EDITORIAL
2103  Clinical Snippets
2104  Editors’ Picks

JID CONNECTOR

JID CONNECTOR

e103  SnapshotDx Quiz: September 2021  ZJ Jaeger, NS Raval and A Musiek

e111  Cells to Surgery Quiz: September 2021  A McEvoy, A Martin and ML Council

COMMENTARIES
2105  The RATIOnal Role of Polyamines in Epidermal Differentiation
K Allmeroth and MS Denzel

2107  Extracellular Adenosine Triphosphate: A Modulator of Cutaneous Candida albicans Infection
SM Caucheteux and V Piguet

PERSPECTIVE
2109  Raising the Bar for Randomized Trials Involving Artificial Intelligence: The SPIRIT-Artificial Intelligence and CONSORT-Artificial Intelligence Guidelines
M Taylor, X Liu, A Denniston, A Esteva, J Ko, R Daneshjou and A-W Chan, on behalf of The SPIRIT-AI and CONSORT-AI Working Group

REVIEW
2112  New Frontiers in Psoriatic Disease Research, Part I: Genetics, Environmental Triggers, Immunology, Pathophysiology, and Precision Medicine
D Yan, JE Gudjonsson, S Le, E Maverakis, O Plazyo, C Ritchlin, JU Scher, R Singh, NL Ward, S Bell and W Liao

ORIGINAL ARTICLES

Autoimmunity/Autoinflammation
2123  Autoantibodies to DSC3 in Pemphigus Exclusively Recognize Calcium-Dependent Epitope in Extracellular Domain 2
H Koga, K Teye, Y Otsuji, N Ishii, T Hashimoto and T Nakama

2132  Rituximab and Corticosteroid Effect on Desmoglein-Specific B Cells and Desmoglein-Specific T Follicular Helper Cells in Pemphigus
M Maho-Vaillant, C Perals, M-L Golinski, V Hébert, F Caillot, C Mignard, G Riou, M Petit, M Viguier, M Hertl, O Boyer, S Calbo, N Fazilleau and P Joly

2141  The Pathogenic Role of CD4+ Tissue-Resident Memory T Cells Bearing T Follicular Helper-Like Phenotype in Pemphigus Lesions
Y Zou, H Yuan, S Zhou, Y Zhou, J Zheng, H Zhu and M Pan

2151  Highly Multiplexed Mass Cytometry Identifies the Immunophenotype in the Skin of Dermatomyositis
J Patel, S Maddukuri, Y Li, C Bax and VP Werth

Carcinogenesis/Tumorigenesis
2161  Differential Molecular Expression Patterns Associated with Metastasis in Cutaneous Squamous Cell Carcinoma: A Systematic Review and Meta-Analysis
PM Mulvaney, PR Massey, KK Yu, JE Drinan and CD Schmults
Cell Biology

2170 AMPK Inhibits mTOR-Driven Keratinocyte Proliferation after Skin Damage and Stress
ED Crane, W Wong, H Zhang, G O’Neil and JD Crane

2178 The Polyamine Regulator AMD1 Upregulates Spermine Levels to Drive Epidermal Differentiation
AB Rahim, HK Lim, CYR Tan, L Jia, VI Leo, T Uemura, J Hardman-Smart, JEA Common, TC Lim, S Bellanger, R Paus, K Igarashi, H Yang and LA Vardy

Clinical Research: Epidemiology

2189 Use of Fertility Drugs and Risk of Malignant Melanoma: Results from a Large Danish Population-Based Cohort Study
L Freund, SK Kjær, S Guleria, V Albieri, A-M Nybo Andersen, K Frederiksen and A Jensen

Clinical Research: Pathophysiology

2197 In-Depth Analysis of the Hidradenitis Suppurativa Serum Proteome Identifies Distinct Inflammatory Subtypes
K Navrazhina, S Garcet, J Gonzalez, D Grand, JW Frew and JG Krueger

2208 Prurigo Nodularis Is Characterized by Systemic and Cutaneous T Helper 22 Immune Polarization

Clinical Research: Therapeutics

2219 Imiquimod Accelerated Antitumor Response by Targeting Lysosome Adaptation in Skin Cancer Cells

Genetics/Genetic Disease

2229 Biochemical Basis of Skin Disease Mal de Meleda: SLURP-1 Mutants Differently Affect Keratinocyte Proliferation and Apoptosis
MA Shulepko, ML Bychkov, ZO Shenkarev, DS Kulbatskii, AM Makhonin, AS Paramonov, AO Chugunov, MP Kirpichnikov and EN Lyukmanova

Melanocytes/Melanoma

2238 A Combination of Epigenetic BET and CDK9 Inhibitors for Treatment of Human Melanoma
AA Emran, H-Y Tseng, D Gunatilake, SJ Cook, F Ahmed, S Wang, P Hersey, SJ Gallagher and JC Tiffen

2250 TBX3 Promotes Melanoma Migration by Transcriptional Activation of ID1, which Prevents Activation of E-Cadherin by MITF
J Peres, V Damerell, J Chauhan, A Popovic, P-Y Desprez, M-D Galibert, CR Goding and S Prince

Pharmacology/Drug Development

2261 PAK1-Dependent Antitumor Effect of AAC-11–Derived Peptides on Sézary Syndrome Malignant CD4+ T Lymphocytes
J Habault, N Thonnart, E Pasquereau-Kotula, M Bagot, A Bensussan, BO Villelouteix, A Marie-Cardine and J-L Poyet
2272 *A Potent and Selective Kallikrein-5 Inhibitor Delivers High Pharmacological Activity in Skin from Patients with Netherton Syndrome*

**Pigmentation**

2280 *Analysis of Matched Skin and Gut Microbiome of Patients with Vitiligo Reveals Deep Skin Dysbiosis: Link with Mitochondrial and Immune Changes*
H Bzioueche, K Simonytė Sjödin, CE West, A Khemis, S Rocchi, T Passeron and MK Tulic

**Tumor Biology**

2291 *Long-Term Effects of Sirolimus on Human Skin TSC2-Null Fibroblast–Like Cells*
X Cai, Q Fan, GS Kang, K Grolig, X Shen, EM Billings, G Pacheco-Rodriguez, TN Darling and J Moss

**LETTERS TO THE EDITOR**

2300 *Hair Follicle Chemosensation: TRPM5 Signaling Is Required for Anagen Maintenance*
A Mardaryev, M van Lessen, M Alam, F Jimenez Acosta, T Bíró and R Paus

2303 *Real-World Application of a Noninvasive Two-Gene Expression Test for Melanoma Diagnosis*
MA Marchetti, JK Nanda, SE Mancebo and SW Dusza

2306 *Adenosine Triphosphate Released by Candida albicans Is Associated with Reduced Skin Infectivity*
S Zhang, TN Edwards, S Mogavero, AR Mathers, B Hube, J Berman, M-E Bougnoux, C D’Enfert and DH Kaplan

**B1 LATE-BREAKING ABSTRACTS FROM THE SOCIETY FOR INVESTIGATIVE DERMATOLOGY 2021 ANNUAL MEETING**

**COVER IMAGE**

In this issue of the JID, Patel and colleagues use highly multiplexed mass cytometry to characterize the inflammatory infiltrates in skin lesions of patients with dermatomyositis (DM) in great detail. Left panel: relative average representations of cell subpopulations in DM lesional skin. Right panel: relative representations of cell subpopulations in the skin of individual DM patients and healthy controls. Refer to pages 2151-2160 to learn more about the technique utilized and the results of the experiments.