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**Treating patients with psoriasis and concurrent malignancies with biologics and apremilast: Results from 2 centers in the Czech Republic**



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**Background:** Psoriasis vulgaris is a chronic skin disease with high impact on quality of life. Life-long term treatment with systemic agents is necessary for controlling the symptoms. Usually, clinical trials exclude patients with history of malignant diseases and therefore it remains unclear how to treat these patients, especially with biologic agents and apremilast.

**Methods:** We analyzed 345 patients on biologic therapy and apremilast, who either developed malignancy (excluding nonmelanoma skin cancer) during biological therapy and further continued in the treatment, or had a preexisting malignancy before biologics or apremilast introduction.

**Results:** We detected 12 patients with malignant tumors except NMSC (4 females and 8 males) with average age of 58.4 for males and 57.2 for females. One patient was diagnosed with lung cancer, 5 with malignant melanoma, 3 with prostate cancer and 3 females with breast cancer. One of the melanoma patients was on pembrolizumab therapy when apremilast was started. Average follow up of these patients with concurrent malignancy on biologics or apremilast was 28.3 months. No progression of malignancy was observed during this follow-up. All patients were adequately treated for their malignancy. Median time of the treatment initiation after cancer diagnosis was 22.5 months.

**Conclusions:** Our case series support that biologic therapy and apremilast may be used in patients with malignant disease before the end of 5-year follow up after cancer diagnosis, which most guidelines recommend. Larger numbers and longer follow up will be needed to confirm our experience.

*Commercial disclosure: None identified.*

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**Long-term results of dupilumab in the treatment of moderate to severe atopic dermatitis: The experience of five reference dermatology units in Spain**



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**Background:** Atopic dermatitis (AD) is a multifactorial disease resulting from the interaction of genetic predisposition, environmental triggers, changes in the integrity of the skin barrier, and immune dysregulation. Targeting T<sub>H</sub>2 cytokines IL-4 and IL-13 with dupilumab has shown to be effective to control the signs and symptoms of AD in previous clinical trials. It is necessary to assess the performance of this treatment in real clinical practice.

**Methods:** We present a series of 32 patients from 5 Andalusian hospitals with moderate to severe AD. Data collected included age, time of evolution, comorbidities, and previous treatments. Disease severity was measured by SCORAD and Pruritus VAS scores at baseline visit, and at follow-up weeks 4, 12, 24, 52, and 104. Quality of life was assessed with DLQI.

**Results:** The effectivity of dupilumab treatment was assessed at weeks 4, 12, 24, 52, and 104. At baseline, SCORAD was 59.4, while pruritus VAS was 8.3. In the follow-up week 52 visit, SCORAD decreased to 10.5 (82.3%), and pruritus VAS reduced to 2.1 (74.7%). Regarding QoL, baseline DLQI value was 19, reaching 2 (89.5%) at the same cut-off. Baseline SCORAD of this series was 58.7, while pruritus VAS was 8.18. In the follow-up visits, SCORAD diminished to 15.03 at week 12 (74.04%), and pruritus VAS reduced to 2.4 at the same cut-off (70.67%). Efficacy results of the following visits, including week 104 will be updated at the AAD Meeting. Safety profile was favorable, reporting 3 cases of conjunctivitis, managed positively without suspension of dupilumab.

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**Primary cutaneous coccidioidomycosis mimicking folliculitis: Case report**



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Coccidioidomycosis is the oldest of the major systemic mycoses disease, it's caused by the dimorphic fungus *Coccidioides immitis* and *Coccidioides posadasii*, occurring mainly in semi desert areas. Up to 98% of all clinical presentations corresponds to the primary pulmonary coccidioidomycosis, the remaining 2% corresponds to the primary cutaneous form. Clinically causes nodules sometimes with ulceration and in some other cases presenting verrucosum injuries, occurring 15-20 days after traumatic inoculation. Diagnosis is made by clinical examination aided by Wilkins criteria. Mycologic direct examination shows spherules; also is important the skin biopsy and the mycologic culture. A 75-year-old woman from Guadalajara, México, with immunosuppression factors and history of living in California for 16 years, presented a dermatosis in the anterior and right side of the trunk, comprising papules, pustules, and nodules seated on an erythematous base with 4 months of evolution, with no respiratory commitment. Gram, Ziehl-Neelsen stain, and direct examination were performed with negative results, mycologic culture compatible with *Coccidioides* spp; coccidioidina reaction of 40 mm in 48 hours and coccidioidina antigen precipitation band and positive complement fixation test 1:320. Itraconazol was initiated with improvement in the lesions and a tendency to cure. This is a rare form of presentation, and sometimes can mimic other diseases like folliculitis or sporotrichosis. In order to reach the diagnosis of primary cutaneous coccidioidomycosis, it is important to perform a good and complete physical examination as well as mycologic tests, and to discard pulmonary disease, this will give us an accurate diagnosis.

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**The skin microbiome in patients with rosacea and healthy control subjects**



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**Background:** Rosacea is a common chronic facial dermatosis, but its pathophysiology is still unclear. Microorganisms were suggested to play a role in the pathogenesis of the disease.

**Objective:** We aimed to conduct a case-control study to characterize the skin bacterial and fungal microbiome in rosacea patients compared with healthy individuals.

**Methods:** Fifty-eight participants were enrolled in this study, including 21 patients with erythematotelangiectatic (ETR) rosacea, 15 patients with papulopustular (PPR) rosacea and 22 healthy subjects. There were no significant differences in age and gender between the three groups. DNA was extracted from skin samples collected from the cheeks of the participants, and the 16S rRNA V3/V4 genes and internal transcribed spacer 1 region were sequenced using an Illumina HiSeq 2500 platform.

**Results:** The analyses revealed that both the number of observed species and Shannon diversity of the bacterial communities were increased in patients with rosacea. Taxonomic profiling showed a reduction in the relative abundance of the majority skin genus *Cutibacterium* in both the ETR and PPR groups (0.24 in ETR vs 0.27 in PPR vs 0.67 in controls, respectively;  $P < .001$ ). In addition, the relative abundance of *Staphylococcus* spp. was significantly enriched in the ETR group, and *Streptococcus* was enriched in the PPR group. However, there was no significant difference in fungal diversity or fungal phyla/genera between the groups.

**Conclusions:** Our study demonstrated that rosacea was associated with changes in the bacterial microbiome, including an increased diversity and a change in the abundances of certain bacterial genera.

*Commercial disclosure: None identified.*