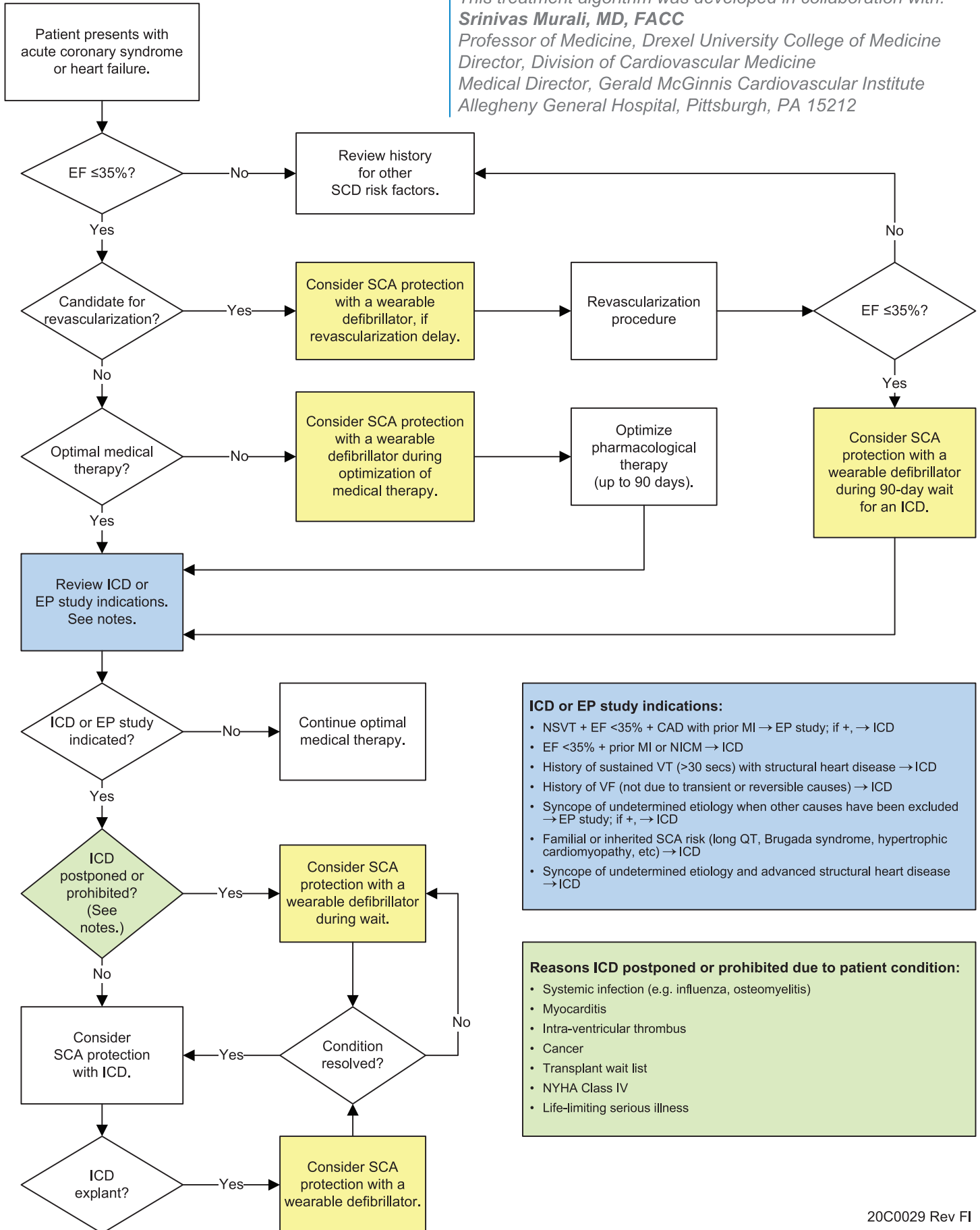# ACS and HF Treatment Algorithm

LifeVest®

This treatment algorithm was developed in collaboration with:
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Patient presents with acute coronary syndrome or heart failure.

EF ≤35%? — No → Review history for other SCD risk factors.

EF ≤35%? — Yes

Candidate for revascularization? — Yes → Consider SCA protection with a wearable defibrillator, if revascularization delay. → Revascularization procedure → EF ≤35%? — No → Review history for other SCD risk factors.

EF ≤35%? — Yes → Consider SCA protection with a wearable defibrillator during 90-day wait for an ICD.

Candidate for revascularization? — No

Optimal medical therapy? — No → Consider SCA protection with a wearable defibrillator during optimization of medical therapy. → Optimize pharmacological therapy (up to 90 days).

Optimal medical therapy? — Yes

Review ICD or EP study indications. See notes.

ICD or EP study indicated? — No → Continue optimal medical therapy.

ICD or EP study indicated? — Yes

ICD postponed or prohibited? (See notes.) — Yes → Consider SCA protection with a wearable defibrillator during wait.

Condition resolved? — No → Consider SCA protection with a wearable defibrillator during wait.

Condition resolved? — Yes → Consider SCA protection with ICD.

ICD postponed or prohibited? (See notes.) — No → Consider SCA protection with ICD.

ICD explant? — Yes → Consider SCA protection with a wearable defibrillator.

ICD or EP study indications:

- NSVT + EF <35% + CAD with prior MI → EP study; if +, → ICD
- EF <35% + prior MI or NICM → ICD
- History of sustained VT (>30 secs) with structural heart disease → ICD
- History of VF (not due to transient or reversible causes) → ICD
- Syncope of undetermined etiology when other causes have been excluded → EP study; if +, → ICD
- Familial or inherited SCA risk (long QT, Brugada syndrome, hypertrophic cardiomyopathy, etc) → ICD
- Syncope of undetermined etiology and advanced structural heart disease → ICD

Reasons ICD postponed or prohibited due to patient condition:

- Systemic infection (e.g. influenza, osteomyelitis)
- Myocarditis
- Intra-ventricular thrombus
- Cancer
- Transplant wait list
- NYHA Class IV
- Life-limiting serious illness