Building a sarcoidosis biomarker roadmap: finding alignment and building consensus at the Foundation for Sarcoidosis Research's 2025 Biomarker Summit

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INTRODUCTION

The Foundation for Sarcoidosis Research (FSR) 2024 Research Agenda identified biomarkers as critical enablers of progress in sarcoidosis diagnosis, multi-organ monitoring, and treatment. In October 2025, FSR convened a Sarcoidosis Biomarker Summit to draw on lessons from other disease areas and outline specific scientific and funding priorities for future strategic work.

OBJECTIVES

Develop a shared, patient-centered consensus biomarker roadmap to guide research investments, partnerships, and infrastructure over the coming decade.

MATERIALS AND METHODS

Clinicians, researchers, and patients were surveyed in advance on biomarker uses and priorities. Thirty-four expert clinicians and researchers representing 27 institutions attended the Summit. Attendees included specialists in pulmonary/critical care, cardiology, rheumatology, neurology, genetics, and biostatistics.

RESULTS

Surveys revealed both clinicians and patients prioritized biomarkers for disease monitoring, with clinicians also prioritizing progression/remission prediction, and patients emphasizing a broader set of needs spanning diagnosis, treatment decision-making, and quality-of-life outcomes. Summit attendees united around key elements from two case studies that could be adapted for sarcoidosis: clear context-of-use definitions and harmonized data and assay protocols (solicited by FSR from the Crohn's & Colitis Foundation's experience in inflammatory bowel disease) and longitudinal cohorts and standardized and shared datasets (solicited by FSR from the Michael J. Fox Foundation's Parkinson's disease work). Summit discussions highlighted the importance of aggregating heterogeneous real-world data rather than excluding it, investing in strategic longitudinal cohorts, and balancing organ-specific insight, including specimen type (body fluid vs blood) with phenotype-driven precision medicine (Figure).

CONCLUSION

Differences in emphasis between clinicians/researchers and patients on priorities for biomarker development underscore the need for a strategy that explicitly links biomarkers to patient-reported outcomes and prioritizes consensus where possible, flexibility where necessary, and sustained collaboration across patients, clinicians, researchers, and industry. The FSR Biomarker Summit culminated in a practical roadmap built on shared foundations, intentional infrastructure, longitudinal validation strategies, and a patient-centered path to clinical translation.

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Figure: FSR Sarcoidosis Biomarker Roadmap