REGENERON
Medical Affairs

CALL FOR GRANT APPLICATIONS – INDEPENDENT MEDICAL EDUCATION

ISSUE DATE:	April 30, 2021	**CGA ID #:**	IME-EOE-0421
THERAPEUTIC AREA:	Immunology	**AREA OF INTEREST:**	Eosinophilic Esophagitis (EoE)
REQUESTOR CONTACT:	Ann Marie DeMatteo, Senior Director, Medical Education annmarie.dematteo@regeneron.com		
SUBMISSION DUE DATE:	Grant requests are due to Regeneron no later than Friday, May 28 2021. *Note: Submissions will be reviewed on an ongoing first come, first-served basis.*		
SUBMISSION PORTAL:	MedEdGrants.Regeneron.com		

The Regeneron and Sanofi Genzyme Alliance seeks to close important medical education gaps through consideration of IME grant proposals addressing the following:

HEALTH CARE GAPS:	EoE is a chronic type 2 inflammatory disease with a multifactorial pathophysiology involving barrier (epithelial) dysfunction that is influenced by immune dysfunction, genetic factors, and/or environmental factors.[1-4] The type 2 cytokines promote inflammatory cell infiltration to the esophageal mucosa including eosinophils, mast cells and basophils. They also promote B-cell class switching and increased IgE production.[4,5] As such, cytokines like IL-4, IL-5 and IL-13 contribute to esophageal remodeling in EoE, including epithelial barrier dysfunction, fibrosis development, and smooth muscle hyperplasia.[3,4,6-11] An understanding of the mechanism of disease is needed to inform clinical decision making. This progressive and debilitating disease has physical, behavioral, and psychosocial impacts, resulting in substantial impairment in quality of life for patients and caregivers.[12-16] Chronic inflammation leads to esophageal narrowing due to remodeling and fibrosis requiring adherence to strict diets, chronic use of swallowed topical steroids, and/or the need for repeat esophageal dilation[1] EoE has a significant cost of care, including direct and indirect economic impacts.[16-18] Recently available EoE prevalence data estimates 114 per 100,000 in the US.[19] The current standard of care for EoE consists of an elimination diet, conventional drugs, and esophageal dilation. However, they do not target the underlying type 2 inflammation of EoE, do not meet all goals of therapy (reducing esophageal eosinophilic inflammation, improving endoscopic signs, clinical symptoms, and quality of life), are burdensome, and are associated with treatment-related adverse effects which further contribute to poor quality of life.[1,20-28] There are no FDA-approved therapies for EoE; and current therapeutic modalities used are off-label. In addition, management of EoE may be limited by the need for repeat endoscopies (ie, routine disease monitoring and dilations), which are associated with procedure-related complications and high cost.[25-26,29-32] There is also potential for high cumulative exposure to steroids for EoE patients with comorbid conditions (eg, asthma, allergic rhinitis, atopic dermatitis), which can confer deleterious health outcomes, as well as additional economic burden.[33] New and emerging data are being evaluated to determine the safety and efficacy of targeted biologic therapies to optimize treatment of EoE.[1,34-38] HCPs need to be aware of these new data and potential clinical impact when determining optimal treatment plans for EoE patients. A new guideline published in 2020 from the Joint Task Force for Allergy/Immunology Practice Parameters and the American Gastroenterological Association (AGA) provides updated recommendations for the management of EoE in pediatric and adult patients.[38] HCPs should be aware of this collaborative effort for integration into clinical practice. **Identified Gaps** 1. EoE pathophysiology, including the key role of cytokines such as IL-4, IL-5 and IL-13 as drivers of Type 2 inflammation 2. Burden of disease, disease progression, chronicity, and the unmet medical needs, including consequences of uncontrolled disease

	3. Recognition of EoE across age group for early diagnosis and treatment 4. Limitations/barriers of the current Standard of Care 5. Awareness of new clinical data and mechanism of action of emerging treatments ***References*** 1. Lucendo AJ, et al. *United European Gastroenterol J*. 2017;5(3):335-358. 2. Hirano I, et al. *Gut.* 2013;62(4):489-495. 3. Dellon ES, Liacouras CA. *Gastroenterology*. 2014;147(6):1238-1254. 4. Straumann A, et al. *J Allergy Clin Immunol*. 2001;108(6):954-961. 5. O'Shea KM, et al. *Gastroenterology*. 2018;154(2):333-345. 6. González-Cervera J, et al. *Ann Allergy Asthma Immunol*. 2017;118(5):582-590. 7. Leigh LY, Spergel JM. *Ann Allergy Asthma Immunol*. 2019;122(1):65-72. 8. Lyles J, Rothenberg M. *Curr Opin Immunol.* 2019;60:46-53. 9. Alexander ES, et al. *J Allergy Clin Immunol*. 2014;134(5):1084-1092. 10. Muir AB, et al. *J Gastroenterol.* 2019;54(1):10-18. 11. Wechsler JB, Bryce PJ. *Gastroenterol Clin North Am*. 2014;43(2):281-296. 12. Dellon ES, et al. *Aliment Pharmacol Ther*. 2013;38(6):634-642. 13. Menard-Katcher C, et al. *World J Gastroenterol*. 2014;20(31):11019-11022. 14. Safroneeva E, et al. *Aliment Pharmacol Ther*. 2015;42(8):1000-1010. 15. DeBrosse CW, et al. *J Allergy Clin Immunol.* 2011;128(1):132-138. 16. Klinnert MD, et al. *J Pediatr Gastroenterol Nutr*. 2014;59(3):308-316. 17. Jensen ET, et al. *Am J Gastroenterol*. 2015;110(5):626-632. 18. Schwartz S, et al. *J Pediatr Gastroenterol Nutr.* 2016;63(Suppl 2):S171-S172. 19. Truven MarketScan 2016-2018 administrative claims data analysis. 20. Lyons E, et al. *Gastroenterology*. 2019;157(2):275-277. 21. Straumann A, Safroneeva E. *Curr Treat Options Allergy*. 2015;2:100-109. 22. Greuter T, et al. *Am J Gastroenterol*. 2017;112(10):1527-1535. 23. De Rooij WE, et al. *Drugs*. 2019;79(13):1419-1434. 24. Muir AB, et al. *Clin Exp Gastroenterol.* 2019;12:391-399. 25. Runge TM, et al. *Am J Gastroenterol*. 2016;111(2):206-213. 26. Watts A, et al. *Gastrointest Endosc*. 2016;83(2):307-308. 27. Lucendo AJ, et al. *Clin Gastroenterol Hepatol*. 2016;14(1):13-22. 28. Molina-Infante J, et al. *J Allergy Clin Immunol*. 2018;141(4):1365-1372. 29. Muir AB, et al. *Gastrointest Endosc Clin N Am.* 2016;26(1):187-200. 30. Gomez Torrijos E, et al. *Front Med (Lausanne)*. 2018;5:247. 31. Moole H, et al. *Medicine (Baltimore).* 2017;96(14):e5877. 32. Roy A, et al. *United European Gastroenterol J*. 2017;5(3):359-364. 33. Sullivan PW, et al. *J Allergy Clin Immunol.* 2018; 141 (1): 110-116.e7. 34. Hirano I et al. *Gastroenterology.* 2020;158:111–122. 35. Clinicaltrials.gov. https://clinicaltrials.gov/ct2/show/NCT02379052. Accessed Sept 11, 2020. 36. Clinicaltrials.gov. https://clinicaltrials.gov/ct2/show/NCT03633617. Accessed Sept 11, 2020. 37. Stein M, et al. J *Allergy Clin Immunol*. 2006;118(6):1312-9. doi: 10.1016/j.jaci.2006.09.007. Epub 2006 Nov 7. 38. Hirano I et al. *Gastroenterology.* 2020;158(6):1776–1786. DOI April 2020. https://www.aaaai.org/about-aaaai/newsroom/news-releases/eoe. Accessed Sept 11, 2020.
REQUEST FOR PROPOSALS:	The Regeneron and Sanofi Genzyme Alliance will consider educational initiatives including, but not limited to: • Symposium (face-to-face or virtual) with enduring spin-off. *Slots should be secured by grant recipient.* – American College of Gastroenterology (ACG), October 2021 – North American Society for Pediatric Gastroenterology, Hepatology & Nutrition (NASPGHAN), November 2021 – American College of Allergy, Asthma & Immunology (ACAAI) 2021, November 2021 – American Academy of Allergy, Asthma & Immunology (AAAAI), February 2022 – Digestive Disease Week (DDW), May 2022 • Interactive self-directed programs designed for impactful learner engagement using proven distribution channels
AUDIENCE(S):	Gastroenterologists, Allergists, Immunologists, Pediatric Gastroenterologists, Pediatric Allergists/Immunologists, Specialty NP/PAs
GEOGRAPHIC SCOPE:	US
GRANT BUDGET RANGE:	Maximum request not to exceed $450,000. *Providing a contingency plan outlining levels of support is encouraged.*
SUBMISSION DIRECTIONS:	Complete the grant application via the Submission Portal indicated above prior to the Submission Due Date. See requirements for inclusion below. Additional supporting information may be included. **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 (i.e., ACCME accreditation element 2). The needs assessment must be independently developed and validated by the accredited provider.

Target Audience and Audience Generation: Proposals should describe the target audience(s) and provide a rationale for how and why this target audience is important to closing the identified healthcare gap. In addition, please describe methods for reaching the target audience(s) including description of and 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 Regeneron and Sanofi Genzyme 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 ACCME calls for educational methods that are clearly designed to address the knowledge, competence and/or performance gaps that may underlie an identified healthcare gap.[2] Your proposal should demonstrate an understanding instructional design issues as they relate to the gaps in the knowledge, competence, or performance of the targeted audience. Education methods and design should be based on current literature in CME best practice and consistent with ACCME accreditation elements 3,4,5,6.[2] 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.[3,4,5] 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 (Accreditation elements 12, 13, 14, 15).[2] Describe methods that will be used to determine the extent to which the activity has served to close the identified healthcare gap. (Accreditation Elements 10, 11, 12), and the qualifications of those involved in the design and analysis of the outcomes.[2] Preference will be given to programs with Objectives and Outcomes Plans of Moore level 3-6.[1]

Budget: Include a detailed budget with rationale including breakdown of costs, clear explanation of the units, and calculations of:

- Content cost per activity
- Out-of-pocket cost per activity
- Management cost per activity

Accreditation: Programs must be accredited by the appropriate accrediting bodies and fully compliant with all ACCME criteria and Standards for Commercial Support™. If you are a nonaccredited provider, the accredited provider must be involved from the concept origin, fully knowledgeable of the grant submission and documentation should be provided on the website grant application section entitled, "Other Information."

Resolution of Conflict: The proposal should briefly describe methods for ensuring fair and balanced content, identification and resolution of conflict of interest, with particular emphasis on ACCME criteria 7, 8, 9.[2]

Communication and Publication Plan: Provide a description of how the provider will keep the supporter informed of progress. Include description of how the results of this educational intervention will be presented, published or disseminated.

References

	1. Moore, D.E., Jr., J.S. Green, and H.A. Gallis, Achieving desired results and improved outcomes: integrating planning and assessment throughout learning activities. J Contin Educ Health Prof. 2009.29(1): p. 1-15 2. Accreditation Criteria. Accreditation Council for Continuing Medical Education. http://www.accme.org/requirements/accreditation-requirements-cmeproviders/accreditation-criteria. Updated 2017. Accessed August 1, 2018. 3. Davis, D., Barnes, B.E., Fox, R., The Continuing Professional Development of Physicians ed. R.t. Practice. 2003, Chicago, IL: AMA. 4. Davis, D., et al., Impact of formal continuing medical education: do conferences, workshops, rounds, and other traditional continuing education activities change physician behavior or health care outcomes? JAMA.1999. 282(9): p. 867-74. 5. AHRQ, Effectiveness in Continuing Medical Education, in Evidence Report No. 149. 2007.
EVALUATION PROCESS:	Grant requests will be comprehensively reviewed as received on a rolling basis and evaluated based on the same criteria. Requests that best meet the goals described and are aligned with the respective Medical Education Plan will be recommended for approval as funds allow. Applicants may be asked for additional information and/or clarification during the review period. Decisions of the GRC are final and will be communicated to the grant applicant via email notifications.
TERMS AND CONDITIONS:	The Regeneron and Sanofi Genzyme Alliance (i) is not obligated to take any course of action as the result of this CGA, (ii) is not responsible for any costs incurred by any entity related to a CGA submission, and (iii) reserves the right to modify this CGA at any time and reserves the right to reject any and all responses to this CGA, in whole or in part, at any time. CGAs released by Regeneron, individually or with its collaborators, and any related submissions or grants, are governed by specific terms and conditions.
TRANSPARENCY:	The National Physicians Payment Transparency Program (Sunshine Act) and other transparency law requirements must be satisfied with respect to payments and other transfers of value to healthcare professionals. To be compliant with these regulations, Regeneron must report payments or items of value it provides directly or indirectly to individuals or institutions meeting the definition of Covered Recipients. Regeneron, at its sole discretion, has the right to disclose the details of funded independent medical education activities, including those that may be required by federal, state, and/or local laws and regulations. This disclosure may include, but shall not be limited to, details of the activity and the grant amount. The information may be disclosed to the public in a manner including, but not limited to, disclosure on the Regeneron website.