

Gilead Sciences, Inc. and Galapagos

Medical Affairs

Request for Proposals – Rheumatology I² (Innovation in Inflammation) Program

Through Medical Affairs, Gilead and Galapagos support the research efforts of academic institutions, clinical investigators, and research networks to help improve initial and long-term management of patients with inflammatory rheumatic conditions. Gilead and Galapagos support novel focused and innovative research efforts. The decision to support any proposal will be based on the validity of the scientific question proposed and only when the proposed data generation will complement the existing body of evidence and not repeat previous research studies.

Gilead and Galapagos are making a specific call for proposals in the disease area of rheumatology. This Request for Proposals is in addition to the already existing Investigator Sponsored Research Program (<https://www.gilead.com/science-and-medicine/research/investigator-sponsored-research>), which supports investigator-sponsored research conducted by clinicians and researchers on Gilead's marketed products or within therapeutic areas of interest to the company.

Research Objectives

With this RFP, Gilead and Galapagos intend to support investigator research focused on rheumatoid arthritis (RA) and innovation beyond RA. Successful projects must demonstrate clear objectives, defined timelines, a comprehensive research plan, and proposed data generation which has relevance to the medical community and addresses one of these two objectives:

1. To evaluate the mechanism behind filgotinib efficacy and safety in RA treatment

- Mechanism of filgotinib efficacy in RA treatment
 - Studies that better define mechanisms of clinical effect in patients achieving deep and sustained response allows for the advancement of RA treatments.
- Role of JAK1 selectivity in filgotinib efficacy
 - Studies that define the potential role of JAK1 selectivity in the efficacy or speed of response to filgotinib therapy provide insight into the temporal relationship between treatment and response.
- Mechanism of differential safety with selective JAK inhibition
 - Although all JAK inhibitors operate through the JAK-STAT pathway, each JAK inhibitor interestingly exhibit unique safety profiles. Studies that identify molecular signatures to inform the rate and risk of adverse events in patients receiving JAK inhibitors can provide a rationale to the observed differences in adverse events among the class.
- Use of patient reported outcomes in RA
 - Studies that focus on how patient-reported outcomes (PROs) can be used to define the efficacy, speed of response, and tolerability of filgotinib can individualize patient treatment. Novel PROs utilizing mobile device or wearable technology are encouraged.

2. To pursue innovation in rheumatology with JAK inhibitors

- Pursuit of personalized medicine in rheumatology
 - Elucidating the mechanism of filgotinib in rheumatologic diseases and translating the finding to identify patients most likely to respond to treatment will advance personalized medicine. Being able to select the patients who are most likely to achieve deep and sustained remission, a priori, allows for earlier clinical benefit and improved quality of life for patients.
- Development of innovative approach to RA treatment
 - Studies that greatly alter the current approach to managing RA will provide novel ways to improve patient functioning and quality of life.
- Development of innovative treatment success parameters in RA
 - Venturing beyond standard efficacy endpoints used in clinical trials, such as ACR response criteria, this objective aims to find new definitions of treatment outcome or remission and analyze filgotinib treatment targets outside of traditional measurements.
- Use of filgotinib in proof-of-concept rheumatologic conditions
 - This can include small pilot studies for hypothesis generation in non-RA rheumatologic conditions.

Consider the following in development of proposals:

- Clear scientific objectives and clearly defined endpoints based on scientific hypotheses
- Well-defined study design including sample size justification
- Defined and specific data collection methods
- Plan to publish results in peer reviewed journals and to present results in scientific forums
- Ability to carry research to completion within 3 years
- Proposals with the potential for rapid data dissemination and presentation of results will be prioritized

Program Specifics

The use of filgotinib for RA is investigational and has not been approved by regulatory authorities. Approval and initiation of clinical studies through this RFP will be contingent upon local approval of filgotinib for RA. As the study sponsor, the principal investigator will be responsible for compliance with all laws and regulations applicable to research sponsors, including satisfying local requirements and obtaining all necessary regulatory approvals prior to beginning the study.

Letter of Intent (LOI) Submission

- The initial submission will consist of a LOI, a two-page concise overview of the proposed project, and targeted budget. The LOI should be entered into the provided template, downloadable at www.gilead.com/science-and-medicine/research/investigator-sponsored-research/rheumatology-i2-rfp, and submitted to: i2rfp@gilead.com.

LOI Review Process

- LOI will be rigorously reviewed by an internal Gilead/Galapagos committee. Each LOI that meets program requirements and is complete will be assigned to multiple primary and secondary reviewers. Each reviewer will review and score the LOI by evaluating the potential impact of the study, the strength of the objectives and study design, and the scientific impact of study results.

Scoring is based on the modified NIH Scoring Tool. High scoring LOIs will be discussed by a multidisciplinary committee. Investigators with the top LOI submissions will be offered the opportunity to submit a full proposal, which will be similarly reviewed.

Full Application Submission

- Once notice of approval to submit a full application has been received, a full application should be submitted to Gilead's Investigator Sponsored Research Program. Investigators who meet criteria for a standard Gilead ISR are encouraged to apply. Awards shall be for research purposes only. Requests that include routine medical care or other costs associated with routine medical care will not be considered.

Key Dates

- The timelines below will be followed for LOI and full application submissions:
 - **28 October 2019:** LOI submission window opens
 - **6 December 2019:** LOI submission window closes
 - **31 January 2020:** Notice of LOI outcome, with invitations for full application submission
 - **28 February 2020:** Deadline for receipt of full application
 - **30 March 2020:** Notice of full application outcome

Budget Considerations

- Gilead and Galapagos plan to award a total of approximately \$5,000,000 in funds for these research proposals, dependent upon availability of funds and receipt of meritorious applications. Gilead and Galapagos anticipate that 6-10 awards will be granted. Any proposal greater than \$500,000 should be discussed with your Medical Scientist prior to submission.

Gilead reserves the right to approve or decline any application. Please discuss additional research topics not listed above or address specific questions about the application process with your local Medical Scientist.

About Gilead Sciences: Gilead Sciences, Inc. is a biopharmaceutical company that discovers, develops and commercializes innovative therapeutics in areas of unmet medical need. The company's mission is to advance the care of patients suffering from life-threatening diseases worldwide. Gilead has operations in more than 30 countries worldwide, with headquarters in Foster City, California.

About Galapagos: Galapagos discovers and develops small molecule medicines with novel modes of action. The company's pipeline comprises Phase 3 through to discovery programs in inflammation, fibrosis, osteoarthritis and other indications. Galapagos' ambition is to become a leading global biopharmaceutical company focused on the discovery, development and commercialization of innovative medicines.