

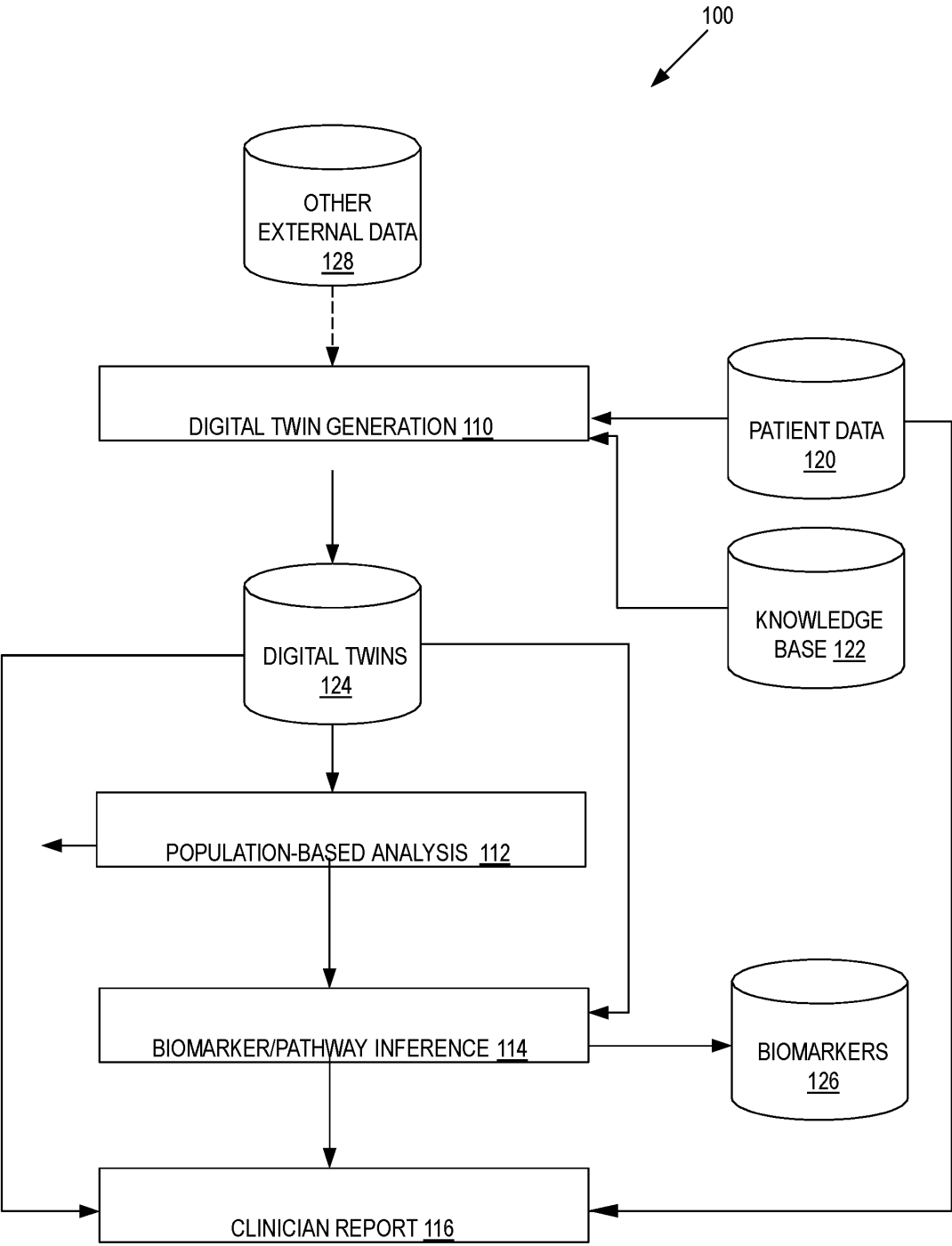


Figure 1

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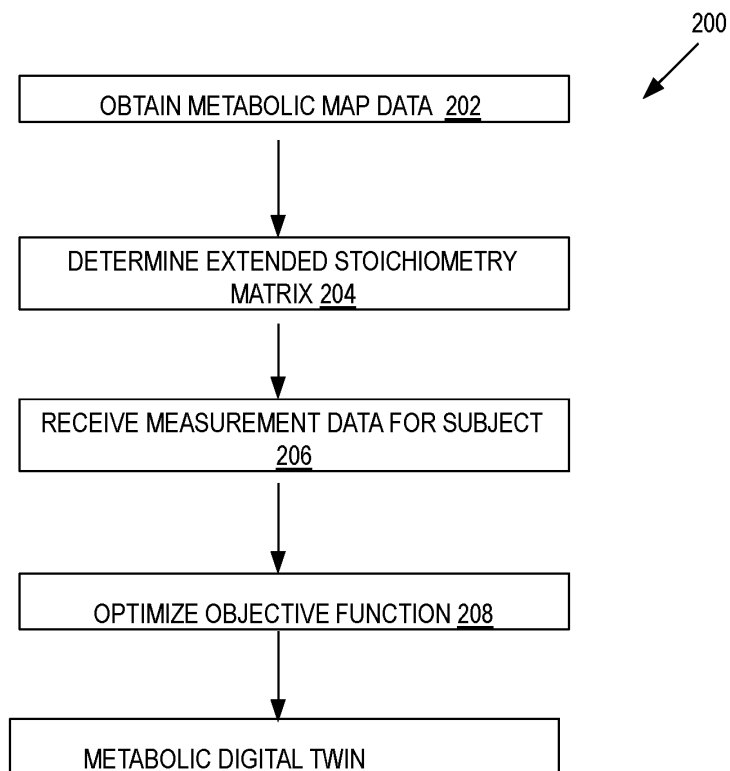


Figure 2

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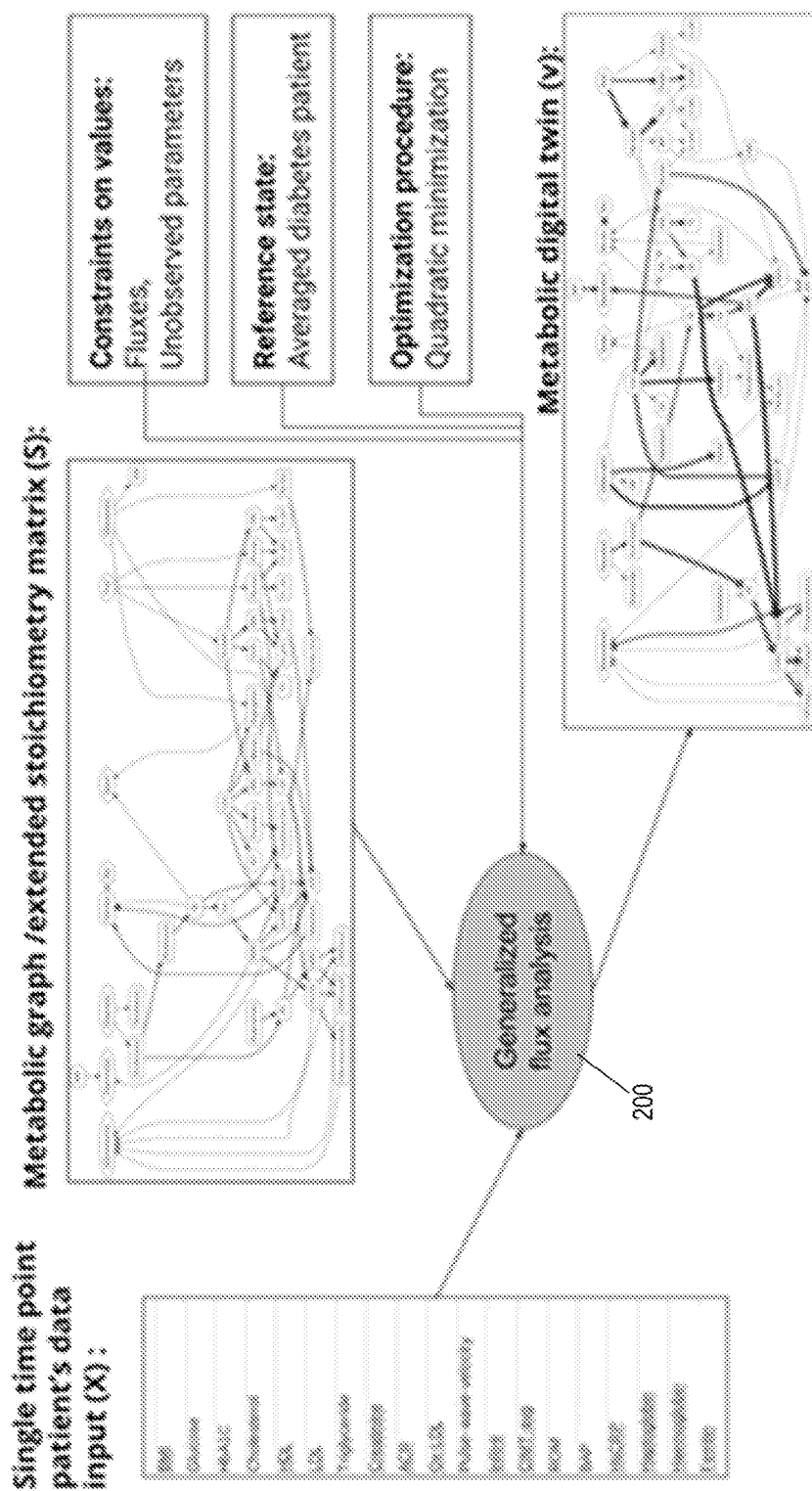


Figure 3

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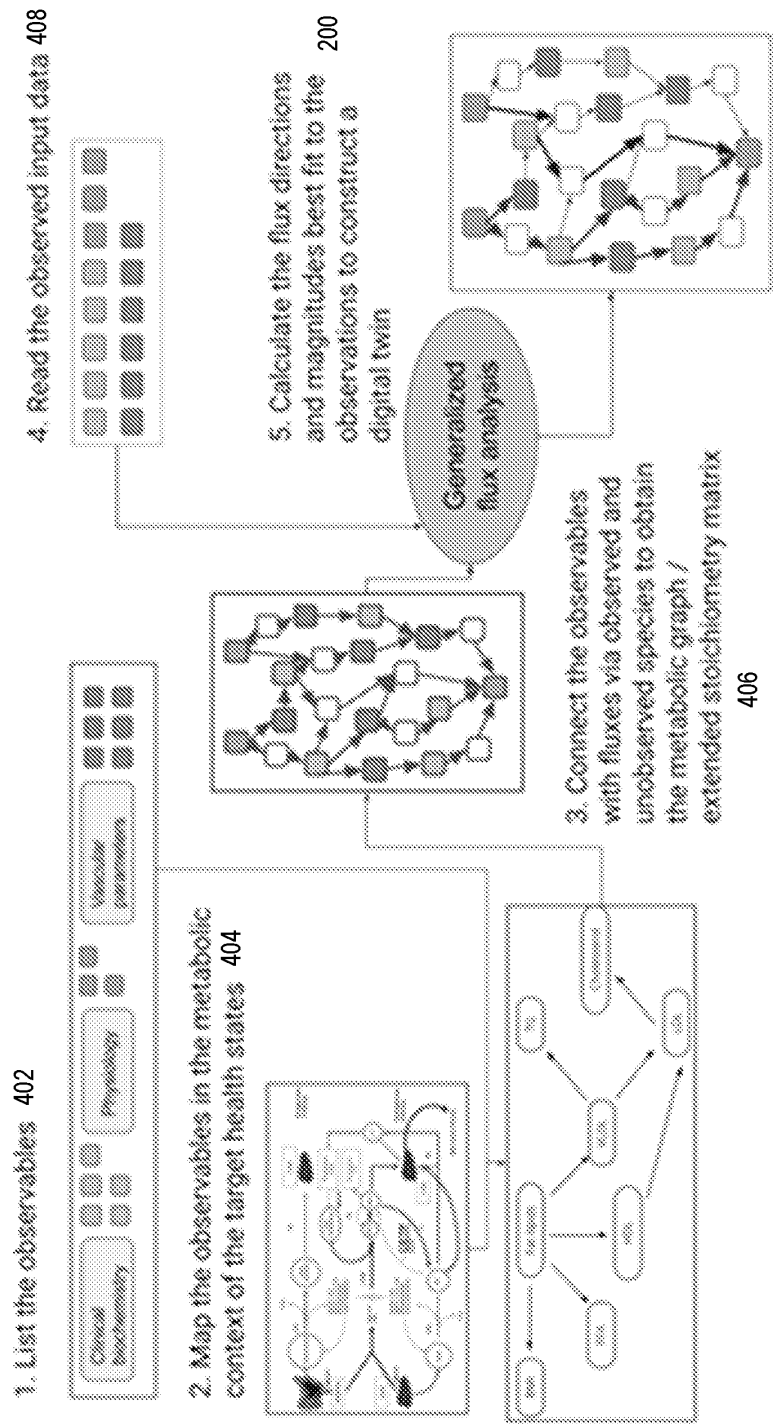


Figure 4

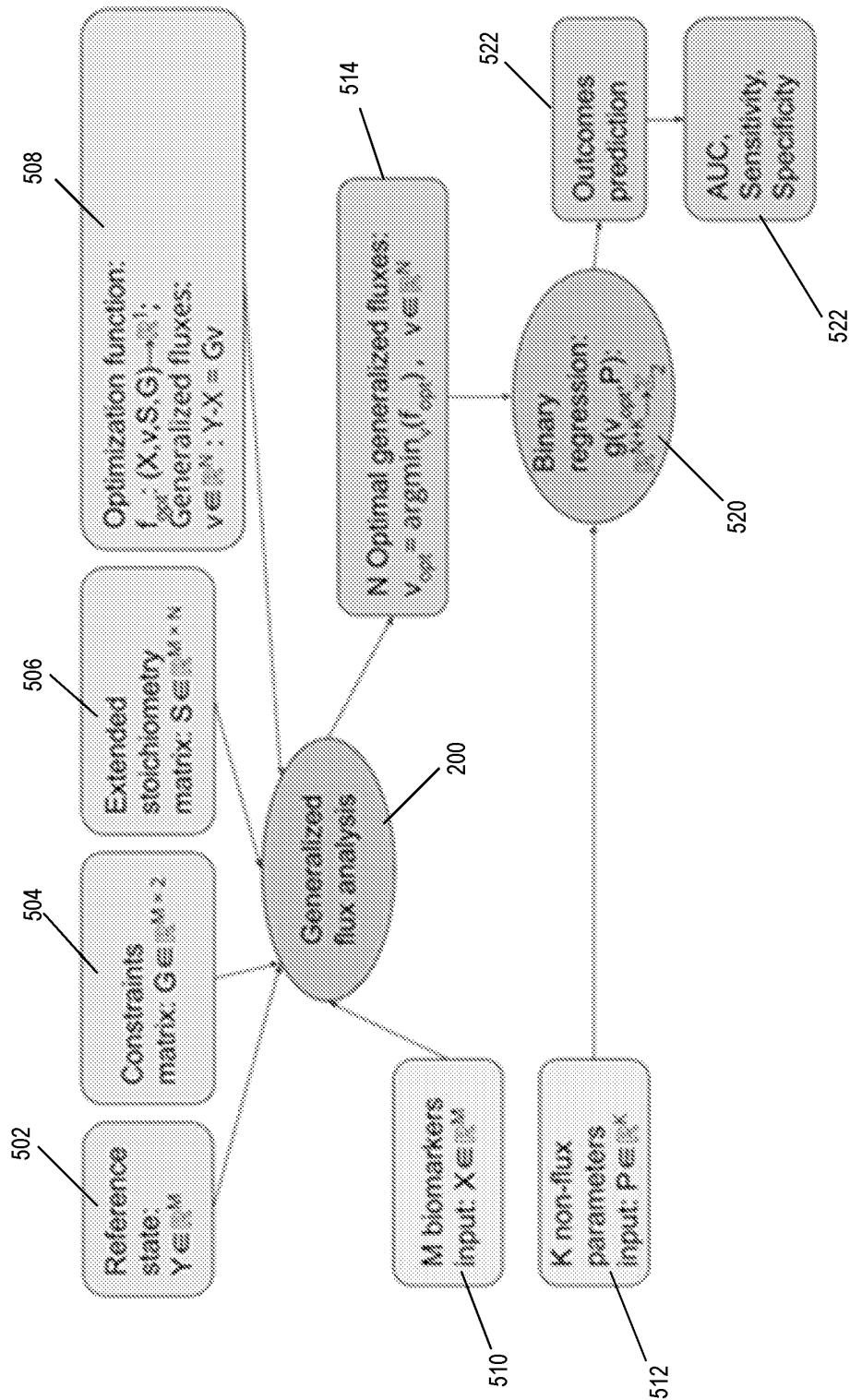


Figure 5

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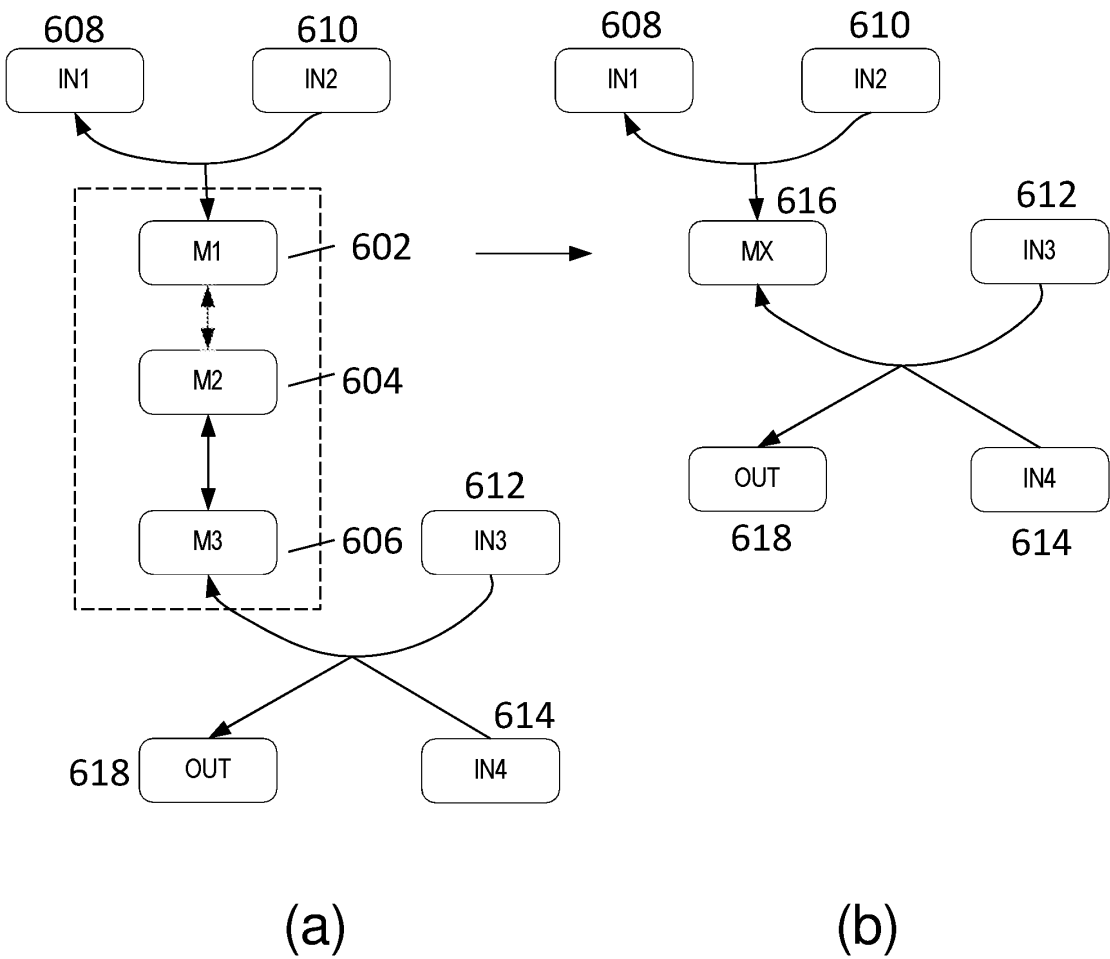


Figure 6

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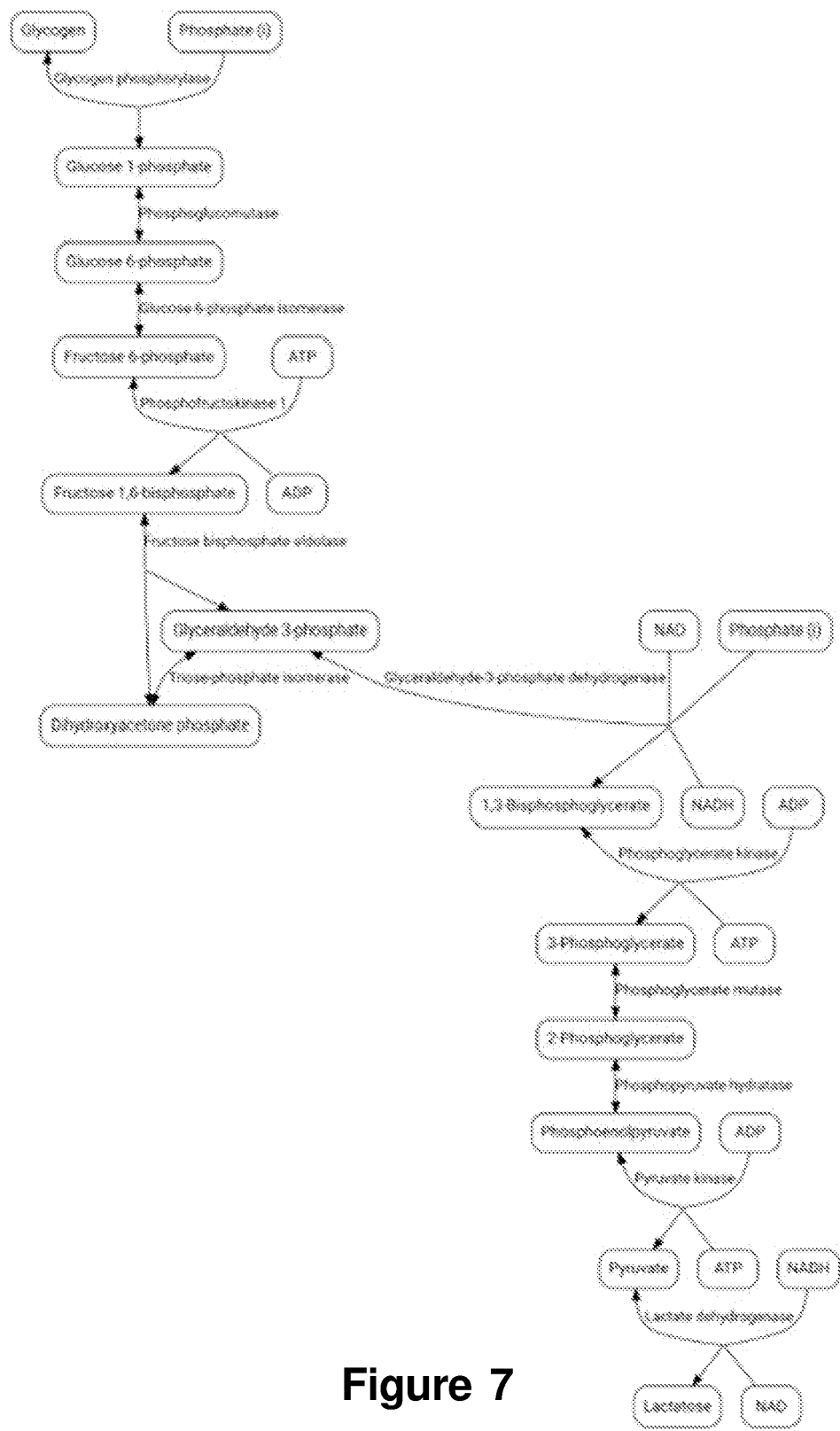


Figure 7

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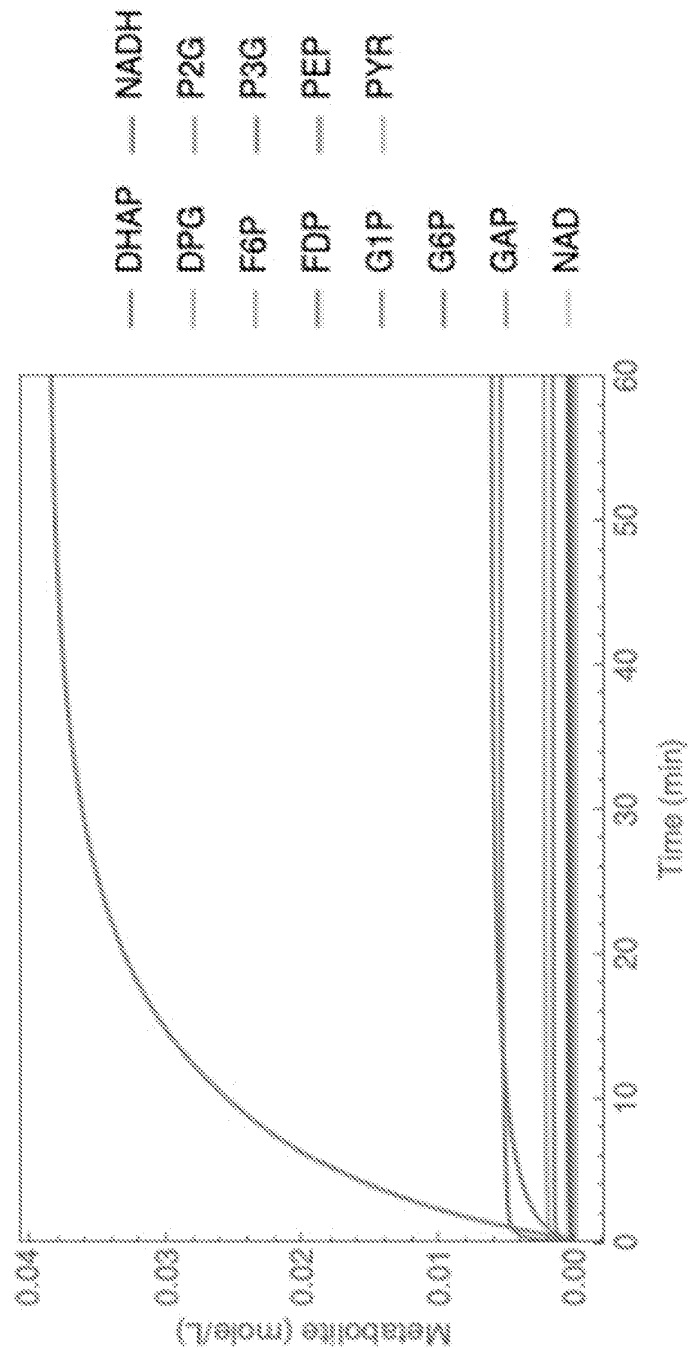


Figure 8

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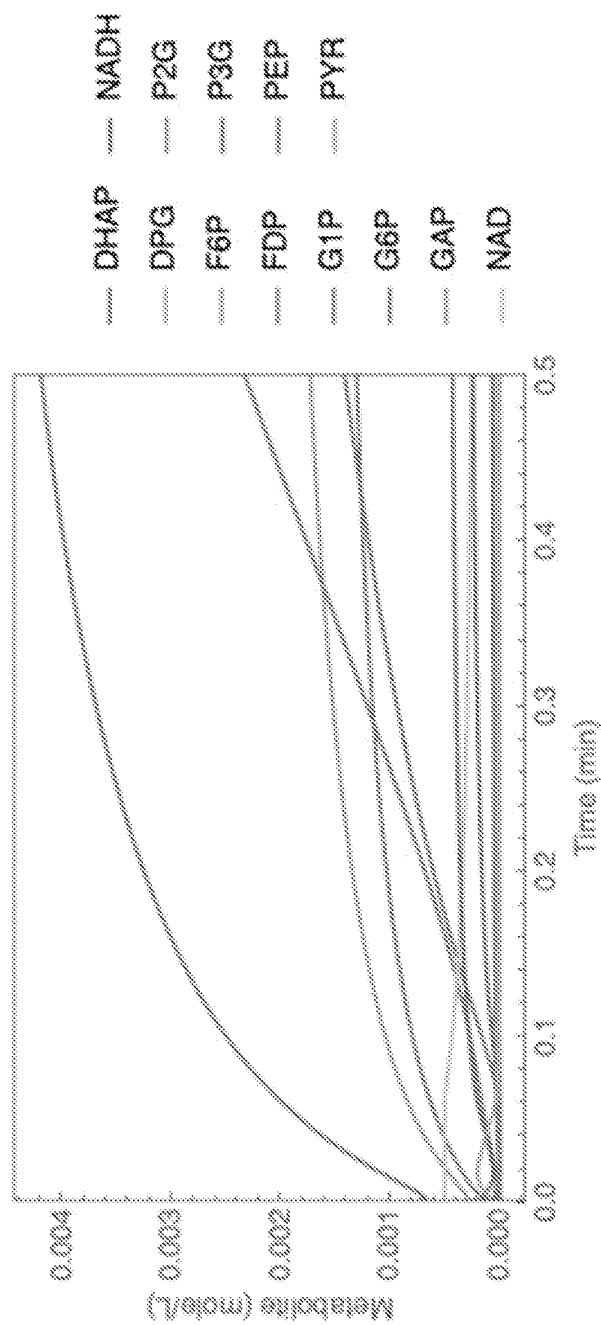


Figure 9

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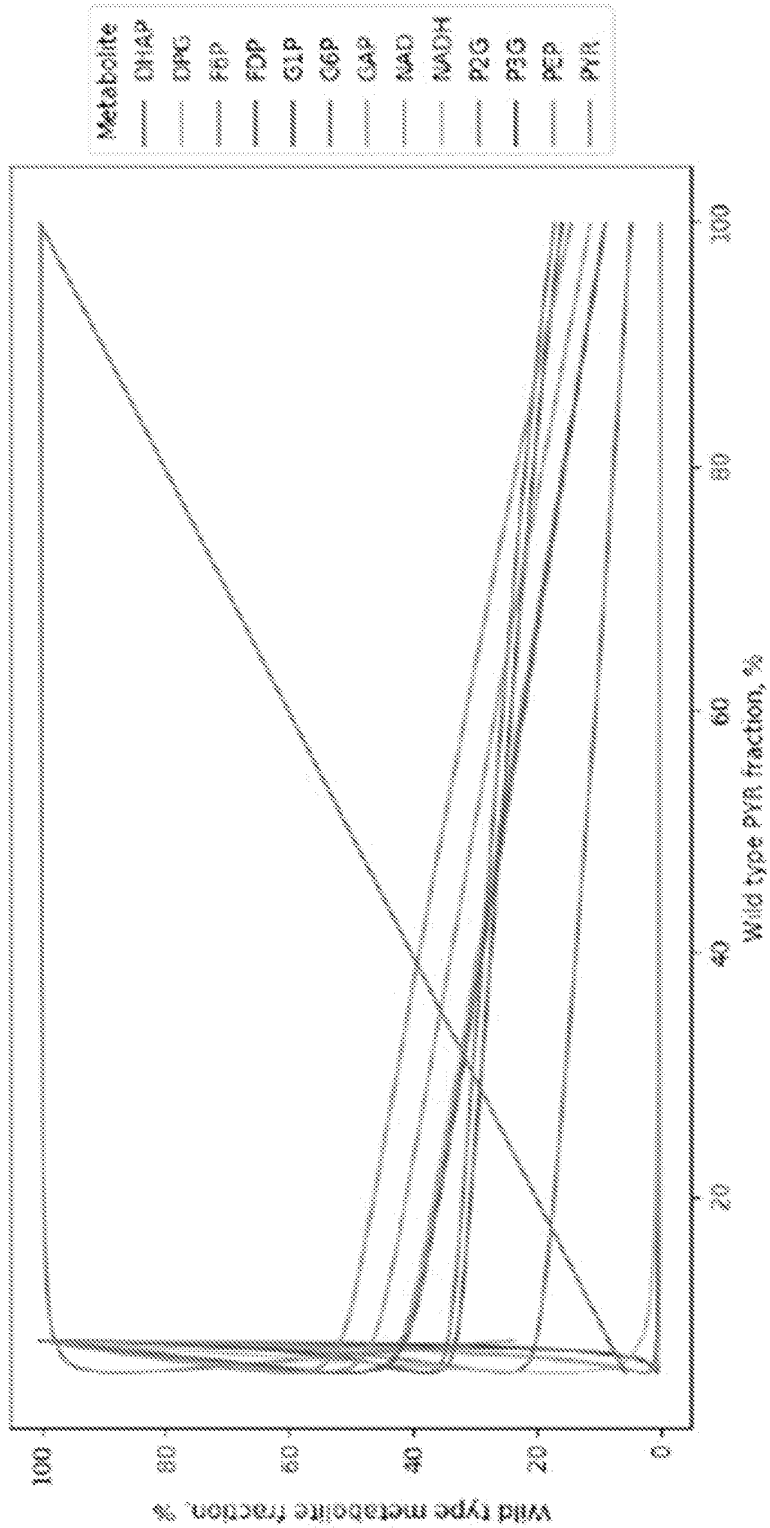


Figure 10

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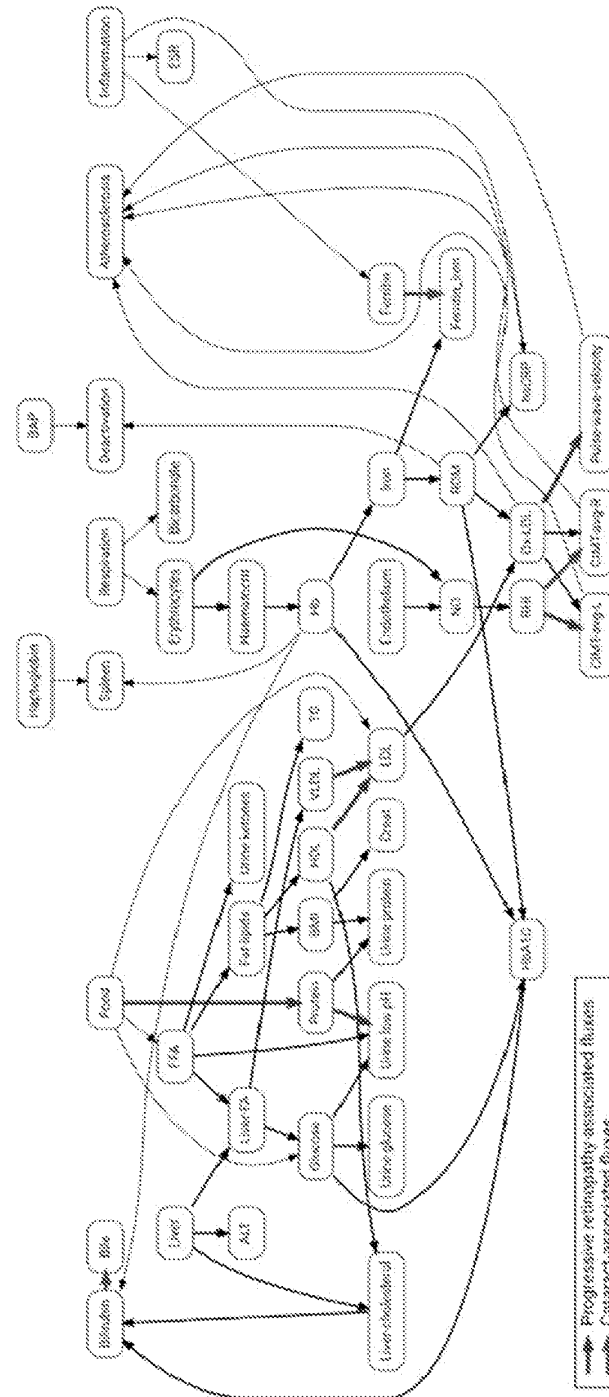
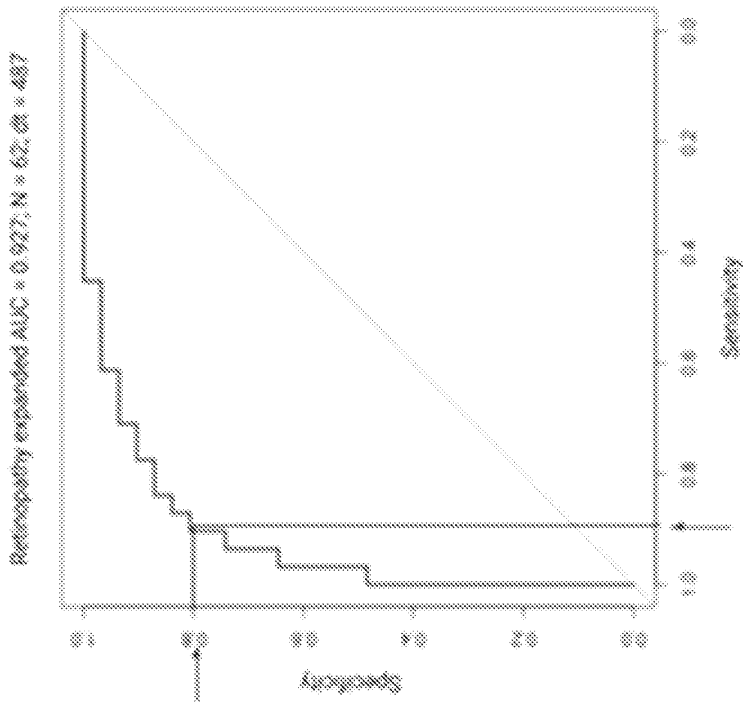


Figure 11

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AUC-ROC is 0.927.

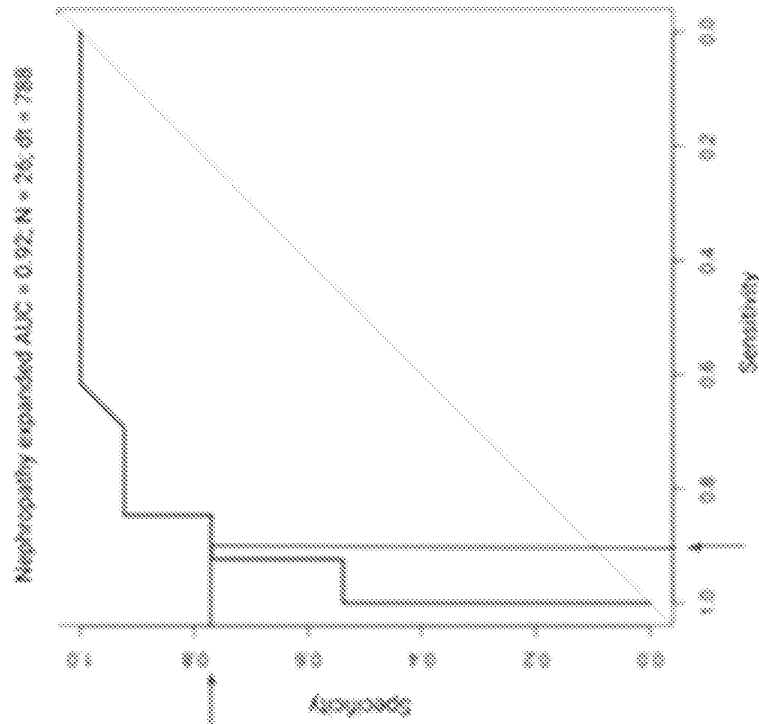
Our model can predict Diabetic Retinopathy within 3 years with **90% Sensitivity** and **80% Specificity**.

Total retinopathy patients = **31**

Non flux parameters
= age at onset,
gender, hypertensive
state

Figure 12(a)

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AUC for this ROC is **0.92**.

Our model can predict Diabetic Nephropathy within 3 years with **90% Sensitivity** and **78% Specificity**. We have used a set of reduced fluxes here due to very small "n" numbers.

Total nephropathy patients = **13**

Non flux parameters =
age at onset, gender,
hypertensive state

Figure 12(b)

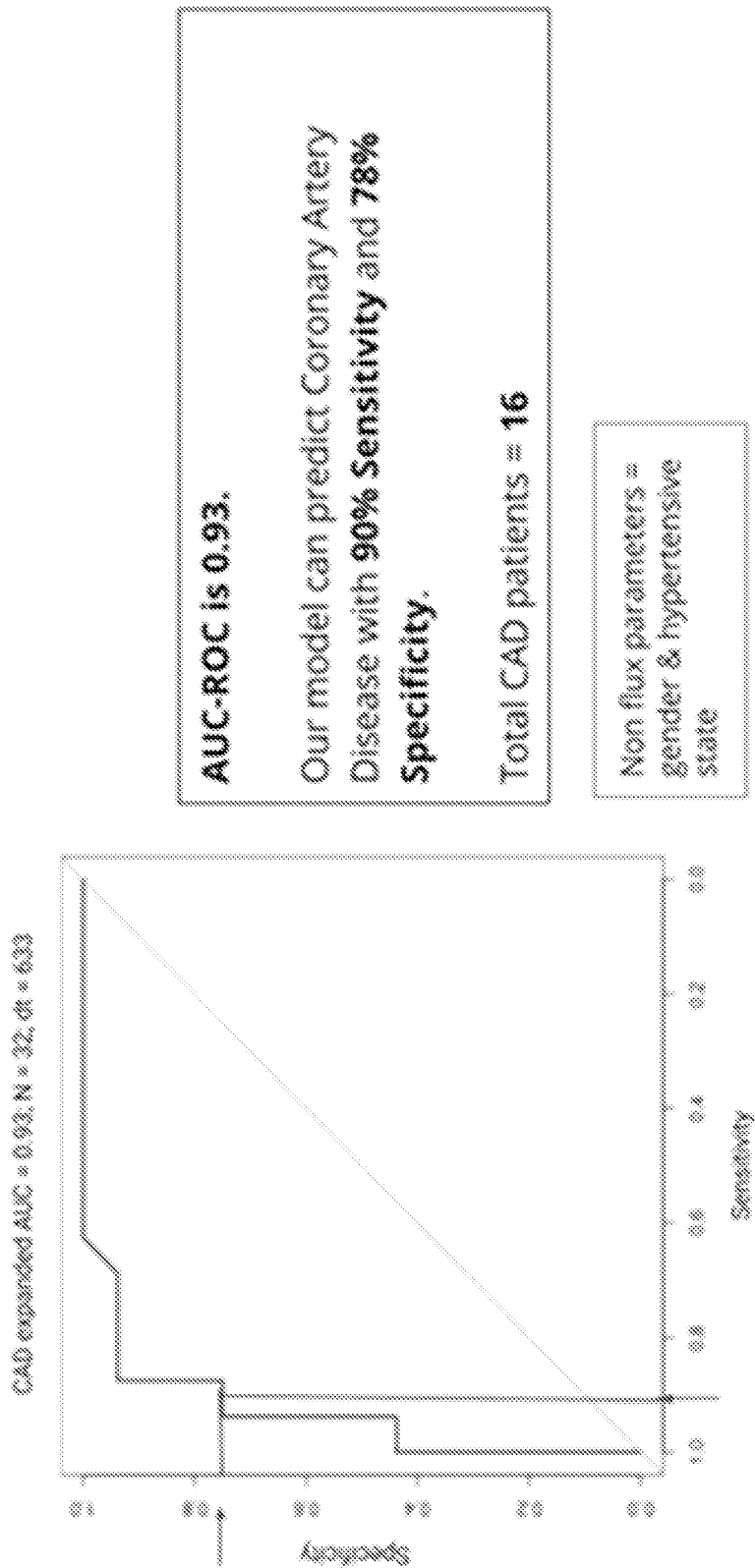


Figure 13