

# Genotype–phenotype associations in Alström syndrome: a systematic review and meta-analysis

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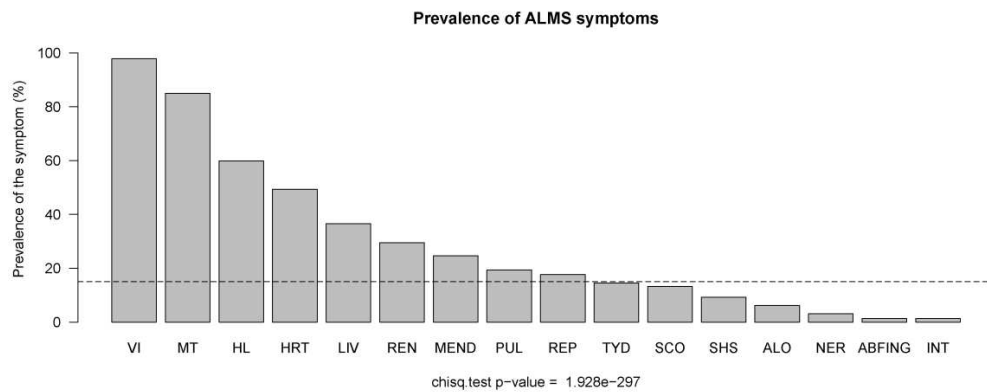
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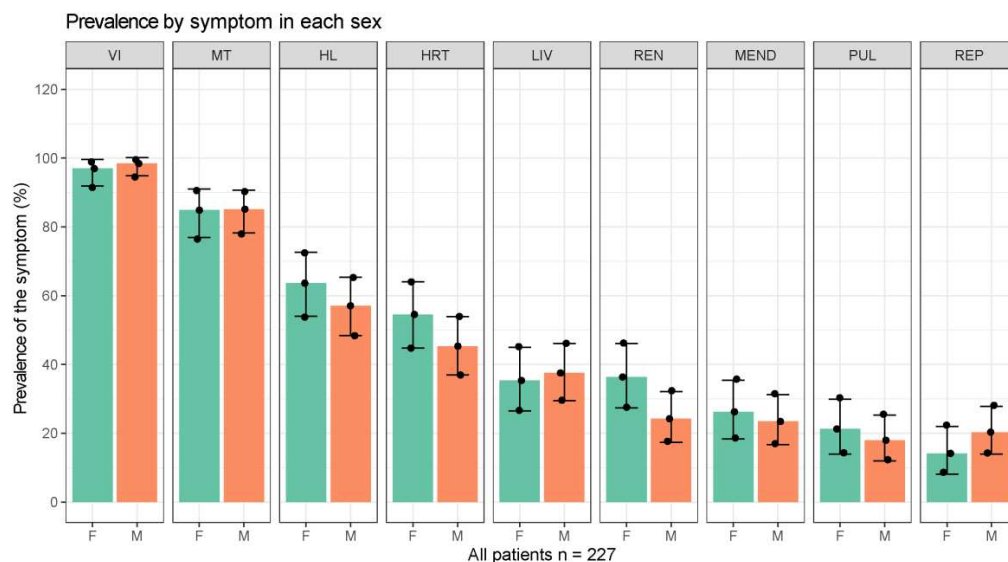
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**Supplementary Figure S1.** The 176 pathogenic variants and the number of alleles of each variant in the cohort.

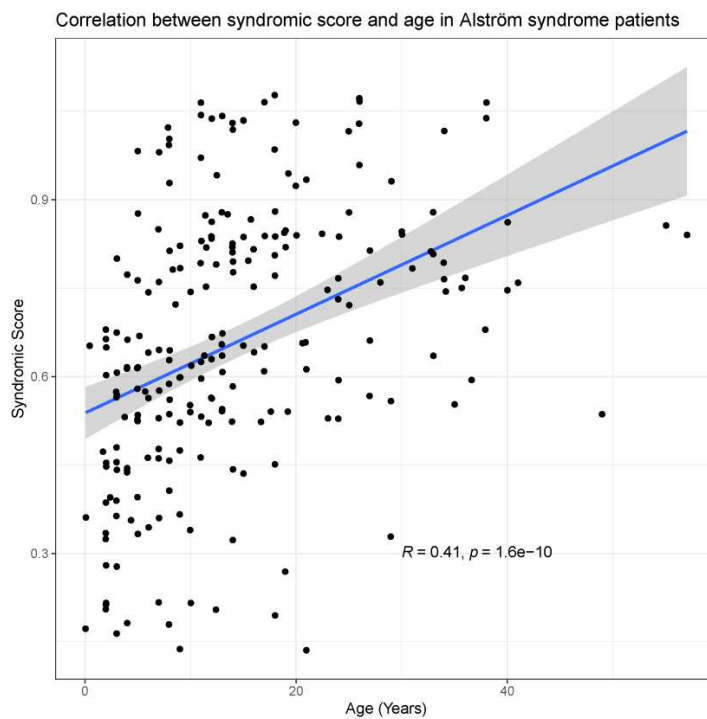


**Supplementary Figure S2.** Prevalence in the 16 syndromic groups initially collected from the literature and the established minimum prevalence threshold (15%; n=33) to be included in the study. **VI:** Vision impairments; **MT:** Metabolic anomalies; **HL:** Hearing anomalies; **HRT:** Heart anomalies; **LIV:** Liver anomalies; **REN:** Renal anomalies; **MEND:** Mental anomalies; **PUL:** Pulmonary anomalies; **REP:** Reproductive system anomalies; **TYD:** Thyroid metabolism anomalies; **SCO:** spine/feet anomalies; **SHS:** Stature anomalies; **ALO:** Alopecia; **NER:** Nervous system anomalies; **ABFING:** Finger anomalies; **INT:** Intestinal anomalies.



**Supplementary Figure S3.** Prevalence by sex in the 9 most prevalent syndromic groups initially collected from the literature. **F:** Female; **M:** Male; **VI:** Vision impairments; **MT:** Metabolic anomalies; **HL:** Hearing anomalies; **HRT:** Heart anomalies; **LIV:** Liver anomalies; **REN:** Renal

anomalies; **MEND**: Mental anomalies; **PUL**: Pulmonary anomalies; **REP**: Reproductive system anomalies.



**Supplementary Figure S4.** Correlation between syndromic score and age of patients included in the meta-analysis (n=227).