**LETTER OF MEDICAL NECESSITY FOR GENETIC TESTING FOR LONG QT SYNDROME (LongQTNext)**

Date: Date of Service/Claim

To: Utilization Review Department

Insurance Company Name, Address, City, State

Re: Patient Name, DOB, ID #

ICD-10 Codes:

The ICD-10 codes listed below are commonly received by Ambry from ordering providers for the testing described in this letter. Ambry provides this information as a customer service but makes no recommendations regarding the use of any diagnosis codes. As a reminder, it is the ordering provider’s responsibility to always determine, for the specific date of service, the appropriate diagnostic codes based on the patient’s signs and symptoms.

Code Description

I45.81 LONG QT SYNDROME

I42.0 DILATED CARDIOMYOPATHY

I46.9 CARDIAC ARREST, CAUSE UNSPECIFIED

Z82.49 FAMILY HISTORY OF ISCHEMIC HEART DISEASE AND OTHER DISEASES OF THE CIRCULATORY SYSTEM

This letter is regarding my patient and your subscriber, referenced above, to request full coverage of medically indicated LongQTNext testing to be performed by Ambry Genetics Corporation.

LongQTNext analyzes genes most commonly associated with long QT syndrome (LQTS) and related arrythmias. Phenotypic features of LQTS and related arrhythmias may include ECG abnormalities, palpitations, syncope, seizures, stress and/or exercise intolerance. However, **they are often asymptomatic and can result in sudden cardiac death**1,2. The genetic etiology of these arrhythmias is mostly associated with mutations in genes that encode for potassium or sodium cardiac ion channels or interacting proteins1,2,5.

**Significant aspects of my patient’s personal and/or family medical history that suggest a hereditary arrhythmia are below:** [check all that apply]

* Clinical suspicion for LQTS or a related arrhythmia based on ECG, stress test, or Holter monitor results
* Personal or family history of palpitations, dizziness, syncope, seizures, stress and/or exercise intolerance
* Personal or family history of sudden cardiac death or near sudden death
* Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Heart Rhythm Society (HRS) has recognized the clinical utility of genetic testing for hereditary arrhythmias and supports it as standard of care.1,6**

Identification of a mutation through genetic testing confirms a diagnosis of a hereditary arrhythmia syndrome or a predisposition to a hereditary arrhythmia. Genetic testing also informs patient risk stratification, prognosis, screening and treatment options, efforts to prevent complications (such as ICD, beta blockers, or left cardiac sympathetic denervation), and genetic counseling, all of which can vary depending on the specific gene implicated in the disease.Specifically for this patient, the impact of testing may include2,3,4,5,6: [check all that apply]

* Genetic testing could allow immediate management and treatment to anticipate and control common clinical findings based on the results of the testing
* Genetic testing could inform lifestyle modifications for the patient
* Genetic testing could assist in long-term management and monitoring of suspected disease progression based on the results of the testing
* Genetic testing could lead to informed decisions for other family members with similar conditions, or that may be at risk for similar conditions
* Genetic testing could alleviate the need for long-term clinical surveillance in individuals who test negative for any disease-causing variants found in my patient
* Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Based on the screening, lifestyle, and treatment modifications indicated above, this test has clear clinical utility for my patient.** Due to the **risk of sudden cardiac death** associated with these mutations and the interventions available to reduce these risks, I am requesting coverage for this testing as medically necessary care and affirm that my patient has provided informed consent for genetic testing. I recommend that you support this request for coverage of diagnostic genetic testing for LongQTNext for my patient.

Thank you for your time and please don’t hesitate to contact me with any questions.

Sincerely,

Ordering Clinician Name (Signature Provided on Test Requisition Form)

(MD/DO, Clinical Nurse Specialist, Nurse-Midwives, Nurse Practitioner, Physician Assistant, Genetic Counselor\*)

\*Authorized clinician requirements vary by state

**Test Details**

Test Name: LongQTNext

CPT codes: 81479

Laboratory: Ambry Genetics Corporation (TIN 33-0892453 / NPI 1861568784), a CAP-accredited and CLIA-certified laboratory located at 7 Argonaut, Aliso Viejo, CA 92656

**References**

1. Ackerman MJ, et al. HRS/EHRA expert consensus statement on the state of genetic testing for the channelopathies and cardiomyopathies. [Heart Rhythm.](https://www.ncbi.nlm.nih.gov/pubmed/?term=21787999) 2011 Aug;8(8):1308-39.
2. Schwartz PJ, et al. Impact of genetics on the clinical management of channelopathies. J Am Coll Cardiol. 2013;62:169-180.
3. Schwartz PJ and Ackerman MJ. The long QT syndrome: a transatlantic clinical approach to diagnosis and therapy. Eur Heart J. 2013;34:3109-3116.
4. Giudicessi JR and Ackerman MJ. Genotype- and phenotype-guided management of congenital long QT syndrome. Curr Probl Cardiol. 2013;38:417-455.
5. Musunuru K, et al. Genetic Testing for Inherited Cardiovascular Diseases: Scientific Statement From the American Heart Association. Circulation. 2020;13(4):e000067.
6. Wilde AAM, et al. European Heart Rhythm Association (EHRA)/Heart Rhythm Society (HRS)/Asia Pacific Heart Rhythm Society (APHRS)/Latin American Heart Rhythm Society (LAHRS) Expert Consensus Statement on the state of genetic testing for cardiac diseases. Heart Rhythm. 2022 Jul;19(7):e1-e60.