University of California San Francisco



Medical Center **Division of Rheumatology**Rheumatology Clinic

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Dear Grant Review Committee,

I am writing to offer my enthusiastic support for the proposal "AI-Driven Monitoring System for Safe Use of Immunosuppressive Therapies," co-led by Drs. Jinoos Yazdany and Augusto Garcia-Agundez and submitted to the AI/ML Demonstration Projects Pilot. As Clinic Chief and Medical Director of Rheumatology at UCSF Health, I can attest that this initiative addresses one of the most persistent and high-risk operational challenges in our practice as well as others that use immunosuppressive medications: ensuring timely laboratory monitoring and management.

Medications such as DMARDs and biologics are life-changing for many of our patients with autoimmune disease—but they carry risks of toxicity and other serious adverse events. Clinical guidelines recommend regular lab testing, yet in our current system, the process remains largely manual and inconsistent. Missed or delayed labs can lead to medication-induced harm and unnecessary treatment interruptions. In fact, our own operational team has identified this gap as a top priority for quality improvement, and our current workaround—manual tracking via spreadsheets or phone calls—is both resource-intensive and unsustainable.

This proposed AI tool will transform our ability to manage lab monitoring at scale. By identifying patients overdue for tests based on structured data and supplementing that with natural language processing of unstructured clinical notes and documentation of external labs, it will surface true monitoring gaps while reducing false alarms. The operational value of this tool is very high. It reduces risk, decreases clinician burden, and addresses a critical patient safety issue that currently lacks any scalable solution. Moreover, its modular design allows for expansion to other specialties—such as gastroenterology or transplant medicine—where lab monitoring is equally vital. The plan to pilot the tool in rheumatology during the first year is practical and well-structured, with rigorous metrics around lab completion rates, provider satisfaction, and error rates built into the evaluation.

Our team, including Diana Ung, PharmD (Ambulatory Care Pharmacist, Rheumatology & Neuroinflammation) and Nathan Karp, MD (Rheumatology Director of Quality Improvement), is fully committed to the successful design, implementation, and integration of this AI tool. We are deeply invested in this work and excited to collaborate across clinical and technical domains. In my role as Clinic Chief, I will support the rollout of the pilot in our practice, assist in securing provider feedback, and help translate clinical workflows into actionable model improvements. This project aligns with UCSF's broader vision for leveraging AI in the service of safer, more equitable, and higher-quality care.

Please feel free to reach out with any questions. I strongly support this initiative and look forward to seeing it succeed.

Andrew J. Gross, MD

UCSF Health Rheumatology Medical Director

Clinical Professor of Medicine