CASE STUDY: ACUTE CORONARY SYNDROME

A.C. is a 72 year-old male being admitted to the ED with an acute episode of sustained chest pain after mowing his yard. After waiting 6 hours, he called 911 and was transported to the ED in a hospital without the ability to conduct PCI. Physical examination reveals an anxious and diaphoretic man. His heart rate and rhythm are regular. Vital signs include BP 190/110 and HR of 105 bpm, and respiratory rate (RR) of 32. A.C.'s chest pain radiates to his left arm and jaw and he describes the pain as "crushing" and "like an elephant sitting on my chest." He rates his pain "10/10" in intensity. Thus far, his pain has not responded to five NTG SL 0.4 mg tabs at home and three more tabs of SL NTG in the ambulance. His ECG reveals a 3-mm ST segment elevation and Q waves in leads I and V_2 to V_4.

A.C. is 5'8" and weighs 96 kg. He has no known drug allergies (NKA).

His lab values include the following:
Na: 141 mEq/L. (135-145)
K: 3.5 mEq/L (3.5-5.2)
Cl: 100 mEq/L (98-106)
CO_2: 20 mEq/L (22-29)
BUN: 28 mg/dL (7-18)
Cr: 1.4 mg/dL (0.6-1.2)
Glucose: 162 mg/dL (70-115)
Magnesium: 2.0 Eq/L. (1.3-2.1)
CK: 1,200 U/L, with a 12% CK-MB fraction (normal: 0-5%)
Troponin I-Ultra: 60 ng/mL (normal: <0.2 ng/mL)
Total Cholesterol: 259 mg/dL (normal: < 200)
Triglycerides: 300 mg/dL (normal: male 40-160)

A.C. has a prior history of CAD. Two years ago, a cardiac catheterization revealed 75% stenosis of his middle left anterior descending coronary artery. His ECHO at the time revealed an EF of 58%. He was deemed suitable for management with medications.

A.C. also has a history of recurrent bronchitis associated with COPD for 10 years, diabetes mellitus treated with insulin for 18 years with a recent Hgb A1c of 7.8%, hypertension with BP's usually in the 140-150/85-90 range, and anxiety managed with a SSRI. He has no known drug allergies (NKA).

A.C. has smoked 1 pack of cigarettes per day for 30 years and drinks approx. one 6-pack of beer/week.

A.C.'s medications include the following:
Insulin glargine (Lantus) 40 UNITS SC QPM.
Symbicort 160/4.5 (formoterol / budesonide) Inhaler: 2 puffs BID
Albuterol Inhaler (90 mcg) Inhaler: 2 puffs PRN SOB
Hydrochlorothiazide (HCTZ) 25 mg PO daily.
NTG Patch 0.2 mg/hour QAM.
NTG SL 0.4 mg Q5min x 3 PRN chest pain.
Fish Oil 1000 mg PO daily
Simvastatin (Zocor) 20 mg PO QHS
Sertraline (Zoloft) 50 mg PO daily.
Tramadol (Ultram) 50 mg PO Q4-6H PRN mod-severe pain.
Ibuprofen (Motrin) 600 mg PO TID PRN mild pain.

What are the immediate and long-term therapeutic objectives in treating A.C.?