Supplementary

Table S1 Characteristics, in-hospital complications and outcomes of patients undergoing TF-TAVR from 2012–2016

Patient characteristics/co-morbidities and complications	N=18793
Age, mean	81.5 years
Year	
2012	6.60%
2013	9.80%
2014	17.00%
2015	26.70%
2016	39.90%
Female sex	46.60%
Race	
Caucasian	82.10%
African American	3.80%
Hospital region	
North-east	25.20%
Mid-west	22.60%
South	33.60%
West	18.40%
Hospital Bed size	
Small	5.30%
Medium	17.60%
Large	77.10%
Elective admission	78.50%
Coronary artery disease	69.70%
DM controlled	26.50%
DM uncontrolled	9.50%
HTN controlled	47.20%
HTN uncontrolled	38.60%
Chronic lung disease	38.50%
Congestive heart failure	75.00%
Carotid artery disease	6.90%
Peripheral vascular disease	25.90%
Atrial fibrillation	42.40%
Anemia	26.90%
ESRD requiring dialysis	3.60%
CKD stage 5	0.20%
CKD stage 4	3.90%

Table S1 (*continued*)

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| Patient characteristics/co-morbidities and complications	N=18793
CKD stage 3	17.30%
CKD stage 1–2	2.40%
Fluid and electrolyte disorder	20.10%
Malnutrition disorder	2.90%
Cardiac arrhythmias	61.90%
Conduction disorder	21.80%
Coagulopathy	18.10%
Liver cirrhosis	1.20%
Smoking	15.60%
Obesity	15.40%
Solid tumor without metastasis	2.40%
Metastatic cancer	0.50%
Lymphoma	1.00%
In-hospital complications/Outcomes	
Mortality	2.60%
STEMI	0.20%
NSTEMI	2.20%
PCI	3.10%
Cardiogenic shock	2.40%
Mechanical circulatory support device	1.80%
Mechanical ventilation	2.40%
Acute renal failure	14.20%
New Pacemaker Insertion	10.30%
In hospital sepsis	3.60%
Vascular complications	4.40%
Blood transfusion	13.40%
Acute stroke	2.80%
Cardiac tamponade	1.00%
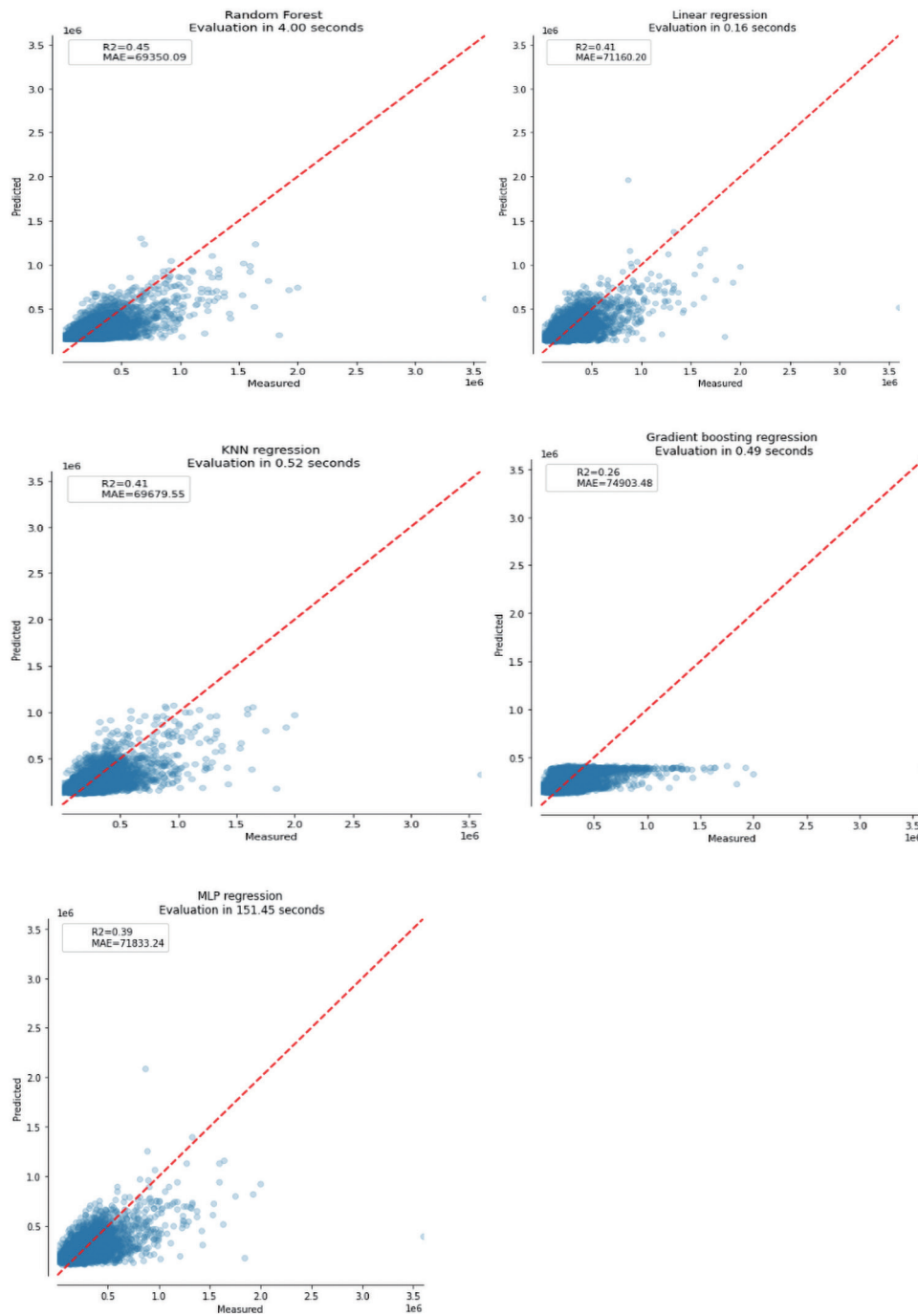
Figure S1 Predicted *vs.* measured hospitalization charges plots for various machine learning algorithms (Stage 3). This figure shows the R^2 score, MAE and time elapsed when running the different machine learning algorithms. This figures illustrates the predicted versus measured hospitalization charges plots for various machine learning algorithms for stage 3 variables. As we note, the random forest algorithm has the highest R^2 score and the lowest MAE (mean absolute error) suggesting the best performance as compared with other algorithms.