ORCCA

Inclusion Criteria for ORCCA

Competitive athletes* ages 14 to <35 years old diagnosed with one of the following:

Pathologic Cardiovascular Condition

- Cardiomyopathy
- Primary electrical disease including the cardiac channelopathies or unexplained sudden cardiac arrest
- Myocarditis
- Coronary artery disease/anomaly
- Congenital heart disease**
- Valvular heart disease+
- Aortopathy

Borderline findings with potential risk for major adverse cardiovascular events

- Markedly abnormal ECG++ per the International Criteria with normal cardiac imaging^
- Isolated left ventricular hypertrophy (14–16 mm M, 13–14 mm F)
- Isolated aortic dilatation (40–44 mm M, 34–39 mm F)
- Subclinical ventricular scar or late-gadolinium enhancement on CMR^^
- Non-compacted LV myocardium with concerns for underlying cardiomyopathy
- Genotype positive/phenotype negative for known pathologic variant of genetic cardiomyopathy or channelopathy
- Unexplained reduction in resting LVEF (45–50%)***
- Clinically significant premature ventricular contractions (PVCs)+++

*A competitive athlete is any athlete competing at the high school, collegiate, semi-professional, professional, elite or national level. ** Moderate or greater complexity of adult congenital heart disease per the 2018 ACC/AHA ACHD Guidelines (excludes isolated small ASD/VSD, PFO, repaired ASD/VSD without residual shunt, repaired PDA). + Primary structural abnormality (bicuspid, prolapse, myxomatous, congenital or rheumatic) with moderate or greater regurgitation/stenosis or other associated abnormality (i.e., bicuspid aortic valve with aortopathy, or mitral valve prolapse with mitral annular disjunction). ++ I.e., inferolateral T-wave inversion.

^ Normal echocardiogram or cardiac magnetic resonance imaging. ^^ Excluding isolated right ventricular insertion point LGE and isolated papillary muscle fibrosis. *** LVEF as defined on transthoracic echocardiogram and in athletes participating in a non-endurance or high-dynamic team sport. +++ Frequent PVCs requiring clinical follow-up consisting of either 1) >2000 in 24 hours of non-outflow tract or non-fascicular morphology/origin, or 2) >10,000 in 24 hours of outflow tract or fascicular morphology/origin.