

DILATED CARDIOMYOPATHY PANELS

- I. Genetic testing for dilated cardiomyopathy (DCM) via a multigene panel (81439) is considered **medically necessary** when:
 - A. The member has findings characteristic of DCM including all of the following:
 1. Left ventricular enlargement based on echocardiogram or cardiac MRI, **AND**
 2. Systolic dysfunction (e.g., ejection fraction less than 50%) based on echocardiogram, cardiac MRI, or left ventricular angiogram, **AND**
 3. Non-genetic causes of DCM have been ruled out, such as prior myocardial infarction from coronary artery disease, valvular and congenital heart disease, toxins (most commonly, anthracyclines or other chemotherapeutic agents; various drugs with idiosyncratic reactions), thyroid disease, inflammatory or infectious conditions, severe long-standing hypertension, and radiation, **OR**
 - B. The member has a first-degree relative with sudden cardiac death (SCD), **AND**
 1. Autopsy revealed a DCM phenotype.
- II. Genetic testing for dilated cardiomyopathy (DCM) via a multigene panel (81439) is considered **investigational** for all other indications.

NOTE: If a panel is performed, the appropriate panel code should be used

DEFINITIONS

1. **Close relatives** include first, second, and third degree blood relatives:
 - a. **First-degree relatives** are parents, siblings, and children

- b. **Second-degree relatives** are grandparents, aunts, uncles, nieces, nephews, grandchildren, and half siblings
 - c. **Third-degree relatives** are great grandparents, great aunts, great uncles, great grandchildren, and first cousins
- 2. **Sudden cardiac death (SCD)** is death due to a cardiovascular cause that occurs within one hour of the onset of symptoms.
- 3. **Sudden unexplained death (Sudden unexplained death syndrome, SUDS)** refers to a sudden cardiac death that occurs in an apparently healthy and often young individual within an hour of the onset of symptoms and for no apparent reason.
- 4. **Sudden cardiac arrest** is defined as “the sudden cessation of cardiac activity so that the victim becomes unresponsive, with no normal breathing and no signs of circulation. If corrective measures are not taken rapidly, this condition progresses to sudden death. Cardiac arrest should be used to signify an event as described above, that is reversed, usually by CPR and/or defibrillation or cardioversion, or cardiac pacing.” (Buxton, et al)

REFERENCES

1. Hershberger RE, Givertz MM, Ho CY, et al. Genetic Evaluation of Cardiomyopathy-A Heart Failure Society of America Practice Guideline. *J Card Fail.* 2018;24(5):281-302. doi:10.1016/j.cardfail.2018.03.004
2. Hershberger, R and Jordan, E. Dilated Cardiomyopathy Overview. 2007 Jul 27 [Updated 2022 Apr 7]. In: Adam MP, Ardinger HH, Pagon RA, et al., editors. *GeneReviews* [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2024. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK1309/>