Supplementary Table S1 Frequency of genotypes among the 1044 patients in the cohort

	All (n = 1044)	**Males (n = 641)**	**Females (n = 403)**
Mutation type, n (%)	765 (73)	456 (71)	309 (77)
Nonsense	147 (14)	83 (13)	64 (16)
Missense	439 (42)	260 (41)	179 (44)
Splice site	43 (4)	32 (5)	11 (3)
Frameshift	101 (10)	59 (9)	42 (10)
Intronic	4 (<1)	3 (<1)	1 (<1)
Initiator codon	3 (<1)	3 (<1)	0
Small deletion (no frameshift)	17 (2)	10 (2)	7 (2)
Small insertion (no frameshift)	1 (<1)	0	1 (<1)
Large deletion	3 (<1)	3 (<1)	0
Large duplication	0	0	0
Large insertion	1 (<1)	0	1 (<1)
Other	6 (<1)	3 (<1)	3 (<1)
Data not available	279 (27)	185 (29)	94 (23)

Supplementary Table S2 Types of severe clinical events among the 1044 patients in the cohort

Severe events	**Total n (%)**
Severe events, n	177
Renal events	58 (33)
Chronic dialysis (>40 days)	41 (23)
Renal transplant	17 (10)
Cardiovascular events	70 (40)
Myocardial infarction	13 (7)
First-time congestive heart failure	11 (6)
Atrial fibrillation	14 (8)
Ventricular tachycardia	3 (2)
Evidence of progressive heart disease sufficiently severe to require a cardiac procedure	29 (16)
Stroke	35 (20)
Death due to any cause	14 (8)

Supplementary Table S3 Fabry-database.org mutation categories by pre-ERT event

Pre-ERT event	Patients with mutations associated with classic Fabry disease	Mutation classification absent, blank or missing
Pre-ERT event: yes		
Patients, n	58	114
Severe events, n (%)	12 (21)	37 (32)
Pre-ERT event: no		
Patients, n	342	530
Severe events, n (%)	48 (14)	80 (15)

ERT, enzyme replacement therapy.