

Supplementary data

Calculation of an adapted Seattle Heart Failure Model for kidney transplant candidates with advanced chronic kidney disease or kidney failure

(Adapted from Levy et al. Circulation 2006, pp. 1424-1433)

The score resulted from summation of points assessed for the following covariates:

Age: Age in years on the date of evaluation was divided by 10, and multiplied by $\ln(1.090)$

Sex: Male sex was assigned $\ln(1.089)=0.08526$ points.

Female sex was assigned 0 points.

New York Heart Association: Categorical class (1-4) was multiplied by $\ln(1.600)$

Ejection fraction: $(100/\text{ejection fraction})$ was multiplied by $\ln(1.030)$

Clinical ischemia: $\ln(1.354)$ points were assigned for clinical ischemia, defined as: history of coronary artery disease or myocardial infarction

Systolic BP: Systolic blood pressure was divided by ten, and multiplied by $\ln(0.877)$

Diuretic use: Diuretic exposure was standardized as “furosemide equivalents”

Conversion of bumetanide: $\text{mg} \times 27$

Conversion of HCTZ/chlorthalidone: $\text{mg} \times 3.2$

Conversion of torsemide $\text{mg} \times 2$

Doses were expressed per kg body weight

Allopurinol use: Assigned $\ln(1.571)$ points if allopurinol in use.

Serum sodium (Na): Zero points assigned if $[\text{Na}^+] \geq 138 \text{ mEq/L}$

Otherwise $(138 - \text{Na})$ multiplied by $\ln(1.050)$

Serum cholesterol: $(100/\text{cholesterol})$ multiplied by $\ln(2.206)$

Hemoglobin (Hgb): Zero points if $\text{Hgb} = 16$

If Hgb>16: (Hgb-16) multiplied by $\ln(1.336)$

If Hgb<16: (16-Hgb) multiplied by $\ln(1.124)$

% lymphocytes in peripheral blood leukocytes (%Lymph):

If <47% lymphocytes, (%Lymph/5) multiplied by $\ln(0.897)$

If ≥47% lymphocytes, (47/5) multiplied by $\ln(0.8997)$

Serum uric acid (UA):

If UA>3.4, UA multiplied by $\ln(1.064)$

If UA≤3.4, 3.4 multiplied by $\ln(1.064)$

Use of angiotensin converting enzyme inhibition (ACE):

$\ln(0.77)$ points assigned for use

Use of angiotensin receptor blocking agents (ARB):

$\ln(0.85)$ points assigned for use

Use of beta blockers (BB):

$\ln(0.66)$ points assigned for use

Use of K-sparing diuretics (Ksp):

$\ln(0.74)$ points assigned for use

1. Note is made that Hgb>16, and use of K-sparing diuretics are both very uncommon in a kidney transplant candidate population.
2. Updates were made to the original SHFM model, with removal of the variable for statins. "Given the negative results with the addition of statins in large randomized clinical trials". We removed it from our adapted SHFM equation as well.
3. The updated equations include variables for vasopressors and advanced heart failure device therapy. No kidney transplant candidates had any of these infusions.

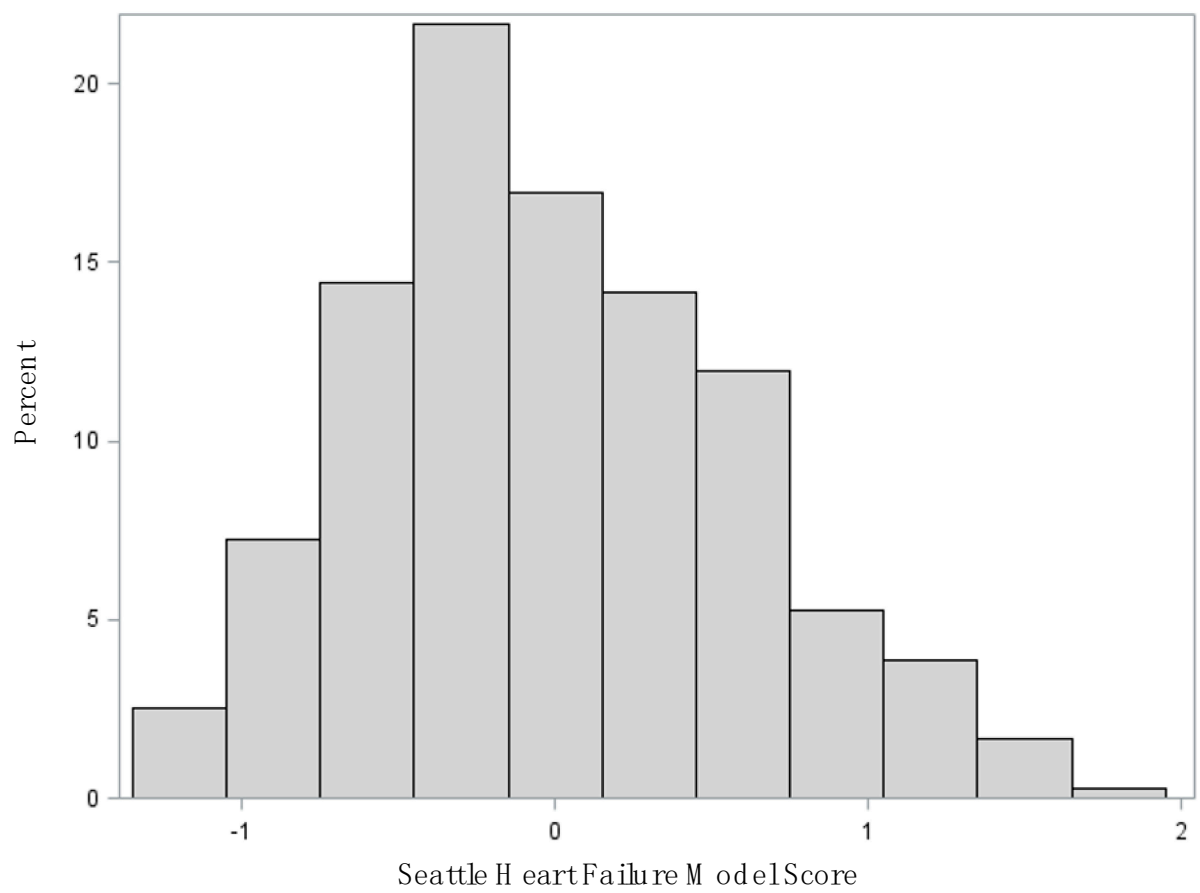


Figure S1: Distribution of the SHFM scores in the kidney transplant cohort