

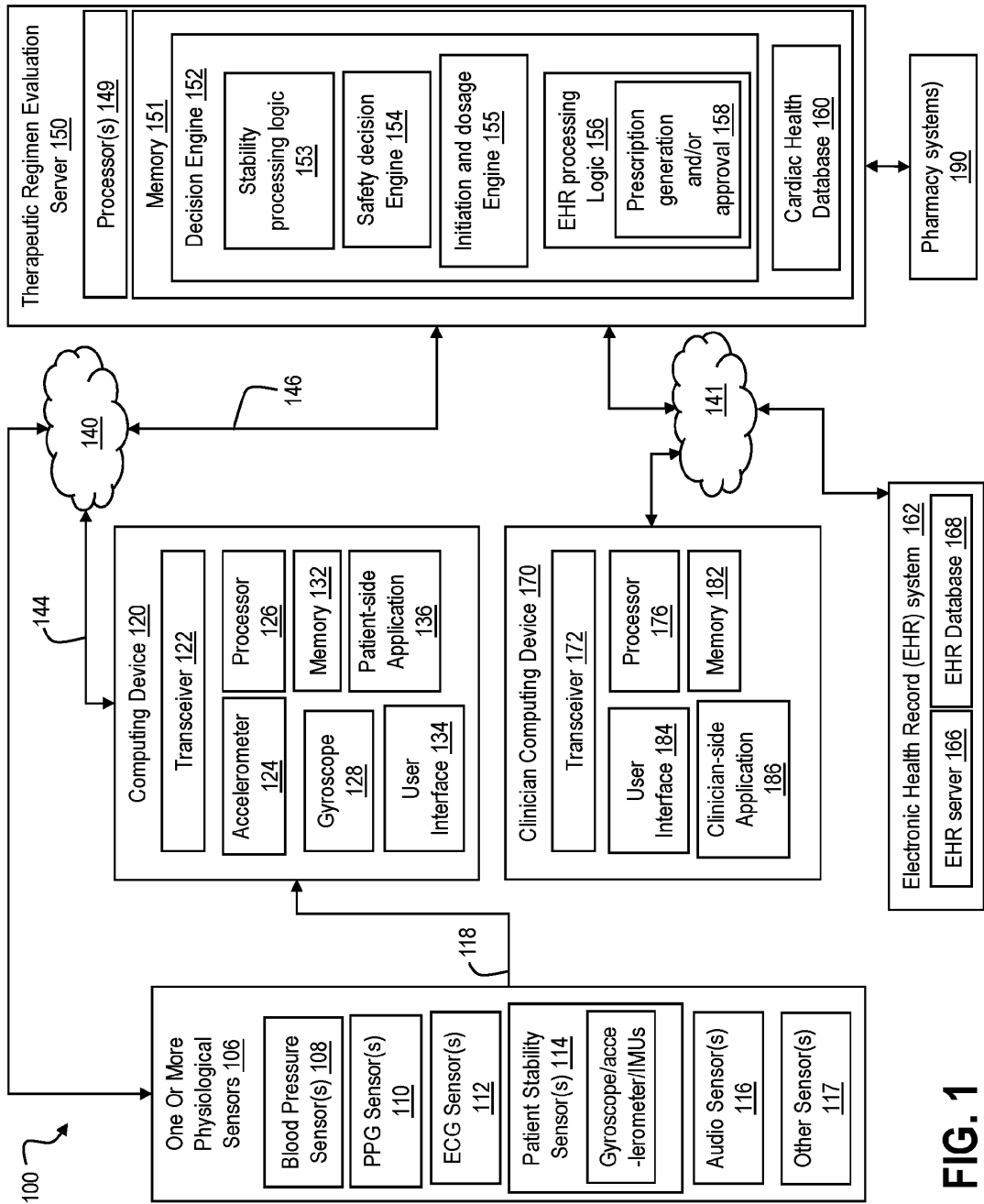


FIG. 1

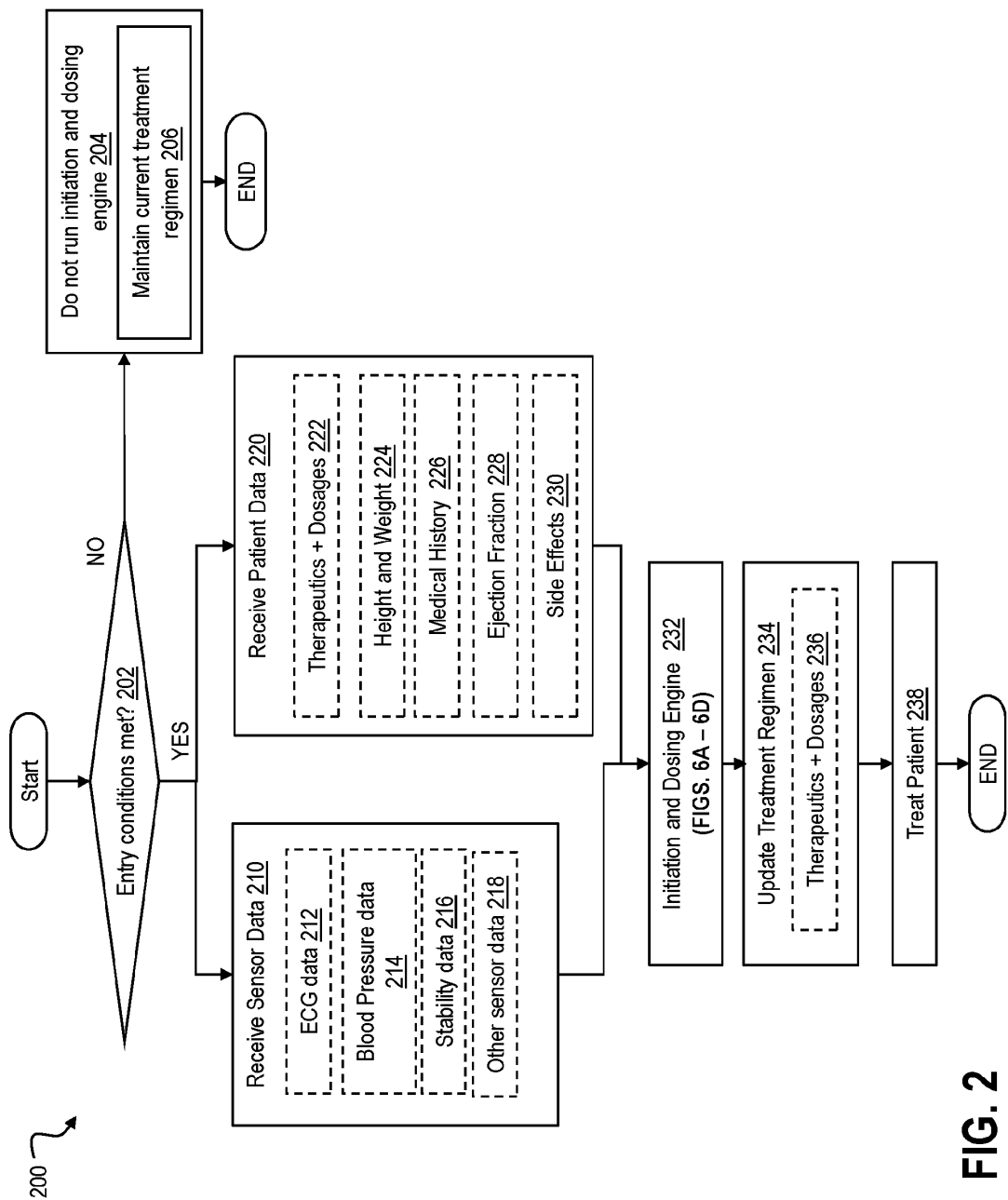
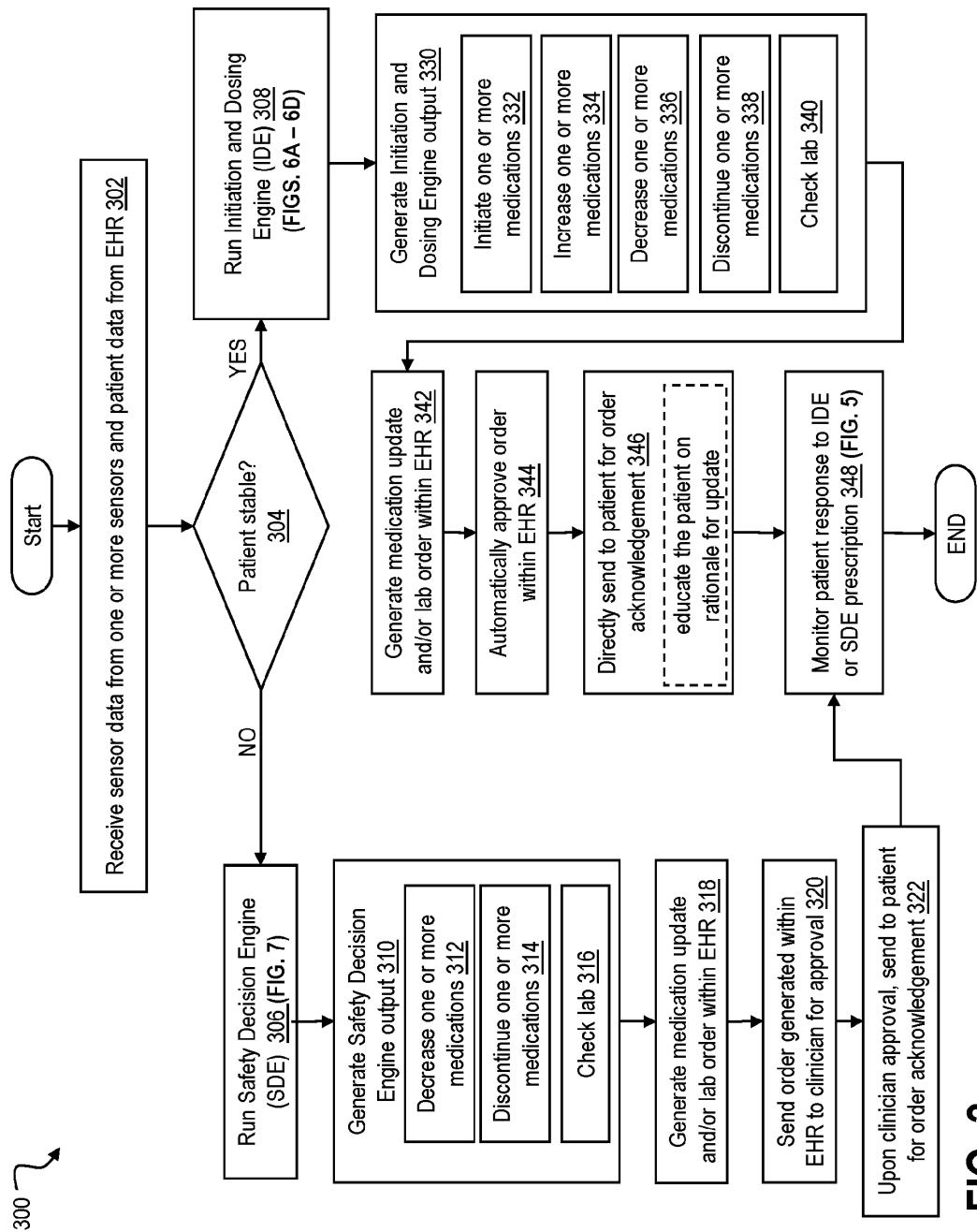


FIG. 2



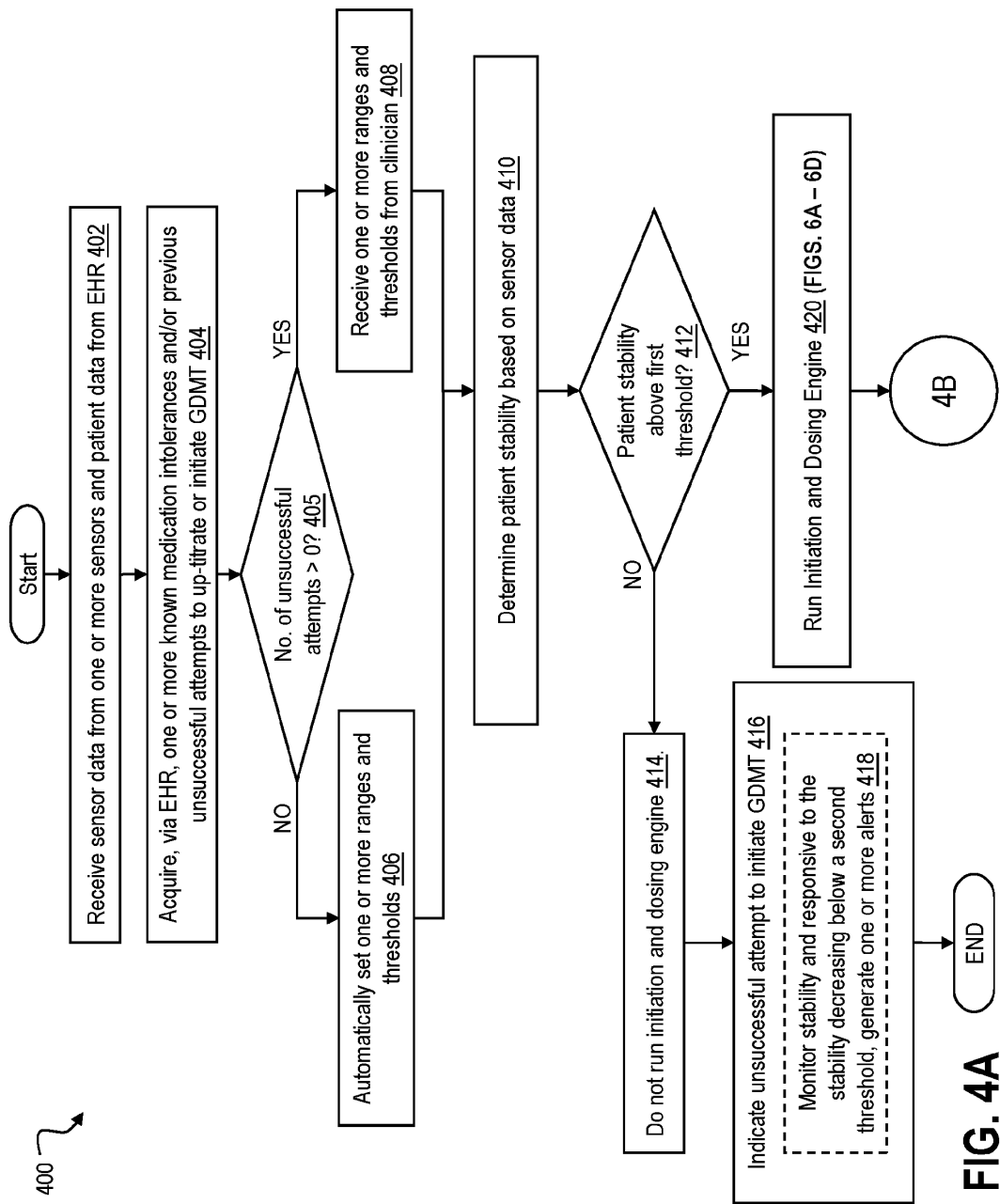
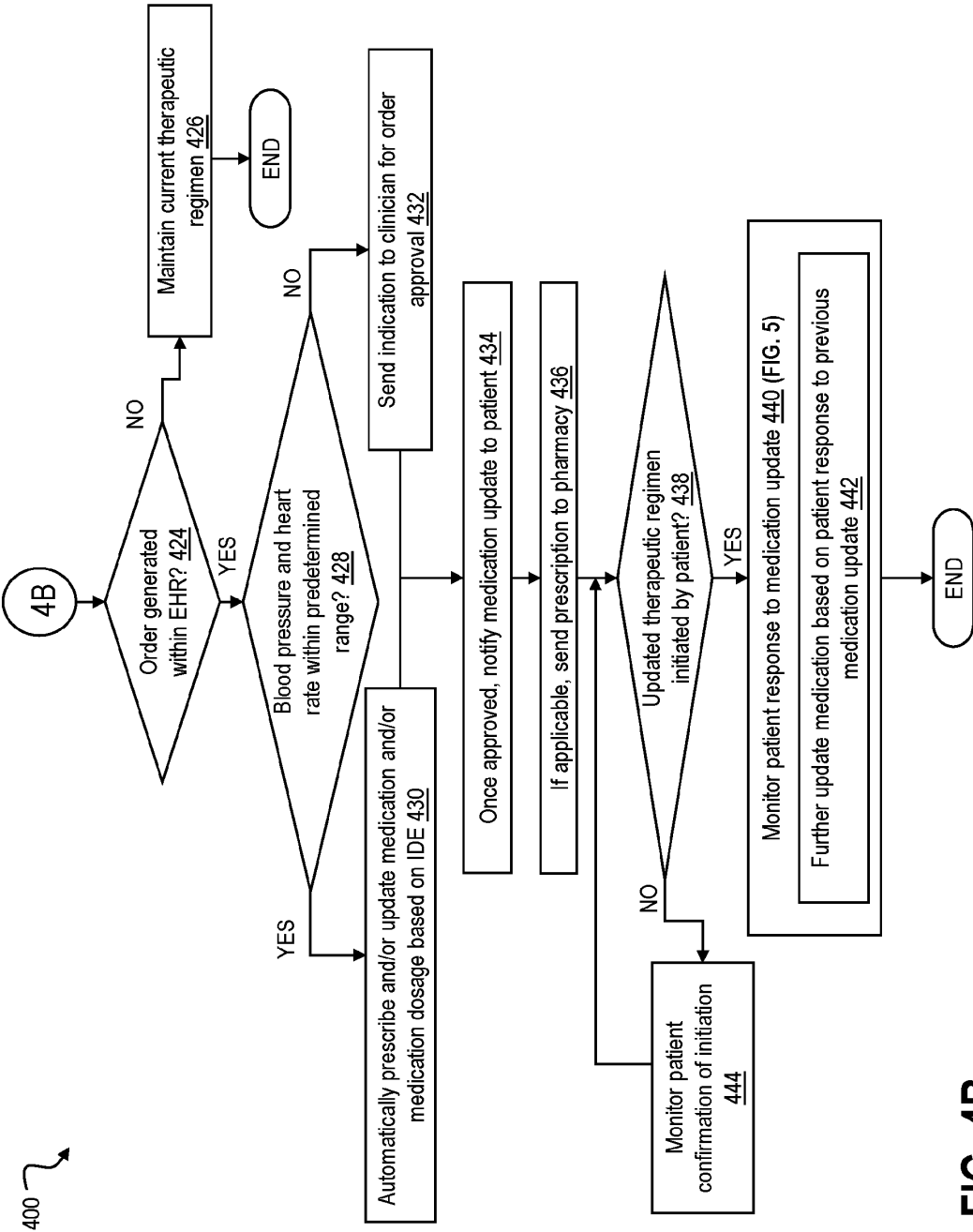


FIG. 4A



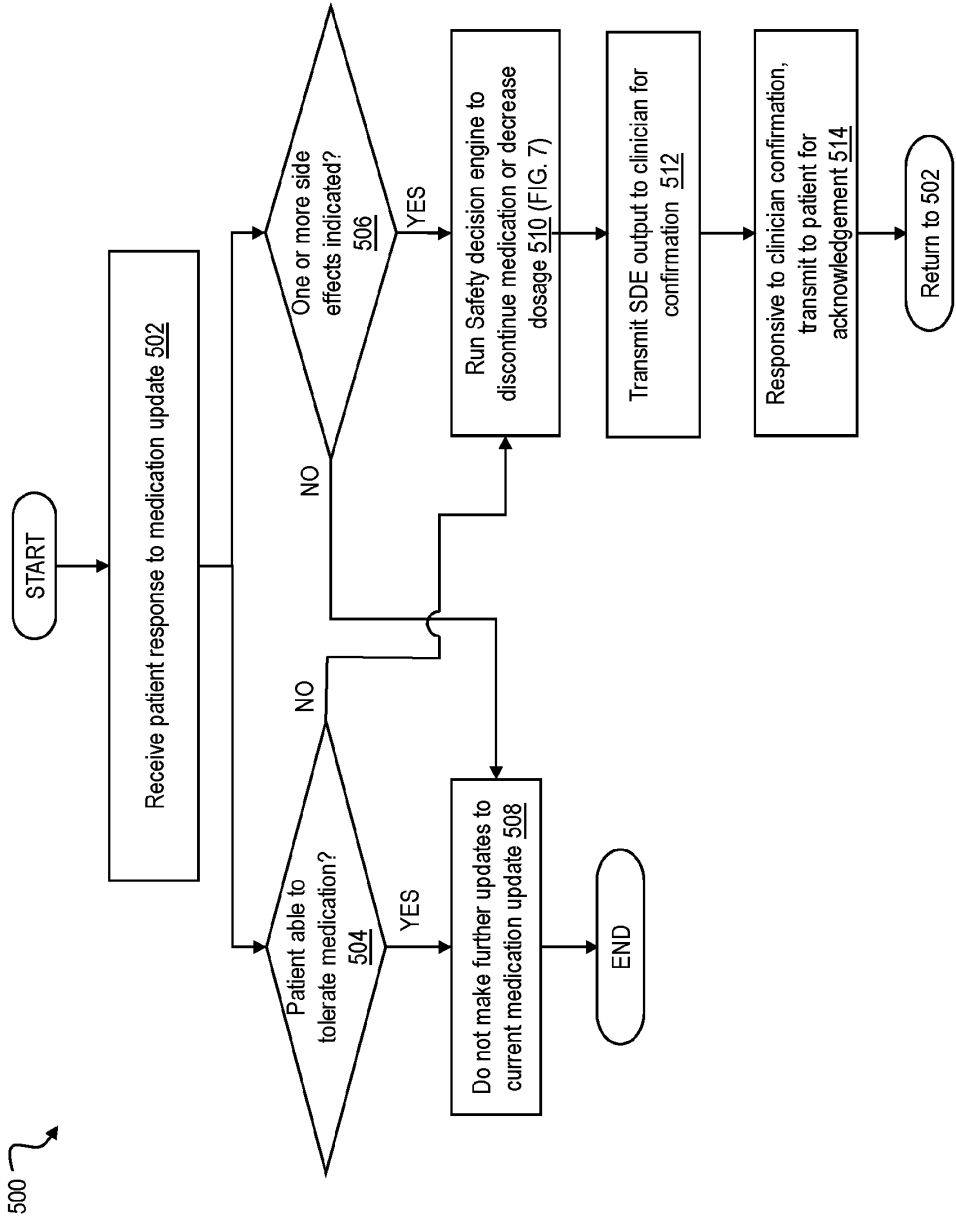


FIG. 5

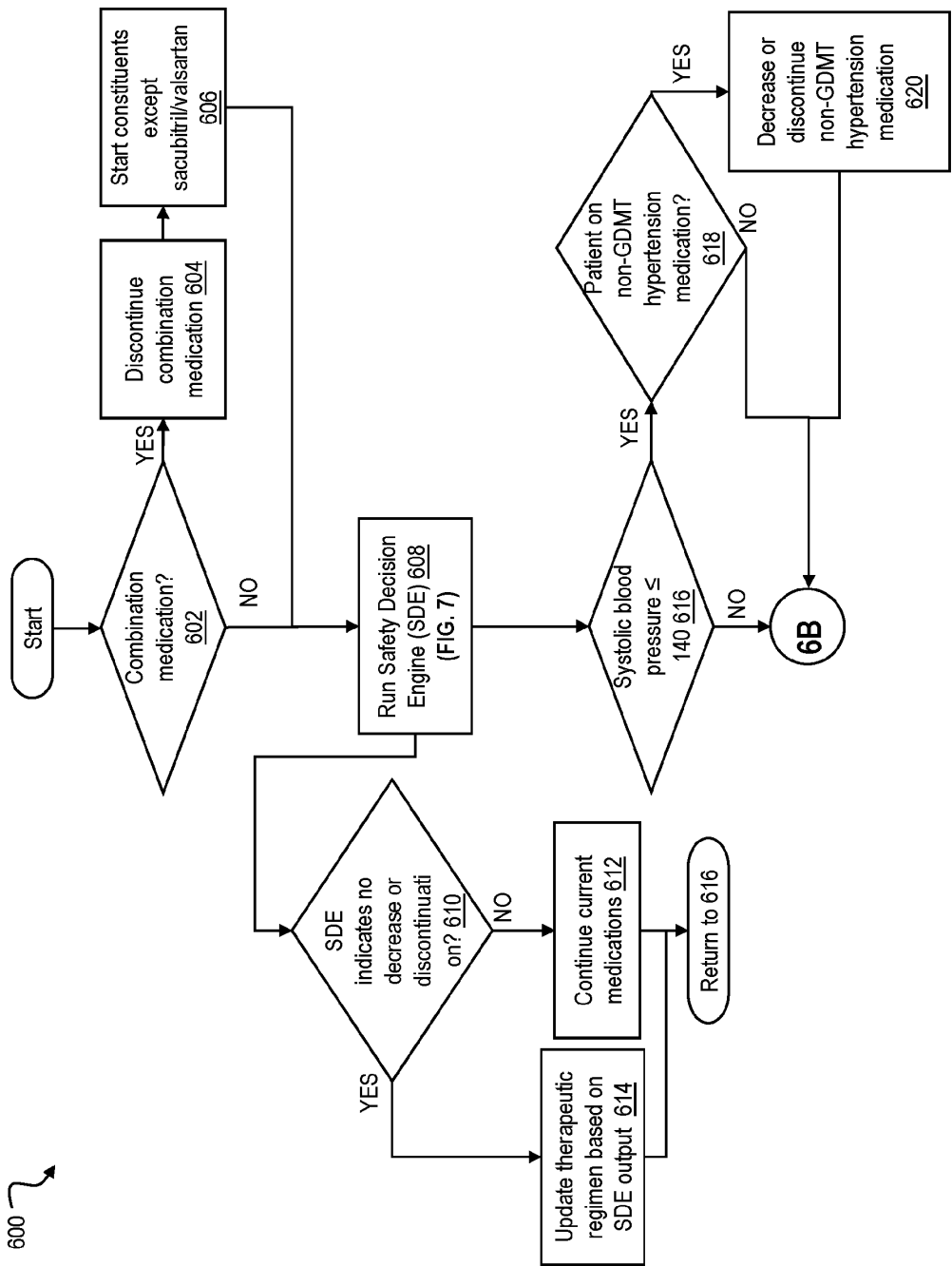


FIG. 6A

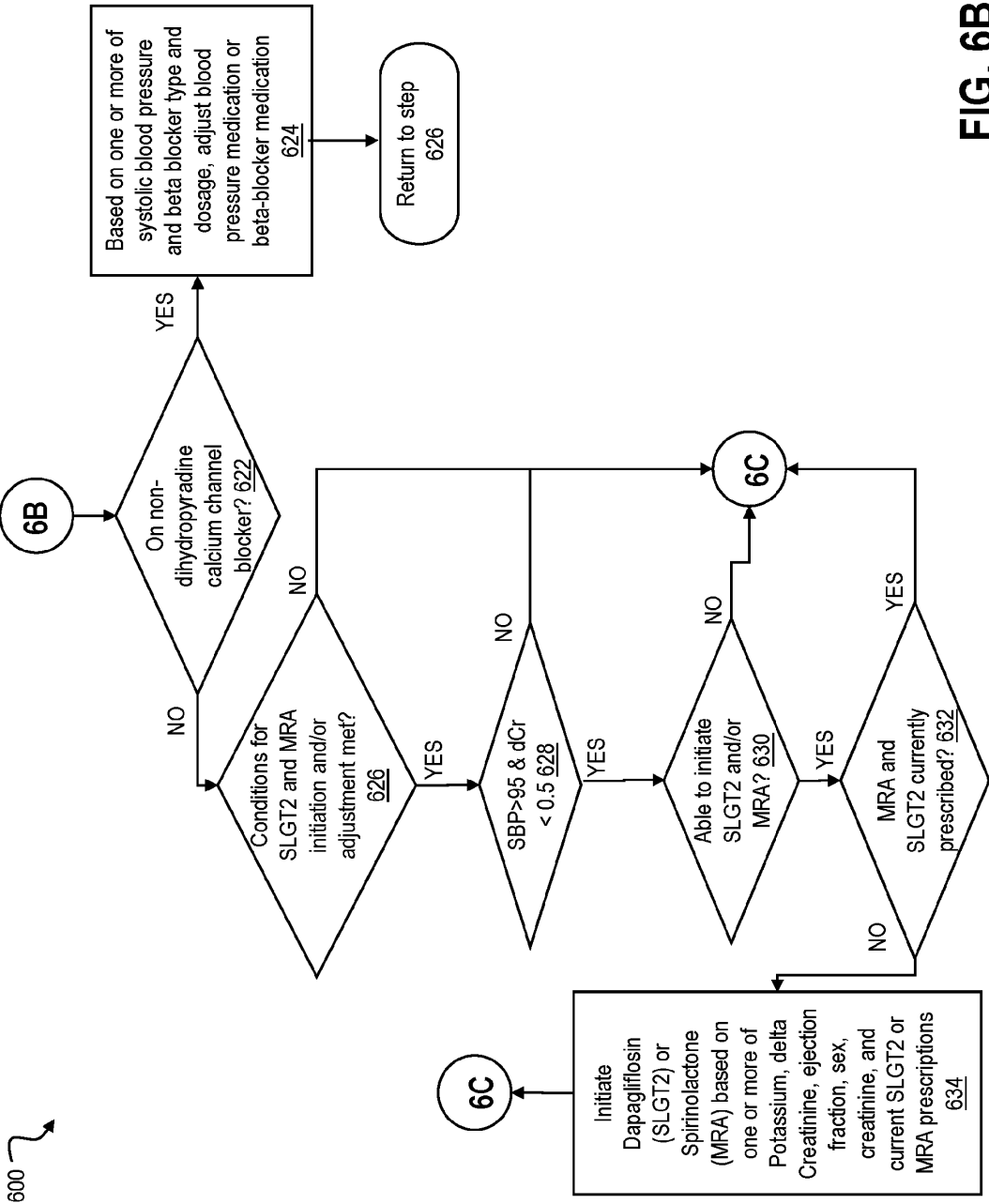
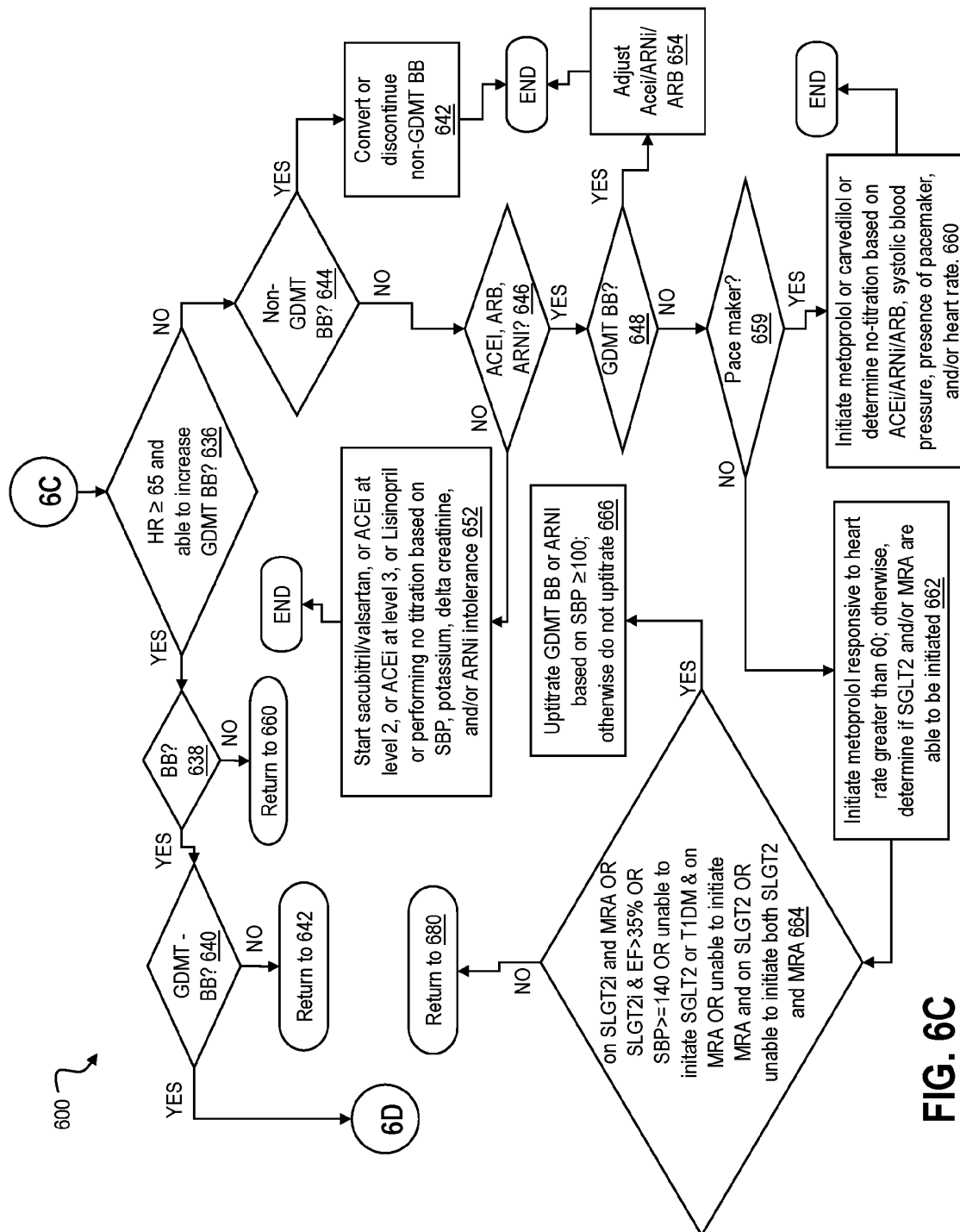


FIG. 6B



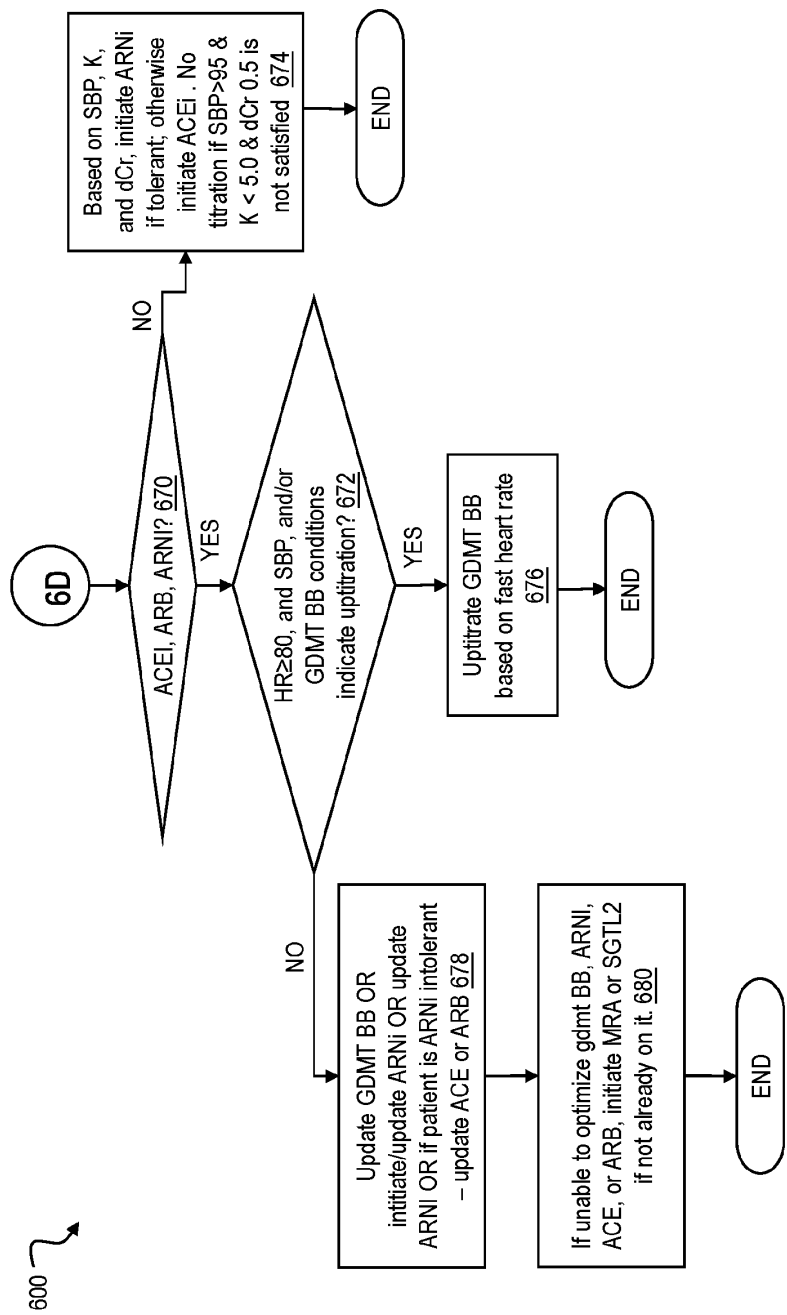


FIG. 6D

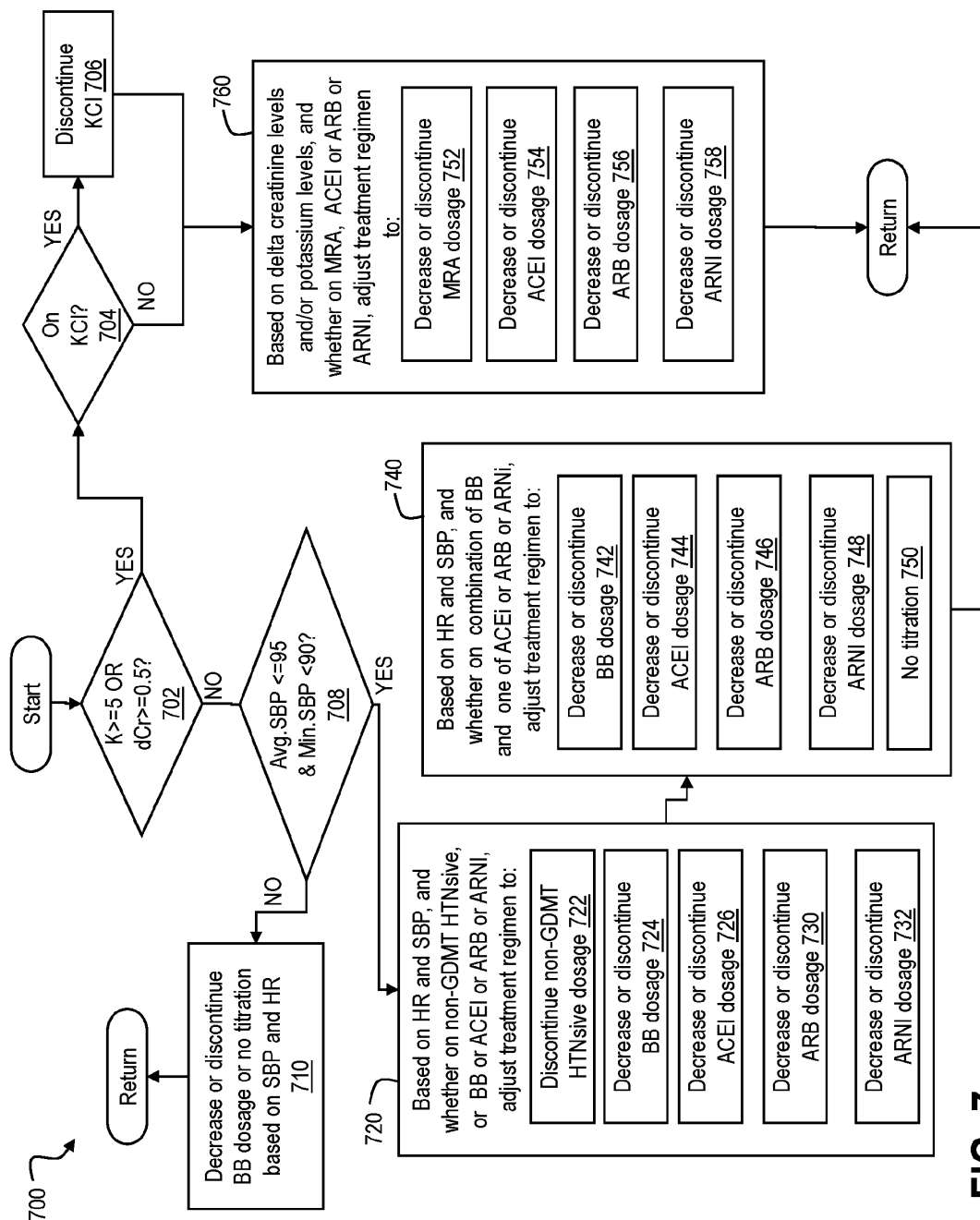


FIG. 7

Age in Years	65	Atenolol				▼ Visited States
Sex	Female	☒ Carvedilol	12.5	Milligrams	BID	1. State: Discontinue Combination Medications
Avg. Systolic BP	140	☐ Dapagliflozin				2. State: Check Systolic Blood Pressure
Avg. Diastolic BP	62	☐ Diltiazem				3. State: Check if on non-dihydropyridine calcium channel blocker
Avg. HR	75	☐ Lisinopril	20	Milligrams	QD	4. State: Check if on GDMT Beta Blocker & ARNI Level 2
Ejection Fraction	10.29	☐ Metoprolol Succinate				5. State: Check SBP >= 95 and K < 5.0 and dCr < 0.5 and eGFR > 30
Weight (kg)	102	☐ Metoprolol Tartrate				6. State: Check if patient is on MRA drug
Alcohol/Week	2	☐ Spironolactone				7. State: Check if ejection fraction is less than 35%
Heart Failure	HFrEF	☐ Tenormin				8. State: Check biological sex
☐ AF Detection		☐ Valsartan				9. State: Check Cr limit (2)
☐ Anticoagulation						10. State: Check if heart rate is greater than or equal to 65
☐ Atrial Fibrillation						11. State: Check if patient is on a beta blocker (HR > 65)
☒ CABG						12. State: Check if patient is on GDMT beta blocker
☐ Cirrhosis						13. State: Check if patient is on ACE/ARB/ARNI medication (HR > 65)
☒ Coronary Artery Disease		☐ Prinzipide				14. State: Check if patient is on GDMT Beta Blocker Level 3-5 (HR > 65)
☒ Diabetes		☐ Hctz				15. State: Check if patient is on ACE medication (HR > 65)
☐ Dialysis		☐ Lisinopril				16. State: Check if patient is on an ARB medication (HR > 65)
☐ End Stage Renal Disease		☒ Sacubitril Valsartan				17. State: Check if patient is on ARNI Level 1 (HR > 65)
☐ Hemodialysis		☒ Sacubitril	49	Milligrams	BID	18. State: No titration.
☐ History of Major Bleeding		☒ Valsartan	51	Milligrams	BID	► Generated Orders
☒ Hypertension						► Generated Alerts
☒ ICD						
☐ Kidney Transplant						
☐ Labile INR						
☐ Mod/Severe Mitral Stenosis						
☒ Pacemaker						
☒ Peripheral Artery Disease						
☐ Peritoneal Dialysis						
☒ Prior Coronary Stent						
☒ Prior MI						
☐ Type 1 Diabetes						

802

FIG. 8A

Age in Years

73

Sex

Female

Avg. Systolic BP

112

Avg. Diastolic BP

57

Min. Systolic BP

88

Avg. HR

65

Ejection Fraction

0.26

Weight (kg)

57.5

Heart Failure

HFrEF

K (mmol/L)

5.6

CR (mg/dL)

1.4

dCR (mg/dL)

0.5

eGFR (ml/min/1.73m²)

42

☐ KCL

☐ Labetalol

☒ Lisinopril

☐ Losartan

☐ Metolazone

☒ Metoprolol Succinate

☐ Metoprolol Tartrate

☐ Nadolol

☐ Niacardipine SR

☐ Nifedipine

☐ Long acting

☐ Olmesartan

☐ Penbutolol

☐ Perindopril

☐ Pindolol

☐ Quinapril

☐ Ramipril

☒ Spirinolactone

☐ Tenormin

☐ Trandolopril

☐ Prinzide

☐ Hctz

☐ Lisinopril

☐ Sacubitril Valsartan

☐ Sacubitril

☐ Valsartan

20

Milligrams

BID

25

Milligrams

QD

12.5

Milligrams

QD

73

Female

112

57

88

65

0.26

57.5

HFrEF

☐ Pacemaker

☐ ICD

☐ Type 1 Diabetes

☐ Unable to initiate Entresto

☐ Unable to increase Entresto

☐ Unable to increase GDMT BB

☐ Unable to initiate MRA

☐ Unable to initiate SGLT2i

☐ Generic Drug Optimization

☐ Run Safety Decision Engine

5.6

1.4

0.5

42

☐ KCL

☐ Labetalol

☒ Lisinopril

☐ Losartan

☐ Metolazone

☒ Metoprolol Succinate

☐ Metoprolol Tartrate

☐ Nadolol

☐ Niacardipine SR

☐ Nifedipine

☐ Long acting

☐ Olmesartan

☐ Penbutolol

☐ Perindopril

☐ Pindolol

☐ Quinapril

☐ Ramipril

☒ Spirinolactone

☐ Tenormin

☐ Trandolopril

20

Milligrams

BID

25

Milligrams

QD

12.5

Milligrams

QD

73

Female

112

57

88

65

0.26

57.5

HFrEF

☐ Pacemaker

☐ ICD

☐ Type 1 Diabetes

☐ Unable to initiate Entresto

☐ Unable to increase Entresto

☐ Unable to increase GDMT BB

☐ Unable to initiate MRA

☐ Unable to initiate SGLT2i

☐ Generic Drug Optimization

☐ Run Safety Decision Engine

5.6

1.4

0.5

42

☐ KCL

☐ Labetalol

☒ Lisinopril

☐ Losartan

☐ Metolazone

☒ Metoprolol Succinate

☐ Metoprolol Tartrate

☐ Nadolol

☐ Niacardipine SR

☐ Nifedipine

☐ Long acting

☐ Olmesartan

☐ Penbutolol

☐ Perindopril

☐ Pindolol

☐ Quinapril

☐ Ramipril

☒ Spirinolactone

☐ Tenormin

☐ Trandolopril

20

Milligrams

BID

25

Milligrams

QD

12.5

Milligrams

QD

▼ Visited States

1: (11) State: Discontinue Combination Medications

2: (107) State: Safety Decision Engine

3: (96) State: Does the patient have hyperkalemia or an increasing creatinine

4: (97) State: Does the patient have hyperkalemia while on an MRA

5: (114) State: Check if patient is hypotensive and is on non GDMT hypertensive

6: (116) State: Check if patient is hypotensive and BB, ACEi, ARB, or ARNI

7: (119) State: Check if patient is hypotensive and on an ACEi and BB

8: (121) State: Downtitrating medication Lisinopril from level Levels

▼ Generated Orders

1: Spirinolactone, 12.5, Milligrams QD Discontinue

2: Spirinolactone, 12.5, Milligrams QOD Initiate

3: Lisinopril, 40, Milligrams QD Discontinue

4: Lisinopril, 20, Milligrams QD Initiate

▼ Generated Alerts

1: Recheck basic metabolic in 5 days.

802

Prinzide

Hctz

Lisinopril

Sacubitril Valsartan

Sacubitril

Valsartan

49

Milligrams

BID

51

Milligrams

BID

FIG. 8B

SUBSTITUTE SHEET (RULE 26)

14/20

Drug	Class	Level 1	Level 2	Level 3	Level 4	Level 5
Bisoprolol	Beta blocker	1.25 mg QD	2.5 mg QD	<u>5 mg QD</u>	10 mg QD#	10 mg QD#
Carvedilol	Beta blocker	3.125 mg BID	6.25 mg BID	<u>12.5 mg BID</u>	25 mg BID*	50 mg BID*
Metoprolol succinate	Beta blocker	12.5 mg QD	25 mg QD	50 mg QD	<u>100 mg QD</u>	200 mg QD#
Captopril	ACEI	6.25 mg TID	12.5 mg TID	<u>25 mg TID</u>	50 mg TID#	50 mg TID#
Enalapril	ACEI	2.5 mg qd	2.5 mg BID	<u>5 mg BID</u>	10 mg BID#	20 mg BID
Fosinopril	ACEI	2.5 mg QD	5 mg QD	10 mg QD	<u>20 mg QD</u>	40 mg QD#
Lisinopril	ACEI	2.5 mg QD	5 mg QD	10 mg QD	<u>20 mg QD</u>	40 mg QD#
Perindopril	ACEI	2 mg QD	4 mg QD	<u>8 mg QD</u>	16 mg QD#	16 mg QD#
Quinapril	ACEI	2.5 mg QD	2.5 mg BID	5 mg BID	<u>10 mg BID</u>	20 mg BID#
Ramipril	ACEI	1.25 mg QD	2.5 mg QD	<u>5 mg QD</u>	10 mg QD#	10 mg QD#
Trandolopril	ACEI	1 mg QD	<u>2 mg QD</u>	4 mg QD#	4 mg QD#	4 mg QD#
Candesartan	ARB	4 mg QD	8 mg QD	<u>16 mg QD</u>	32 mg QD#	32 mg QD#
Losartan	ARB	12.5 mg QD	25 mg QD	<u>50 mg QD</u>	100 mg QD#	100 mg QD#

FIG. 9A

Drug	Class	Level 1	Level 2	Level 3	Level 4	Level 5
Valsartan	ARB	40 mg QD	40 mg BID	<u>80 mg BID</u>	160 mg BID#	160 mg BID#
Olmesartan	ARB	10 mg QD	<u>20 mg QD</u>	40 mg QD#	40 mg QD#	40 mg QD#
Sacubitril / Valsartan	ARNI	12/13 mg BID	<u>24/26 mg BID</u>	49/51 mg BID	97/103 mg BID#	97/103 mg BID
Spironolactone	MRA	<u>12.5 mg QD</u>	25 mg QD#	25 mg BID	25 mg BID	25 mg BID
Eplerenone	MRA	<u>25 mg QD</u>	50 mg QD#	50 mg QD	50 mg QD	50 mg QD
Dapagliflozin	SGLT2i	<u>5 mg</u>	10 mg QD	10 mg QD	10 mg QD	10 mg QD
Empagliflozin	SGLT2i	10 mg QD#	25 mg QD	25 mg QD	25 mg QD	25 mg QD
Canagliflozin	SGLT2i	100 mg QD	200 mg QD	300 mg QD	300 mg QD	300 mg QD
Ertugliflozin	SGLT2i	5 mg QD	10 mg QD	15 mg QD	15 mg QD	15 mg QD
<u>50% of target dose</u>						
# Target Dose						

FIG. 9B

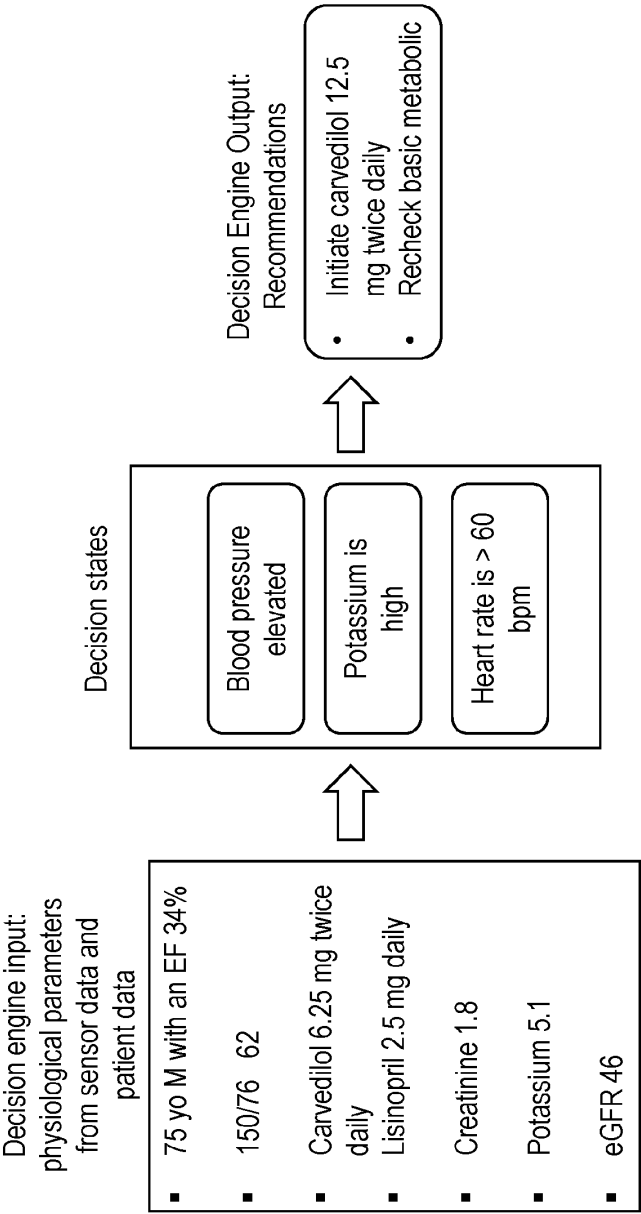


FIG. 10A

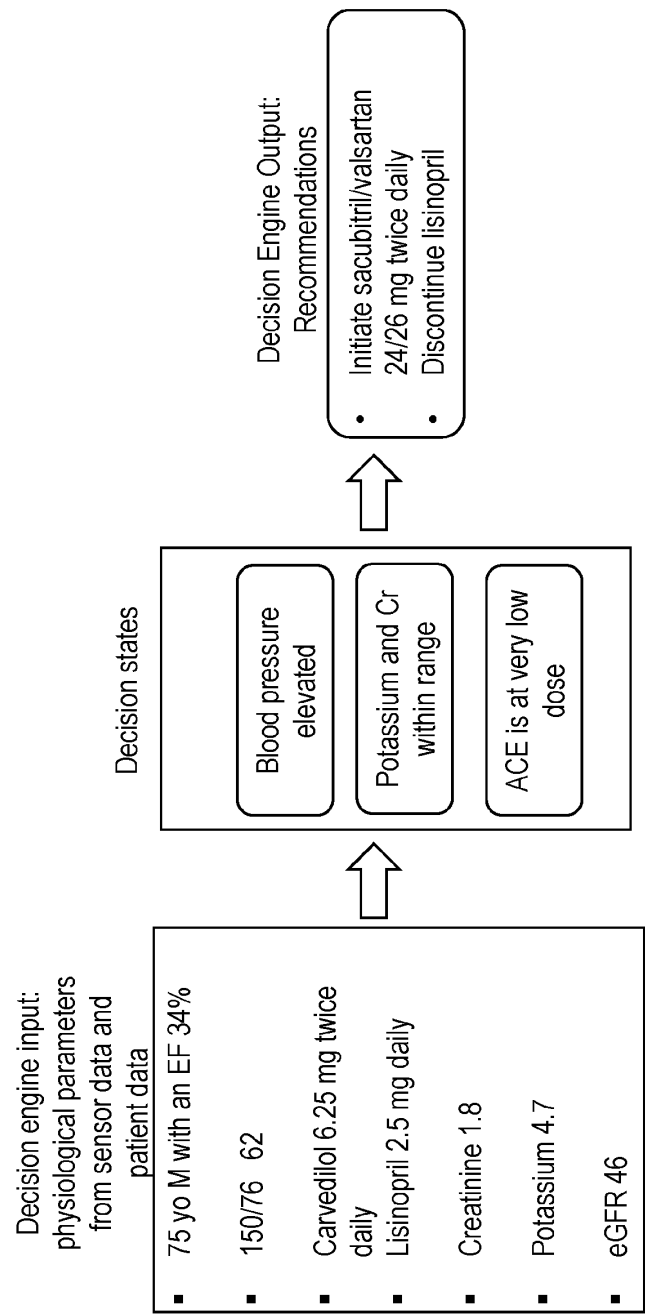


FIG. 10B

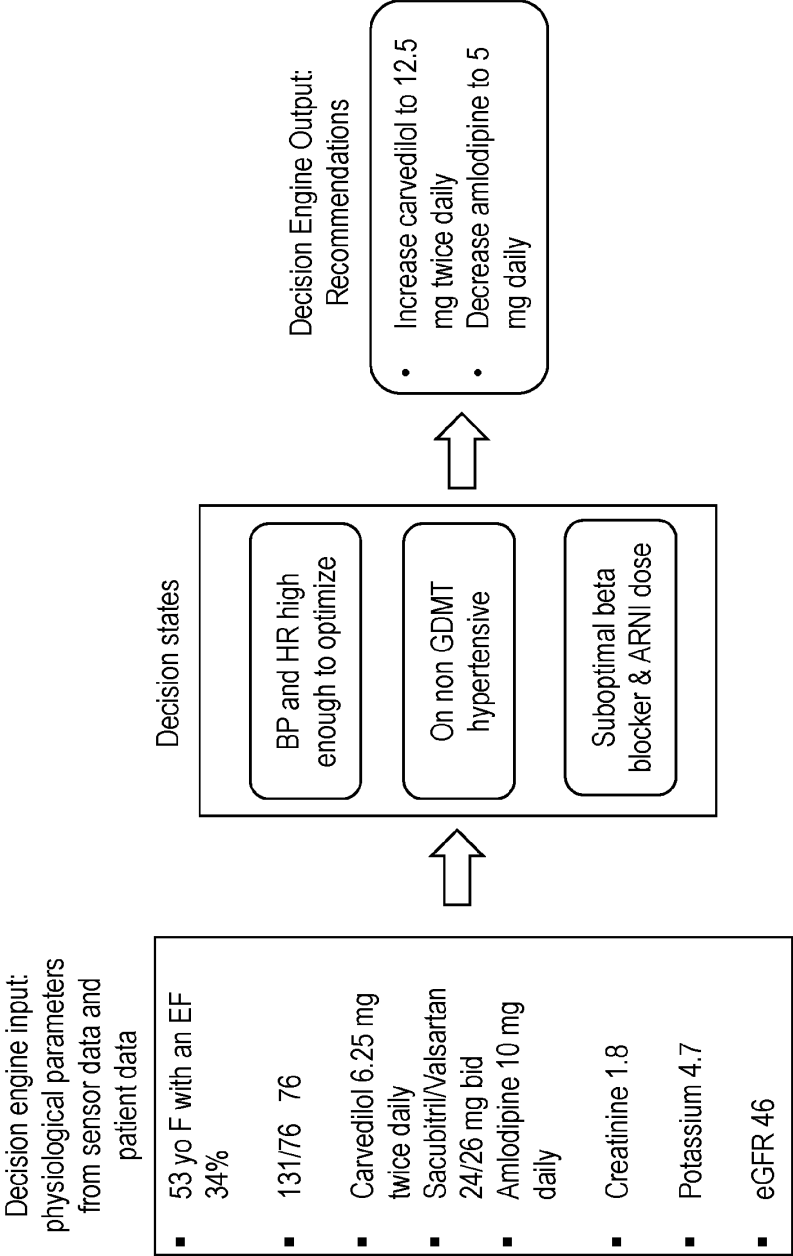


FIG. 11A

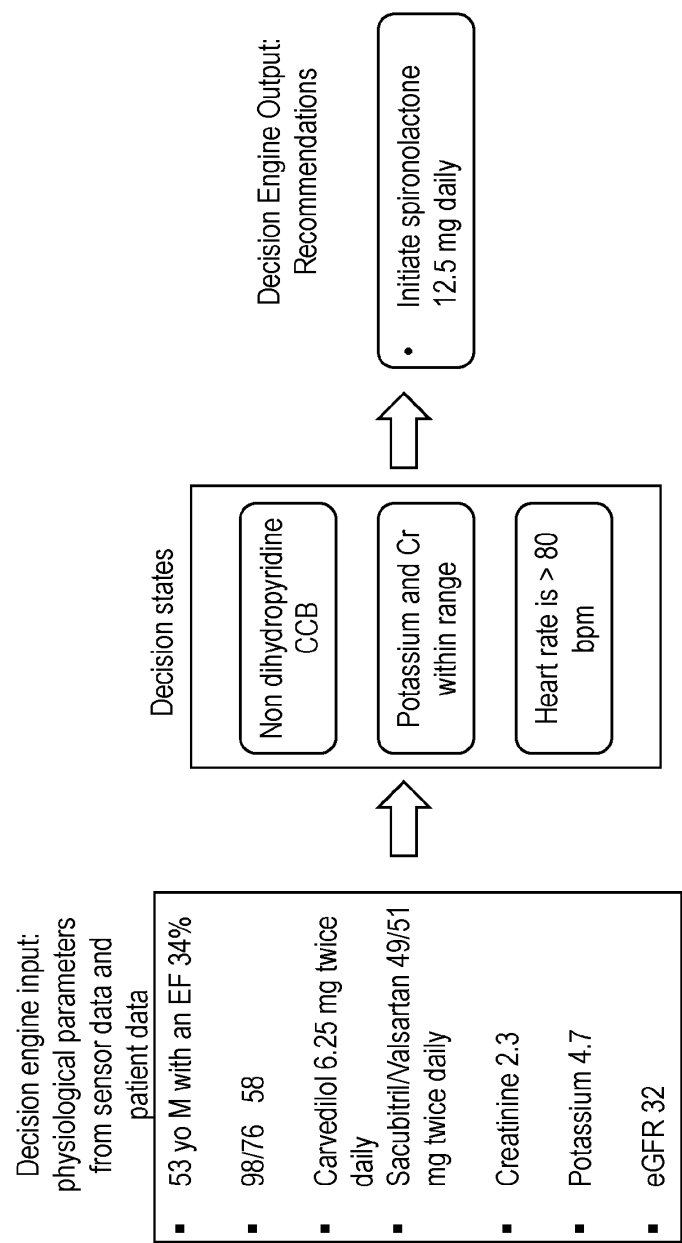


FIG. 11B

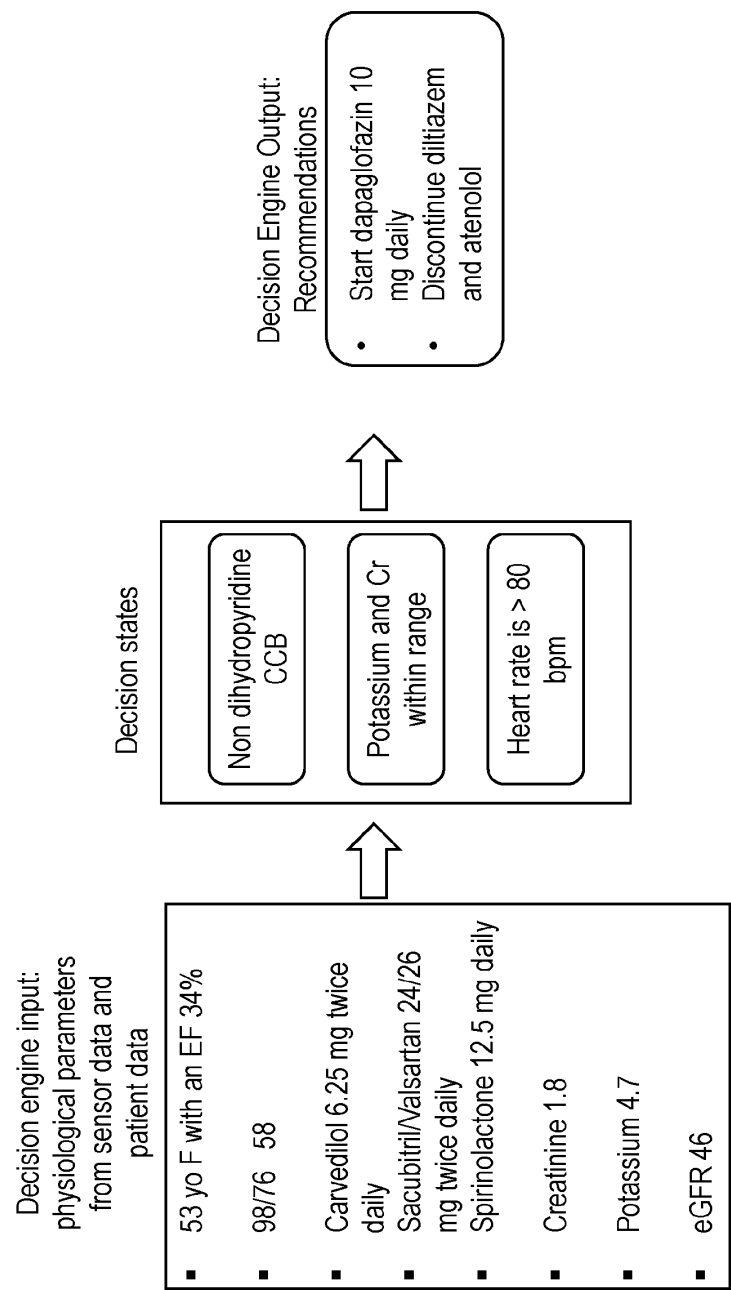


FIG. 11C