

Prior Authorization Criteria Fabry Disease Medications

All requests for Fabry Disease Medications require a prior authorization and will be screened for medical necessity and appropriateness using the criteria listed below.

Fabry disease medications include Galafold (migalastat), Fabrazyme (agalsidase beta), or Elfabrio (pegunigalsidase alfa-iwxj). New products with this classification will require the same documentation.

For all requests for Fabry disease medications all of the following criteria must be met:

Coverage may be provided with a <u>diagnosis</u> of Fabry Disease and the following criteria is met:

- Diagnosis has been confirmed by biochemical/genetic confirmation by ONE of the following:
 - o α -galactosidase A (α -Gal A) activity in plasma, isolated leukocytes, and/or cultured cells.
 - Plasma or urinary globotriaosylceramide (Gb3/GL-3) or globotriaosylsphingosine (lyso-Gb3).
 - O Detection of pathogenic mutations in the alpha-galactosidase A (alpha-Gal A; galactosidase alpha [GLA]) gene by molecular genetic testing.
- Documentation the member is ONE of the following:
 - Symptomatic (i.e. intermittent episodes of burning pain in the extremities (acroparesthesias); cutaneous vascular lesions (angiokeratomas); diminished perspiration (hypo- or anhidrosis); characteristic corneal and lenticular opacities; abdominal pain, nausea, and/or diarrhea of unknown etiology in young adulthood; left ventricular hypertrophy (LVH) or hypertrophic cardiomyopathy of unknown etiology, particularly in young adults; arrhythmias of unknown etiology, particularly in young adults; stroke of unknown etiology at any age; chronic kidney disease (CKD) and/or proteinuria of unknown etiology; multiple renal sinus cysts discovered incidentally)
 - o Asymptomatic with ALL of the following:
 - Assigned male at birth
 - Have classic Fabry mutations
 - Documentation of biopsy evidence indicating initiation of therapy is medically necessary.
- Medication must be prescribed by or in association with a metabolic specialist, geneticist, dermatologist, neurologist, nephrologist, rheumatologist, or cardiologist.
- The requested dose and frequency is in accordance with FDA-approved labeling, nationally recognized compendia, and/or evidence-based practice guidelines



- For all requests for Fabrazyme (agalsidase beta) or Elfabrio (pegunigalsidase alfa-iwxj)
- **Initial Duration of Approval:** 12 months
- Reauthorization Criteria
 - Chart documentation demonstrating clinical benefit and tolerance to requested medication
- Reauthorization Duration of approval: 12 months

For all requests for Galafold (migalastat) all of the following criteria must be met:

- Member must have amenable GLA variant that is interpreted by a clinical genetics professional as causing Fabry disease (pathogenic, likely pathogenic) in the clinical context of the patient.
- Exclusion criteria
 - o Member must not have severe renal impairment (eGFR <30 mL/minute/1.73 m²)
 - o Member must not have end-stage renal disease requiring dialysis
- **Initial Duration of Approval:** 12 months
- Reauthorization criteria
 - o Chart documentation demonstrating clinical benefit and tolerance to Galafold.
- Reauthorization Duration of Approval: 12 months

Coverage may be provided for any non-FDA labeled indication if it is determined that the use is a medically accepted indication supported by nationally recognized pharmacy compendia or peer-reviewed medical literature for treatment of the diagnosis(es) for which it is prescribed. These requests will be reviewed on a case by case basis to determine medical necessity.

When criteria are not met, the request will be forwarded to a Medical Director for review. The physician reviewer must override criteria when, in their professional judgment, the requested medication is medically necessary.



FABRY DISEASE MEDICATIONS PRIOR AUTHORIZATION FORM

Please complete and fax all requested information below including any progress notes, laboratory test results, or chart documentation as applicable to Highmark Wholecare Pharmacy Services. **FAX:** (888) 245-2049 If needed, you may call to speak to a Pharmacy Services Representative. **PHONE**: (800) 392-1147 Mon – Fri 8:30am to 5:00pm

| 0.50am to | . 5.00pm |
|---|--|
| PROVIDER IN | FORMATION |
| uesting Provider: NPI: | |
| Provider Specialty: | Office Contact: |
| Office Address: | Office Phone: |
| | Office Fax: |
| MEMBER INF | FORMATION |
| Member Name: | DOB: |
| Member ID: | Member weight: Height: |
| REQUESTED DRUG | G INFORMATION |
| Medication: | Strength: |
| Frequency: | Duration: |
| Is the member currently receiving requested medication? | ? Yes Date Medication Initiated: |
| Billing Inf | ormation |
| This medication will be billed: at a pharmacy OR | _ |
| JCODE: | medicany, |
| Place of Service: Hospital Provider's office | Member's home Other |
| Place of Service. | |
| Name: | NPI: |
| Address: | Phone: |
| | |
| MEDICAL HISTORY (Co | mplete for ALL requests) |
| | ICD Code: |
| Has member's diagnosis been confirmed by bioc | hemical/genetic confirmation by ONE of the |
| following: | , |
| α-galactosidase A (α-Gal A) activity in pl Yes No | lasma, isolated leukocytes, and/or cultured cells. |
| b. Plasma or urinary globotriaosylceramide ☐ Yes ☐ No | (Gb3/GL-3) or globotriaosylsphingosine (lyso-Gb3). |
| c. Detection of pathogenic mutations in the Yes No | GALA/GLA gene by molecular genetic testing. |
| | |



| 2. Please select all of the following that apply: The member is symptomatic (please provide documentation of symptoms) The member is asymptomatic with the following: Assigned male at birth Has classic Fabry mutations The member had a biopsy indicating initiation of enzyme replacement therapy is medically necessary (Please provide documentation. | | | |
|---|---|--|---|
| For Galafold (Migalastat) o | • | | |
| professional as caus patient? Yes No Please provide varia | sing Fabry disease (path | nogenic, likely patho | terpreted by a clinical genetics ogenic) in the clinical context of the L/minute/1.73 m ²)? |
| 3) Does the member ha | ave end-stage renal disc | 1 0 1 | |
| | CURRENT or PREVIOUS THERAPY Status (Discontinued & | | |
| Madigation Name | | | Status (Discontinued & |
| Medication Name | Strength/ Frequency | Dates of Therapy | |
| Medication Name | | | Status (Discontinued & |
| Medication Name | | | Status (Discontinued & |
| | Strength/ Frequency | | Status (Discontinued & |
| Medication Name For Fabrazyme: Has the member demonstrated Please describe: | Strength/ Frequency REAUTH | Dates of Therapy ORIZATION | Status (Discontinued & Why/Current) |
| For Fabrazyme: Has the member demonstrated | Strength/ Frequency REAUTH | Dates of Therapy ORIZATION | Status (Discontinued & Why/Current) |
| For Fabrazyme: Has the member demonstrated Please describe: | Strength/ Frequency REAUTH clinical benefit and tol | Dates of Therapy ORIZATION erance with treatme | Status (Discontinued & Why/Current) nt? Yes No |
| For Fabrazyme: Has the member demonstrated Please describe: For Galafold: Has the member experienced of Please describe: | REAUTH clinical benefit and toler | ORIZATION erance with treatme | Status (Discontinued & Why/Current) nt? Yes No Yes No |
| For Fabrazyme: Has the member demonstrated Please describe: For Galafold: Has the member experienced of Please describe: | Strength/ Frequency REAUTH clinical benefit and tol | ORIZATION erance with treatme | Status (Discontinued & Why/Current) nt? Yes No Yes No |
| For Fabrazyme: Has the member demonstrated Please describe: For Galafold: Has the member experienced of Please describe: | REAUTH clinical benefit and toler | ORIZATION erance with treatme | Status (Discontinued & Why/Current) nt? Yes No Yes No |
| For Fabrazyme: Has the member demonstrated Please describe: For Galafold: Has the member experienced of Please describe: | REAUTH clinical benefit and toler RTING INFORMATI | ORIZATION erance with treatme | Status (Discontinued & Why/Current) nt? Yes No Yes No |



Attachment: 1

Table 2: Amenable *GLA* Variants Based on the In Vitro Assay

| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|-------------------|--------------------|-----------------------------------|-----------------------------------|
| c.7C>G | c.C7G | p.(L3V) | p.(Leu3Val) |
| c.8T>C | c.T8C | p.(L3P) | p.(Leu3Pro) |
| c.[11G>T; 620A>C] | c.G11T/A620C | p.(R4M/Y207S) | p.(Arg4Met/Tyr207Ser) |
| c.37G>A | c.G37A | p.(A13T) | p.(Ala13Thr) |
| c.37G>C | c.G37C | p.(A13P) | p.(Ala13Pro) |
| c.43G>A | c.G43A | p.(A15T) | p.(Ala15Thr) |
| c.44C>G | c.C44G | p.(A15G) | p.(Ala15Gly) |
| c.53T>G | c.T53G | p.(F18C) | p.(Phe18Cys) |
| c.58G>C | c.G58C | p.(A20P) | p.(Ala20Pro) |



| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| c.59C>A | c.C59A | p.(A20D) | p.(Ala20Asp) |
| c.65T>G | c.T65G | p.(V22G) | p.(Val22Gly) |
| c.70T>C or c.70T>A | c.T70C or c.T70A | p.(W24R) | p.(Trp24Arg) |
| c.70T>G | c.T70G | p.(W24G) | p.(Trp24Gly) |
| c.72G>C or c.72G>T | c.G72C or c.G72T | p.(W24C) | p.(Trp24Cys) |
| c.95T>C | c.T95C | p.(L32P) | p.(Leu32Pro) |
| c.97G>T | c.G97T | p.(D33Y) | p.(Asp33Tyr) |
| c.98A>G | c.A98G | p.(D33G) | p.(Asp33Gly) |
| c.100A>C | c.A100C | p.(N34H) | p.(Asn34His) |
| c.100A>G | c.A100G | p.(N34D) | p.(Asn34Asp) |
| c.101A>C | c.A101C | p.(N34T) | p.(Asn34Thr) |
| c.101A>G | c.A101G | p.(N34S) | p.(Asn34Ser) |
| c.102T>G or c.102T>A | c.T102G or c.T102A | p.(N34K) | p.(Asn34Lys) |
| c.103G>C or c.103G>A | c.G103C or c.G103A | p.(G35R) | p.(Gly35Arg) |
| c.104G>A | c.G104A | p.(G35E) | p.(Gly35Glu) |
| c.104G>T | c.G104T | p.(G35V) | p.(Gly35Val) |
| c.107T>C | c.T107C | p.(L36S) | p.(Leu36Ser) |
| c.107T>G | c.T107G | p.(L36W) | p.(Leu36Trp) |
| c.108G>C or c.108G>T | c.G108C or c.G108T | p.(L36F) | p.(Leu36Phe) |
| c.109G>A | c.G109A | p.(A37T) | p.(Ala37Thr) |
| c.110C>T | c.C110T | p.(A37V) | p.(Ala37Val) |
| c.122C>T | c.C122T | p.(T41I) | p.(Thr41Ile) |
| c.124A>C or c.124A>T | c.A124C or c.A124T | p.(M42L) | p.(Met42Leu) |
| c.124A>G | c.A124G | p.(M42V) | p.(Met42Val) |
| c.125T>A | c.T125A | p.(M42K) | p.(Met42Lys) |
| c.125T>C | c.T125C | p.(M42T) | p.(Met42Thr) |
| c.125T>G | c.T125G | p.(M42R) | p.(Met42Arg) |
| c.126G>A or c.126G>C or c.126G>T | c.G126A or c.G126C or c.G126T | p.(M42I) | p.(Met42Ile) |
| c.137A>C | c.A137C | p.(H46P) | p.(His46Pro) |



Table 2: Amenable GLA Variants Based on the In Vitro Assay (Continued)

| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| c.142G>C | c.G142C | p.(E48Q) | p.(Glu48Gln) |
| c.152T>A | c.T152A | p.(M51K) | p.(Met51Lys) |
| c.153G>A or c.153G>T or c.153G>C | c.G153A or c.G153T or c.G153C | p.(M51I) | p.(Met51Ile) |
| c.[157A>C; 158A>T] | c.A157C/A158T | p.(N53L) | p.(Asn53Leu) |
| c.157A>G | c.A157G | p.(N53D) | p.(Asn53Asp) |
| c.160C>T | c.C160T | p.(L54F) | p.(Leu54Phe) |
| c.161T>C | c.T161C | p.(L54P) | p.(Leu54Pro) |
| c.164A>G | c.A164G | p.(D55G) | p.(Asp55Gly) |
| c.164A>T | c.A164T | p.(D55V) | p.(Asp55Val) |
| c.[164A>T; 170A>T] | c.A164T/A170T | p.(D55V/Q57L) | p.(Asp55Val/Gln57Leu) |
| c.167G>A | c.G167A | p.(C56Y) | p.(Cys56Tyr) |
| c.167G>T | c.G167T | p.(C56F) | p.(Cys56Phe) |
| c.170A>T | c.A170T | p.(Q57L) | p.(Gln57Leu) |
| c.175G>A | c.G175A | p.(E59K) | p.(Glu59Lys) |
| c.178C>A | c.C178A | p.(P60T) | p.(Pro60Thr) |
| c.178C>T | c.C178T | p.(P60S) | p.(Pro60Ser) |
| c.179C>T | c.C179T | p.(P60L) | p.(Pro60Leu) |
| c.196G>A | c.G196A | p.(E66K) | p.(Glu66Lys) |
| c.197A>G | c.A197G | p.(E66G) | p.(Glu66Gly) |
| c.207C>A or c.207C>G | c.C207A or c.C207G | p.(F69L) | p.(Phe69Leu) |
| c.214A>G | c.A214G | p.(M72V) | p.(Met72Val) |
| c.216G>A or c.216G>T or c.216G>C | c.G216A or c.G216T or c.G216C | p.(M72I) | p.(Met72Ile) |
| c.218C>T | c.C218T | p.(A73V) | p.(Ala73Val) |
| c.227T>C | c.T227C | p.(M76T) | p.(Met76Thr) |
| c.239G>A | c.G239A | p.(G80D) | p.(Gly80Asp) |
| c.239G>T | c.G239T | p.(G80V) | p.(Gly80Val) |
| c.247G>A | c.G247A | p.(D83N) | p.(Asp83Asn) |
| c.253G>A | c.G253A | p.(G85S) | p.(Gly85Ser) |



Table 2: Amenable GLA Variants Based on the In Vitro Assay (Continued)

| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|-------------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| c.[253G>A; 254G>A] | c.G253A/G254A | p.(G85N) | p.(Gly85Asn) |
| c.[253G>A; 254G>T; 255T>G] | c.G253A/G254T/T255G | p.(G85M) | p.(Gly85Met) |
| c.254G>A | c.G254A | p.(G85D) | p.(Gly85Asp) |
| c.261G>C or c.261G>T | c.G261C or c.G261T | p.(E87D) | p.(Glu87Asp) |
| c.265C>T | c.C265T | p.(L89F) | p.(Leu89Phe) |
| c.272T>C | c.T272C | p.(I91T) | p.(Ile91Thr) |
| c.288G>A or c.288G>T or c.288G>C | c.G288A or c.G288T or c.G288C | p.(M96I) | p.(Met96Ile) |
| c.289G>C | c.G289C | p.(A97P) | p.(Ala97Pro) |
| c.290C>T | c.C290T | p.(A97V) | p.(Ala97Val) |
| c.305C>T | c.C305T | p.(S102L) | p.(Ser102Leu) |
| c.311G>T | c.G311T | p.(G104V) | p.(Gly104Val) |
| c.316C>T | c.C316T | p.(L106F) | p.(Leu106Phe) |
| c.320A>G | c.A320G | p.(Q107R) | p.(Gln107Arg) |
| c.322G>A | c.G322A | p.(A108T) | p.(Ala108Thr) |
| c.326A>G | c.A326G | p.(D109G) | p.(Asp109Gly) |
| c.334C>G | c.C334G | p.(R112G) | p.(Arg112Gly) |
| c.335G>A | c.G335A | p.(R112H) | p.(Arg112His) |
| c.337T>A | c.T337A | p.(F113I) | p.(Phe113Ile) |
| c.337T>C or c.339T>A or c.339T>G | c.T337C or c.T339A or c.T339G | p.(F113L) | p.(Phe113Leu) |
| c.352C>T | c.C352T | p.(R118C) | p.(Arg118Cys) |
| c.361G>A | c.G361A | p.(A121T) | p.(Ala121Thr) |
| c.368A>G | c.A368G | p.(Y123C) | p.(Tyr123Cys) |
| c.373C>T | c.C373T | p.(H125Y) | р.(Ніs125Тут) |
| c.374A>T | c.A374T | p.(H125L) | p.(His125Leu) |
| c.376A>G | c.A376G | p.(S126G) | p.(Ser126Gly) |
| c.383G>A | c.G383A | p.(G128E) | p.(Gly128Glu) |
| c.399T>G | c.T399G | p.(I133M) | p.(Ile133Met) |
| c.404C>T | c.C404T | p.(A135V) | p.(Ala135Val) |



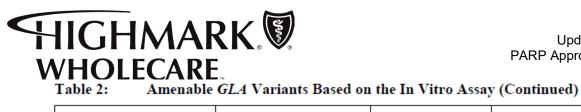
Table 2: Amenable GLA Variants Based on the In Vitro Assay (Continued)

| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|----------------------|--------------------|-----------------------------------|-----------------------------------|
| c.408T>A or c.408T>G | c.T408A or c.T408G | p.(D136E) | p.(Asp136Glu) |
| c.416A>G | c.A416G | p.(N139S) | p.(Asn139Ser) |
| c.419A>C | c.A419C | p.(K140T) | p.(Lys140Thr) |
| c.427G>A | c.G427A | p.(A143T) | p.(Ala143Thr) |
| c.431G>A | c.G431A | p.(G144D) | p.(Gly144Asp) |
| c.431G>T | c.G431T | p.(G144V) | p.(Gly144Val) |
| c.434T>C | c.T434C | p.(F145S) | p.(Phe145Ser) |
| c.436C>T | c.C436T | p.(P146S) | p.(Pro146Ser) |
| c.437C>G | c.C437G | p.(P146R) | p.(Pro146Arg) |
| c.454T>C | c.T454C | p.(Y152H) | p.(Tyr152His) |
| c.454T>G | c.T454G | p.(Y152D) | p.(Tyr152Asp) |
| c.455A>G | c.A455G | p.(Y152C) | p.(Tyr152Cys) |
| c.466G>A | c.G466A | p.(A156T) | p.(Ala156Thr) |
| c.466G>T | c.G466T | p.(A156S) | p.(Ala156Ser) |
| c.467C>T | c.C467T | p.(A156V) | p.(Ala156Val) |
| c.471G>C or c.471G>T | c.G471C or c.G471T | p.(Q157H) | p.(Gln157His) |
| c.484T>G | c.T484G | p.(W162G) | p.(Trp162Gly) |
| c.493G>C | c.G493C | p.(D165H) | p.(Asp165His) |
| c.494A>G | c.A494G | p.(D165G) | p.(Asp165Gly) |
| c.496_497delinsTC | c.496_497delinsTC | p.(L166S) | p.(Leu166Ser) |
| c.496C>G | c.C496G | p.(L166V) | p.(Leu166Val) |
| c.[496C>G; 497T>G] | c.C496G/T497G | p.(L166G) | p.(Leu166Gly) |
| c.499C>G | c.C499G | p.(L167V) | p.(Leu167Val) |
| c.506T>C | c.T506C | p.(F169S) | p.(Phe169Ser) |
| c.511G>A | c.G511A | p.(G171S) | p.(Gly171Ser) |
| c.520T>C | c.T520C | p.(C174R) | p.(Cys174Arg) |
| c.520T>G | c.T520G | p.(C174G) | p.(Cys174Gly) |
| c.525C>G or c.525C>A | c.C525G or c.C525A | p.(D175E) | p.(Asp175Glu) |
| c.539T>G | c.T539G | p.(L180W) | p.(Leu180Trp) |
| c.540G>C or c.540G>T | c.G540C or c.G540T | p.(L180F) | p.(Leu180Phe) |



Table 2: Amenable GLA Variants Based on the In Vitro Assay (Continued)

| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| c.548G>A | c.G548A | p.(G183D) | p.(Gly183Asp) |
| c.548G>C | c.G548C | p.(G183A) | p.(Gly183Ala) |
| c.550T>A | c.T550A | p.(Y184N) | p.(Tyr184Asn) |
| c.551A>G | c.A551G | p.(Y184C) | p.(Tyr184Cys) |
| c.553A>G | c.A553G | p.(K185E) | p.(Lys185Glu) |
| c.559_564dup | c.559_564dup | p.(M187_S188dup) | p.(Met187_Ser188dup) |
| c.559A>G | c.A559G | p.(M187V) | p.(Met187Val) |
| c.560T>C | c.T560C | p.(M187T) | p.(Met187Thr) |
| c.561G>T or c.561G>A or c.561G>C | c.G561T or c.G561A or c.G561C | p.(M187I) | p.(Met187Ile) |
| c.567G>C or c.567G>T | c.G567C or c.G567T | p.(L189F) | p.(Leu189Phe) |
| c.572T>A | c.T572A | p.(L191Q) | p.(Leu191Gln) |
| c.581C>T | c.C581T | p.(T194I) | p.(Thr194Ile) |
| c.584G>T | c.G584T | p.(G195V) | p.(Gly195Val) |
| c.586A>G | c.A586G | p.(R196G) | p.(Arg196Gly) |
| c.593T>C | c.T593C | p.(I198T) | p.(Ile198Thr) |
| c.595G>A | c.G595A | p.(V199M) | p.(Val199Met) |
| c.596T>C | c.T596C | p.(V199A) | p.(Val199Ala) |
| c.596T>G | c.T596G | p.(V199G) | p.(Val199Gly) |
| c.599A>G | c.A599G | p.(Y200C) | p.(Tyr200Cys) |
| c.602C>A | c.C602A | p.(S201Y) | p.(Ser201Tyr) |
| c.602C>T | c.C602T | p.(S201F) | p.(Ser201Phe) |
| c.608A>T | c.A608T | p.(E203V) | p.(Glu203Val) |
| c.609G>C or c.609G>T | c.G609C or c.G609T | p.(E203D) | p.(Glu203Asp) |
| c.611G>T | c.G611T | p.(W204L) | p.(Trp204Leu) |
| c.613C>A | c.C613A | p.(P205T) | p.(Pro205Thr) |
| c.613C>T | c.C613T | p.(P205S) | p.(Pro205Ser) |
| c.614C>T | c.C614T | p.(P205L) | p.(Pro205Leu) |
| c.619T>C | c.T619C | p.(Y207H) | p.(Tyr207His) |



| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|----------------------|--------------------|-----------------------------------|-----------------------------------|
| c.620A>C | c.A620C | p.(Y207S) | p.(Tyr207Ser) |
| c.623T>G | c.T623G | p.(M208R) | p.(Met208Arg) |
| c.628C>T | c.C628T | p.(P210S) | p.(Pro210Ser) |
| c.629C>T | c.C629T | p.(P210L) | p.(Pro210Leu) |
| c.638A>G | c.A638G | p.(K213R) | p.(Lys213Arg) |
| c.638A>T | c.A638T | p.(K213M) | p.(Lys213Met) |
| c.640C>T | c.C640T | p.(P214S) | p.(Pro214Ser) |
| c.641C>T | c.C641T | p.(P214L) | p.(Pro214Leu) |
| c.643A>G | c.A643G | p.(N215D) | p.(Asn215Asp) |
| c.644A>G | c.A644G | p.(N215S) | p.(Asn215Ser) |
| c.[644A>G; 937G>T*] | c.A644G/G937T* | p.(N215S/D313Y*) | p.(Asn215Ser/Asp313Tyr*) |
| c.644A>T | c.A644T | p.(N215I) | p.(Asn215Ile) |
| c.646T>G | c.T646G | p.(Y216D) | p.(Tyr216Asp) |
| c.647A>G | c.A647G | p.(Y216C) | p.(Tyr216Cys) |
| c.655A>C | c.A655C | p.(I219L) | p.(Ile219Leu) |
| c.656T>A | c.T656A | p.(I219N) | p.(Ile219Asn) |
| c.656T>C | c.T656C | p.(I219T) | p.(Ile219Thr) |
| c.659G>A | c.G659A | p.(R220Q) | p.(Arg220Gln) |
| c.659G>C | c.G659C | p.(R220P) | p.(Arg220Pro) |
| c.662A>C | c.A662C | p.(Q221P) | p.(Gln221Pro) |
| c.671A>C | c.A671C | p.(N224T) | p.(Asn224Thr) |
| c.671A>G | c.A671G | p.(N224S) | p.(Asn224Ser) |
| c.673C>G | c.C673G | p.(H225D) | p.(His225Asp) |
| c.683A>G | c.A683G | p.(N228S) | p.(Asn228Ser) |
| c.687T>A or c.687T>G | c.T687A or c.T687G | p.(F229L) | p.(Phe229Leu) |
| c.695T>C | c.T695C | p.(I232T) | p.(Ile232Thr) |
| c.712A>G | c.A712G | p.(S238G) | p.(Ser238Gly) |
| c.713G>A | c.G713A | p.(S238N) | p.(Ser238Asn) |
| c.716T>C | c.T716C | p.(I239T) | p.(Ile239Thr) |



Table 2: Amenable GLA Variants Based on the In Vitro Assay (Continued)

| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|-------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|
| c.717A>G | c.A717G | p.(I239M) | p.(Ile239Met) |
| c.720G>C or c.720G>T | c.G720C or c.G720T | p.(K240N) | p.(Lys240Asn) |
| c.724A>G | c.A724G | p.(I242V) | p.(Ile242Val) |
| c.724A>T | c.A724T | p.(I242F) | p.(Ile242Phe) |
| c.725T>A | c.T725A | p.(I242N) | p.(Ile242Asn) |
| c.725T>C | c.T725C | p.(I242T) | p.(Ile242Thr) |
| c.728T>G | c.T728G | p.(L243W) | p.(Leu243Trp) |
| c.729G>C or c.729G>T | c.G729C or c.G729T | p.(L243F) | p.(Leu243Phe) |
| c.730G>A | c.G730A | p.(D244N) | p.(Asp244Asn) |
| c.730G>C | c.G730C | p.(D244H) | p.(Asp244His) |
| c.733T>G | c.T733G | p.(W245G) | p.(Trp245Gly) |
| c.740C>G | c.C740G | p.(S247C) | p.(Ser247Cys) |
| c.747C>G or c.747C>A | c.C747G or c.C747A | p.(N249K) | p.(Asn249Lys) |
| c.749A>C | c.A749C | p.(Q250P) | p.(Gln250Pro) |
| c.749A>G | c.A749G | p.(Q250R) | p.(Gln250Arg) |
| c.750G>C | c.G750C | p.(Q250H) | p.(Gln250His) |
| c.758T>C | c.T758C | p.(I253T) | p.(Ile253Thr) |
| c.758T>G | c.T758G | p.(I253S) | p.(Ile253Ser) |
| c.760-762delGTT or c.761- 763del | c.760_762delGTT or c.761_763del | p.(V254del) | p.(Val254del) |
| c.769G>C | c.G769C | p.(A257P) | p.(Ala257Pro) |
| c.770C>G | c.C770G | p.(A257G) | p.(Ala257Gly) |
| c.770C>T | c.C770T | p.(A257V) | p.(Ala257Val) |
| c.772G>C or c.772G>A | c.G772C or c.G772A | p.(G258R) | p.(Gly258Arg) |
| c.773G>T | c.G773T | p.(G258V) | p.(Gly258Val) |
| c.776C>A | c.C776A | p.(P259Q) | p.(Pro259Gln) |
| c.776C>G | c.C776G | p.(P259R) | p.(Pro259Arg) |
| c.776C>T | c.C776T | p.(P259L) | p.(Pro259Leu) |
| c.779G>A | c.G779A | p.(G260E) | p.(Gly260Glu) |
| c.779G>C | c.G779C | p.(G260A) | p.(Gly260Ala) |



Table 2: Amenable GLA Variants Based on the In Vitro Assay (Continued)

| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|----------------------|--------------------|-----------------------------------|-----------------------------------|
| c.781G>A | c.G781A | p.(G261S) | p.(Gly261Ser) |
| c.781G>C | c.G781C | p.(G261R) | p.(Gly261Arg) |
| c.781G>T | c.G781T | p.(G261C) | p.(Gly261Cys) |
| c.788A>G | c.A788G | p.(N263S) | p.(Asn263Ser) |
| c.790G>T | c.G790T | p.(D264Y) | p.(Asp264Tyr) |
| c.794C>T | c.C794T | p.(P265L) | p.(Pro265Leu) |
| c.800T>C | c.T800C | p.(M267T) | p.(Met267Thr) |
| c.805G>A | c.G805A | p.(V269M) | p.(Val269Met) |
| c.806T>C | c.T806C | p.(V269A) | p.(Val269Ala) |
| c.809T>C | c.T809C | p.(I270T) | p.(Ile270Thr) |
| c.810T>G | c.T810G | p.(I270M) | p.(Ile270Met) |
| c.811G>A | c.G811A | p.(G271S) | p.(Gly271Ser) |
| c.[811G>A; 937G>T*] | c.G811A/G937T* | p.(G271S/D313Y*) | p.(Gly271Ser/Asp313Tyr*) |
| c.812G>A | c.G812A | p.(G271D) | p.(Gly271Asp) |
| c.823C>G | c.C823G | p.(L275V) | p.(Leu275Val) |
| c.827G>A | c.G827A | p.(S276N) | p.(Ser276Asn) |
| c.829T>G | c.T829G | p.(W277G) | p.(Trp277Gly) |
| c.831G>T or c.831G>C | c.G831T or c.G831C | p.(W277C) | p.(Trp277Cys) |
| c.832A>T | c.A832T | p.(N278Y) | p.(Asn278Tyr) |
| c.835C>G | c.C835G | p.(Q279E) | p.(Gln279Glu) |
| c.838C>A | c.C838A | p.(Q280K) | p.(Gln280Lys) |
| c.840A>T or c.840A>C | c.A840T or c.A840C | p.(Q280H) | p.(Gln280His) |
| c.844A>G | c.A844G | p.(T282A) | p.(Thr282Ala) |
| c.845C>T | c.C845T | p.(T282I) | p.(Thr282Ile) |
| c.850A>G | c.A850G | p.(M284V) | p.(Met284Val) |
| c.851T>C | c.T851C | p.(M284T) | p.(Met284Thr) |
| c.860G>T | c.G860T | p.(W287L) | p.(Trp287Leu) |
| c.862G>C | c.G862C | p.(A288P) | p.(Ala288Pro) |
| c.866T>G | c.T866G | p.(I289S) | p.(Ile289Ser) |



Table 2: Amenable GLA Variants Based on the In Vitro Assay (Continued)

| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| c.868A>C or c.868A>T | c.A868C or c.A868T | p.(M290L) | p.(Met290Leu) |
| c.869T>C | c.T869C | p.(M290T) | p.(Met290Thr) |
| c.870G>A or c.870G>C or c.870G>T | c.G870A or c.G870C or c.G870T | p.(M290I) | p.(Met290Ile) |
| c.871G>A | c.G871A | p.(A291T) | p.(Ala291Thr) |
| c.877C>A | c.C877A | p.(P293T) | p.(Pro293Thr) |
| c.881T>C | c.T881C | p.(L294S) | p.(Leu294Ser) |
| c.884T>G | c.T884G | p.(F295C) | p.(Phe295Cys) |
| c.886A>G | c.A886G | p.(M296V) | p.(Met296Val) |
| c.886A>T or c.886A>C | c.A886T or c.A886C | p.(M296L) | p.(Met296Leu) |
| c.887T>C | c.T887C | p.(M296T) | p.(Met296Thr) |
| c.888G>A or c.888G>T or c.888G>C | c.G888A or c.G888T or c.G888C | p.(M296I) | p.(Met296Ile) |
| c.893A>G | c.A893G | p.(N298S) | p.(Asn298Ser) |
| c.897C>G or c.897C>A | c.C897G or c.C897A | p.(D299E) | p.(Asp299Glu) |
| c.898C>T | c.C898T | p.(L300F) | p.(Leu300Phe) |
| c.899T>C | c.T899C | p.(L300P) | p.(Leu300Pro) |
| c.901C>G | c.C901G | p.(R301G) | p.(Arg301Gly) |
| c.902G>A | c.G902A | p.(R301Q) | p.(Arg301Gln) |
| c.902G>C | c.G902C | p.(R301P) | p.(Arg301Pro) |
| c.902G>T | c.G902T | p.(R301L) | p.(Arg301Leu) |
| c.907A>T | c.A907T | p.(I303F) | p.(Ile303Phe) |
| c.908T>A | c.T908A | p.(I303N) | p.(Ile303Asn) |
| c.911G>A | c.G911A | p.(S304N) | p.(Ser304Asn) |
| c.911G>C | c.G911C | p.(S304T) | p.(Ser304Thr) |
| c.919G>A | c.G919A | p.(A307T) | p.(Ala307Thr) |
| c.922A>G | c.A922G | p.(K308E) | p.(Lys308Glu) |
| c.924A>T or c.924A>C | c.A924T or c.A924C | p.(K308N) | p.(Lys308Asn) |
| c.925G>C | c.G925C | p.(A309P) | p.(Ala309Pro) |
| c.926C>T | c.C926T | p.(A309V) | p.(Ala309Val) |



Table 2: Amenable GLA Variants Based on the In Vitro Assay (Continued)

| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|----------------------|--------------------|-----------------------------------|-----------------------------------|
| c.928C>T | c.C928T | p.(L310F) | p.(Leu310Phe) |
| c.931C>G | c.C931G | p.(L311V) | p.(Leu311Val) |
| c.935A>G | c.A935G | p.(Q312R) | p.(Gln312Arg) |
| c.936G>T or c.936G>C | c.G936T or c.G936C | p.(Q312H) | p.(Gln312His) |
| c.937G>T* | c.G937T* | p.(D313Y*) | p.(Asp313Tyr*) |
| c.[937G>T*; 1232G>A] | c.G937T*/G1232A | p.(D313Y*/G411D) | p.(Asp313Tyr*/Gly411Asp) |
| c.938A>G | c.A938G | p.(D313G) | p.(Asp313Gly) |
| c.946G>A | c.G946A | p.(V316I) | p.(Val316Ile) |
| c.947T>G | c.T947G | p.(V316G) | p.(Val316Gly) |
| c.950T>C | c.T950C | p.(I317T) | p.(Ile317Thr) |
| c.955A>T | c.A955T | p.(I319F) | p.(Ile319Phe) |
| c.956T>C | c.T956C | p.(I319T) | p.(Ile319Thr) |
| c.958A>C | c.A958C | p.(N320H) | p.(Asn320His) |
| c.959A>T | c.A959T | p.(N320I) | p.(Asn320Ile) |
| c.962A>G | c.A962G | p.(Q321R) | p.(Gln321Arg) |
| c.962A>T | c.A962T | p.(Q321L) | p.(Gln321Leu) |
| c.963G>C or c.963G>T | c.G963C or c.G963T | p.(Q321H) | p.(Gln321His) |
| c.964G>A | c.G964A | p.(D322N) | p.(Asp322Asn) |
| c.964G>C | c.G964C | p.(D322H) | p.(Asp322His) |
| c.966C>A or c.966C>G | c.C966A or c.C966G | p.(D322E) | p.(Asp322Glu) |
| c.967C>A | c.C967A | p.(P323T) | p.(Pro323Thr) |
| c.968C>G | c.C968G | p.(P323R) | p.(Pro323Arg) |
| c.973G>A | c.G973A | p.(G325S) | p.(Gly325Ser) |
| c.973G>C | c.G973C | p.(G325R) | p.(Gly325Arg) |
| c.978G>C or c.978G>T | c.G978C or c.G978T | p.(K326N) | p.(Lys326Asn) |
| c.979C>G | c.C979G | p.(Q327E) | p.(Gln327Glu) |
| c.980A>T | c.A980T | p.(Q327L) | p.(Gln327Leu) |
| c.983G>C | c.G983C | p.(G328A) | p.(Gly328Ala) |
| c.989A>G | c.A989G | p.(Q330R) | p.(Gln330Arg) |



Table 2: Amenable GLA Variants Based on the In Vitro Assay (Continued)

| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|------------------------|----------------------|-----------------------------------|-----------------------------------|
| c.1001G>A | c.G1001A | p.(G334E) | p.(Gly334Glu) |
| c.1010T>C | c.T1010C | p.(F337S) | p.(Phe337Ser) |
| c.1012G>A | c.G1012A | p.(E338K) | p.(Glu338Lys) |
| c.1013A>T | c.A1013T | p.(E338V) | p.(Glu338Val) |
| c.1016T>A | c.T1016A | p.(V339E) | p.(Val339Glu) |
| c.1027C>A | c.C1027A | p.(P343T) | p.(Pro343Thr) |
| c.1028C>T | c.C1028T | p.(P343L) | p.(Pro343Leu) |
| c.1033T>C | c.T1033C | p.(\$345P) | p.(Ser345Pro) |
| c.1046G>C | c.G1046C | p.(W349S) | p.(Trp349Ser) |
| c.1055C>G | c.C1055G | p.(A352G) | p.(Ala352Gly) |
| c.1055C>T | c.C1055T | p.(A352V) | p.(Ala352Val) |
| c.1061T>A | c.T1061A | p.(I354K) | p.(Ile354Lys) |
| c.1066C>G | c.C1066G | p.(R356G) | p.(Arg356Gly) |
| c.1066C>T | c.C1066T | p.(R356W) | p.(Arg356Trp) |
| c.1067G>A | c.G1067A | p.(R356Q) | p.(Arg356Gln) |
| c.1067G>C | c.G1067C | p.(R356P) | p.(Arg356Pro) |
| c.1072G>C | c.G1072C | p.(E358Q) | p.(Glu358Gln) |
| c.1073A>C | c.A1073C | p.(E358A) | p.(Glu358Ala) |
| c.1073A>G | c.A1073G | p.(E358G) | p.(Glu358Gly) |
| c.1074G>T or c.1074G>C | c.G1074T or c.G1074C | p.(E358D) | p.(Glu358Asp) |
| c.1076T>C | c.T1076C | p.(I359T) | p.(Ile359Thr) |
| c.1078G>A | c.G1078A | p.(G360S) | p.(Gly360Ser) |
| c.1078G>T | c.G1078T | p.(G360C) | p.(Gly360Cys) |
| c.1079G>A | c.G1079A | p.(G360D) | p.(Gly360Asp) |
| c.1082G>A | c.G1082A | p.(G361E) | p.(Gly361Glu) |
| c.1082G>C | c.G1082C | p.(G361A) | p.(Gly361Ala) |
| c.1084C>A | c.C1084A | p.(P362T) | p.(Pro362Thr) |
| c.1085C>T | c.C1085T | p.(P362L) | p.(Pro362Leu) |
| c.1087C>T | c.C1087T | p.(R363C) | p.(Arg363Cys) |



Table 2: Amenable GLA Variants Based on the In Vitro Assay (Continued)

| DNA Change (Long) | DNA Change (Short) | Protein Change (1-letter Code) | Protein Change (3-letter Code) |
|----------------------|----------------------|-----------------------------------|-----------------------------------|
| c.1088G>A | c.G1088A | p.(R363H) | p.(Arg363His) |
| c.1102G>A | c.G1102A | p.(A368T) | p.(Ala368Thr) |
| c.1117G>A | c.G1117A | p.(G373S) | p.(Gly373Ser) |
| c.1124G>A | c.G1124A | p.(G375E) | p.(Gly375Glu) |
| c.1139C>T | c.C1139T | p.(P380L) | p.(Pro380Leu) |
| c.1153A>G | c.A1153G | p.(T385A) | p.(Tyr385Ala) |
| c.1168G>A | c.G1168A | p.(V390M) | p.(Val390Met) |
| c.1172A>C | c.A1172C | p.(K391T) | p.(Lys391Thr) |
| c.1184G>A | c.G1184A | p.(G395E) | p.(Gly395Glu) |
| c.1184G>C | c.G1184C | p.(G395A) | p.(Gly395Ala) |
| c.1192G>A | c.G1192A | p.(E398K) | p.(Glu398Lys) |
| c.1202_1203insGACTTC | c.1202_1203insGACTTC | p.(T400_S401dup) | p.(Thr400_Ser401dup) |
| c.1208T>C | c.T1208C | p.(L403S) | p.(Leu403Ser) |
| c.1225C>A | c.C1225A | p.(P409T) | p.(Pro409Thr) |
| c.1225C>G | c.C1225G | p.(P409A) | p.(Pro409Ala) |
| c.1225C>T | c.C1225T | p.(P409S) | p.(Pro409Ser) |
| c.1228A>G | c.A1228G | p.(T410A) | p.(Thr410Ala) |
| c.1229C>T | c.C1229T | p.(T410I) | p.(Thr410Ile) |
| c.1232G>A | c.G1232A | p.(G411D) | p.(Gly411Asp) |
| c.1234A>C | c.A1234C | p.(T412P) | p.(Thr412Pro) |
| c.1235C>A | c.C1235A | p.(T412N) | p.(Thr412Asn) |
| c.1253A>G | c.A1253G | p.(E418G) | p.(Glu418Gly) |
| c.1261A>G | c.A1261G | p.(M421V) | p.(Met421Val) |

^{*} Based on available published data, the *GLA* variant c.937G>T, (p.(D313Y)) is considered benign (not causing Fabry disease). Consultation with a clinical genetics professional is strongly recommended in patients with Fabry disease who have this *GLA* variant as additional evaluations may be indicated.

If a *GLA* variant does not appear in Table 2, it is either non-amenable (if tested) or has not been tested for in vitro amenability. For further information, please contact Amicus Medical Information at 1-877-4AMICUS or medinfousa@amicusrx.com.