SANOFI GENZYME and REGENERON Alliance
Medical Affairs
<u>**Request for Proposal**</u>

Date: May 7, 2021	
Disease State/Therapeutic Area: Immunology	
Area of Interest: Prurigo Nodularis (PN)	
Geographic Scope: US	
Internal Requestor Information:	
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Due Date: **June 9, 2021 by 5pm ET**	
Submission Portal: https://sgrants.envisionpharma.com/vt_sgrants/	
RFP Name: PN-RFP-1-2021	

<u>**Educational Gap**</u>

Prurigo nodularis (PN) is a chronic, inflammatory skin condition characterized by intense pruritus, stinging and burning, and papulonodular lesions often symmetrically distributed on areas of the skin accessible to scratching (e.g., trunk and extremities). The three most burdensome symptoms rated by patients with PN are pruritus, visibility and bleeding of skin lesions. Symptoms of PN may have substantial physical, mental, emotional, and socio-economic effects on patients' quality of life.

Estimated real-world prevalence of (PN) in the US is 87,634 (72 per 100,000). Most commonly, the patients are middle-age adults, with no consistent report of associations with sex, and in the US, PN patients were more likely to be African American than CaucasianIn addition, 55% of patients report sleep disturbances 5 to 7 days per week, which are related to skin pain and itch. The intense pruritus, stinging, and burning and the resulting sleep disturbances and deprivation lead to absenteeism from work, and daily function, symptoms of depression, anxiety, anger, disgust, shame, helplessness and increased use of antidepressants and anxiolytics. The socio-economic effects of PN and its impact on the healthcare system can be substantial, with high rates of inpatient hospital admission, increased cost of care and length of hospitalization, and resultant days of absence from work reflecting high proportions of PN patients with serious systemic illness. PN is associated with an increased risk of psychiatric, metabolic and infectious comorbidities, and patients with PN often suffer from coexisting type 2 inflammatory diseases such as atopic dermatitis (AD). Approximately half (47%) of PN patients have an atopic predisposition with AD, a type 2 inflammatory disease, as the single most prevalent atopic comorbidity. Additional allergic comorbidities include asthma and urticaria. Consideration and treatment of these comorbidities must be a part of the management strategy for PN.

The underlying pathophysiology of PN is characterized by synergistic neural- and immune-mediated mechanisms. PN is thought to involve components of type 2 inflammation in sensitizing cutaneous sensory neurons which potentiates responsiveness to pruritogens, and is suggested to perpetuate an itch–scratch cycle contributing to barrier disruption, release of inflammatory cytokines, and the development of pruriginous lesions. PN pathophysiology is complex and is characterized by both immune and neural dysregulation. Endogenous mediators involved in itch (such as TSLP, cathepsin S, cytokines, and neuropeptides) originate from complex interactions between keratinocytes, inflammatory cells and nerves. PN pathophysiology is thought to involve components of type 2 inflammation, including the release of the inflammatory cytokines IL-4, IL-13 and IL-31. An inflammatory infiltrate is present in PN lesional skin, with eosinophil accumulation and increased levels of eosinophil cationic protein (ECP) and eosinophil derived neurotoxin (EDN). Increased levels of circulating eosinophils in the blood are present in inflammatory diseases, where they are trafficked to the site of tissue damage. The intense itch causes scratching, which leads to pruriginous lesions in PN and barrier dysfunction, and promotes the release of type 2 inflammatory cytokines, further perpetuating the itch–scratch

cycle. Advances in the understanding of the neuroimmunology of chronic pruritus have led to the identification of new therapeutic targets and the rapid development of cutting-edge clinical trials. Although incredible advances have already been made, chronic itch continues to be an area of great unmet need.

According to the US Consensus, treatment goals are to reduce pruritis, interrupt the itch-scratch cycle and completely heal lesions by targeting both the neural and immunologic components of the disease. Many current, symptomatic treatments for PN have limited efficacy, high frequency of side effects, and/or limited evidence base. Adequate treatment of PN need to address both the immunologic and neural components of pruritus. There are no approved therapies for PN, and it is commonly managed with several modalities (topical treatments, UV therapy, immunosuppressive agents [e.g., corticosteroids, methotrexate, cyclosporine, and thalidomide]). Despite these interventions, most patients' disease is inadequately controlled, and treatments may be associated with serious safety concerns, indicating a need for safe and effective targeted therapies. There is an unmet need for safe and effective, targeted treatments for the long-term management of patients with PN, as current therapeutic options are either not approved for PN, are ineffective with a poor evidence base or have intolerable side effects. With novel therapeutics on the horizon for PN, it is important for clinicians to better understand the pathogenesis and current management of PN.

Call for Grants

The Sanofi Genzyme and Regeneron Alliance is seeking to close independently identified gaps and provide education for US Health Care Providers involved in the diagnosis and treatment of PN (eg, Dermatologists, Specialty Nurse Practitioners, Specialty Physician Assistants) and Managed Care/Pharmacy Directors, and other clinicians who diagnose, treat, and/or manage patients with PN. Proposals can target one or multiple audiences and should focus on key evidence-based data to support recognized healthcare gaps and independently identified and referenced educational needs. Grants should address issues specific to PN and be inclusive of appropriate available data for current/emerging treatments options.

Learning objectives for the proposed initiative should provide measurable objectives for improving clinicians' knowledge, competence, and/or performance with the ultimate goal of improving patient care.

The Regeneron and Sanofi Genzyme Alliance will consider grants including, but not limited to, the following:
- 2022 Symposia (face-to-face live or virtual real-time) with enduring (eg, AAD, Managed Care Congresses [AMCP Annual, Asembia Specialty Pharmacy])
    - Securing slots are the responsibility of the grant recipient(s)
    - Applicants should articulate considerations for addressing anticipated limitations and/or challenges due to pandemic conditions

- Self-directed online programs (eg, Virtual, Mobile, Social Media, Podcast, Point-of-Care, Print). May include scientific/clinical simulation, case-based learning formats, microlearning. Comprehensive, interactive, and innovative online educational formats designed for engagement using various proven distribution channels are eligible.

- Proposals should clearly demonstrate the initiative's applicability to the target audience. Single supported and multi-supported proposals will be considered with a maximum request not to exceed **$300,000.**

Please note that proposals are expected to include an analysis of educational gap(s) and how the proposed intervention(s) would address the identified gap(s), with consideration for learner preferences and potential clinical impact. Preference will be given to proposals that recommend appropriately designed interventions that are likely to enhance a learner's knowledge of the unmet needs and employ proven strategies to overcome knowledge and performance gaps and barriers.

<u>Proposals should include the following information:</u>

- **Needs Assessment/Gaps/Barriers**: Include a comprehensive needs assessment that is well referenced and demonstrates an understanding of the specific gaps and barriers of the target audiences (in alignment with ACCME criteria). **The needs assessment must be independently developed and validated by the accredited provider, as applicable.**

- **Target Audience and Audience Generation:** Proposal should indicate the target audience(s) and provide a rationale for how and why this target audience is appropriate for closing the identified healthcare gap. In addition, please describe methods for reaching the target audience including description of any rationale for recruitment and placement strategies to maximize participation according to need. Any unique recruitment efforts specific to the target audience should be highlighted.

- **Learning Objectives and Content Accuracy:** Provide clearly defined and measurable learning objectives framed as expected practice improvements in relation to the identified gaps and barriers. Include an overview of program content and explanation of criteria that will guide content selection, considering level of evidence and other variables. The Sanofi Genzyme/Regeneron Alliance is committed to the highest standards in ensuring patient safety; the applicant should describe methods to ensure complete, accurate, evidence-based review of key safety data for any therapeutic entities discussed in the activity. Explain how content will be updated if necessary throughout the program period, and how accuracy will be ensured.

- **Educational Methods:** The Sanofi Genzyme/Regeneron Alliance supports the ACCME guidance for educational methods to be clearly designed to address the knowledge, competence and/or performance gaps that may underlie an identified healthcare gap. Your proposal should demonstrate an understanding of instructional design as it relates to the gaps in the knowledge, competence, or performance of the targeted audience. Educational methods and design should be based on current literature in CME best practice and consistent with ACCME accreditation criteria, as applicable. For example, systematic reviews have suggested that the most effective continuing education is clearly linked to clinical practice, uses methods including interaction, reflection, strategies that ensure reinforcement through use of multiple educational interventions, and more.[a,b,c]

- Preference will be given to applications that utilize methods that have been shown to result in practice improvements, and/or with data on the effectiveness of other programs of the same type. ACCME criteria recognize that barriers may be related to systems, lack of resources, or tools etc. and these may be included if relevant in your discussion of the gap and the educational methods you propose. In addition, the educational preferences of the target audience(s) may be considered to maximize attendance/participation and lead to practice improvements.

- **Faculty Recruitment and Development:** Provide Information on the expected qualifications of contributors and description of methods to ensure recruitment of course directors and faculty who meet the qualifications. Explain any methods that will be used to ensure that faculty are fully trained in the program expectations and any skills that may be needed to ensure effective delivery of intended education.

- **Program Evaluation and Outcomes:** Provide a description of the approach to evaluate the reach and quality of program delivery; methods for monitoring individual activities and for ensuring ongoing quality improvements. For ACCME accredited programs, refer to accreditation elements and criteria, as applicable. Describe methods that will be used to determine the extent to which the activity will close the identified healthcare gap, and the qualifications of those involved in the design and analysis of the outcomes. Preference will be given to programs with Outcomes Plans with objective measures of changes in knowledge, and/or additional measures of improvements in competence, performance, patient health, population health, and/or system improvements as aligned with the design of the intervention.[d] Objective and quantitative methods are preferred for each outcomes level.

- **Budget:** Include a detailed budget with rationale and breakdown of costs, per unit, and description of each budget line item. In addition, please include any registrations fees paid by the learner, and how the fees will be applied.

- **Accreditation**: If proposal involves an accredited program, the accreditation must be provided by an appropriate accrediting body and fully compliant with the accrediting body's criteria and applicable government guidelines and regulations.

- **Fair Balance:** The proposal should briefly describe methods for ensuring fair and balanced content, identification and resolution of conflict of interest, in alignment with applicable ACCME criteria.

- **Communication and Publication Plan**: Provide a description of how the provider will keep the Sanofi Genzyme/ Regeneron Pharmaceuticals Alliance informed of progress. If applicable, include description of how the results of this educational intervention will be presented, published or disseminated.

References

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