**Table 4. Included Studies in Longitudinal Data Analysis** 

Study	Study type	Diagnostic method of CHM	No. of eyes (patients) in study- level data	No. of eyes (patients) in individual- level data	Age at baseline (years)	Baseline residual RPE area (mm²)	Mean follow-up duration (years)	Data extraction methods
Aylward et al, 2018 <sup>1</sup> Screening Process for Gene Therapy Trials NCT01461213 and NCT02407678	Observational	Clinical <sup>†</sup>	29 (29)	29 (29)	28.3 ± 9.1	27.91 ± 34.73	1.9	Data were extracted from the text, supplementary Table and Figure 1 (DataThief III software for extracting individual-level data in the figure) in Aylward et al, 2018.
Dimopoulos et al, 2018 <sup>2</sup> An Open Label Clinical Trial of Retinal Gene Therapy for Choroideremia NCT02077361	Interventional	Genetics	6 (6)	6 (6)	34.3 ± 5.0	4.54 ± 4.79	2	Data were extracted from the text, Table 1 and Figure 2 (DataThief III software for extracting individual-level data in the figure) in Jolly et al, 2016.
Fischer et al, 2018 <sup>3</sup> THOR Study NCT02671539	Interventional	Genetics	6 (6)	6 (6)	54.3 ± 4.1	8.57 ± 10.0	1	Data were extracted from the text and Table 2 in Fischer et al, 2018.
Seitz et al, 2015 <sup>4</sup> University Eye Hospital Tübingen	Observational	Clinical <sup>†</sup>	15 (8)	15 (8)	43.1 ± 13.8	8.87 ± 6.41	4.7	Data were extracted from the text in Seitz et al, 2015. Longitudinal data of individual patients were obtained from the author of the original paper.
Xue et al, 2018 <sup>5</sup> Gene Therapy for Blindness Caused by Choroideremia NCT01461213	Interventional	Genetics	12 (12)	12 (12)	47.8 ± 12.4	5.05 ± 3.99	3.5	Data were extracted from the text, supplementary Table 1, supplementary Table 4, and supplementary Figure 5 (DataThief III software for extracting individual-level data in the figure) in Xue et al, 2018

CHM = Choroideremia; RPE = retinal pigment epithelium; THOR = Tübingen Choroideremia Gene Therapy Trial.

## References:

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- 2. Dimopoulos IS, Hoang SC, Radziwon A, et al. Two-year results after aav2-mediated gene therapy for choroideremia: the alberta experience. Am J Ophthalmol 2018;193:130-42.
- 3. Fischer MD, Ochakovski GA, Beier B, et al. Changes in retinal sensitivity after gene therapy in choroideremia. Retina 2018.
- 4. Seitz IP, Zhour A, Kohl S, et al. Multimodal assessment of choroideremia patients defines pre-treatment characteristics. Graefes Arch Clin Exp Ophthalmol 2015;253(12):2143-50.
- 5. Xue K, Jolly JK, Barnard AR, et al. Beneficial effects on vision in patients undergoing retinal gene therapy for choroideremia. Nat Med 2018;24(10):1507-12.

<sup>\*</sup> Data reported as mean ± standard deviation

<sup>&</sup>lt;sup>†</sup> Genetic confirmation of CHM was performed in some but not all patients.