PARASOL Project Advances Understanding of Proteinuria in FSGS

BETHESDA, MD. October 14, 2024 – A multi-stakeholder group of rare kidney disease experts aligned around a potential proteinuria-based clinical trial endpoint, balancing biological relevance and trial design considerations.

PARASOL (**P**roteinuria **a**nd GF**R** as Clinical Trial Endpoints in Foc**a**l **S**egmental Gl**o**merulosc**l**erosis [FSGS]), an initiative co-sponsored by NephCure, the International Society of Glomerular Disease, the U.S. Food and Drug Administration, the Kidney Health Initiative, and the National Kidney Foundation, convened for the third time in the past ten months at a public scientific workshop held in Bethesda, Maryland on October 7-8, 2024. FSGS is an important cause of kidney failure in patients of all ages and new therapies are urgently needed to reduce the risk of progression. The objective of PARASOL is to advance the understanding and use of proteinuria and eGFR-based surrogate endpoints for accelerated and traditional approval of new treatments for FSGS, thus facilitating the development of new therapies. PARASOL represents the collaborative effort of nephrologists, scientists, patient advocates, biostatisticians, trial sponsors, and regulatory authorities.

At the meeting, the biostatistical team reported an in-depth analysis of 1626 children and adults with FSGS from a combined dataset drawn from multiple glomerular disease networks around the world. Analysis lead Abigail Smith, PhD, Associate Professor of Biostatistics, Department of Preventive Medicine, Northwestern University Feinberg School of Medicine, reported: “The principal finding is that reduction in proteinuria over 24 months is strongly associated with a reduction in the risk of kidney failure, and responder definitions based on thresholds of proteinuria are both biologically plausible and strongly supported by epidemiological data. The finding was consistent in subgroups based on patient age, level of baseline proteinuria, or presence of chronic kidney disease and was validated in a large independent European patient cohort.” Discussion of the findings in an open forum highlighted their broad utility, the biological role of proteinuria in FSGS as a podocytopathy, and implications for clinical trial design.

“PARASOL is an incredible demonstration by the international nephrology community that through generosity and multidisciplinary collaboration, we can answer fundamental, practical scientific questions needed to inform clinical trial design in rare disease,” said Dr. Laura Mariani, PARASOL Co-Chair and Associate Professor of Medicine (Nephrology) at the University of Michigan.

Laurel Damashek, Executive Director of the International Society of Glomerular Disease, commented, “In under a year, we have taken a giant step forward for FSGS thanks to the dedication and expertise of this collaborative workgroup. We will continue to integrate datasets from additional entities that have generously committed to sharing. Our team hopes to maintain and leverage the PARASOL infrastructure to address urgent questions in other glomerular diseases. PARASOL has shown that sharing data is vital to our collective ability to advance glomerular medicine and improve the lives of people living with rare kidney diseases like FSGS.”

The results of PARASOL will be presented to the full nephrology community on October 25, 2024 at a dedicated session of the annual Kidney Week meeting of the American Society of Nephrology in San Diego, California. Plans for publication in a peer-reviewed journal are also underway.

About PARASOL: PARASOL is a collaborative project sponsored by the U.S. Food and Drug Administration, NephCure, the International Society of Glomerular Disease, the Kidney Health Initiative of the American Society of Nephrology, and the National Kidney Foundation. It was launched in December 2023 to advance the understanding and use of proteinuria and eGFR-based endpoints as surrogate endpoints for accelerated and traditional approval in FSGS by facilitating new analyses of existing data from randomized controlled trials, observational studies, and registries.

For more information, please contact the organizing committee via https://www.is-gd.org/contact-the-parasol-team.