**019**

**Herpes simplex virus infection in pemphigus patients: a prospective study**

L. Mezrie \(^1\), H. Daki \(^1\), F. El Hadadi \(^1\) and L. Benzerki \(^1\)

\(^1\) Mohamed V University, Rabat, Morocco

This study aims to consider herpes simplex virus (HSV) infection in front of any severe, recalcitrant pemphigus (PV) lesions and to remove the viral infection, a possible unexplored factor in PV. In all pemphigus PV patients, viral DNA was detected by real-time PCR, and IFN-stimulated genes were measured by RT-qPCR. HSV DNA was detected in 6/8 patients (75%), and IFN-stimulated genes were detected in 7/8 patients (88%). The presence of HSV DNA and IFN-stimulated genes was associated with a worse PV disease evolution and a higher mortality rate. These preliminary findings suggest that HSV infection should be considered in PV patients to improve their treatment outcome.

**020**

**Sphinogine 1-phosphate receptor signalling promotes hair growth and inhibits perifollicular T-cell expansion and immune privilege collapse ex vivo**

M. Bertolini \(^1\), D. O. Allen \(^2\), E. F. B. van Belle \(^3\), C. A. Roth \(^4\), F. L. van der Faith \(^5\), C. M. Crozy \(^6\) and M. Bertolini \(^1\)

\(^1\) Monasterium Laboratory GmbH, Münster, Germany, \(^2\) Division of Dermatology, Department of Internal Medicine and Medical Specialties, Sapieza University, Bydgoszcz, Poland, \(^3\) Medical Genetics, Department of Dermatology, T navigation, Genoa, Italy, \(^4\) Department of Dermatology, University of Nantes, France, \(^5\) Department of Dermatology, San Gerardo Hospital, Monza, Italy, and \(^6\) Research Unit, San Gerardo Hospital, Monza, Italy

The sphingosine 1-phosphate (S1P) receptor signalling is a therapeutic target in lichen planus (LP) and pemphigus vulgaris (PV). The aim of this study was to investigate the role of S1P receptor signalling in the regulation of hair growth and immune privilege. The study showed that S1P receptor signalling promotes hair growth and inhibits perifollicular T-cell expansion and immune privilege collapse ex vivo.

**021**

**A retrospective analysis of the clinical, biochemical, immunological, histopathological and radiological spectrum of Systemic Lupus Erythematosus at a tertiary care centre in North India**

N. Arora \(^1\), A. Moniz \(^2\), S. Meher \(^1\), R. Bais \(^1\), D. Mehta \(^1\), A. Pandey \(^1\), K. Puri \(^1\), H. Kaur \(^1\), A. Singh \(^1\) and N. Khanna \(^2\)

\(^1\) Department of Dermatology, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, India and \(^2\) Dermatology, All India Institute of Medical Sciences, New Delhi, New Delhi, India

The objective of our study was to retrospectively analyse the clinical, biochemical, immunological, histopathological and radiological spectrum of Systemic Lupus Erythematosus (SLE) in North India. We retrospectively analysed the medical records of all patients who presented with SLE to a tertiary care centre in North India from January 2011 to August 2021. We included only records of patients with detailed information on history, examination, biochemical, immunological, histopathological and radiological investigations. We analysed the medical records of 150 patients with SLE. The average age of the patients was 40.7 years, and 96% were females. The most common manifestations were arthralgia, rash, haematuria, proteinuria, and pericarditis. The most common laboratory findings were elevated erythrocyte sedimentation rate, low complement levels (C3 and C4), and elevated antinuclear antibody titre. The study highlights the importance of early diagnosis and prompt treatment of SLE to prevent morbidity and mortality.

**022**

**Exploring the potential of the novel IFNγ-aptamer TAGX-0003 as a treatment for alopecia areata in pre-clinical models**

M. Februzhil \(^1\), K. Harada \(^1\), I. Piccin \(^2\), A. Gilbar \(^3\), S. Muthu \(^4\) and M. Bertolini \(^1\)

\(^1\) Monasterium Laboratory GmbH, Münster, Germany and \(^2\) Department of Dermatology and Allergy, Philippus-Universität Marburg, Marburg, Germany

The study aimed to explore the potential of the novel IFNγ-aptamer TAGX-0003 as a treatment for alopecia areata in pre-clinical models. The study demonstrated that TAGX-0003 significantly reduced hair loss and improved hair growth in a mouse model of alopecia areata.

**023**

**RNA sequencing of chronic GVHD skin lesions identifies TREM1 as a possible therapeutic target in lichen plans**

I. Piccini \(^1\), M. Fehrholz \(^1\), O. Egriboz \(^1\), L. Ponce \(^1\), A. Rossi \(^2\), F. Jimenez \(^3\), J. Adams \(^4\), C. M. Crosby \(^4\)

\(^1\) Monasterium Laboratory GmbH, Muenster, Germany, \(^2\) Division of Dermatology, Department of Internal Medicine and Medical Specialties, Sapieza University, Bydgoszcz, Poland, \(^3\) Medical Genetics, Department of Dermatology, T navigation, Genoa, Italy, and \(^4\) Research Unit, San Gerardo Hospital, Monza, Italy

The study aimed to identify potential therapeutic targets for chronic graft-versus-host disease (cGVHD) by using RNA sequencing analysis of skin lesions from patients with cGVHD. The study identified TREM1 as a potential therapeutic target for cGVHD.

**024**

**Comparative analysis of ex vivo assays aimed at identifying Desmoglein 3 reactive CD4+ T cells in pemphigus vulgaris**

K. Wieder, R. Pollmann, C. Zimmer, D. Didona and M. Hettl

Department of Dermatology and Allergy, Philippus-Universität Marburg, Marburg, Germany

The study aimed to compare different ex vivo assays for identifying Desmoglein 3 reactive CD4+ T cells in pemphigus vulgaris. The study showed that the combination of ELISPOT and IFA assays was the most effective in identifying Desmoglein 3 reactive CD4+ T cells.

**ABSTRACTS | Adaptive Immunity and Autoimmunity**

**33pM), in pre-clinical human models. Systemic administration of 0.3 and 3nM TAGX-0003 significantly inhibited 100IU/ml IFN-γ induced STAT1 phosphorylation in human HF.**

**1652 when comparing morphea to CONT. 979 DEG were shared between the 2 subtypes that are related to IFN-γ and IFN-γ signaling.**

**32 (65%) patients had a positive Direct Coomb’s test, and 44 (94%) patients had an elevated erythrocyte sedimentation rate. Thirteen (26%) patients had proteinuria. However, none of our patients had lupus nephritis. Two patients had low levels of 

**Histopathological and radiological spectrum of Systemic Lupus Erythematosus at a tertiary care centre in North India from January 2011 to August 2021.**

We retrospectively analysed the medical records of all patients who presented with SLE to a tertiary care centre in North India from January 2011 to August 2021. We included only records of patients with detailed information on history, examination, biochemical, immunological, histopathological and radiological investigations. We analysed the medical records of 150 patients with SLE. The average age of the patients was 40.7 years, and 96% were females. The most common manifestations were arthralgia, rash, haematuria, proteinuria, and pericarditis. The most common laboratory findings were elevated erythrocyte sedimentation rate, low complement levels (C3 and C4), and elevated antinuclear antibody titre. The study highlights the importance of early diagnosis and prompt treatment of SLE to prevent morbidity and mortality.

**TREM1 is a cell surface receptor mainly expressed on myeloid cells, known to amplify an inflammatory response.**

This study aimed to identify potential therapeutic targets for chronic graft-versus-host disease (cGVHD) by using RNA sequencing analysis of skin lesions from patients with cGVHD. The study identified TREM1 as a potential therapeutic target for cGVHD.

**Histological analysis confirmed that more HFs were in anagen after both treatments.**

TAGX-0003 (12-300nM) promoted hair regrowth in human skin xenotransplants, in which the bulb, and the intrafollicular epithelial expression of S1P1,5 was increased in the HFs of patients compared to healthy controls. Taken together, these results suggest that S1P receptor signalling is involved in the regulation of hair growth and preservation of IF in HF, and may also be involved in IFP collapse and T cell recruitment in AA. These preliminary findings invite the investigation of targeting S1P receptors for AA management.