# Joint AAD-NPF Guideline on Topical Therapy and Alternative Modalities for Psoriasis Released



The latest expert-written and evidence-based guideline on the management of psoriasis with topical therapies and alternative medicine modalities was published in *Journal of the American Academy of Dermatology*.¹ The guideline is the sixth published jointly by the American Academy of Dermatology and National Psoriasis Foundation²-6 and specifically addresses important clinical questions regarding treatment recommendations and the role dermatologists should take in monitoring and educating patients regarding benefits and risks.

In the first part of the guideline, 'the expert group explored the efficacy, effectiveness, and safety of topical monotherapies. Among the options discussed are topical steroids, topical tacrolimus and pimecrolimus, vitamin D analogues, tazarotene, moisturizers, salicyclic acid, anthralin, and coal tar. The group also discussed these options in combination with biologic agents as well as nonbiologic combinations, including methotrexate, cyclosporine, acitretin, and apremilast.

Second, the use of alternative medicines are outlined. These options are commonly a hot button topic among patient groups, and

dermatologists should be aware of alternative medicines to better guide patient care. The group also recognized complementary alternative medicine applications. Further discussed in the guidelines are traditional Chinese medicine, herbal therapies (aloe vera, St John's wort), diet and nutrition (fish oil, vitamin D, turmeric, zinc, and gluten), and mind-body therapies (hypnosis, stress reduction/meditation).

This most recent guideline also looks at various severity measures used to assess disease: body surface area (BSA), Psoraisis Area and Severity Index, Physician Global Assessment (PGA), PGA x BSA, Psoriasis Symptom Inventory, Dermatology of Life Quality Index, and pruritus assessment. The group evaluates each measure for accuracy, clinical utility, and treatment parameters.

### References

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# Adults With Hospital-Managed AD Have Increased Risk of Systemic Infection, Study Finds

A nationwide, register-based cohort study found that adults with atopic dermatitis (AD) have an increased risk of systemic infection. Researchers sought to examine whether Danish adults with AD have an increased risk of developing systemic infections in a register-based cohort study. Cox models were used to estimate hazard ratio (HR) or adjusted HR (aHR) with 95% CI. In total, the study included 10,602 adults with AD with a median age of 29.8 years (range, 22.6-44.8 years) and 106,020 reference individuals.

Overall incidence rate of systemic infetions per 10,000 person-years was 180.6 (95% CI, 172.6-189.0) among adults with AD compared with 120.4 (95% CI, 118.3-122.5) among reference adults. An association between AD and systemic infection in the cohort was observed for musculoskeletal (aHR, 1.81; 95% CI, 1.42-2.31), heart (aHR, 1.75; 95% CI, 1.21-2.53), and

respiratory infections. In particular, the respiratory infections included upper (aHR, 1.42; 95% CI, 1.15-1.73) and lower (aHR, 1.21; 95% CI, 1.10-1.33) tract infections. An increased risk of sepsis (aHR, 1.19; 95% CI, 1.01-1.44) and skin infections (aHR, 2.30; 95% CI, 2.01-2.62) was also found.

While a large-scale study, the researchers noted that the results should not be generalized to adults with mild AD treated outside of the hospital system.

"We found an increased risk of systemic infections among adults with hospital-managed AD," they concluded.

### Reference

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## Immunosuppressive Therapy Use Not Linked to Higher Risk of Severe COVID-19 Infection

A group of researchers from Henry Ford Health System in Detroit, MI, found that immunosuppressive therapies were not associated with a significantly greater risk of severe COVID-19. The results of their study were published online in *Journal of the American Academy of Dermatology*.

To determine if immunosuppressive therapeutic type impacts the outcomes of patients with immune-mediated inflammatory diseases (IMIDs), the group conducted a retrospective cohort analysis of their health system. Included in the analysis were patients with a IMID treated with immunosuppressive therapy who were tested for COV-ID-19 between February 1, 2020, and April 18, 2020. Multivariate models using the class of immunosuppressive agent, patient comorbidities, and patient demographic factors were used to determine predictors of COVID-19 infection, admission, ventilator use, and mortality.

The study included 213 patients with a IMID. Of this cohort, 36.2% tested positive for COVID-19; this COVID-positive group

had no greater odds of hospitalization or ventilation when compared with the general population. In addition, after multivariate correction, no specific immunosuppressive drug was associated with a worse course of disease. The authors noted that multidrug regimens predicted an increased rate of hospitalization. However, biologic use predicted a decreased rate of hospitalization, most notably with inhibitors of tumor necrosis factor alpha.

While the study was limited to a single center and by the small patient cohort, the researchers concluded that immunosuppressive therapies for the treatment of IMIDs are not associated with a greater risk of COVID-19 infection, admission, ventilation, and mortality.

#### Reference

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## Is Capecitabine Beneficial For Preventing Precancerous and Cancerous Skin Lesions?

apecitabine chemoprevention may be considered for the treatment of precancerous and cancerous lesions among patients at high risk for developing skin cancers, including those with a history of multiple squamous cell carcinomas (SCCs) and solid organ transplant recipients, according to findings from a recent systematic review published in *JAMA Dermatology*.

The researchers analyzed articles published between January 1, 1998, and December 31, 2019, that assessed the use of capecitabine for the treatment and prevention of actinic keratoses (AKs), basal cell carcinomas (BCCs), and SCCs. Included in the analysis were a total of 16 articles: eight case reports describing the inflammation of AKs in patients with solid organ cancer treated with capecitabine, one case report and one case series that assessed the use of capecitabine for the treatment of advanced or widespread cutaneous SCCs, and three case reports and three case series that investigated the use of capecitabine to prevent the development of SCC in solid organ transplant recipients.

Overall, two studies found significant reduction in the rate of SCC incidence during treatment with capecitabine compared with before treatment. Adverse effects limited the duration of chemoprevention in several patients. The most common of these included fatigue, nausea, vomiting, diarrhea, elevated creatinine level, hand-foot syndrome, hyperuricemia, weight loss, anemia, and cardiomyopathy.

"Capecitabine treatment may be associated with a decrease in the incidence of SCCs in [solid organ transplant recipients]," the researchers concluded, also noting that

capecitabine may be associated with decreases in the incidence of AK and BCC. "However, practitioners must weigh this benefit against the risk of adverse effects for each patient individually. Further investigation with a prospective clinical trial is warranted," they added.

### Reference

Schauder DM, Kim J, Nijhawan RI. Evaluation of the use of capecitabine for the treatment and prevention of actinic keratoses, squamous cell carcinoma, and basal cell carcinoma: a systematic review. *JAMA Dermatol*. Published online July 8, 2020. doi:10.1001/jamadermatol.2020.2327



# DPP-4 Inhibitors Associated With Increased Risk of Bullous Pemphigoid

indings of a cohort study suggest that dipeptidyl peptidase 4 (DPP-4) inhibitor use is associated with a higher risk of bullous pemphigoid (BP) compared with sulfonylurea. The results from Lee et al were published in *JAMA Dermatology*.

The study analyzed data from the Optum Clinformatics Data Mart (October 17, 2006 - December 31, 2018), IBM MarketScan Research Database (October 17, 2006 - December 31, 2017), and Medicare (January 1, 2006 - December 31, 2016) to characterize the incidence rate of BP among patients with type 2 diabetes who received DPP-4 inhibitors vs those treated with second-generation sulfonylureas. The rate along with hazard ratio (HR) and 95% CI were estimated, and subgroup analyses by age, sex, race, and individual DPP-4 agents were also performed. Results from each of the three insurance claim databases were pooled using an inverse-variance fixed-effects meta-analysis.

A total of 1,664,880 patients were included in the study. In the DPP-4 group, 51.0% of patients were female with a mean age of

 $63.0 \pm 9.7$  years, and in the sulfonylurea group, 50.4% were female with a mean age of  $63.9 \pm 9.9$  years.

In the DPP-4 group, the incidence rate of BP per 1000 person-years was 0.42 compared with 0.31 for the sulfonylurea group (HR, 1.42; 95% CI, 1.17-1.72). In patients who were 65 years or older, those on DPP-4 inhibitors had a BP incidence rate of 0.79 per 1000 person-years vs only 0.49 in the sulfonylurea group. In addition, patients who were White (0.93 vs 0.54; HR, 1.70; 95% CI, 1.30-2.24) or were treated with lingliptin (1.20 vs 0.55; HR, 1.68; 95% CI, 1.16-2.43) had higher BP incidence rates than patients who were treated with sulfonylurea.

"Clinicians should be aware of this rare adverse effect of DPP-4 inhibitors," said the research group, particularly in patients who are older or White or take linagliptin. ■

#### Reference

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