

SUPPLEMENTARY LEGENDS

Supplementary Tables:

Table S1. *ENPP1* variants for prevalence calculation.

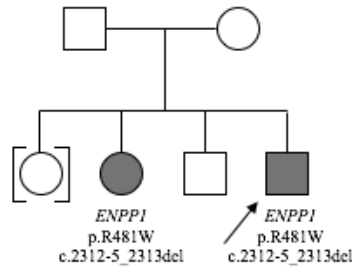
The first sheet presents known pathogenic variants (allele count 93). The second sheet contains predicted pathogenic variants (allele count 179). Total allele frequency is 0.224%, or 1 in 446. Using the Hardy-Weinberg principle, the carrier frequency was calculated to be 1 in 224 and the incidence of biallelic *ENPP1* deficiency was calculated to be 1 in 199,238 live births. The third sheet contains predicted non-pathogenic *ENPP1* variants, not factored into the aforementioned calculations.

Supplementary Figures:

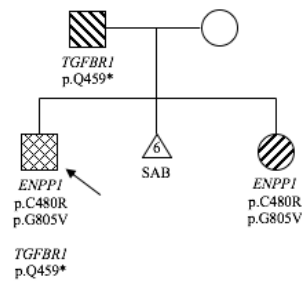
Figure S1. Family pedigrees.

Pedigrees of the 17 families described in this paper.

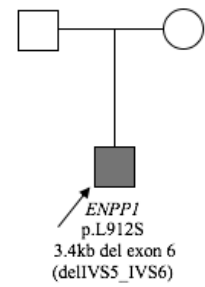
Family 1



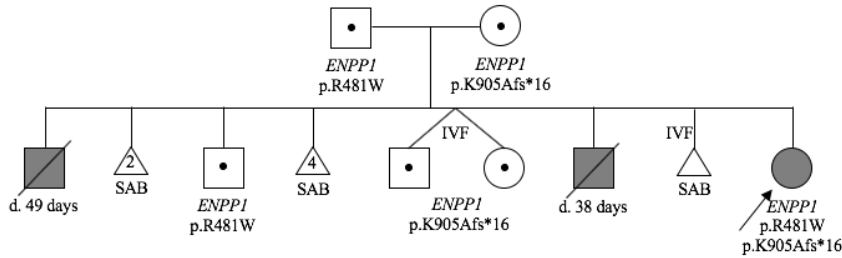
Family 2



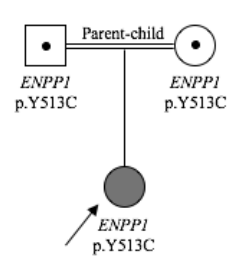
Family 3



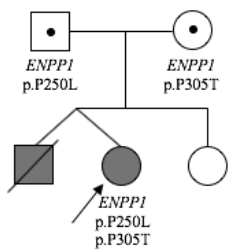
Family 4



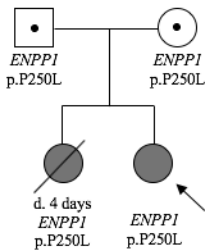
Family 5



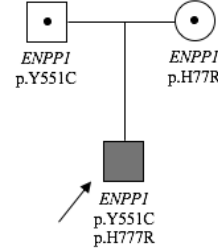
Family 6



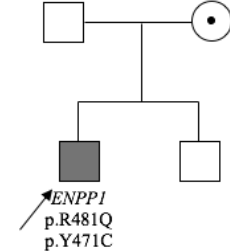
Family 7



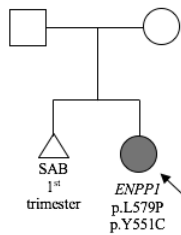
Family 8



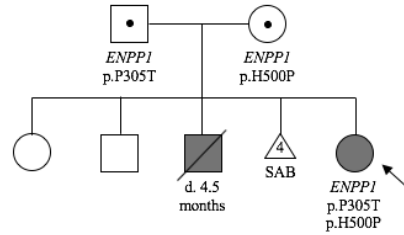
Family 9



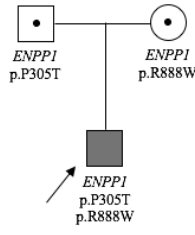
Family 10



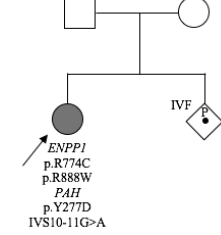
Family 11



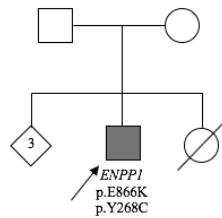
Family 12



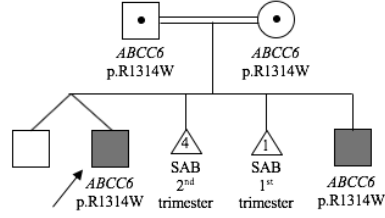
Family 13



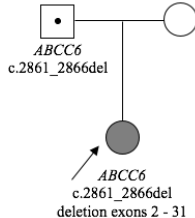
Family 14



Family 15



Family 16



Family 17

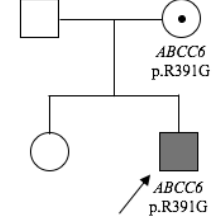
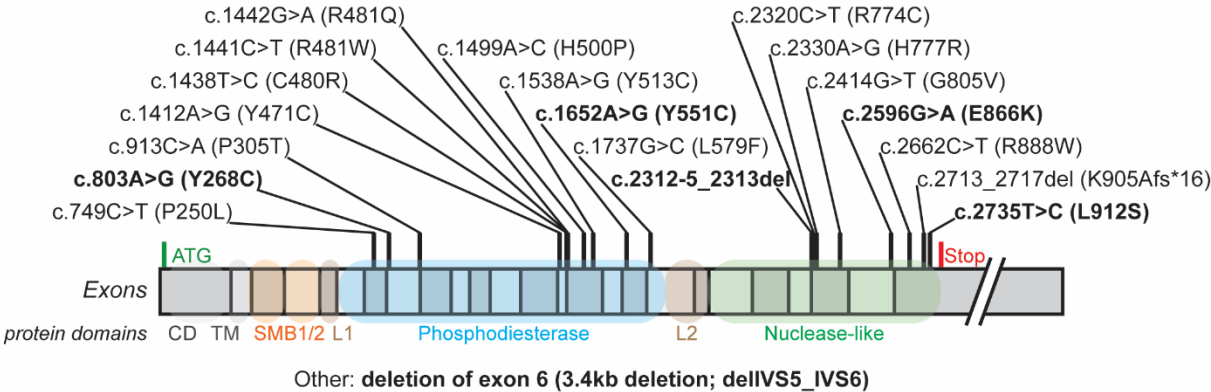


Figure S2. Position of variants found in our cohort.

ENPP1 (NM_006208.2)



ABCC6 (NM_001171.5)

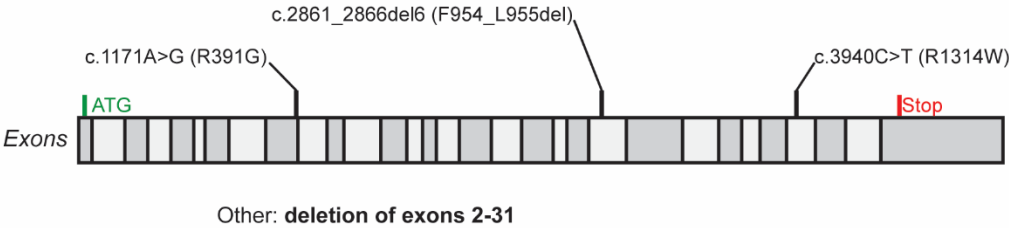


Figure S3. Arterial stenosis. Three-dimensional CT video reconstruction showing bilateral external iliac artery occlusion with prominent collaterals (Patient 10 at 5 years old).