An 81-year-old man presents to the emergency department after collapsing while running for a bus. He has a history of hypertension treated with felodipine but no other major illnesses. He has noted mild breathlessness on exertion, worsening over the past few years. Examination reveals blood pressure is 125/90 mmHg. He has a soft systolic murmur but no signs of heart failure. His ECG is shown below. Serum creatine kinase (CK) is 205 U/L [<180]. Troponin level is pending.

Which one of the following is the most appropriate initial management step?

A. Observation.
B. Intravenous heparin.
C. Intravenous amiodarone.
D. Thrombolysis.
E. Primary angioplasty.

ECG shows L ventricular hypertrophy
Diagnosed with:
1) Voltage criteria or
2) Non-voltage criteria

Voltage criteria:

**Limb leads:**
- R wave in lead 1 plus S wave in lead III > 25mm
- R wave in lead aVL > 11mm
- R wave in lead aVF > 20mm
- S wave in lead aVR > 14mm

**Precordial leads**
- R wave in leads V4,5,or 6 > 26mm
- R wave in leads V5 or 6 plus S wave in lead V1 > 35mm
- Largest R wave plus largest wave in precordial leads > 45mm

Non voltage criteria
- Delayed ventricular activation time > 0.05s in leads V5 or 6 > 0.05s
- ST segment depression and T wave inversion in the left precordial leads

Common causes of left ventricular hypertrophy
1) Hypertension
2) Aortic stenosis
3) Coartation of aorta

This patient has a soft systolic murmur with a history of hypertension. There is no immediate indication to currently treat as a NSTEMI although the mistake of diagnosing it as a STEMI is often made. Answer: A Observe.