyan Kannan, Yunus Ali, Tamir Malley, David Abraham, Andrew Leask, Bruce Riser, Bahja Ahmed Abdi, Richard Stratton
- P.015 Plasma CD40L (CD154) Is Increased in Patients with Early Systemic Sclerosis and Reflects Platelets Activation**
[Otylia Kowal-Bielecka](#), Pawel Bielecki, Natalia Szymanska, Krzysztof Kowal
- P.016 Global DNA methylation and histone 4 modifications in a cohort of bulgarian patients with systemic sclerosis – a pilot study**
[Tsvetelina Kostova](#), Maria Kazakova, Rositsa Karalilova, Victoria Sarafian, Anastas Batalov



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01. PATHOGENESIS, CELLULAR & ANIMAL

P.017 **Treprostinil Restores Normal the Functional phenotype of scleroderma (SSc) Vascular Smooth Muscle Cells (vSMCs) by Inhibiting Yap and Activating PPARG Signaling**
Bashar Kahaleh, Yongqing Wang

P.018 **Identifying a Signature of Adipocyte to Fibroblast Transition In Systemic Sclerosis**
Helen Jarnagin, Rezvan Parvizi, Madeline Morrisson, Zhiyun Gong, Patricia A. Pioli, Michael L. Whitfield

P.019 **Overexpression of BAG3 (Bcl2-associated athanogene3) in serum and skin of patients with systemic sclerosis**
Margot De Marco, Antonia Falco, Annalisa Cammarota, Francesca Repucci, Liberato Marzullo, Alessandra Rosati, Antonina Minniti, Giuseppe Armentaro, Claudia Iannone, Maria Rosa Pellico, Silvia Cavalli, Roberto Caporali, Maria Caterina Turco, Nicoletta Del Papa

P.020 **Fcγ Receptors: Orchestrators of Pro-Phagocytic Macrophages and Disrupted Resolution in Systemic Sclerosis**
Amela Hukara, Gino Andrea Bonazza, Tracy Tabib, Raphael Micheroli, Suzana Jordan, Kristina Bürki, Sylvie Schiltz Schönbacher, Michal Rudnik, Adrian Ciurea, Oliver Distler, Robert Lafyatis, Przemyslaw Blyszczuk, Gabriela Kania

P.021 **Determination of the Functional State of the M1-Macrophages in the Blood in Systemic Sclerosis**
Elena Gerasimova, Tatiana Kirichenko, Alexander Markin, Anastasia Bogatyreva, Olga Koneva, Tatiana Popkova

P.022 **Mitochondrial DNA copy number in patients with untreated systemic sclerosis**
Elena Gerasimova, Tatiana Kirichenko, Anastasia Bogatyreva, Olga Koneva, Yuliya Markina, Tatiana Popkova, Alexander Markin

P.023 **RNA-containing immune complexes induce type I and III interferons in SSc blood leukocytes**
Shamisa Adeli, Össur I. Emilsson, Erik Hellbacher, Karin Hjorton, Paul Runeson, Anastasios Christias, Per M. Hellström, Andrei Malinovsky, Maija-Leena Eloranta

P.024 **Detection of early pulmonary alterations in the IMU-COLV mice model**
Vitória Elias Contini, Ana Paula Pereira Velosa, Zelita Aparecida de Jesus Queiroz, Sergio Catanozi, Antonio dos Santos Filho, Sandra de Moraes Fernezlian, Lizandre Keren Ramos da Silveira, Thays de Matos Lobo, Camila Machado Baldavira, Denise Frediane Barbeiro, Aritania Souza Santos, Percival Degrava Sampaio-Barros, Vera Luiza Capelozzi, Walcy Rosolia Teodoro

P.025 **Exploring Macrophage Responses in Systemic Sclerosis: Experimental Insights and Therapeutic Potential of Vitamin D3 and Alpha-Tocopherol Acetate**
Bohdana Doskaliuk, Liubomyr Zaiats, Roman Yatsyshyn

P.026 **Proportion of type V collagen modulates the evolution of skin fibrosis in IMU-COLV mice model**
Zelita Aparecida De Jesus Queiroz, Ana Paula Pereira Velosa, Vitória Elias Contini, Juliana Sampaio Silva, Sergio Catanozi, Antonio dos Santos Filho, Sandra de Moraes Fernezlian, Lizandre Keren Ramos da Silveira, Thays de Matos Lobo, Solange Carrasco, Aritania Souza Santos, Debora Levy, Vera Luiza Capelozzi, Walcy Rosolia Teodoro

P.027 **Extracorporeal photopheresis prevents inflammation and fibrosis in a mouse model of systemic sclerosis**
Aurore Collet, Manel Jendoubi, Thomas Guerrier, Silvia Specca, Alexis Largy, Arnaud Lionet, Sylvain Dubucquoi, David Launay

P.028 **Myofibroblasts in SSc are a heterogeneous population with epigenetically stable phenotype in vitro**
Begoña Caballero-Ruiz, Rebecca Ross, Clarissa Corinaldesi, Christina Philippeos, Fiona M. Watt, Natalia Riobo-Del Galdo, Francesco Del Galdo

P.029 **Mutual amplification of hedgehog and cJUN signaling promote fibroblast activation in SSc**
Christina Bergmann, Sara Chenguiti Fakhouri, Honglin Zhu, Clara Dees, Benita Merlevede, Alexandru-Emil Matei, Thuong Trin-Minh, Andrea-Hermina Györfi, Xiang Zhou, Aline Bozec, Meik Kunz, Oliver Distler, Georg Schett, Jörg Distler

P.030 **Role of the renin-angiotensin system in the pathogenesis of systemic sclerosis**
Miziolek Bartosz, Kucharz Eugene J, Bergler-Czop Beata, Pieczyrak Robert, Kotyla Przemyslaw

P.031 **Cordycepin suppresses extracellular matrix and actin cytoskeleton organisation in dermal fibroblasts activated by TGF- β**
Matija Bajzelj, Nika Bostic, Mateja Zotler, Andrej Gregori, Blaz Burja, Snezna Sodin-Semrl, Katja Lakota

P.032 **Bosentan accelerates delayed wound healing in epithelial cell specific Fli1 knockout mice by restoring impaired reepithelialization**
Jun Omatsu, Takehiro Takahashi, Takuya Miyagawa, Ryosuke Saigusa, Yuki Fukui, Satoshi Toyama, Kentaro Awaji, Ayumi Yoshizaki, Shinichi Sato, Yoshihide Asano

P.033 **Synchrotron-radiation based tomography to study pulmonary damage in a mouse model of lung fibrosis**
Silvia Agarbatì, Chiara Paolini, Fiorenza Orlando, Michele Furlani, Silvia Svegliati, Ada Funaro, Mauro Provinciali, Alessandra Giuliani, Gianluca Moroncini

P.034 **Characterising blister macrophages in Systemic Sclerosis**
Sandra Lopez Garces, Anas Al-Oweidi, Tamara Searle, Henry Lopez, George Martin, Teresa Collins, Jennifer Cross, Christopher Denton, David Abraham, Richard Stratton



02. ANTIBODIES

- P.035 Progression of Pulmonary Involvement According to The Autoantibody Profile In Patients with Limited Cutaneous Systemic Sclerosis: a Long-term Follow-Up Study**
Yasemin Yalcinkaya, Melodi Gizem Can, Busra Demir, Bahar Artim-Esen, Ahmet Gul, [Murat Inanc](#)
- P.036 Clinical features of patients with systemic sclerosis positive for anti-SS-A antibody: A cohort study of 156 patients**
[Tomoya Watanabe](#), Yasushi Ootake, Asami Akita, Mao Suzuki, Miwa Kanaoka, Jun Tamura, Yusuke Saigusa, Yukie Yamaguchi
- P.037 Autoantibodies to eIF2b identify a subset of SSc patients with high morbidity and mortality**
Antonio Tonutti, Francesca Motta, Angela Ceribelli, Natasa Isailovic, Carlo Selmi, [Maria De Santis](#)
- P.038 Clinical and serological characteristics of patients with systemic sclerosis and cancer**
[Antonio Tonutti](#), Francesca Motta, Angela Ceribelli, Natasa Isailovic, Carlo Selmi, Maria De Santis
- P.039 Cancer In Systemic Sclerosis: Association Between Antibodies and Malignancy And Results From a Third-Level Center**
[Cristiana Sieiro Santos](#), Ruben Rego Salgueiro, Clara Moriano Morales, Ismael González Fernández, Carolina Alvarez Castro, Elvira Dáez Alvarez
- P.040 Clinical Phenotype in Scleroderma Patients with Limited and Diffuse Cutaneous Disease Based on Autoimmunity**
[Cristiana Sieiro Santos](#), Miriam Retuerto Guerrero, Clara Moriano, Ismael Gonzalez Fernandez, Carolina Alvarez Castro, Elvira Elvira Dáez Alvarez
- P.041 Association of Anti-Muscarinic 3 Antibody with Gastrointestinal Disease in Systemic Sclerosis**
[Elen Roblin](#), Claire Beesley, Rory Maclean, Fiza Ahmed, Charles Murray, Voon Ong, Christopher Denton
- P.042 Polyautoimmunity and Multiple Autoimmune Syndrome in Systemic Sclerosis.**
[Miriam Retuerto](#), Clara Moriano, Cristiana Sieiro, Elvira Diez
- P.043 A rare case of acanthosis nigricans associated with diffuse cutaneous systemic sclerosis**
[Carolina Ochoa Matos](#), Eduardo Dourado, Cláudia Brazão, Pedro de Vasconcelos, Luis Soares de Almeida, Nikita Khmelinskii, Sofia C. Barreira
- P.044 Clinical features of Romanian systemic sclerosis (SSc) patients negative for SSc – specific autoantibodies: a single center retrospective study**
[Cristina Nita](#), Laura Groseanu, Delia Nicoara, Denisa Predeteanu, Violeta Bojinca, Daniela Opris, Florian Berghea, Violeta Vlad, Mihai Abobului, Madalina Duna, Magdalena Negra, Andreea Borangiu, Ioana Saulescu, Sanziana Daia, Cosmin Constantinescu, Claudia Cobilinschi, Denise Mardale, Diana Mazilu, Andra Balanescu
- P.045 Frequency and clinical associations of anti-Ro/SSA antibodies in patients with systemic sclerosis**
[Cristina Nita](#), Laura Groseanu, Delia Nicoara, Denisa Predeteanu, Violeta Bojinca, Daniela Opris, Florian Berghea, Ioana Saulescu, Violeta Vlad, Mihai Abobului, Andreea Borangiu, Sanziana Daia, Diana Mazilu, Magdalena Negra, Cosmin Constantinescu, Madalina Duna, Claudia Cobilinschi, Denise Mardale, Andra Balanescu
- P.046 Serological Signatures of Scleroderma in the United Arab Emirates: A Focus on Scl-70 and ACA Autoantibodies**
Rajae Namas, [Sarah Al Qassimi](#), Jawahir Alameri, Esat Memisoglu, Saniya Khan, Mohamed Elarabi
- P.047 Correlation between quantitative level of anti-topoisomerase I antibody and clinical course in systemic sclerosis**
[Kamonwan Mulalin](#), Ajanee Mahakkanukrauh, Siraphop Suwannaroj, Sawinee Kasa, Patnarin Pongkulkit, Tippawan Onchan, Chingching Foocharoen
- P.048 Autoantibodies which bind to and activate keratinocytes in Systemic Sclerosis**
[Carine Moezinia](#), Valerie Wong, James Watson, Lydia Nagib, Sandra Lopez Garces, Siyu Zhang, Bahja Ahmed Abdi, Florence Newton, Christopher Denton, David Abraham, Richard Stratton
- P.049 Antiphospholipid Antibodies Positivity among Portuguese Patients with Systemic Sclerosis: Is there any association with Vasculopathy?**
[Carlos Marques Gomes](#), Raquel Miriam Ferreira, Mariana Diz Lopes, Inês Santos, Miguel Bernardes, Georgina Terroso, Lúcia Costa
- P.050 Antibodies Against Borrelia Specific Antigens in Patients with Systemic Sclerosis**
Eleni Patrikiou, Christos Liaskos, Emmanouela Marou, [Theodora Simopoulou](#), Thomas Scheper, Wolfgang Meyer, Lazaros I Sakkas, Dimitrios P Bogdanos
- P.051 ANTI-RO52 Antibodies Are More Frequent in Anti-Centromere Positive Patients with Systemic Sclerosis Rather than ANTI-SCL70 or ANTI-RNA Polymerase III Positive Patients**
Eleni Patrikiou, Christos Liaskos, Theodora Simopoulou, Lazaros I Sakkas, [Dimitrios P Bogdanos](#)
- P.052 Association of myeloperoxidase-anti-neutrophil cytoplasmic antibody with Systemic sclerosis-associated interstitial lung disease**
[Yuki Ichimura](#), Yasushi Kawaguchi, Kae Takagi, Akiko Tochimoto, Tomoaki Higuchi, Hikaru Hirose, Masayoshi Harigai
- P.053 Disease Progression in Anti-Centromere Positive Systemic Sclerosis Patients**
[Eva Hoekstra](#), Saad Ahmed, David Ueckert, Nina Ajmone Marsan, Philippine Kiés, Maarten Ninaber, Marlies Heuvers, Miranda Geelhoed, Tom Huizinga, Jeska de Vries - Bouwstra
- P.054 Anti-topoisomerase positivity is not associated with baseline organ severity in juvenile systemic sclerosis**
[Ivan Foeldvari](#), Jens Klotsche, Kathryn Torok, Ozgur Kasapcopur, Amra Adrovic, Brian Feldman, Flavio Sztajnbnok, Maria Teresa Terrieri, Ana Paula Sakamoto, Sindhu Johnson, Jordi Anton, Valda Stanevicha, Raju Khubchandani, Dieneke Schonenberg-Meinema, Ekaterina Alexeeva, Maria Katsicas, Sujata Sawhney, Vanessa Smith, Eslam Al-Abadi, Simone Appenzeller, Tadey Avcin, Mikhail Kostik, Thomas Lehman, Hana Malcova, Edoardo Marrani, Anjali Patwardhan, W.-Alberto Sifuentes-Giraldo, Natalia Vasquez-Canizares, Nicola Helmus



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02. ANTIBODIES

- P.055 Shaping Monocyte Pathogenicity in Systemic Sclerosis: The Convergence of AT1R Autoantibodies and Extracellular Vesicles**
Alexander Hackel, Reza Akbarzadeh, Hanna Grasshoff, Marieke Leiber, Antje Mueller, Xinhua Yu, Frank Petersen, Gabriela Riemekasten
- P.056 Clinical courses comparison between limited cutaneous systemic sclerosis and diffuse cutaneous systemic sclerosis with positive for anti-topoisomerase I antibody: a cohort study**
Chingching Foocharoen, Chana Chaovanitk, Tippawan Onchan, Patnarin Pongkulkiat, Ajanee Mahakkanukrauh, Siraphop Suwannaraj
- P.057 The Anti-Nucleolar Organizer Region 90 Antibodies (NOR90) In Systemic Sclerosis: A European Scleroderma Trials and Research (EUSTAR) Study**
Alina Dima, Madelon Vonk, Alexandru Garaiman, Radim Bekvar, Michal Tomcik, Anna-Maria Hoffmann-Vold, Ivan Castellvi, Jose Luis Tandaipan Jaime, Marek Brzokos, Marcin Milchert, Dorota Krasowska, Malgorzata Michalska-Jakubus, Paolo Airo, Marco Matucci-Cerinic, Cosimo Bruni, Michele Iudici, Jorg Distler, Ana-Maria Gheorghiu, Hadi Poormoghim, Francesca Motta, Maris De Santis, Magda Parvu, Oliver Distler, Carina Mihai
- P.058 Assessment of Systemic Sclerosis Markers Utilizing a Particle-Based Multi-Analyte Technology in An Italian Cohort of Scleroderma Patients**
Marco De Pinto, A Spinella, A Melegari, E De Santis, M Orlandi, O Secchi, C Bentow, M Mahler, M T Mascia, D Giuggioli
- P.059 Immunoglobulins G Purified from Systemic Sclerosis Patients Influence Cytoplasmic and Nuclear Proteins Profile in Dermal Fibroblasts**
Aurélien Chepy, Marie Duhamel, Solange Vivier, Clément Chauvet, Lucile Guilbert, Eric Hachulla, Sylvain Dubucquoi, David Launay, Michel Salzet, Vincent Sobanski
- P.060 Definition of disease phenotype in patients with Systemic Sclerosis with anti-topoisomerase I antibodies: a comparison between diffuse and limited cutaneous form**
Ilaria Bisconti, Davide Mohammad Reza Beigi, Greta Pellegrino, Marius Cadar, Francesca Romana Di Ciommo, Elena Platania, Jacopo Landro, Simona Truglia, Fabrizio Conti, Valeria Riccieri
- P.061 Phenotype of diffuse cutaneous systemic sclerosis patients with positive anticentromere antibodies: data from systematic literature review and case series from our referral centre**
Marco Binda, Beatrice Moccaldi, Mariangela Salvato, Andrea Doria, Elisabetta Zanatta
- P.062 Evaluation of the Relationship Between Gastrointestinal Involvement Characteristics and Anti Muscarinic Receptor 3 Antibodies in Patients with Systemic Sclerosis**
Fatma Rukiye Uysal, Gizem Ayan, Yasin Kiran, Alper Sari, Levent Kilic, Taylan Kav, Sedat Kiraz, Ali Akdogan
- P.063 Autoantibody profile in IMU-COLV mice systemic sclerosis model: a pilot study**
Jaine Almeida, Zelita Aparecida de Jesus Queiroz, Vitória Contini, Cleonice Bueno, Thays de Matos Lobo, Antonio dos Santos Filho, Vitor Daniel Souza, Sergio Catanozzi, Ana Paula Velosa, Vera Luiza Capellozzi, Sandra Gofinet Pasoto, Walcy Teodoro

03. ILD

- P.064 Predictors of Progressive Pulmonary Fibrosis in Patients with Systemic Sclerosis-Associated Interstitial Lung Disease**
Keina Yomono, Masataka Kuwana
- P.065 The Efficacy of the Breath-Holding Test: Machine Learning Approach to Predict Pulmonary Function in Systemic Sclerosis**
Jina Yeo, Min Hyuk Lim, Ju Yeon Kim, Ji In Jung, Saram Lee, Eun Bong Lee
- P.066 Nintedanib Treatment in Patients with Systemic Sclerosis Associated Interstitial Lung Disease: A Real Life Experience**
Yasemin Yalcinkaya, Shir Khan Amikishiyev, Burak Gultekin, Ezgi Sahin, Yildiz Akbal Engin, Bahar Artim-Esen, Ahmet Gul, Zuleyha Bingol, Gulfer Okumus, Murat Inanc
- P.067 C-reactive Protein in Systemic Sclerosis-Associated Interstitial Lung Disease: Re-Envisioning Clinical Trial Enrichment Strategies Based on Evidence**
Elizabeth Volkman, Alana Haussmann, Holly Wilhalme, Grace Kim, Andrea Oh, Jonathan Goldin, Michael Roth, Donald Tashkin, Shervin Assasi
- P.068 Effects of early immunosuppressive treatment on the course of pulmonary function in systemic sclerosis**
Arthina Velauthapillai, Merle F.R. Bootsma, Cosimo Bruni, Christina Bergmann, Marco Matucci-Cerinic, David Launay, Gabriela Riemekasten, Liudmila Garzanova, Paolo Airo, Elena Rezus, José A. Pereira da Silva, Francesco Del Galdo, Nicolas Hunzelmann, Lorinda S. Chung, Dorota Krasowska, Oliver Distler, Cornelia H.M. van den Ende, Madelon C. Vonk; on behalf of EUSTAR collaborators
- P.069 Nintedanip usage may prevent scleroderma ILD progression**
Ender Terzioğlu, Yagmur Kahraman, Funda Erbasan, Deniz Ozel, Veli Yazisiz, Bengisu Aslan
- P.070 The relationship between digital ulcer and capillaroscopy findings and lung parenchyma and vascular involvement in patients with scleroderma**
Nehir Sisman, Funda Erbasan, Tahir Saygin, Veli Yazisiz, Deniz Ozel, Ender Terzioğlu
- P.071 Interstitial lung disease in scleroderma patients: association between the disease phenotype and flow cytometry data - preliminary results**
Adela Skoumalova, Pavel Horak, Zuzana Mikulkova, Eva Kriegova, Ondrej Janca
- P.072 Nintedanib in systemic sclerosis-associated interstitial lung disease – a multicentre nationwide cohort study**
Augusto José Ser Silva, Ana Martins, Beatriz Samões, Cláudia Oliveira, João Aguiar, Laura Gago, Ana Catarina Duarte, Maria João Salvador, Natália Melo, João Eurico Fonseca, Maria João Gonçalves, Patrícia Pinto, Rita Prata, Vasco C. Romão, Miguel Bernardes, Sofia Barreira, Catarina Resende
- P.073 K16 and IL-18 Levels are Negatively Correlated with Respiratory Function Tests and ILD Extent Assessed on HRCT in Patients with Systemic Sclerosis-Related Interstitial Lung Disease (Ssc-ILD)**
Cristiana Sjeiro Santos, Sara Calleja Antolin, Javier De La Calle Lorenzo, Carmen Lázpe Garay, Clara Moriano Morales, Elena Bollo De Miguel, Elvira Dáez Álvarez

POSTER SESSION

03. ILD

- P.074 Predictors of Interstitial Lung Involvement in Systemic Sclerosis**
Cristiana Sieiro Santos, Miriam Retuerto Guerrero, Clara Moriano Morales, Carolina Alvarez Castro, Alejandra López Robles, Elvira Dáez Álvarez
- P.075 Identification and characterization of clinical and radiologic markers of disease presentation and progression in patients with scleroderma related interstitial lung disease (SSc-ILD) in Ontario**
Jessica Scott, Rachel Gerber, Margaret Larché
- P.076 Compliance of patients with systemic sclerosis to pulmonary function tests**
 Gül Sandal Uzun, Oguz Karcioğlu, Alper Sari, Elifnaz Sancar, Erdinc Unaldi, Busra Firlatan, Levent Kilic, *Ali Akdoğan*
- P.077 Bronchiectasis in Systemic Sclerosis: A single-center analysis**
Miriam Retuerto, Clara Moriano, Cristiana Sieiro, Elvira Diez
- P.078 CRTAC1 as a Potential Biomarker of Pulmonary Involvement in Systemic Sclerosis**
Aneta Pekáčová, Sabina Oreska, Hana Storkanová, Jiri Baloun, Radim Becvar, Ladislav Senolt, Michal Tomcik
- P.079 Combination treatment of Tocilizumab and Nintedanib, with or without Mycophenolate, in Systemic Sclerosis: One-year, single center experience in 20 patients**
Stylianós Panopoulos, Vasileios Tzilias, Vasiliki-Kalliop Bournia, Maria Tektonidou, Petros Sfikakis
- P.080 The scleroderma clinical trials consortium damage index (SCTC-DI) in patients with systemic sclerosis-interstitial lung disease**
Olga Ovsyannikova, Lidiya Ananyeva, Olga Koneva, Ludmila Garzanova, Oxana Desinova, Maya Starovoytova, Rushana Shayahmetova, Anna Helkovskaya-Sergeeva
- P.081 Sensitivity and Specificity of ultrasound for diagnosis of interstitial lung disease in patients with rheumatic diseases**
Olga Ovsyannikova, Olga Koneva, Lidiya Ananyeva, Ludmila Garzanova, Maya Starovoytova, Oxana Desinova, Rushana Shayahmetova, Anna Helkovskaya-Sergeeva
- P.082 Rituximab and tocilizumab and their effect on lung disease progression in scleroderma: a retrospective cohort study at a single centre**
 Voon Ong, *Nina Goldman*, Claire Beesley, Aoife Tynan, Rizgar Mageed, Christopher Denton
- P.083 The impact of screening programs with HRCT for the identification of ILD in SSc**
Cristina Nita, Laura Groseanu, Daniela Opris-Belinski, Mihaela Mirea-Popescu, Athir Eddan, Emily Langball, Phuong Phuong Diep, Håvard Fretheim, Torhild Garen, Michael T Durheim, Øyvind Midtvedt, Trond Mogens Aaløkken, Øyvind Molberg, Andra Balanescu, Anna-Maria Hoffmann-Vold
- P.084 The different trend of tumor antigens in Systemic Sclerosis compared to others connective tissue diseases**
Caterina Naclerio, Giovanna Cuomo
- P.085 Impact of interstitial lung disease with and without pulmonary hypertension on survival - large cohort study of the German network for systemic sclerosis**
Pia Moinzadeh, Francesco Bonella, Max Oberste, Jithmi Weliwitage, Norbert Blank, Gabriela Riemekasten, Ulf Mueller-Ladner, Joerg Henes, Elise Siegert, Claudia Guenther, Ina Koetter, Christiane Pfeiffer, Marc Schmalzing, Gabriele Zeidler, Peter Korsten, Laura Susok, Aaron Juche, Margitta Worm, Ilona Jandova, Jan Ehrchen, Gernot Keyßer, Cord Sunderkoetter, Andreas Ramming, Tim Schmeiser, Alexander Kreuter, Hanns-Martin Lorenz, Nicolas Hunzelmann, Michael Kreuter
- P.086 Detection of systemic sclerosis-associated interstitial lung disease using electronic nose technology**
Emiel Marges, Iris G. van der Sar, Jeska K. de Vries-Bouwstra, Tom W.J. Huizinga, Paul L.A. van Daele, Marlies S. Wijsenbeek, Catharina C. Moor, J.J. Miranda Geelhoed
- P.087 Correlation between Nailfold Videocapillaroscopy and Pulmonary Function Tests in Systemic Sclerosis: a monocentric study**
Marco Manca, Alberto Floris, Valentina Ibbia, Alessandra Vacca, Alberto Cauli
- P.089 DLCO impairment in Early-SSc is associated to disease progression**
 Samuel Leal, *Marta De La Rubia*, Iago Alcántara, Inmaculada Chalmeta Verdejo, Hikmat Charia, Luis González Puig, Elena Grau García, Victor Huaylla Quispe Anderson, José Ivorra Cortés, Isabel Martínez, Laura Mas Sánchez, Pablo Francisco Muñoz Martínez, Rosa Negueroles, José Eloy Oller Rodríguez, Daniel Ramos Castro, Carmen Riesco Bárcena, Alba Torrat Novés, Ernesto Tovar Sagrañes, Elvira Vicens Bernabeu, Belén Villanueva Mañes
- P.090 Analysis of Circulating Angiogenic T-cells in Patients with Systemic Sclerosis: A Potential Biomarker for Systemic Sclerosis-associated Interstitial Lung Disease**
Jergus Krc, Yehya Al-Adwi, Berber Doornbos-van der Meer, Alja Stel, Wajel Abdulhadi, Harry van Goor, Johanna Westra, Douwe Johannes Mulder
- P.091 Antifibrosis therapy in patients with systemic sclerosis with interstitial lung disease: impact on clinical manifestation and quality of life**
Olga Koneva, Liudmila Garzanova, Lidia Ananyeva, Oxana Desinova, Olga Ovsyannikova, Mayya Starovoytova, Rushana Shayahmetova
- P.092 Real-life multicentric national observational study of the use of nintedanib in systemic sclerosis-associated interstitial lung disease**
Vincent Koether, David Launay, Martine Reynaud Gaubert, Gregoire Prevot, Luc Mouthon, Raphael Borie, Kinan El Hussein, Paul Decker, Stephanie Dirou, Elodie Blanchart, Amelie Leurs, Sabine Berthier, Xavier Delbrel, Marie Durel, Christian Agard, Ana Nieves-Martinez, Eric Hachulla, Denise Aydingag, Vincent Cottin, Yurdagul Uzunhan
- P.093 Outcomes in patients with Systemic Sclerosis following Lung Transplantation: an Italian multicentre experience**
Claudia Iannone, Maria Rosa Pellico, Letizia Corinna Morlacchi, Valeria Rossetti, Marco Vicenzi, Paolo Airò, Lorenzo Beretta, Adriana Severino, Eleonora Zaccara, Fabio Cacciapaglia, Stefano Stano, Antonina Minniti, Silvia Cavalli, Giorgia Trignani, Marta Saracco, Anna Maria Iagnocco, Francesco Blasi, Roberto Caporali, Nicoletta Del Papa



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03. ILD

- P.094 Prediction of progressive fibrosing interstitial lung disease in systemic sclerosis patients: insight from the CRDC cohort study**
Min Hui, Xinwang Duan, Jiaxin Zhou, Mengtao Li, Qian Wang, Juliang Zhao, Yong Hou, Dong Xu, Xiaofeng Zeng
- P.095 Characterisation of incident interstitial lung disease in late systemic sclerosis**
Sabrina Hoa, Maggie Larche, Nouha Lahmek, Joshua Levy, Marie Hudson
- P.096 Diffuse juvenile systemic sclerosis patients show distinct organ involvement, antibody pattern and have more severe disease in the largest jSSc cohort of the world**
Ivan Foeldvari, Jens Klotsche, TorokKathryn Torok, Ozgur Kasapcopur, Amra Adrovic, Brian Feldman, Flavio Sztajnbock, Maria Teresa Terreri, Ana Paula Sakamoto, Sindhu Johnson, Jordi Anton, Valda Stanevicha, Raju Khubchandani, Dieneke Schonenberg-Meinema, Eslam Al-Abadi, Ekaterina Alexeeva, Maria Katsicas, Sujata Sawhney, Vanessa Smith, Simone Appenzeller, Tadey Avcin, Mikhail Kostik, Thomas Lehman, Hana Malcova, Edoardo Marrani, Clare Pain, Anjali Patwardhan, W.Alberto Sifuentes-Giraldo, Natalia Vasquez-Canizares, Nicola Helmus
- P.097 Antibodies against R052 are enriched in the lungs and are associated with progressive interstitial lung disease in patients with systemic sclerosis**
Viggo Hamberg, Azita Sohrabian, Elizabeth R Volkman, Marie Wildt, Anna Löfdahl, Dirk M Wuttge, Roger Hesselstrand, Göran Dellgren, Gunilla Westergren-Thorsson, Johan Rönnelid, Kristofer Andréasson
- P.098 Changes of pulmonary function tests in patients with systemic sclerosis and different severity of interstitial lung disease**
Lidia Ananyeva, Liudmila Garzanova, Olga Koneva, Oxana Desinova, Mayya Starovoytova, Olga Ovsyannikova, Rushana Shayakhmetova, Alena Kolomeychuk
- P.099 Elevated serum CCL18 is a potential biomarker of interstitial lung disease in systemic sclerosis**
Kristóf Filipánits, Gabriella Nagy, Gábor Kumánovics, Cecília Varjú, Diána Simon, Szabina Erdo-Bonyar, Tímea Berki, László Czirkák, Tünde Minier
- P.100 Trajectories of forced vital capacity (FVC) in patients with systemic sclerosis-associated interstitial lung disease (SSc-ILD)**
Oliver Distler, Madelon C Vonk, Arata Azuma, Maureen D Mayes, Dinesh Khanna, Kristin B Highland, Gerrit Toenges, Margarida Alves, Yannick Allanore
- P.101 Factors prognostic of rapid progression of systemic sclerosis-associated interstitial lung disease (SSc-ILD)**
Oliver Distler, Jérôme Avouac, Anna-Maria Hoffmann-Vold, Vanessa Smith, Gerrit Toenges, Margarida Alves, Masataka Kuwana
- P.102 Frequency and factors associated with lung involvement in Systemic sclerosis in a Colombian population**
Jennifer Delgadillo, Kevin Maldonado, Gerardo Quintana

- P.103 Lung function changes in patients with SSc and IPF treated with Nintedanib: a real life observational study**
Fiammetta Danzo, Linda Pelosi, Peter Dilov, Dejan Radovanovic, Pierachille Santus, Giovanna Cuomo
- P.104 Extracellular vesicles in systemic sclerosis. Do we have a new biomarker of progressive interstitial lung disease phenotype?**
Jelena Colic, Iva Pruner, Nemanja Damjanov, Jovan Antovic, Mirjana Sefik-Buklicia, Aleksandra Antovic
- P.105 Association between PFT baseline characteristics and ATS/ERS 2022 Progressive Pulmonary Fibrosis criteria in SSc before and after ILD Diagnosis**
Ivan Castellvi Barranco, Helena Codes Mendez, Jose Luis Tandaipan Jaime, Berta Magallares Lopez, Patricia Moya Alvarado, Cesar Diaz Torne, Hye Sang Park, Ana Laiz Alonso, Hector Corominas Macias, Diego Castillo Villegas
- P.106 Clinical Insights into Established Systemic Sclerosis Interstitial Lung Disease: A Comprehensive Study**
Helena Codes Mendez, Jose Luis Tandaipan Jaime, Diego Castillo Villegas, Berta Magallares Lopez, Patricia Moya Alvarado, Cesar Diaz Torne, Hye Sang Park, Luis Sainz Comas, Ana Laiz Alonso, Hector Corominas Macias, Ivan Castellvi Barranco
- P.107 High Bronchoalveolar Fluid Neutrophils Independently Predict 15-Year Mortality in Scleroderma Patients with Interstitial Lung Disease Naive to Immunosuppressant**
Gabriella Alonzi, Enrico De Lorenzis, Gerlando Natalello, Lucrezia Verardi, Pier Giacomo Cerasuolo, Silvia Fiore, Andrea Zoli, Stefano Di Muro, Valentina Boni, Maria Antonietta D'agostino, Silvia Laura Bosello
- P.108 Concordance and prognostic relevance of different definitions of Systemic Sclerosis Interstitial Lung Disease Progression**
Enrico De Lorenzis, Francesco Del Galdo, Gerlando Natalello, Stefano Di Donato, Lucrezia Verardi, Vishal Kakkar, Pier Giacomo Cerasuolo, Francesco Varone, Luca Richeldi, Maria Antonietta D'agostino, Silvia Laura Bosello
- P.109 Esophageal erosions can predict the deterioration of lung function over a four-year follow-up period and long-term mortality in patients with interstitial lung disease associated with sclero**
Pier Giacomo Cerasuolo, Enrico De Lorenzis, Gerlando Natalello, Ludovica Berardini, Lucrezia Verardi, Alfredo Papa, Luca Richeldi, Gabriella Alonzi, Maria Antonietta D'agostino, Silvia Laura Bosello
- P.110 Predictors of response and long-term efficacy and safety of Nintedanib in Systemic Sclerosis-Interstitial Lung Disease: data from an Italian multicentre study**
Corrado Campochiaro, Giacomo De Luca, Maria Grazia Lazzaroni, Giuseppe Armentaro, Anna Stanzola, Barbara Ruaro, Devis Benfaremo, Enrico De Lorenzis, Beatrice Moccaldi, Francesco Bonomi, Lorenzo Bianchessi, Fabio Cacciapaglia, Marco Confalonieri, Serena Guiducci, Gianluca Moroncini, Elisabetta Zanatta, Veronica Codullo, Eisabetta Bosello, Florenzo Iannone, Paolo Airo', Giovanna Cuomo, Nicoletta Del Papa, Lorenzo Dagna, Marco Matucci-Cerinic

POSTER SESSION

03. ILD

- P.111 Real-world evaluation of lung function tests in patients with connective tissue disease and pulmonary fibrosis, after nintedanib treatment**
 Maria Boutel, Afroditi Boutou, Georgia Pitsiou, Alexandros Garyfallos, Theodoros Dimitroulas
- P.112 Real life data on efficacy and tolerability of Nintedanib in a small Italian cohort of CTD patients with progressive lung fibrosis**
 Lorenzo Mattia Bianchessi, Sara Lettieri, Valentina Vertui, Paola Putignano, Sara Bozzini, Eleonora Bozza, Cecilia Bagnera, Giovanni Zanframundo, Meloni Federica, Cavagna Lorenzo, Codullo Veronica
- P.113 Prognostic value of select circulating biomarkers in patients with systemic sclerosis-associated interstitial lung disease (SSc-ILD)**
 Shervin Assassi, Sudha Visvanathan, Masataka Kuwana, Carina Itrrich, Margarida Alves, Oliver Distler
- P.114 Predictive significance of serum proteins for the course of systemic sclerosis related interstitial lung disease in the multicenter CONQUER cohort**
 Shervin Assassi, Masataka Kuwana, Meng Zhang, Flavia Castelino, Lorinda Chung, Luke Evin, Tracy Frech, Jessica Gordon, Faye Hant, Laura Hummers, Kimberly Lakin, Dorota Lebiecz-Odrobina, Yiming Luo, Dinesh Khanna, Ashima Makol, Jerry Molitor, Duncan Moore, Carrie Richardson, Nora Sandorf, Ankoor Shah, Victoria Shanmugam, Brian Skaug, Virginia Steen, Elizabeth Volkmann, Jessica Alvey, John VanBuren, Elana Bernstein
- P.115 Lung quantification predicts mortality in interstitial lung disease in systemic sclerosis**
 Fernanda Amorim, Cristiane Kayser
- P.116 Interferon scores are higher in SSc-ILD patients and correlate with declined lung function**
 Yehya AlAdwi, Jergus Krc, Salome Mooij, Britt Martijn, Berber Doornbos-van der Meer, Alja Stel, Wayel Abdulahad, Harry van Goor, Johanna Westra, Douwe J Mulder
- P.117 Progressive Interstitial Lung Disease in Systemic Sclerosis**
 Catarina Abreu, Ana Cordeiro, Maria José Santos
- P.118 Combined pulmonary fibrosis and emphysema in Systemic Sclerosis: Clinical, functional and imaging features**
 Houssem Abida, Zeineb Meddeb, Mariem Affés, Cherifa Abdelkefi, Amira El Ouni, Sana Toujan, Saoussen Hantous, Lamia Ben Hassine, Kamel Bouslama, Thara Larbi, Saloua B'chir Hamzaoui
- P.119 Frequency and Impact of Secondary Sjögren's Syndrome in Connective Tissue Disease-Related Interstitial Lung Disease**
 Alida Aliyeva, Derya Kocakaya, Ozlem Demircioglu, Nuri Cagatay Cimsit, Semra Akkaya Turhan, Gonca Mumcu, Nevsun Inanc
- P.120 Compatibility of forced inspiratory vital capacity measured by incentive spirometry with pulmonary function tests in patients with systemic sclerosis**
 Erdinc Unaldi, Alper Sari, Oguz Karcioglu, Gizem Ayan, Gul Sandal Uzun, Alptug Hekimcan Kaynar, Aytekin Idikut, Levent Kilic, Ali Akdogan, Ata Murat Kaynar

04. GASTROINTESTINAL

- P.121 The role of IVIG treatment on gastrointestinal involvement**
 Jose Tandaijan, Alfredo Guillén-Del-Castillo, Carmen Pilar Simeón-Aznar, Patricia Carreira, Carlos De la Puente, Javier Narváez, Judit Lluch, Manuel Rubio-Rivas, Juan Jose Alegre-Sancho, Gema Bonilla, Clara Moriano, Ivette Casafont-Sole, Rosario Garcia-Vicuña, Vera Ortiz-Santamaría, Elena Riera, Belén Atienza-Mateo, Ricardo Blanco, Carlos Galisteo, Jorge Juan Gonzalez-Martin, Jose Maria Pego-Reigosa, Ana Pros, Sergi Heredia, Ivan Castellví
- P.122 Esophageal dysmotility in Systemic Sclerosis: demographic and clinical findings**
 Inês Santos, Raquel Miriam Ferreira, Carlos Gomes, Mariana Diz Lopes, Georgina Terroso, Lúcia Costa
- P.123 Characteristics of patients with systemic sclerosis (SSc) with dysphagia**
 Tatsuki Naganawa, Ayako Kuwabara, Yumi Ito, Ai Umeda, Konomi Akamatsu, Megumi Kurumizawa, Takako Hashimoto, Jo Nishino, Syusaku Fukaya, Youko Inamoto, Seiko Shibata, Otaka Yohei, Hidekata Yasuoka
- P.124 Alternation of gastrointestinal tract microbial composition in patients with systemic sclerosis and predicting their functional capabilities**
 Su-Jin Moon, Bong-Woo Lee, Hae-Rim Kim, Seung-Ki Kwok
- P.125 Does therapy with immunosuppressive drugs improve gastrointestinal symptoms in patients with systemic sclerosis?**
 Lea Stamm, Alexandru Garaïman, Mike Oliver Becker, Cosimo Bruni, Rucsandra Dobrota, Muriel Elhai, Sherif Ismail, Suzana Jordan, Norina Zampatti, Aurora Tatu, Oliver Distler, Carina Mihaï
- P.126 The Role of Surgery in the Management of Oesophageal Involvement in Systemic Sclerosis: A Systematic Literature Review**
 Pietro Maturi Cerinic, Akpabio Akpabio, Michael Hughes, Szusanna H McMahan, Giovanni Terroso, Antonio Martino, Massimo Vecchiato, Roberto Petri, Marco Maturi Cerinic, Alessia Alunno
- P.128 Malignancies and Their Effects on Disease Course in Patients with Systemic Sclerosis with 10 Years Follow-Up**
 Ibrahim Gunduz, Mehmet Ali Balci, Lufti Akyol, Remzi Cevik, Suleyman Serdar Koca
- P.129 Approaches to Treating Gastric Antral Vascular Ectasia in Systemic Sclerosis: Clinical Cases Utilizing APC, Tocilizumab, and IVIG Therapies**
 Hyun-Sook Kim, Heewon Kim, Hye-Ji Jeon, Kyung-Ann Lee, Taehee Lee
- P.131 How often do we use gastrointestinal endoscopy in patients with systemic sclerosis? - Single-center experience**
 Busra Firlatan, Gozde Seygi Kart Bayram, Erdinc Unaldi, Gul Sandal Uzun, Mustafa Ekici, Levent Kilic, Ali Akdogan
- P.132 Both UCLA-GIT 2.0 and EUSTAR-AI are linked to malnutrition in patients with systemic sclerosis**
 Alexandra Maria Burlui, Ioana Bratou Harton, Patricia Richter, Ioana Ruxandra Mihaï, Anca Cardoneanu, Luana Andreea Macovei, Elena Rezug



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- P.133 Different gut microbiome profiles among patients with Systemic Sclerosis compared to Rheumatoid Arthritis**
Yolanda Braun-Moscovici, Nofar Asulin, Katya Dolnikov, Sami Giryes, Vika Shataylo, Doron Markovits, Rita Erlich, Yonit Tavor, Kochava Toledano, Sondra Turjeman, Alexandra Balbir-Gurman, Omry Koren
- P.134 Color Doppler Ultrasound, a powerful tool to disclose and assess bowel vasculopathy in Systemic Sclerosis**
Giulia Bandini, Khadija El Aoufy, Elisa Martinelli, Francesco Bonomi, Esterita Accogli, Michael Hughes, Zsuzsanna H. McMahan, Corrado Campochiaro, Serena Guiducci, Gemma Lepri, Laura Cometi, Gabriele Ciuti, Gianluca Moroncini, Silvia Bellando Randone, Lorenzo Dagna, Marco Matucci Cerinic, Alberto Moggi Pignone
- P.135 A multinational survey investigating the unmet needs and patient perspectives concerning Proton Pump Inhibitors in Systemic Sclerosis**
Giulia Bandini, Alessia Alunno, Filipe Oliveira Pinheiro, Corrado Campochiaro, Ilaria Galetti, Pietro Matucci Cerinic, Barbara Ruaro, Khadija El Aoufy, Maria Ramona Melis, Alberto Moggi Pignone, Lorenzo Dagna, Marco Matucci Cerinic, Zsuzsanna McMahan, Michael Hughes
- P.136 A multi-national survey to identify the clinicians' perspectives concerning proton pump inhibitors in patients with systemic sclerosis**
Giulia Bandini, Alessia Alunno, Filipe Oliveira Pinheiro, Corrado Campochiaro, Ilaria Galetti, Pietro Matucci Cerinic, Barbara Ruaro, Alberto Moggi Pignone, Lorenzo Dagna, Marco Matucci Cerinic, Zsuzsanna McMahan, Michales Hughes
- P.137 Oral Manifestations in Systemic Sclerosis: Clinical Evaluation of a Personal Case Series of 13 Scleroderma Patients**
Amelia Spinella, Giacomo Setti, Marco De Pinto, Samuele Veronesi, Gabriele Amati, Federica Lumetti, Ottavio Secchi, Martina Orlandi, Gilda Sandri, Dilia Giuggioli
- P.138 Evaluating the associations between dysautonomia, gastrointestinal transit and clinical phenotype in patients with systemic sclerosis**
Maria Paula Álvarez, Brittany Adler, Jamie Perin, Michael Hughes, Zsuzsanna H. McMahan
- P.139 Severe gastrointestinal dysmotility is the main predictor of PPI-refractory gastroesophageal reflux disease in patients with systemic sclerosis**
Luis Gerardo Alcalá-González, Alfredo Guillen Del Castillo, Ariadna Aguilar Cayuelas, Antonio Marin, Claudia Barber Caselles, Alberto Palacios, Carolina Malagelada, Carmen Pilar Simeon Aznar
- P.140 Small intestinal dysmotility in patients with systemic sclerosis: Objective evaluation using intestinal high-resolution manometry**
Luis Gerardo Alcalá-González, Alfredo Guillen Del Castillo, Antonio Marin, Ariadna Aguilar Cayuelas, Claudia Barber Caselles, Alberto Palacios, Carolina Malagelada, Carmen Pilar Simeon Aznar
- P.141 Evaluation of esophageal involvement in Systemic Sclerosis-associated Interstitial Lung Disease**
Houssem Abida, Zeineb Meddeb, Mariem Affès, Cherifa Abdelkefi, Amira El Ouni, Sana Toujani, Saoussen Hantous, Lamia Ben Hassine, Kamel Bouslama, Thara Larbi, Saloua B'chir Hamzaoui

- P.142 Gastroesophageal intussusception treated through cTIF in a patient with systemic sclerosis**
Areeka Memon, Monique Hinchcliff, Nicholas Dugan, Amir Masoud

05. CARDIOVASCULAR

- P.143 Arrhythmias and Conduction Disturbances in Patients with Systemic Sclerosis- A Systematic Literature Review**
Cristina Andreea Vrancianu, Dragos Emanuel Popa, Jeffrey Shi Kai Chan, Danish Itlaf Satti, Yan Hiu Athena Lee, Jeremy Man Ho Hui, Gary Tse, Ioan Ancuta, Ana Ciobanu, Mihai Bojinca, Ana Maria Gheorghiu
- P.144 Getting to the heart of the matter - electrocardiogram and echocardiography in the assessment of cardiac involvement in patients with systemic sclerosis**
Maria José Villar Cofre, Francisca Bozan, Joanne Manning, Ariane Herrick, Graham Dinsdale, Muditha Samaranyaka, Michael Hughes
- P.146 Cardiovascular risk in patients with systemic sclerosis compared to the general population**
Sabina Oreská, Aneta Pekacova, Hana Storkanova, Jaroslav Kudlicka, Vladimir Tuka, Ondrej Mikes, Zdislava Krupickova, Martin Satny, Eva Chytilova, Jan Kvasnicka, Maja Spiritovic, Barbora Hermankova, Petr Cesak, Marian Rybar, Karel Pavelka, Ladislav Senolt, Radim Becvar, Jiri Vencovsky, Michal Vrablik, Michal Tomcik
- P.147 Relation of non-specific capillaroscopic findings, patient's clinical data and outcome in a monocentric cohort of systemic sclerosis patients**
Cristina Nita, Laura Grosceanu, Delia Nicora, Violeta Bojinca, Denisa Predeteanu, Daniela Opris, Florian Bergheta, Violeta Vlad, Ioana Saulescu, Mihai Abobului, Magdalena Negru, Andreea Borangiu, Sanziana Daia, Diana Mazilu, Cosmin Constantinescu, Claudia Cobilinschi, Madalina Duna, Denise Mardale, Andra Balanescu
- P.148 Prevalence and Severity of Coronary Artery Calcification Assessed by High-Resolution CT Scans of the Lungs in Patients with Systemic Sclerosis**
Esben Naeser, Frederik Enevoldsen, Simon Winther, Morten Böttcher, Klaus Søndergaard, Ellen Hauge
- P.149 Prevalence of pulmonary hypertension in Systemic Sclerosis complicated by Interstitial lung disease (ILD). Analysis in a cohort of Southern Italy**
Caterina Naclerio, Fabio Crescibene, Giovanna Cuomo
- P.150 Clinical characteristics, risk factors, and prognosis of left ventricular diastolic dysfunction in systemic sclerosis: a single-center experience**
Su-Jin Moon, Bong-Woo Lee, Hae-Rim Kim, Hae Ok Jung, Seung-Ki Kwok
- P.151 Periarterial sympathectomy in Scleroderma Ischemic digital ulcers**
Antonella Marcocchia, Mariagrazia Modesti, Cecilia Cianfrocca, Rosalia Privitera, Vito Marchese, Francesco Fabi
- P.152 Acute effects of intravenous Iloprost on finger power doppler ultrasound in scleroderma patients**
Luca Magnani, Sofia Testoni, Pierluigi Macchioni, Gianluigi Bajocchi, Carlo Salvarani

05. CARDIOVASCULAR

- P.153 Role of Neutrophil-Lymphocyte Ratio and Platelet-Lymphocyte Ratio in Atherosclerosis in SSc Patients**
[Laura Perea-Galera](#), Joaquin Lacasa-Molina, Alida Taberner-Cortés, Angels Martínez-Ferrer, Elia Vallis-Pascual, Ignacio Gómez-Vázquez, Desamparados Ybáñez-García, Carlos Valera-Ribera, Pablo Andújar-Brazal, Adrián Mayo-Juanatey, Juan José Alegre-Sancho
- P.154 Therapeutic challenges in aggressive systemic sclerosis with multisystemic involvement**
[Elena Icatoiu](#), Laura Groseanu, Andra-Rodica Balanescu, Violeta-Claudia Bojinca
- P.155 Novel tissue turnover biomarkers are associated with prolonged QTc and pulmonary arterial hypertension in patients with systemic sclerosis**
 Christoffer Tandrup Holst Nielsen, [Signe Holm Nielsen](#), Sine Søndergaard Korsholm, Axel Diderichsen, John Bonde Knudsen, Morten Karsdal, Anne -Christine Bay-Jensen, Louise Diderichsen
- P.156 Right ventricular dysfunction by cardiac magnetic resonance, associated risk factors and prognostic value in patients with systemic sclerosis**
[Alfredo Guillen-Del-Castillo](#), Jorge Rodrigo Fernandez, Federica Illuminato, Claudia Codina-Clavaguera, Filipa Valente, Lucia Rodriguez-Eyras, Jose Fernando Rodriguez-Palomares, Carmen Pilar Simeon-Aznar
- P.157 Heart involvement of systemic sclerosis on long-term rituximab therapy**
[Liudmila Garzanova](#), Lidia Ananyeva, Olga Koneva, Olga Ovsyannikova, Mayya Starovoytova, Oxana Desinova, Rushana Shayakhmetova, Anna Khelkovskaya-Sergeeva
- P.158 Characterization of the pericardial involvement in systemic sclerosis and related cardiac complications**
[Carlos Fernandes](#), Ana Cordeiro de Sousa Cabral, Maria José Parreira dos Santos
- P.159 Safety and efficacy of intravenous ILOPROST in the treatment and prevention of scleroderma-related digital ulcers**
 Gabriele Amati, [Amelia Spinella](#), Gilda Sandri, Marco De Pinto, Benedetta Bongiovanni, Giorgia Patrono, Ottavio Secchi, Federica Lumetti, Dilia Giuggioli
- P.160 Two case reports of heart conduction system defects in systemic sclerosis**
[Catarina Abreu](#), Vanessa Fraga, Alice Castro, Ana Cordeiro, Maria Jose Santos

06. MUSCULOSKELETAL

- P.161 Characteristics of patients with concomitant axial spondyloarthritis and Systemic sclerosis**
[Jose Tandaiapan](#), Helena Codes, Ivan Castellvi
- P.162 Muscle Function Impairment in Systemic Sclerosis –SARC-F Questionnaire and Physical Tests for Diagnosis of Sarcopenia**
[Marina Simões](#), Carlos Teixeira, Marília Santos, Juliana Gaino, Luciana Palhares, Zoraida Sachetto, Ana Paula Del Rio
- P.163 Correlation between the peak of skin thickness progression rate and onset of cardiopulmonary involvement in Thai systemic sclerosis patients**
[Piyarat Rujirawinitchai](#), Chingching Foocharoen, Ajanee Mahakkanukrauh, Siraphop Suwannaraj, Patnarin Pongkulkiat, Tippawan Onchan
- P.164 In Systemic sclerosis (SSc) patients, peripheral blood CD21low B cells influence joints involvement**
 Chiara Pellicano, Amalia Colalillo, Lorenzo Vantaggio, Umberto Basile, [Edoardo Rosato](#)
- P.165 Calcinosi in systemic sclerosis, still an unmet need - a retrospective Single-Center Study**
[Cristina Nita](#), Laura Groseanu, Delia Nicoara, Daniela Opris, Violeta Bojinca, Denisa Predeteanu, Florian Bergheta, Violeta Vlad, Ioana Saulescu, Sanziana Daia, Diana Mazilu, Magdalena Negru, Cosmin Constantinescu, Claudia Cobilinschi, Madalina Duna, Denise Mardale, Mihai Abobului, Andra Balanescu
- P.167 Low bone mineral density and increased frequency of osteoporosis in patients with systemic sclerosis**
[Kerstin Liljpers](#), Kristofer Andreasson, Fiona McGuigan, Kristina E Åkesson, Roger Hesselstrand
- P.168 Comparison of radiographic and ultrasound evaluations of the hand to decipher joint involvement in SSc patients: a cross sectional study**
 Marine Tas, Romain Lecigne, Nicolas Belhomme, François Robin, Claire Cazalets, Guillaume Coiffier, [Alain Lescoat](#)
- P.169 Variables associated with the hand functioning in patients with systemic sclerosis**
 Patrycja Kaczmarek, [Eugene J. Kucharz](#), Bartosz Miziolek, Magdalena Kopec-Medrek, Robert Pieczyrak, Przemyslaw Kotyla
- P.170 Osteolysis of the parietal bone in a patient with systemic sclerosis mimicking Gorham-Stout disease**
[Jae-Bum Jun](#), Bon San Koo, Seunghun Lee
- P.171 Inflammatory myopathies with cancer**
[Anna Khelkovskaya-Sergeeva](#), Liudmila Garzanova, Rushana Shayakhmetova, Alena Kolomeychuk, Olga Koneva, Lidia Ananyeva, Anastasia Koltakova, Olga Ovsyannikova, Oxana Desinova, Mayya Shayakhmetova
- P.172 Arthropathy in systemic sclerosis on rituximab therapy during long-term follow up**
[Liudmila Garzanova](#), Lidia Ananyeva, Olga Koneva, Olga Ovsyannikova, Oxana Desinova, Mayya Starovoytova, Rushana Shayakhmetova, Anna Khelkovskaya-Sergeeva



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06. MUSCULOSKELETAL

- P.173 The impact of low 25(OH) vitamin D levels in a portuguese population with Systemic Sclerosis**
 Mariana Diz Lopes, Raquel Miriam Ferreira, Carlos Marques Gomes, Inês Santos, Georgina Terroso, Teresa Martins Rocha, Lúcia Costa
- P.174 Assessment of sarcopenia in patients with systemic sclerosis: a multidisciplinary approach**
 Alessandra Della Rossa, Marco Di Battista, Alessandra Rossi, Gaia Pisano, Mattia Da Rio, Elisabetta Bertolucci, Marta Mosca
- P.175 Systemic Sclerosis-polymyositis/dermatomyositis-overlap syndrome in clinical practice**
 Oxana Desinova, Mayya Starovoytova, Lidia P. Ananyeva, Olga Koneva, Liudmila Garzanova, Olga Ovsyannikova, Rushana Shayakhmetova
- P.176 Chest wall muscle area and exercise capacity in systemic sclerosis**
 Amalia Colalillo, Nicola Galea, Chiara Pellicano, Emanuele Possente, Gregorino Paone, Antonella Romaniello, Maurizio Muscaritoli, Edoardo Rosato, Antonietta Gigante
- P.177 Osteoporosis in systemic sclerosis: a single center study of risk factors. A possible role for bone-vascular axis?**
 Marius Cadar, Davide Mohammad Reza Beigi, Greta Pellegrino, Ilaria Bisconti, Francesca Roman Di Ciommo, Jacopo Landro, Elena Platania, Simona Truglia, Fabrizio Conti, Valeria Riccieri
- P.178 Spinal calcinosis in scleroderma patients, severe morbidity and dangerous alarm**
 Alexandra Balbir-Gurman, Daniela Militianu, Natali Puchkov, Vika Vika Shataylo, Yolanda Braun-Moscovici
- P.179 The Evaluation of Clinical Calcinosis cutis in Systemic Sclerosis: clinical characteristics and risk factors from the European Scleroderma Trial and Research Group (EUSTAR) database**
 Aslihan Avanoğlu Guler, Michael Hughes, Giacomo De Luca, Silvia Bellando Randone, David Launay, Anna Wojteczek, Simona Rednic, Emmanuel Chatelus, Alexandra Balbir-Gurman, Paolo Airò, Ulf Müller-Ladner, Petros P Sfakaki, Luca Idolazzi, Nicoletta Del Papa, Oliver Distler, Marie Elise Truchetet, Madelon C Vonk, Francesco Del Galdo, Marco Matucci-Cerinic, Corrado Campochiario

07. PRECISION MEDICINE

- P.180 Developing a Composite Pharmacodynamic Serum Marker of Skin Severity in Systemic Sclerosis**
 Elen Roblin, Kristina Clark, Claire Beesley, Voon Ong, Christopher Denton
- P.181 Serum lipopolysaccharide-binding protein (LBP) is associated with digital ulcers (DUs) in Systemic sclerosis (SSc) patients**
 Chiara Pellicano, Alessandra Oliva, Amalia Colalillo, Elisa D'alesio, Claudio Maria Mastroianni, Edoardo Rosato

- P.182 Prevalence of CYP2C19 and CYP3A5 polymorphisms in Thai systemic sclerosis with gastroesophageal reflux disease**
 Tippawan Onchan, Patnarin Pongkulkiat, Chingching Foocharoen, Ajanee Mahakkanukrauh, Siraphop Suwannaroj, Suda Vannaprasaht
- P.183 Predictors of persistent disease activity and damage in systemic sclerosis: data from a monocentric cohort**
 Beatrice Moccaldi, Marco Binda, Salvatore Prete, Andrea Martini, Maria Favaro, Andrea Doria, Elisabetta Zanatta
- P.185 Cohort to assess Pathophysiology of Fatigue, Post-Exertional Malaise and further symptoms of Myalgic Encephalomyelitis/Chronic Fatigue Syndrome in Systemic Sclerosis**
 Hanna Grasshoff, Moritz Jaegemann, Konstantinos Fourlakis, Sophie Biedermann, Tanja Lange, Gabriela Riemekasten
- P.186 The role of serum Ferritin level in predicrion of major SSC complications and mortality**
 Alexandra Balbir-Gurman, Shirley Markovich Sholomon, Yolanda Braun Moscovici

08. ARTIFICIAL INTELLIGENCE

- P.187 Deconvolution Reveals Differences in Cell Type Composition Among Systemic Sclerosis Intrinsic Subtypes Defined by Unsupervised Learning In Multiple Cohorts**
 Zhiyun Gong, Rezvan Parvizi, Helen Jarnagin, Haobin Chen, Madeline Morrisson, Michael L. Whitfield

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- P.189 Recommendations of non-pharmacological management of SSC and SLE: assessing alignment with clinical care**
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- P.190 Malignancy in systemic sclerosis. A Clinical Series from University of Debrecen Clinical Center**
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- P.194 Effect of Phosphodiesterase-5 Inhibitor and Endothelin Receptor Antagonist Use on Microvascular Complications, Respiratory Parameters and Pulmonary Artery Pressure in Systemic Sclerosis Patients**
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- P.195 Incidence of pulmonary arterial hypertension among a Hungarian systemic sclerosis patient cohort**
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- P.196 Predictors of 5-years survival in systemic sclerosis patients affected by pulmonary arterial hypertension: data from real life experience**
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- P.197 Pulmonary arterial hypertension screening and management in systemic sclerosis: application of the DETECT algorithm and the ESC/ERS guidelines in real-life setting.**
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- P.198 Mortality and Associated Factors in 44 Patients with Systemic Sclerosis Associated Pulmonary Arterial Hypertension with and without Interstitial Lung Disease**
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- P.201 Quantification of T cell subsets in patients with systemic sclerosis-associated pulmonary arterial hypertension reveals a distinct T helper cell profile**
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- P.202 Pulmonary artery hypertension in patients with systemic sclerosis in the Ukrainian population**
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- P.203 Pulmonary Arterial Hypertension in Scleroderma Spectrum Diseases: Epidemiological Characteristics And Evolution of a Cohort Assisted in a Public Hospital In Autonomous City Of Buenos Aires, Argentina**
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- P.204 Screening for Pulmonary Arterial Hypertension in Patients with Systemic Sclerosis in the Era of New Pulmonary Arterial Hypertension Definitions**
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- P.205 Treatment of Pulmonary Arterial Hypertension in Patients with Connective Tissue Diseases: A systematic review and meta-analysis**
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- P.206 The promising role of TAPSE/PAPs ratio for pulmonary arterial hypertension screening in Systemic sclerosis. Is it possible to improve the specificity?**
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- P.207 Application of REVEAL 2.0 score at diagnosis of All-Cause Pulmonary Hypertension in a cohort of Systemic Sclerosis Patients, to Determine Its Usefulness as a Prognosis tool. A Multicentric Study**
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- P.208 Immunosuppression with targeted therapies reduces morbidity and mortality in pre-capillary pulmonary hypertension associated with systemic sclerosis: a EUSTAR sensitivity analysis based on the hemodynamic definition**
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- P.209 Current therapeutic approach in systemic sclerosis. The problem of pulmonary fibrosis and its management**
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 Maria Paula Álvarez, Yannick Allanore, Ivo Andrare, Maya H. Buch, Gerry Coghlan, Francesco Del Galdo, Christopher P. Denton, Dinesh Khanna, David G. Kiely, John D. Pauling, Sheila Ramjug, Michael Hughes

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- P.211 Maternal and fetal outcomes of prospectively followed pregnancies in Systemic Sclerosis: the experience of a multidisciplinary Pregnancy Clinic in 2008-2023**
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- P.212 Differences in the perception of systemic sclerosis disease management by sex: real-world findings from a multi-national survey**
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- P.213 Sex related differences in Systemic Sclerosis**
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- P.214 Systemic Sclerosis and Pregnancy Outcomes**
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- P.217 Ovarian Function in Patients with Systemic Sclerosis**
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- P.218 Systemic Sclerosis and Parity as a Risk Factor - A Fetal Microchimerism Theory**
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- P.219 Cigarette Smoking Increases the Risk of All-Cause Mortality in Male Patients with Systemic Sclerosis: An Analysis of the EUSTAR Cohort**
Jacopo Claffi, Sophie Liem, Saad Ahmed, Eva Hoekstra, Piotr Wiland, Tatsuya Atsumi, Gabriella Szucs, Alexandra Balbir-Gurman, Laszlo Czirkak, Elisabetta Zanatta, Ina Koetter, Jorg Henes, Marco Matucci-Cerinic, Paolo Airo, Francesco Ursini, Thomas Huizinga, Jeska De Vries-Bouwstra

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- P.220 Initial Characterization of a Skin Symptom Questionnaire for Patients with Systemic Sclerosis**
 Jeong Min Yu, John VanBuren, Angela Child, Jessica Alvey, Lisa Mandl, Laura Pinheiro, Shervin Assassi, Elana Bernstein, Flavia Castellino, Lorinda Chung, Luke Evnin, Tracy Frech, Faye Hant, Laura Hummers, Dinesh Khanna, Kimberly Lakin, Dorota Lebedz-Odrobina, Yiming Luo, Ashima Makol, Jerry Molitor, Duncan Moore, Carrie Richardson, Nora Sandorf, Ami Shah, Ankoor Shah, Victoria Shanmugam, Brian Skaug, Virginia Steen, Elizabeth Volkmann, Jessica Gordon
- P.221 Attitudes and factors affecting the decision-making regarding COVID-19 vaccination among autoimmune rheumatic disease patient**
Orathai Wantha, Ajanee Mahakkanukrauh, Kwankaew Tuydaung, Walailuk Donsrichan, Kanikar Yingyuan, Sumalee Kaewmeun, Siraphop Suwannaroj, Chingching Fochcharoen
- P.222 Comparison of Patient-Reported Outcome Measures with Radiological and Functional Parameters in Systemic Sclerosis-Related Interstitial Lung Disease**
Duygu Temiz Karadag, Enes Basaran, Ozgur Cakir, Neslihan Gokcen, Ayten Yazici, Ayse Cefle
- P.223 Understanding Frailty in Systemic Sclerosis: contributing factors and patient impact**
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- P.224 Causes and risk factors for death in Japanese systemic sclerosis**
Kae Takagi, Hikari Hirose, Akiko Tochimoto, Yuki Ichimura, Tomoaki Higuchi, Yasushi Kawaguchi
- P.225 Predictors of Energy Levels in Systemic Sclerosis Patients**
Yossra Suliman, Maittha Alfazari, Ali Alghalithi, Daniel Furst
- P.226 Self-assessment of scleroderma skin: validation of the PASTUL questionnaire**
Julia Spierings, Voon H Ong, Paco W.J. Welsing, Michael Hughes, John D. Pauling, Francesco Del Galdo, Ariane L Herrick, Christopher P Denton
- P.227 Productivity loss in Portuguese patients with Systemic Sclerosis – a pilot study**
Susana P. Silva, Pedro Miguel Teixeira, Carolina Mazedo, Carolina Vilafanha, Gisela Eugénio, Anabela Barcelos
- P.228 PROs in Patients With Systemic Sclerosis in Real-World Practice**
José Eloy Oller Rodríguez, Carmen Riesco Bárcena, Samuel Leal Rodríguez, Ernesto Tovar Sagrañes, Anderson Huaylla Quispe, Pablo Francisco Muñoz Martínez, Laura Mas Sánchez, Alba Torrat Noves, Daniel Ramos Castro, Belén Villanueva Mañes, Iago Alcántara Álvarez, Isabel Martínez Cordellat, Marta De La Rubia Navarro, Elvira Vicens Bernabeu, Rosa Negueroles Albuxech, Carmen Nájera Herranz, Inés Cánovas Olmos, Elena Grau García, Hikmat Charia, Luis González Puig, José Rafael Ivorra Cortés, José Andrés Román Ivorra

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- P.229 Relationship Between CXCL4, CXCL8, GDF15 And TGF-B Levels and PROS In Systemic Sclerosis**
José Eloy Oller Rodríguez, Carmen Riesco Bárcena, Samuel Leal Rodríguez, Ernesto Tovar Sugrañes, Anderson Huaylla Quispe, Pablo Francisco Muñoz Martínez, Laura Mas Sánchez, Alba Torrat Noves, Daniel Ramos Castro, Belén Villanueva Mañes, Iago Alcántara Álvarez, Isabel Martínez Cordellat, Marta De La Rubia Navarro, Elvira Vicens Bernabeu, Rosa Negueroles Albuixech, Elena Grau García, Hikmat Charia, Carmen Nájera Herranz, Inés Cánovas Olmos, Luis González Puig, José Rafael Ivorra Cortés, José Andrés Román Ivorra
- P.230 The Association of Resilience and Positive Mental Health in Systemic Sclerosis: A Scleroderma Patient-centered Intervention Network (SPIN) Cohort Cross-Sectional Study**
Marieke Neyer, Richard Henry, Marie-Eve Carrier, Linda Kwakkenbos, Gabrielle Virgili-Gervais, Robyn Wojeck, Amanda Wurz, Amy Gietzen, Karen Gottesman, Geneviève Guillot, Amanda Larrie-Jones, Maureen Mayes, Luc Mouthon, Warren Nielson, Michelle Richard, Maureen Sauvé, Daphna Harel, Vanessa Malcarne, Susan Bartlett, Andrea Benedetti, Brett Thombs
- P.231 Concurrent criterion validity of the Assessment of Systemic Sclerosis – Associated Raynaud Phenomenon questionnaire and nailfold capillaroscopy in systemic sclerosis associated Raynaud phenomenon**
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- P.232 Giant Cell Arteritis Overlap in Systemic Sclerosis and Mixed Connective Tissue Disease Treated with Tocilizumab: Case Reports and Literature Review**
Marie-Laurence Laliberté, Justine Lafleur-Careau, Charles Leduc, Jean-Paul Makhzoum, Frédéric Lefebvre, Josiane Bourré-Tessier, Sabrina Hoa
- P.233 Longitudinal changes in the Scleroderma Health Assessment Questionnaire visual analogue scales in patients with systemic sclerosis: a retrospective cohort study**
Michael Hughes, Yvonne Sylvestre, Joanne Manning, Melissa Mandzuk, Muditha Samaranyaka, Graham Dinsdale, Ariane Herrick
- P.234 Improvement across organ system, physician and patient reported outcome measures over a 36-time period in the juvenile systemic scleroderma inception cohort**
Ivan Foeldvari, Jens Klotsche, Ozgur Kasapcopur, Amra Adrovic, Kathryn Torok, Brian Feldman, Maria Teresa Terreri, Ana Paula Sakamoto, Jordi Anton, Simone Appenzeller, Edoardo Marrani, Tadey Avcin, Maria Katsicas, Dana Nemcova, Maria Jose Santos, Flavio Sztajnbock, Lillemor Bernntson, Jürgen Brunner, Gerd Horneff, Sindhu Johnson, Tilmann Kallinich, Mikhail Kostik, Kirsten Minden, Farzana Nuruzzaman, Anjali Patwardhan, Nicola Helmus
- P.235 Comorbidity Burden In Systemic Sclerosis: The Systemic Sclerosis Comorbidome**
Thomas Fauthoux, Damien Brisou, Estibaliz Lazaro, Julien Seneschal, Joel Constans, Sophie Skopinski, Pierre Duffau, Elodie Blanchard, Cecile Bordes, Marie-Elise Truchetet

- P.236 Clinically relevant differences between primary and secondary Raynaud's phenomenon secondary to connective tissue diseases: results from a large international survey**
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- P.237 Factors Associated with Satisfaction with Social Roles and Activities among People with Systemic Sclerosis: A Scleroderma Patient-centered Intervention Network (SPIN) Cohort Cross-sectional Study**
Tiffany Dal Santo, Danielle B. Rice, Marie-Eve Carrier, Gabrielle Virgili-Gervais, Brooke Levis, Linda Kwakkenbos, Susan J. Bartlett, Amy Gietzen, Karen Gottesman, Geneviève Guillot, Marie Hudson, Laura K. Hummers, Vanessa L. Malcarne, Maureen D. Mayes, Luc Mouthon, Michelle Richard, Maureen Sauvé, Robyn K. Wojeck, Marie-Claude Geoffroy, Andrea Benedetti, Brett D. Thombs
- P.238 Factors Associated with Physical Function among People with Systemic Sclerosis: A Scleroderma Patient-centered Intervention Network (SPIN) Cohort Cross-sectional Study**
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- P.239 Systemic Sclerosis in mother and son: Coincidental or Induced Association**
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- P.240 Cerebral Lymphoma and Systemic Scleroderma: Fortuitous Association?**
 Amal Kella, Khadidja Bouadi, Nadia Bouziani, Amel Belabbas, Nadia Chougrani, Abdelkader Bouattou, Tewfik Bounzira, Jugurtha Rami, Karima Abacci, Abdelkrim Berrah, Nazim Laraba, Abdelhalim Morsli, Djenette Hakem
- P.241 Economic, Humanistic, and Health-Related Quality of Life (HRQOL) Burden in Patients with Systemic Sclerosis (SSC) Interstitial Lung Disease (ILD): A Systematic Literature Review (SLR)**
 Emily Glowienka, Sarah Nickolls, Kevin Coady, Eesha Kodi, Ian Steinfield, Florence Wilson, Svetlana Nihtyanova, Roger A. Levy, Daniel Moldaver

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- P.242 Factors Associated with Employment in a Cohort of Patients with Systemic Sclerosis**
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- P.243 Correlation between Baseline Modified Rodnan Skin Score and Ulcer Development in Systemic Sclerosis: A Single-Center Retrospective Study**
 Carolina Vilafanha, Susana P. Silva, Pedro Miguel Teixeira, Carolina Mazedo, Cláudia Pinto Oliveira, Ana Rita Prata, Anabela Barcelos



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- P.245** **Prevalence and clinical associations with impaired sexual function in systemic scleroderma woman: pilot study**
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- P.246** **Quality of Life in Systemic Sclerosis: Case Report**
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- P.247** **The Long-Term Neurodevelopmental Outcome of Children Born to Women With Systemic Sclerosis: Assessment Through a Self-Reported Questionnaire by the mothers and Neuropsychiatric Evaluations of the Child**
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- P.248** **Does chronic fatigue syndrome reflect a more severe chronic hypoxic state in patients with limited cutaneous systemic sclerosis (LCSSC)? A cross-sectional study**
Charmaine van Eeden, Muhammad Elezzabi, Desiree Redmond, Lamia Khan, Douwe Mulder, Maggie Larché, Anthony Russell, Robert Gnidecki, Andrew Mason, Jan Willem Cohen Tervaert, Mohammed Osman
- P.249** **Results from A Living Systematic Review of the Prevalence of Mood and Anxiety Disorders and Factors Associated with Symptoms in People with Systemic Sclerosis**
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- P.250** **Clinical findings associated with poor quality of life in systemic sclerosis - Restoration of clinical findings, including muscle weakness**
Naoki Mugii, Takashi Matsushita, Yasuhito Hamaguchi, Shinichi Noto, Pleiades Tiharu Inaoka, Kazuhiko Takehara
- P.251** **Psychopathological Symptoms and Their Association with the Quality of Life and the Sexual Functioning in Women Affected by Systemic Sclerosis: A Preliminary Investigation**
Antonella Marcoccia, Antonella Guarino, Teresa Cocchiaro, Mariagrazia Modesti, Cecilia Cianfrocca, Rosalia Privitera, Sofia Isabella, Marta Anna Stell Vizzini, Rocco Rago, Alessia Renzi, Michela Di Trani
- P.252** **Exploring the role of palliative care in the management of Systemic Sclerosis: an international survey**
Johnson Lily, Muditha Samaranyaka, Michael Hughes, Zoe Rose, Yusef Emre Akdeniz, Elizabeth Wragg, Timothy Jackson
- P.253** **Factors associated with sleep disturbances in patients with systemic sclerosis**
Eleonora Machura-Porebska, Eugene J. Kucharz, Robert Pieczyrak, Przemyslaw Kotyla

- P.254** **The assessment of organ damage with Scleroderma Clinical Trials Consortium Damage Index in patients with systemic sclerosis in Russian cohort patients**
Anastasia Koltakova, Valeriya Babak, Lidia Ananyeva, Olga Ovsyannikova, Olga Koneva, Liudmila Garzanova, Oxana Desinova, Maya Starovoytova, Rushana Shayakhmetova, Anna Khelkovskaya-Sergeeva
- P.255** **Predictive factors of social integration in women with systemic sclerosis**
Poormoghim Hadi, Liela Azizi, Fatemeh Babae, Maryam Salimie Benyni, Ali Kabir
- P.256** **Health-related quality of life in systemic sclerosis - A Case-Control Study**
Ines Genrinho, Susana Pinto Silva, Carolina Mazedo, Anabela Barcelos
- P.257** **Quality of life in interstitial lung disease associated with systemic sclerosis during rituximab treatment**
Liudmila Garzanova, Lidia Ananyeva, Olga Koneva, Olga Ovsyannikova, Oxana Desinova, Maya Starovoytova, Rushana Shayakhmetova, Anna Khelkovskaya-Sergeeva
- P.258** **Clinical outcomes and associated factors with mortality in systemic sclerosis patients with sarcopenia**
Chingching Foochareon, Sirada Hongkanjanapong, Patnarin Pongkulkiat, Ajanee Mahakkanukrauh, Siraphop Suwannaraj
- P.259** **Development of a Tool to Document Systemic Sclerosis Pain Sources, Patterns, and Management Barriers: A Scleroderma Patient-Centered Intervention Network (SPIN) Patient-Researcher Partnership**
Tiffany Dal Santo, Elsa-Lynn Nassar, Marie-Eve Carrier, Sophie Hu, Susan Bartlett, Rina S. Fox, Linda Kwakkenbos, Yvonne Lee, John Varga, Jo-Ann Lapointe McKenzie, Amanda Lawrie-Jones, Tracy Mieszcza, Silvia Petrozza, Sandra Rideout, Maureen Sauve, Gayle Wixson, Brett D. Thombs
- P.260** **Changes of Damage Index in Patients with Limited and Diffusion Forms of Systemic Sclerosis**
Valeriya Babak, Anastasia Koltakova, Lidia Ananyeva, Olga Koneva, Olga Ovsyannikova, Liudmila Garzanova, Oxana Desinova, Maya Starovoytova, Rushana Shayakhmetova, Anna Khelkovskaya-Sergeeva
- P.261** **Health-related quality of life in patients with systemic sclerosis; comparison to the leading causes of disease burden**
Begonya Alcacer-Pitarch, Ruben Duarte-Fernandes, Anthony C. Redmond, Elizabeth Hensor, Francesco Del Galdo, Maya H. Buch, Anne-Maree Keenan

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- P.262** **Underrepresented Groups in Randomized Controlled Trials of Scleroderma Over the Last 5 Years (2018-2022)**
Shabnum Teja, Matthew Turk, Janet Pope
- P.263** **Underrepresented Groups in Scleroderma Randomized Controlled Trials Over the Last 5 Years (2018-2022)**
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- P.264** **Co-designing Digital Ulcer Self-Care Tools in Systemic Sclerosis**
Tani Ngcozana, Christopher Denton

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- P.266 The Patient as the Primary Educator for a Scleroderma-Focused Interprofessional Education Event: Encouraging Patient Empowerment**
 Corey Fellon, [Hannah Bowen](#), Lee Shapiro, Linda Meenan, Amy Gietzen, Steve Rosenblum, Peter Meenan
- P.267 The rising challenge of Health Literacy in Systemic Sclerosis: data from an Italian cohort provide evidence for an important unmet need in clinical practice**
[Khadija El Aoufy](#), Maria Ramona Melis, Paolo Iovino, Stefano Bambi, Chiara Lorini, Guglielmo Bonaccorsi, Ilaria Galetti, Carla Garbagnati, Silvia Tonolo, Marco Mitola, Serena Guiducci, Marco Maticci Cerinic, Laura Rasero, Silvia Bellando Randone
- P.268 Lessons and feedback from a patient event: Salford Scleroderma Open Day 2023**
[Monisha Corotana](#), Muditha Samaranyaka, Graham Dinsdale, Michael Hughes, Lily Johnson, Elizabeth Wragg
- P.269 Application of Well-Being Therapy in systemic sclerosis: a randomized controlled trial**
[Francesco Bonomi](#), Sara Romanazzo, Elisa Fiorentini, Silvia Peretti, Carlo Cannistra', Arianna Damiani, Gemma Lepri, Silvia Bellando Randone, Fiammetta Cosci, Serena Guiducci
- P.270 Unmet needs and treatment preferences concerning digital ulcers in patients with Systemic Sclerosis**
[Giulia Bandini](#), Alessia Alunno, Barbara Ruaro, Ilaria Galetti, Begonya Alcacer-Pitarch, Filipe Oliveira Pinheiro, Giulia Campanaro, Judith Jade, Stefano Di Donato, Lindsay Muir, Alberto Moggi Pignone, [Khadija El Aoufy](#), Francesco Del Galdo, Zsuzsanna McMahan, Marco Maticci Cerinic, Michael Hughes
- P.271 Patient Engagement in Scleroderma Research: Enhancing Knowledge and Practice**
[Claire Adams](#), Elsa-Lynn Nassar, Maureen Sauve, Danielle Rice, Vanessa Cook, Brett Thombs
- P.272 Impact of online patient support groups in Systemic Sclerosis: A study of the Arab countries online group**
[Housseem Abida](#), Mariem Jebri, Wiem Belhaj, Mohamed Salah Hamdi, Ines Kechaou, Imen Boukhris, Eya Cherif, Samira Azzabi, Lamia Ben Hassine

15. RENAL

- P.273 Identifying clinical associations with scleroderma renal crisis in the US Nationwide Inpatient Sample Dataset**
 Amar D. Desai, David Fiorentino, [Lorinda Chung](#)
- P.274 Iloprost infusion reduces neutrophil gelatinase-associated lipocalin (NGAL) serum levels in a cohort of systemic sclerosis patients**
 Amalia Colalillo, Chiara Pellicano, Umberto Basile, Antonietta Gigante, Rosario Cianci, [Edoardo Rosato](#)

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- P.275 Clinical and ultrasonographic phenotype of SSc patients with sicca symptoms: comparison with Sjogren's disease and sicca manifestations from other causes**
[Francois Zimmermann](#), Francois Robin, Elisabeth Diot, Aurore Bleuzen, Sandrine Jousse-Joulin, Claire de Moreuil, Nicolas Belhomme, Claire Cazalet, Ronan Garlantezec, Agnes Gazzola, Francisco Llamas-Gutierrez, Romain Muraz, Antoinette Perlat, Guillaume Coiffier, Alain Lescoat
- P.276 A glimpse of MRI deep white matter Hyperintensities in Systemic sclerosis patients**
 Shihan Xu, Xinyu Tong, [Huilin He](#), Jiaxin Zhou, Qian Wang, Dong Xu, Xihai Zhao, Mengtao Li, Xiaofeng Zeng
- P.278 Peripheral vascular complications in patients with Systemic Sclerosis are not always caused by the disease itself: a case report**
[Saskia Van De Zande](#), Anne van Gessel, Arie van Roon, Bart Slijkhuis, Alja Stel, Julia Spierings, Amel Abdulle, Anniek van Roon, Douwe Mulder
- P.279 Feasibility study of polarisation sensitive optical coherence tomography (PS-OCT) imaging of digital lesions: towards non-invasive longitudinal ulcer tracking**
 Lewis Smith, Graham Dinsdale, Joanne Manning, Sarah Wilkinson, Ariane Herrick, Mark Dickinson, [Andrea Murray](#)
- P.280 Macrovascular involvement of the Forearm is common in Systemic Sclerosis**
[Berend Slijkhuis](#), Anne van Gessel, Amel Eran Abdulle, Tobias Stel, Anniek van Roon, Saskia van de Zande, Elisabeth Brouwer, Douwe Mulder
- P.281 Nailfold capillaroscopy for prediction of novel severe organ involvement and mortality in systemic sclerosis**
[Cristiana Sieiro Santos](#), Pérez García, Paula Jose Ordas Martinez, Miriam Retuerto Guerrero, Clara Moriano Morales, Carolina Álvarez Castro, Elvira Dáez Álvarez
- P.282 Using unsupervised machine learning classification algorithms for the early diagnosis of Raynaud's phenomenon in children**
[Mario Sestan](#), Daniel Turudic, Nikola Skreb, Martina Held, Marko Baresic, Nastasia Kifer, Marijan Frkovic, Jagoda Stipic, Danko Milosevic, Marija Jelusic



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- P.283 Descriptive Analysis of Changes in the Pattern of Capillaroscopy in a Cohort of Patients Diagnosed with Systemic Sclerosis**
Carmen Riesco Bárcena, Jose Eloy Oller Rodríguez, Jose Ivorra Cortés, Elena Grau García, Pablo Martínez Muñoz, Samuel Leal Rodríguez, Luis González Puig, Anderson Victor Huaylla Quispe, Alva María Torrat Noves, Daniel Ramos Castro, Laura Mas Sánchez, Inés Cánovas Olmos, Hikmat Charia, Isabel Martínez Cordellat, Carmen Najera Herranz, Rosa Negueroles Albuixech, Marta De La Rubia Navarro, Ernesto Tovar Sugrañes, Elvira Vicens Bernabeu, Iago Alcántara Álvarez, Belén Villanueva Mañes, Jose Andrés Román Ivorra
- P.284 Nailfold Video Capillaroscopy Patterns and Associated Clinical Features in Systemic Sclerosis in Qatar**
Aishwariya Padmakumari, Neethu Maria Kunjumon, Fiaz Alam, Samar Al Emadi, Karima Becetti
- P.285 Thermal imaging in clinical trials: exploring post-cold challenge rearming to better utilise thermography as an outcome measure**
Abigail Aika Ndosi, Graham Dinsdale, Joanne Manning, Melissa Mandzuk, Sarah Wilkinson, Ariane Herrick, Andrea Murray
- P.286 Comparison of Lung Ultrasound Scores with Automated Quantitative Ct: Is it Possible to Overcome the Limitations of the Ultrasound Method?**
Daive Mohammad Reza Beigi, Greta Pellegrino, Nicholas Landini, Monica Mattone, Chiara De Nardo, Gregorino Paone, Ilaria Bisconti, Francesca Romana Di Ciommo, Marius Cadar, Simona Truglia, Valeria Panebianco, Fabrizio Conti, Valeria Riccieri
- P.287 Can microvascular damage severity be associated with global disease severity in patients with systemic sclerosis?**
Ana Martins, Daniela Oliveira, Raquel Ferreira, Georgina Terroso, Miguel Bernardes, Sofia Pimenta, Lúcia Costa
- P.288 Optimizing Methodical Assessment of Normal Pattern in Healthy Nailfold Using High-Frequency Ultrasound with Superb Microvascular Imaging**
Gabija Jasionyte, Goda Seskute, Rita Ruginė, Irena Butrimienė
- P.289 STONE Study progress: Ultrasound based Outcome measure of calcinosis in Scleroderma**
Lorraine Green, Robert Fairchild, Antonia Maria Valenzuela Vergara, Diane Mar, Mariani Diaz Deluna, Srijana Davulari, Maria Antonietta D'Agostino, Richard Wakefield, Lorinda Cheung, Francesco Del Galdo
- P.290 A case of self-recorded nailfold capillary changes on a mobile phone: a new opportunity for remote monitoring of microvascular progression in secondary Raynaud's?**
Graham Dinsdale, Joanne Manning, Melissa Mandzuk, Emily Collier, Emre Yusuf Akdeniz, Michael Hughes, Muditha Samaranyaka
- P.291 Digital Artery Volume Index (DAVIX), first quantitative contrast free MRI-based surrogate outcome measure of Digital Ulcer Disease activity in Systemic Sclerosis**
Stefano Di Donato, Michael Hughes, Klodian Gjelogshi, Giuseppina Abignano, Enrico De Lorenzis, Fiammetta Danzo, Giovanni Lettieri, Dominic Bertham, Philip O'connor, Olga Kubassova, Jamshid Demeshkin, Francesco Del Galdo

- P.292 Liver involvement in patients with systemic sclerosis: role of transient elastography in the assessment of hepatic fibrosis and steatosis**
Giovanna Cuomo, Carlo Iandoli, Raffaele Galiero, Alfredo Caturano, Claudio Di Vico, Danilo Perretta, Piervincenzo Adamo, Roberta Ferrara, Luca Rinaldi, Ciro Romano, Ferdinando Carlo Sasso
- P.293 Initial experience with ultrasound imaging as a diagnostic tool for contiguous osteomyelitis in systemic sclerosis patients with infected digital ulcers**
Natalia Puchkov, Zohar Keidar, Doron Markovits, Daniela Miiteanu, Alexandra Balbir-Gurman, Yolanda Braun-Moscovici
- P.294 Utility of infrared thermography for the investigation of microvasculopathy in systemic sclerosis**
Miziolek Bartosz, Pieczyrak Robert, Bultrowicz Monika, Kucharz Eugene J, Bergler-Czop Beata
- P.296 Comparison of the Goh Score and the modified Goh Score in the assessment of Systemic Sclerosis's associated Interstitial lung disease**
Houssein Abida, Zeineb Meddeb, Afès Mariem, Abdelkefi Cherifa, El Ouni Amira, Toujani Sana, Ben Hassine Lamia, Hantous Saoussen, Bouslama Kamel, Larbi Thara, B'chir Hamzaoui Saloua

17. NEUROLOGICAL

- P.299 Cognitive Impairment and Quality of Life in Patients with Systemic Sclerosis and Interstitial Lung Diseases**
Chutchaiwat Savetamornkul, Pintip Ngamjanyaporn, Pirada Witoonpanich
- P.300 Risk of new-onset depression in patients with systemic sclerosis: a nationwide population-based study**
Su-Jin Moon, Bong_Woo Lee, Hae-Rim Kim, Seung-Ki Kwok
- P.301 Foot peripheral neuropathy: a frequent and disabling manifestation in systemic sclerosis**
Begonya Alcacer-Pitarch, Marco Di Battista, Anthony C. Redmond, Anne-Maree Keenan, Stefano Di Donato, Maya H. Buch, Francesco Del Galdo

18. TRANSPLANTATION

- P.302 Impact of autologous hematopoietic stem cell transplantation on Th1/Th2 balance in patients with systemic sclerosis**
Ann-Christin Pecher, Johannes Olschner, Jörg Henes, Reinhild Klein
- P.303 Autologous Hematopoietic Stem Cell Transplantation (AHSCT) In Autoimmune Diseases. Single-Center Experience**
Gema María Lledó, Montserrat Rovira, Priscila Givadedoni, Flor Vera-Morandini, Sergio Prieto-González, Gerard Espinosa
- P.304 Digital Gangrene and Survival Following Lung or Heart-Lung Transplantation in Patients with Systemic Sclerosis**
Brian S. Lee, Shufeng Li, Lorinda Chung

POSTER SESSION



18. TRANSPLANTATION

- P.305 Autologous fat grafting is a promising treatment method of juvenile localized scleroderma (LoS) patients with facial involvement**
Louise Sander, [Ivan Foeldvari](#), Daniel Glaser, Rebecca Stier, J. Camilo Roldán
- P.306 Description of 646 patients with systemic sclerosis and factors associated with morbidity and mortality**
[Erika Diete](#), Ann-Christin Pecher, Joerg Henes
- P.307 Autologous Hematopoietic Stem Cell Transplantation in Systemic Sclerosis: Four Cases**
[Marta De La Rubia Navarro](#), Samuel Leal Rodriguez, Elena Grau Garcia, Hikmat Chiara, Luis González Puig, Rosa Negueroles Albuixech, Elvira Vicens Bernabeu, Isabel Martínez Cordellat, Ernesto Tovar Sugrañés, José Ivorra Cortés, José Eloy Oller Rodríguez, Inmaculada Chalmeta Verdejo, Carmen Riesco Bárcena, Anderson Victor Huaylla Quispe, Iago Alcántara Álvarez, Pablo Muñoz Martínez, Laura Mas Sanchez, Belén Villanueva Mañés, Alba Torrat Novés, Daniel Ramos Castro, José Andrés Román Ivorra
- P.308 Musculoskeletal Manifestations in Chronic Graft-Versus-Host Disease**
[Marta De La Rubia Navarro](#), Samuel Leal Rodriguez, Elena Grau Garcia, Hikmat Chiara, José Ivorra Cortés, Luis González Puig, Rosa Negueroles Albuixech, Elvira Vicens Bernabeu, Isabel Martínez Cordellat, Inmaculada Chalmeta Verdejo, José Eloy Oller Rodríguez, Ernesto Tovar Sugrañés, Carmen Riesco Bárcena, Anderson Victor Huaylla Quispe, Pablo Muñoz Martínez, Laura Sánchez Mas, Daniel Ramos Castro, Alba Torrat Novés, Iago Alcántara Álvarez, Belén Villanueva Mañés, José Andrés Román Ivorra
- P.309 Successful autologous stem cell transplantation of the diffuse cutaneous systemic sclerosis patient**
[Marko Baresic](#), Lijljana Smljjanic Tomicevic, Boris Karanovic, Miroslav Mayer, Branimir Anic

19. VEDOSS

- P.310 Disease progression after one year in patients with very early systemic sclerosis, results from the Hit Hard and Early trial**
[Madelon Clementi Vonk](#), Brigit Kersten, Jacqueline Lemmers, Amber Vanhaecke, Arthiha Velauthapillai, Wieneke van den Hombergh, Frank van den Hoogen, Els van den Ende, Vanessa Smith
- P.311 Towards A Comprehensive Approach to the Management and Prognosis of Systemic Sclerosis's Patients: The Role of Comorbidities**
[Martina Orlandi](#), Silvia Bellando Randone, Rossella De Angelis, Fabio Cacciapaglia, Carlo Scire', Veronica Codullo, Dilia Giuggioli, Francesca Ingegno, Valeria Riccieri, Serena Guiducci, Clodoveo Ferri, Marco Matucci Cernic And, Cosimo Brunì And
- P.312 Arthritis and risk stratification in patients with very early systemic sclerosis**
Sinziana Muraru, Carmen -Marina Mihai, Muriel Elhai, Mike Becker, Suzana Jordan, Alexandru Garaman, Cosimo Bruni, Liubov Petelytska, Anna -Maria Hoffmann-Vold, Oliver Distler, [Rucsandra Dobrota](#)

- P.313 Features of the very early systemic sclerosis**
[Oxana Desinova](#), Mayya Starovoytova, Lidia P. Ananyeva, Olga Koneva, Liudmila Garzanova, Olga Ovsyannikova, Rushana Shayakhmetova

20. INNOVATIVE THERAPIES

- P.314 Calcium-Dependent Mechanisms of a Novel Anti-Fibrotic Agent, M10, in Scleroderma and Normal Lung Fibroblasts**
[Richard Silver](#), Tanjina Akter, Iliia Atanelishvili, Clementine Perry, Ahmed Ismail, Galina Bogatkevich
- P.315 The use of local platelet-rich fibrin therapy in patient with systemic sclerosis and digital ulcer**
[Rushana Shayakhmetova](#), Lidia Ananyeva, Olga Koneva, Liudmila Garzanova, Oxana Desinova, Mayya Starovoytova, Olga Ovsyannikova, Anna Khelkovskaya-Sergeeva
- P.316 Efficacy and Safety of Macitentan in Refractory Digital Ulcers**
[Miriam Retuerto](#), Clara Moriano, Ivan Castellví, Belén Atienza, Elvira Diez
- P.317 Combined blockade of IL-1, IL-33 and IL-36 signaling by targeting IL1RAP ameliorates skin and lung fibrosis in preclinical models of systemic sclerosis**
[Sara Rattik](#), Caitriona Grönberg, Petter Skoog, David Liberg, Thuong Trinh-Minh, Jörg Distler
- P.318 Influence of nintedanib therapy on vasculopathy in patients with interstitial lung disease associated with systemic sclerosis – a preliminary study**
[Aleksandra Nadel](#), Agnieszka Cieplucha, Olga Brzezinska, Filip Styrzynski, Joanna Makowska, Anna Lewandowska – Polak
- P.319 Myeloid-derived suppressor cells (MDSCs) improves skin and lung fibrosis via expansion of IL-10-producing regulatory B cells in bleomycin-induced mouse model of systemic sclerosis**
[Bong-Woo Lee](#), Min-Jung Park, Hae-Rim Kim, Seung-Ki Kwok
- P.320 Sodium thiosulfate treatment of calcinosis cutis in patients with systemic sclerosis assessed by novel biomarkers and advanced diagnostic imaging – a study protocol**
[Luna Toppenberg Lazar](#), Mette Mogensen, Douwe J. Mulder, Anne Braae Olesen
- P.321 CD19 targeting CAR T cell therapy in a patient with severe systemic sclerosis**
[Joerg Henes](#), Ann-Christin Pecher, Luca Hensen, Reinhild Klein, Wolfgang Bethge, Claudia Lengerke
- P.322 Brentuximab Vedotin for skin involvement in refractory diffuse cutaneous systemic sclerosis, an open-label trial with historical controls**
[Andreu Fernandez-Codina](#), Tatiana Nevskaya, Murray Baron, C Thomas Appleton, Matthew J Cecchini, Iago Pinal-Fernandez, Janet Pope
- P.323 Selexipag for the treatment of severe digital vasculopathy in systemic sclerosis: long-term clinical and perfusion results**
[Marco Di Battista](#), Alessandra Della Rossa, Marta Mosca



20. INNOVATIVE THERAPIES

- P.324 Arsenic trioxide demonstrates efficacy in a mouse model of preclinical systemic sclerosis**
Anne Cauvet, Arthur Decellas, Christophe Guignabert, Dominique Rongvaux-Gaïda, Raphaël Thuillet, Mina Ottaviani, Ly Tu, François Rieger, Jérôme Avouac, Yannick Allanore
- P.325 Intravenous Immunoglobulin's role in the management of chronic diarrhea in Systemic Sclerosis: a case series report**
 Maria João Cadrório, João Oliveira, Marcelo Neto, Fernando Albuquerque, Maria João Salvador, Tânia Santiago
- P.326 Targeting IL-6 to treat skin fibrosis: two cases of groove sign resolution in eosinophilic fasciitis**
Virginia Berlingiero, Roberto D'alexandro, Estrella Garcia Gonzalez, Francesca Bellisai, Giacomo Maria Guidelli, Bruno Frediani, Enrico Selvi
- P.327 A Phase I/II dose escalation study to assess the effect of Resolix on safety, tolerability and early clinical efficacy in adult patients with diffuse Systemic Sclerosis**
Susanne Behlke, Melanie Couturier, Sylvain Perruche, Marie-Elise Truchetet
- P.328 A novel therapeutic opportunity in Systemic Sclerosis: The fibrolytic activities of a specialized macrophage secretome**
Susanne Behlke, Francis Bonnefoy, Sylvain Perruche
- P.329 Effects of B cell depletion by CD19-targeted CAR-T cells in a murine model of systemic sclerosis**
 Jérôme Avouac, Anne Cauvet, Cindy Orvain, Morgane Boulch, Philippe Bousso, Yannick Allanore
- P.330 A New Approach for Procedural Sedoanalgesia with Target Controlled Infusion of Ketamine and Propofol in Patients with Systemic Sclerosis Undergoing Autologous fat Transplantation**
Amelia Spinella, Alessandro Carratta, Raimondo Femino, Valentina Pinto, Marco de Pinto, Melba Lattanzi, Ottavio Secchi, Gabriele Amati, Martina Orlandi, Luca Magnani, Giulia Bernante, Giorgio De Santis, Gilda Sandri, Dilia Giuggioli
- P.331 Treatment with autologous bone marrow transplantation in progressive systemic sclerosis case**
Esra Firat Senturk, Tugrul Elverdi, Serdal Ugurlu

21. RANDOMIZED CLINICAL TRIALS

- P.332 Nailfold videocapillaroscopy in patients with systemic sclerosis-associated interstitial lung disease (SSc-ILD)**
Vanessa Smith, Christopher P Denton, Ariane L Herrick, Carina Itrich, Margarida Alves, Maurizio Cutolo
- P.333 VITALISSc™: A Phase II study of BI 685509, a novel soluble guanylate cyclase activator, in patients with systemic sclerosis**
Dinesh Khanna, Jeska de Vries-Bouwstra, Anna-Maria Hoffmann-Vold, Masataka Kuwana, Andrea LH Low, Susanna Proudman, Mary Flack, Tobias Litzenburger, Nora Fagan, Oliver Distler

- P.334 Effectiveness of Non-pharmacological and Non-surgical Interventions to Improve Health Outcomes in Systemic Sclerosis: A Living Systematic Review**
Elsa-Lynn Nassar, Sophie Hu, Linda Kwakkenbos, Susan Bartlett, Richard Henry, Marie-Eve Carrier, Jill Boruff, Carina Boström, Nicole Culos-Reed, Marie Hudson, David Leader, Malin Mattsson, Luc Mouthon, Janet Pope, Robyn Wojeck, Elizabeth Yakes Jimenez, Amanda Wurz, Vanessa Malcarne, Catherine Fortune, Amy Gietzen, Karen Gottesman, Geneviève Guillot, Amanda Lawrie-Jones, Michelle Richard, Maureen Sauvé, Andrea Benedetti, Brett Thombs
- P.335 Baseline demographics and disease characteristics in a Phase 2 study to evaluate efficacy, safety, and tolerability of MT-7117 in subjects with diffuse cutaneous systemic sclerosis**
Dinesh Khanna, Patricia E Carreira, Lorinda S Chung, Christopher P Denton, Marco Matucci-Cerinic, Gabriela Riemekasten, Sakiko Mukai, Yoshiari Yanai, Shawn Liu, Songjie Cai, Tanya Bogoslovsk
- P.336 A Randomized, Parallel-Group, Double-Blind, Placebo-Controlled Phase 3 Study of the Type I Interferon Receptor Antibody, Anifrolumab, in Systemic Sclerosis: Design and Rationale of the Daisy Trial**
Dinesh Khanna, Christopher Denton, Shervin Assassi, Masataka Kuwana, Yannick Allanore, Robyn Domsic, Christi Kleoudis, John Xu, Eszter Csomor, Caroline Seo, Marius Albuлесcu, Raj Tummala, Hussein Al-Mossawi, Rubana Kalyani, Francesco Del Galdo
- P.337 Effects of locally applied water-filtered infrared a radiation in patients with systemic sclerosis and severe Raynaud's phenomenon receiving prostaglandin treatment – a randomized controlled trial**
Priyanka Boettger, Joachim Baer, Ioannis Sagonas, Nils Schulz, Til Ole Kracht, Ulf Mueller-Ladner, Uwe Lange, Philipp Klemm

22. STANDARD OF CARE THERAPIES

- P.338 Acute Hospitalisations between Subtypes of Systemic Sclerosis in Waikato, Aotearoa New Zealand**
 Philippa Van Dantzig, Sri Deepika Padala, Douglas White, Kamal Solanki
- P.339 Efficacy of rituximab in scleroderma patients with progressive disease non-responsive to csDMARDs – preliminary results of a prospective, observational, monocentric study**
Sabina Oreska, Aneta Jirankova, Anna Bobrova, Katerina Bobrova, Barbora Hermankova, Hana Storkanova, Hana Ciferska, Karel Pavelka, Ladislav Senolt, Jiri Vencovsky, Radim Becvar, Michal Tomcik
- P.340 Management pitfalls and prevalence of lost to follow-up due to unpredicted death in systemic sclerosis**
Patnarin Pongkulkiat, Orathai Wantha, Ajanee Mahakkanukrauh, Siraphop Suwannaroj, Chingching Foocharoen
- P.341 Approval status of essential therapeutic drugs for systemic sclerosis versus that of drugs for rheumatoid arthritis**
Ki Won Moon, Soo-Hee Hwang, Jin Young Lee, Jieun Yun, Eun Bong Lee
- P.342 The nintedanib safety profile in patients with systemic sclerosis (SSc) associated with interstitial lung disease (ILD)**
Olga Koneva, Liudmila Garzanova, Lidia Ananyeva, Olga Ovsyannikova, Oxana Desinova, Mayya Starovoytova, Rushana Shayakhmetova

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- P.343 Safety of Rituximab with or Without Mycophenolate Mofetil in Systemic Sclerosis: A Single-Center Study in Japan**
Futoshi Iwata, Sho Fukui, Takehiro Nakai, Asano Takahiro, Hiroki Ozawa, Satoshi Kawaaai, Haruyuki Yanaoka, Yukihiko Ikeda, Hironichi Tamaki, Kenichi Yamaguchi, Masato Okada
- P.344 The pattern of medication use significantly changed over 36 months observation period**
Ivan Foeldvari, Jens Klotsche, Ozgu Kasapcopur, Amra Adrovic, Kathryn Torok, Brian Feldman, Maria Teresa Terrier, Ana Paula Sakamoto, Jordi Anton, Simone Appenzeller, Edoardo Marrani, Tadey Avcin, Dana Nemcova, Maria Jose Santos, Flavio Sztajnbock, Lillemor Berntson, Jürgen Brunner, Gerd Horneff, Sindhu Johnson, Tilmann Kallinich, Mikhail Kostik, Farzana Nuruzzaman, Anjali Patwardhan, Nicola Helmus
- P.345 Botulinum toxin for the treatment of patients with primary and secondary Raynaud's Phenomenon**
Ingrid Gerhardson, Elisabet Dyrsmeds, Karina Gheorghe, Henrik Pettersson, Karin Gunnarsson, Nancy Vivar Pomiano, Marie Holmqvist
- P.346 Long-term retention rate, adverse event temporal patterns and rescue treatment strategies of mycophenolate mofetile in systemic sclerosis: insights from a large real-life multicentric cohort**
Gerlando Natalello, Enrico De Lorenzis, Greta Pellegrino, Lucrezia Verardi, Veronica Batani, Gemma Lepri, Giuseppe Armentano, Marco De Pinto, Francesca Motta, Stefano Di Donato, Vishal Kakkar, Ilaria Bisconti, Corrado Campochario, Stefano Stano, Laura Cometi, Maria De Santis, Dilia Giuggioli, Nicoletta Del Papa, Serena Guiducci, Fiorenzo Iannone, Fabio Cacciapaglia, Giacomo De Luca, Valeria Riccieri, Marco Matucci Cerinic, Maria Antonietta D'agostino, Francesco Del Galdo, Silvia Laura Bosello

23. BASIC IMMUNOLOGY

- P.347 CD32 (Fc γ -RIIB) expression is low on CD21^{low} B cells from systemic sclerosis patients with digital ulcers, interstitial lung disease, and anti-topoisomerase I autoantibodies**
Enangeli Kourkouni, Sotirios G. Tsiogkas, Athanasios Mavropoulos, Theodora Simopoulou, Christina G Katsiari, Dimitrios P Bogdanos, Lazaros Sakkas
- P.348 CD7 activation regulates cytotoxicity-driven pathology in systemic sclerosis, yielding a target for selective cell depletion**
Theodoros Ioanni Papadimitriou, Prashant Singh, Arjan van Caam, Birgitte Walgreen, Mark Gorris, Ely Vitters, Iris van Ingen, Marije Koenders, Ruben Smeets, Madelon Vonk, Jolanda de Vries, Peter van der Kraan, Ypke van Oosterhout, Matijn Huijnen, Hans Koenen, Rogier Thurlings
- P.349 Elevated serum IL-40 in systemic sclerosis is associated with disease activity, gastrointestinal involvement and serum TGF-beta levels, and may be involved in the immune response**
Adéla Navrátilová, Katerina Bobrová, Viktor Becvar, Ondrej Kodet, Radim Becvar, Hana Ciferská, Aneta Pekacova, Karel Pavelka, Jiri Vencovsky, Ladislav Senolt, Lucie Andrés Cerezo, Michal Tomcik

- P.350 Circulating Fibroblasts from Patients with Systemic Sclerosis Behaved Differently than from Normal Controls**
Mie Jin Lim, Won Park, Hyoun-Ah Kim
- P.351 Deficiency and altered phenotype of mucosal-associated invariant T cells in systemic sclerosis**
 Manon Lesturgie-Talarek, Virginie Gonzalez, Lucie Beaudoin, Camélia Frantz, Noémie Senot, Zouriatou Gouda, Camille Rousseau, Jérôme Avouac, Agnès Lehuen, Yannick Allanore
- P.352 Angiotensin 1-7, Alamandin, MRGD Levels in Systemic Sclerosis and Primary Raynaud's Phenomenon**
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- P.353 Effect of phosphodiesterase-4 inhibition by apremilast on the TGF β 1-induced epithelial-to-mesenchymal transition in cultured human lung epithelial cells**
Emanuele Gotelli, Stefano Soldano, Paola Montagna, Elvis Hysa, Rosanna Campitiello, Alberto Sulli, Vanessa Smith, Maurizio Cutolo
- P.354 Analysing the Metabolic Profile of Plasmacytoid Dendritic Cells in Systemic Sclerosis**
Beatriz H. Ferreira, Carolina Mazedo, Daniela Barros, Anabela Barcelos, Adrienne W. Paton, James C. Paton, Rafael J. Argüello, Iola F. Duarte, Philippe Pierre, Catarina R. Almeida
- P.355 Single-Cell RNA Sequencing Reveals Distinct Fibroblast Subsets in Systemic Sclerosis and the Modulatory Effects of Mycophenolate Mofetil**
 Deborah Webb, Reeba Paul, Frank Li, Lei Chen, Dennis Delic, Christian Wohnhaas, Julia Soellner, Shawn Anderson, Andrew Mikosz, LeeAnne Daley, Chao-Ting Wang, Shervin Assassi, Sudha Visvanathan, Jochen Schmitz, David Lenin Ebenezer
- P.356 Endothelial cells-induced macrophages efferocytic alteration in SSc: a role for sustained fibroblast inflammation?**
Agathe Depaire, Damien Brisou, Matthieu Cochard, Sylvain Perruche, Marie-Elise Truchetet, Cécile Contin-Bordes

24. ANGIOGENESIS

- P.357 The usefulness of nailfold capillaroscopy in scleroderma-spectrum disorders - a single-centre observational study**
Ewa Wielosz, Katarzyna Wiak-Walerowicz, Magdalena Dryglewska, Maria Majdan
- P.358 Steroid hormones in systemic sclerosis: associations with disease characteristics and modifications during scleroderma renal crisis**
Aurore Collet, Sebastien Sanges, Amjad Ghulam, Michael Genin, Benoît Soudan, Vincent Sobanski, Eric Hachulla, Sylvain Dubucquoi, Bodale Djobo, Stephanie Espiard, Claire Douillard, David Launay
- P.359 Systemic sclerosis' offspring share nailfold capillaroscopic features with their parents. Is there a vascular memory?**
Marta Amaral, Filipe Paula, Frederico Batista, Joana Caetano, Susana Oliveira, Paul Ames, Jose Delgado Alves



25. B C & T CELLS

- P.360 Assessment of the level of B-cell activation factor in patients with systemic sclerosis before and after rituximab therapy**
Mayya Starovoytova, Oxana Desinova, Lidiya Ananieva, Olga Koneva, Lyudmila Garzanova, Rushana Shayakhmetova, Olga Ovsyannikova
- P.361 Soluble immune checkpoint molecules in patients with systemic sclerosis**
Judith Potjewijd Potjewijd, Rachid Tobal, Jan GMC Damoiseaux, Peter Heeringa, Pieter van Paassen
- P.362 Differential recognition of topoisomerase 1-DNA complexes modulates activation of topoisomerase 1-reactive B cells in systemic sclerosis**
Sam Neppelenbroek, Corrie M. Wortel, Danique M.H. van Rijswijk, Sophie I.E. Liem, Marjolein J.A.L. Wetzels, Albert J.R. Heck, Cynthia M. Fehres, Jeska K. de Vries-Bouwstra, Rene E.M. Toes, Hans U. Scherer
- P.363 Investigating the interaction between B cells and skin in systemic sclerosis**
Mathilde Le Maitre, Thomas Guerrier, Aurore Collet, Mehdi Derhourhi, Benedicte Toussaint, Amelie Bonnefond, Jean-Pascal Meneboo, Celine Villenet, Sheherazade Sebda, Martin Figeac, Antonino Bongiovanni, Meryem Tardivel, Myriam Simon, Manel Jendoubi, Blanche Daunou, Alexis Largy, Sylvain Dubucquoi, David Launay

26. GENETICS/EPIGENETICS

- P.364 Biomarkers Identified by Differentially Expressed RNA in Systemic Sclerosis**
Kevin John Keen, Alykhan Rajan, Christopher Ryerson, Pearce Wilcox, Basak Sahin, Beth Ann Whalen, James Vincent Dunne
- P.365 An explorative analysis of extracellular vesicles and EVs embedded miRNAs at different systemic sclerosis disease stages**
Chiara Bellocchi, Alessandro Albini, Alessandro Santaniello, Lorenzo Beretta, Martina Iacubino, Federica Rota, Laura Cantone, Giulia Solazzo, Laura Dioni, Luca Ferrari, Valerina Bollati, Marco Vicenzi

27. OMICS

- P.366 Serum Based Biomarker Algorithm to Predict Rapid Progression of FVC in SSC Across Disease Subsets**
Kakkar Vishal, Sunhwa Kim, Marco Di Battista, Rebecca Ross, Yingtao Bi, Thierry Sornasse, Francesco Del Galdo
- P.367 High throughput multiplex assay identifies clinically meaningful clusters in systemic sclerosis patients with low cardiovascular risk and no history of heart disease**
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