

SGLT-2 INHIBITORS & GLP-1 AGONISTS: BENDING THE CURVE IN CARDIOVASCULAR RISK AND DISEASE TRAJECTORY

Moderator:

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Case Presentation:

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BACKGROUND

68 y/o Female **Height:** 5' 0" **Weight:** 299 lbs **BMI:** 56

HPI: Presents with worsening exertional dyspnea and decreased effort capacity

PMHx: hypertension, hyperlipidemia, diabetes, parosymal atrial fibrillation, obstructive sleep apnea, COPD

Social Hx: former smoker, no alcohol use or drug use

Functional status: NYHA class II to class III, ambulates with a walker, and requires oxygen at night

QUESTION:

Which patient phenotypes would derive the greatest benefit from SGLT-2 inhibitors and GLP-1 agonists?

- a. Diabetes
- b. Weight
- c. NYHA Class II – III heart failure symptoms
- d. All of the Above

MEDICATIONS

March 2023

Aspirin 81 mg daily

Warfarin

Metformin 500 mg daily

Prednisone 10 mg daily

Ramipril 2.5 mg daily

Simvastatin 20 mg daily

Furosemide 20 mg daily

Ozempic 1 mg/dose weekly

Northwell Health®

August 2024 Regimen

Entresto 49-51 mg BID

Eliquis 5 mg BID

Metformin 500 mg BID

Ozempic 2 mg/dose weekly

Prednisone 10 mg daily

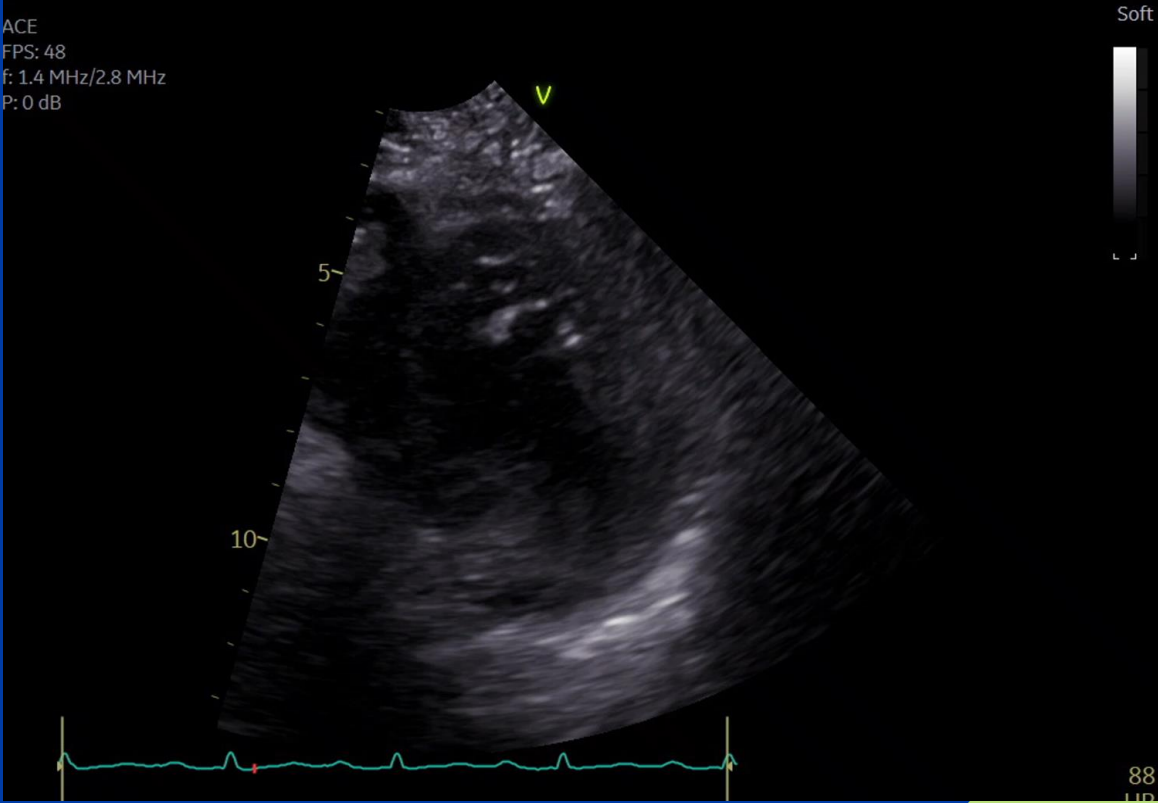
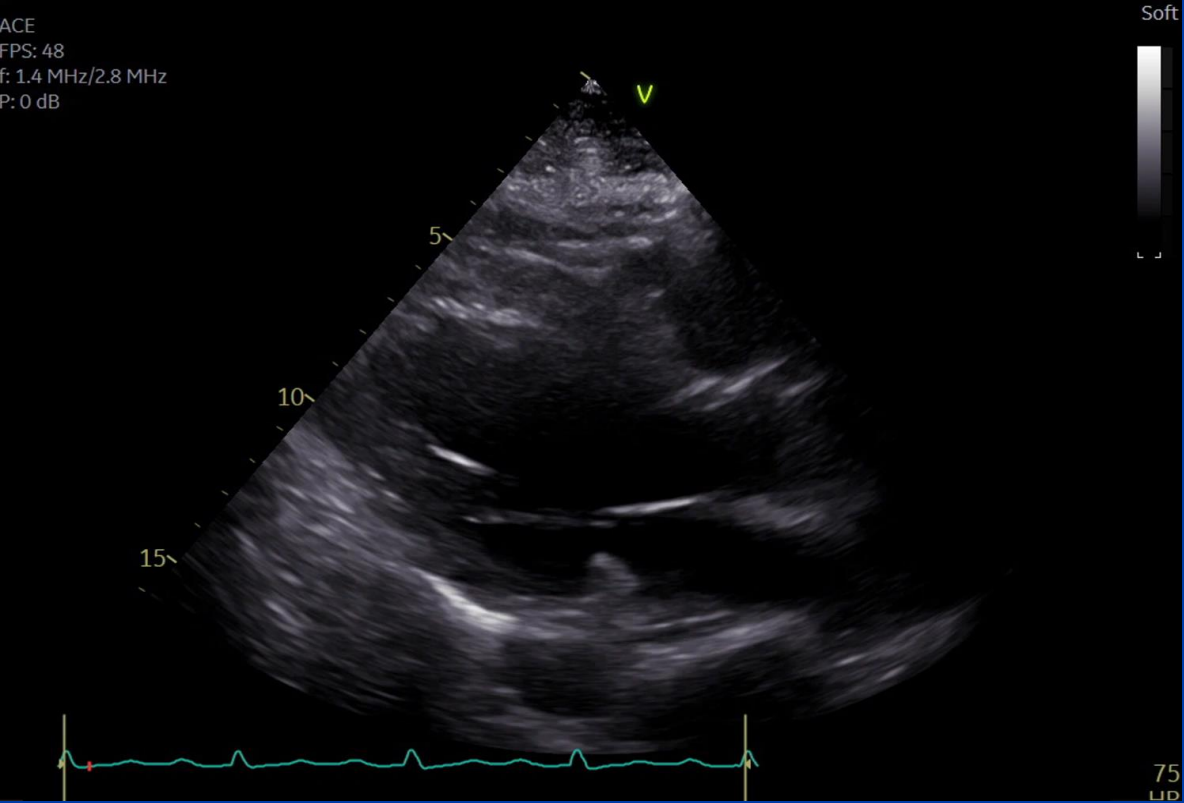
Simvastatin 20 mg daily

Furosemide 20 mg daily

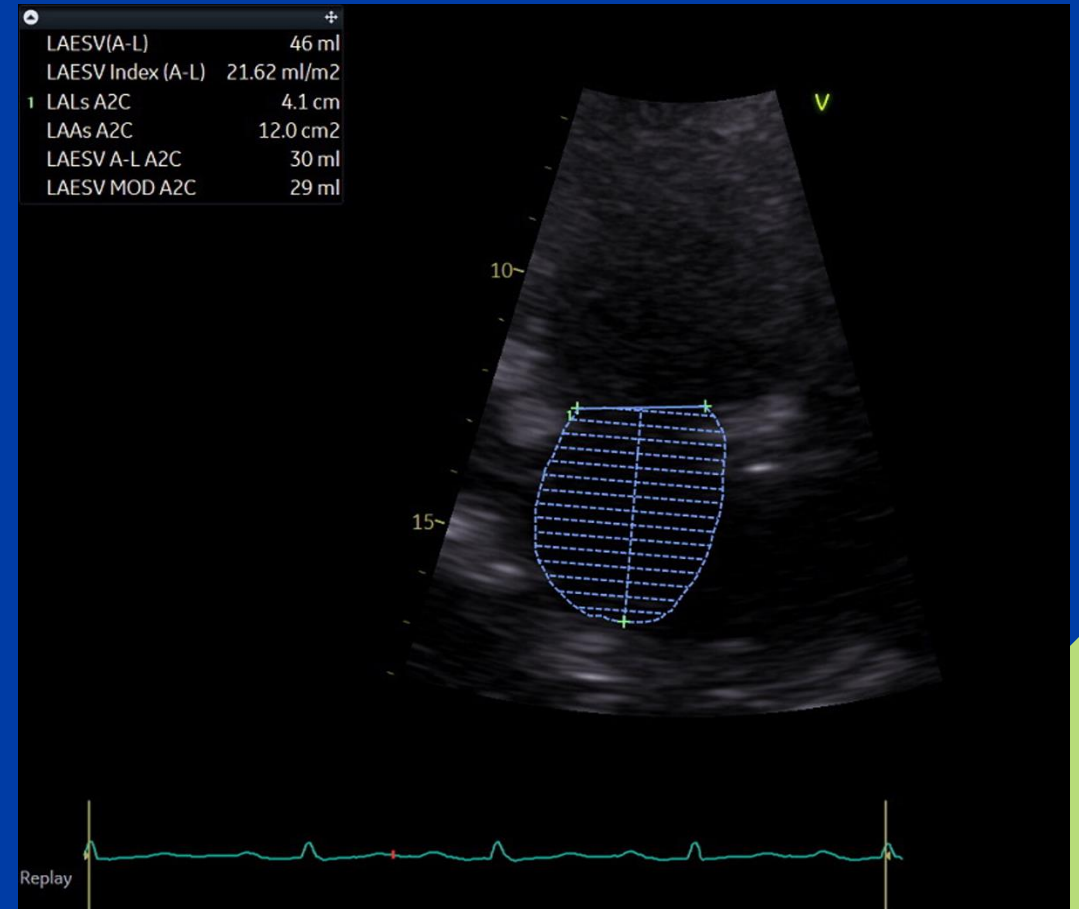
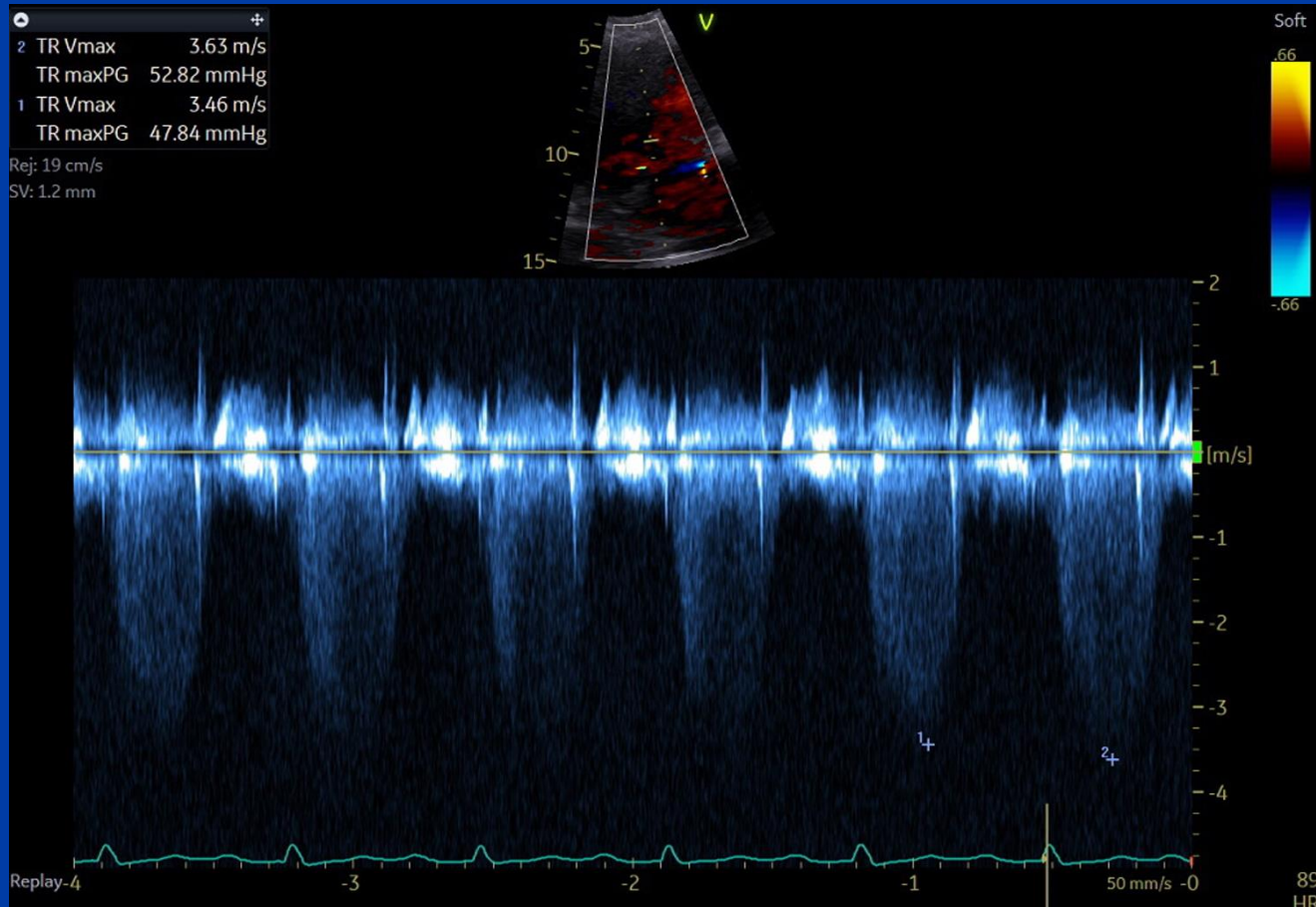
NSR 92 bpm
PR 210 msec
QRSD 100 msec
Lateral repolarization
abnormalities



ECHOCARDIOGRAM 2024



ECHOCARDIOGRAM 2024



RELEVANT LABS / IMAGING

LDL 40 | HDL 72 | TG 107 | Serum Cr 1.3 | HgbA1C 6.8

BNP 2612

Echo (2024):

- LVEF 60%, LVEDD 5.3 cm, E/e' avg: 12
- Estimated PASP 52
- Normal RV function

Left heart cath (2022): no significant coronary disease

Right heart cath (2022):

- RA pressure 11
- PAP 46/24 (mean 32)

H2FPEF SCORE

	Clinical Variable	Values	Points
H₂	H heavy	Body mass index > 30 kg/m ²	2
	H ypertensive	2 or more antihypertensive medicines	1
F	Atrial F ibrillation	Paroxysmal or Persistent	3
P	P ulmonary Hypertension	Doppler Echocardiographic estimated Pulmonary Artery Systolic Pressure > 35 mmHg	1
E	E lder	Age > 60 years	1
F	F illing Pressure	Doppler Echocardiographic E/e' > 9	1
H₂FPEF score			Sum (0-9)

Total Points 0 1 2 3 4 5 6 7 8 9

Probability of HFpEF 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 0.95

Age 68 years

BMI 50 kg/m²
Very high double-check.

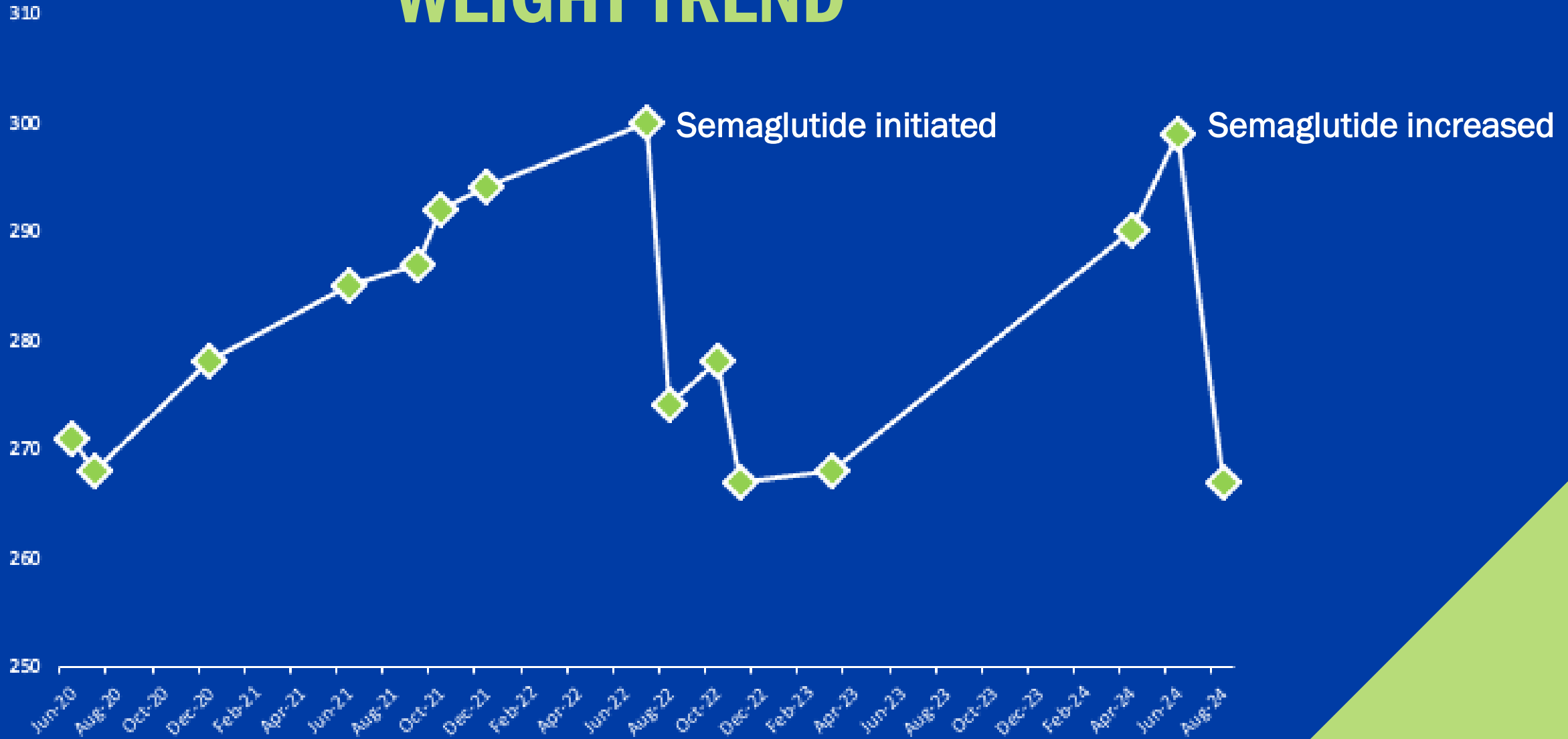
Early mitral inflow velocity/mitral annular early diastolic velocity (E/e') ratio 12

Pulmonary artery systolic pressure As estimated from echo 52 mm Hg

Atrial fibrillation From clinical history and EKG No Yes

99.7 %
 Probability of heart failure with preserved EF

WEIGHT TREND



QUESTION:

Optimal Guideline Directed Medical Therapy would

NOT include:

- a. Mineralocorticoid Receptor Antagonist
- b. SGLT2 inhibitors
- c. Beta-Blocker
- d. Angiotensin Receptor-Neprolysin Inhibitor

THANK YOU



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