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**Response to Correspondence on “Genomic testing for suspected monogenic kidney disease in children and adults: a health economic evaluation” (Lombardi and Mesnard, 2023)**

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## **Response**

We write to acknowledge the recent correspondence by Lombardi and Mesnard (2023) and thank them for their positive comments regarding the quality, importance and novelty of our work.<sup>1</sup> We concur that economic evaluation studies from a wide variety of jurisdictions and health systems are very much needed.

We also agree that real-world data have a crucial role to play in understanding and valuing the health economic impacts of genomics and precision medicine for both probands and family members and support evidence-based regulatory and reimbursement decision-making. It is critical that relevant data infrastructure and systems are set up to support the collection and use of real-world evidence for informing healthcare priorities.

Beyond considering the source of healthcare utilization data, we would also like to highlight the importance of capturing the broader ‘utility’ of genomics<sup>2</sup> to reflect the diagnostic, personal and clinical value to patients and families. While our work has attempted to address this,<sup>1</sup> more economic evaluations incorporating spillover effects to families<sup>3</sup> and valuations of the broader genomic utility<sup>4</sup> are needed to support the sustainable and equitable translation of genomics into clinical care.

## References

1. Wu Y, Jayasinghe K, Stark Z, et al. Genomic testing for suspected monogenic kidney disease in children and adults: a health economic evaluation. *Genet Med.* 2023;100942.
2. Mallett A, Stark Z, Fehlberg Z, Best S, Goranitis I. Determining the utility of diagnostic genomics: a conceptual framework. *Hum Genomics.* 2023;17(1):75.
3. Wu Y, Al-Janabi H, Mallett A, et al. Parental health spillover effects of paediatric rare genetic conditions. *Qual Life Res.* 2020;29(9):2445-2454.
4. Goranitis I, Best S, Christodoulou J, Stark Z, Boughtwood T. The personal utility and uptake of genomic sequencing in pediatric and adult conditions: eliciting societal preferences with three discrete choice experiments. *Genet Med.* 2020;22(8):1311-1319.