

Supplementary Online Content

Lala A, Rowland JC, Ferket BS, et al. Strategies of wait-listing for heart transplant vs durable mechanical circulatory support alone for patients with advanced heart failure. *JAMA Cardiol*. Published online April 15, 2020. doi:10.1001/jamacardio.2020.0631

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. BTT LVAD vs DT LVAD After Propensity Score Matching

| | BTT (n=2131) | DT (n=2131) | P Value |
|----------------------|----------------------|----------------------|---------|
| Age, yrs | 56.00 [47.00, 63.00] | 68.00 [64.00, 72.00] | <0.001 |
| Race | | | <0.001 |
| Asian (Non-Hispanic) | 38 (1.8) | 16 (0.8) | |
| Black (Non-Hispanic) | 524 (24.6) | 351 (16.5) | |
| Hispanic | 79 (3.7) | 46 (2.2) | |
| Other | 149 (7.0) | 107 (5.0) | |
| White (Non-Hispanic) | 1341 (62.9) | 1611 (75.6) | |
| BMI | 28.17±5.78 | 29.15±6.31 | <0.001 |
| Male | 1699 (79.7) | 1668 (78.3) | 0.259 |
| Blood Type | | | <0.001 |
| A | 715 (33.6) | 829 (38.9) | |
| AB | 52 (2.4) | 86 (4.0) | |
| B | 263 (12.3) | 240 (11.3) | |
| O | 1101 (51.7) | 976 (45.8) | |
| Creatinine, mg/dL | 1.39±0.81 | 1.49±0.67 | <0.001 |
| Albumin, g/dL | 3.48±0.67 | 3.26±0.66 | <0.001 |
| INTERMACS Profile | | | <0.001 |
| 1 | 319 (15.0) | 224 (10.5) | |
| 2 | 908 (42.6) | 558 (26.2) | |
| 3 | 590 (27.7) | 758 (35.6) | |
| 4+ | 314 (14.7) | 591 (27.7) | |

*Categorical measures are presented as the number of patients and (%). Continuous measures are presented as median [interquartile range (IQR)] or mean ± standard deviation (SD).

eTable 2. BTT LVAD Not Transplanted vs BTT Transplanted From Matched Dataset

| | BTT-No TXPL (n=1031) | BTT-TXPL (n=1100) | p Value |
|----------------------|-------------------------|----------------------|---------|
| Age, yrs | 57.00 [48.00, 63.00] | 55.00 [46.00, 62.00] | 0.007 |
| Race | | | 0.03 |
| Asian (Non-Hispanic) | 13 (1.3) | 25 (2.3) | |
| Black (Non-Hispanic) | 281 (27.3) | 243 (22.1) | |
| Hispanic | 39 (3.8) | 40 (3.6) | |
| Other | 66 (6.4) | 83 (7.5) | |
| White (Non-Hispanic) | 632 (61.3) | 709 (64.5) | |
| BMI | 28.55±6.08 | 27.81±5.47 | 0.003 |
| Male | 809 (78.5) | 890 (80.9) | 0.178 |
| Blood Type | | | <0.001 |
| A | 315 (30.6) | 400 (36.4) | |
| AB | 22 (2.1) | 30 (2.7) | |
| B | 111 (10.8) | 152 (13.8) | |
| O | 583 (56.5) | 518 (47.1) | |
| Creatinine, mg/dL | 1.41±0.88 | 1.37±0.73 | 0.217 |
| Albumin, g/dL | 3.46±0.65 | 3.49±0.69 | 0.246 |
| INTERMACS Profile | | | 0.66 |
| 1 | 158 (15.3) | 161 (14.6) | |
| 2 | 428 (41.5) | 480 (43.6) | |
| 3 | 296 (28.7) | 294 (26.7) | |
| 4+ | 149 (14.5) | 165 (15.0) | |

*Categorical measures are presented as the number of patients and (%). Continuous measures are presented as median [interquartile range (IQR)] or mean ± standard deviation (SD).

eTable 3. BTT LVAD Not Transplanted vs DT LVAD From Matched Dataset

| | BTT-No TXPL (N=1031) | DT (N=2131) | p Value |
|----------------------|-------------------------|----------------------|---------|
| Age, yrs | 57.00 [48.00, 63.00] | 68.00 [64.00, 72.00] | <0.001 |
| Race | | | <0.001 |
| Asian (Non-Hispanic) | 13 (1.3) | 16 (0.8) | |
| Black (Non-Hispanic) | 281 (27.3) | 351 (16.5) | |
| Hispanic | 39 (3.8) | 46 (2.2) | |
| Other | 66 (6.4) | 107 (5.0) | |
| White (Non-Hispanic) | 632 (61.3) | 1611 (75.6) | |
| BMI | 28.55±6.08 | 29.15±6.31 | 0.011 |
| Male | 809 (78.5) | 1668 (78.3) | 0.938 |
| Blood Type | | | <0.001 |
| A | 315 (30.6) | 829 (38.9) | |
| AB | 22 (2.1) | 86 (4.0) | |
| B | 111 (10.8) | 240 (11.3) | |
| O | 583 (56.5) | 976 (45.8) | |
| Creatinine, mg/dL | 1.41±0.88 | 1.49±0.67 | 0.01 |
| Albumin, g/dL | 3.46±0.65 | 3.26±0.66 | <0.001 |
| INTERMACS Profile | | | <0.001 |
| 1 | 158 (15.3) | 224 (10.5) | |
| 2 | 428 (41.5) | 558 (26.2) | |
| 3 | 296 (28.7) | 758 (35.6) | |
| 4+ | 149 (14.5) | 591 (27.7) | |

*Categorical measures are presented as the number of patients and (%). Continuous measures are presented as median [interquartile range (IQR)] or mean ± standard deviation (SD).

eTable 4. BTT LVAD vs DT LVAD Patients Who Ultimately Were Transplanted

| | BTT (N=2131) | DT-TXPL (N=161) | p Value |
|----------------------|----------------------|----------------------|---------|
| Age, yrs | 56.00 [47.00, 63.00] | 64.00 [60.00, 67.00] | <0.001 |
| Race | | | 0.115 |
| Asian (Non-Hispanic) | 38 (1.8) | 0 (0.0) | |
| Black (Non-Hispanic) | 524 (24.6) | 30 (18.6) | |
| Hispanic | 79 (3.7) | 4 (2.5) | |
| Other | 149 (7.0) | 12 (7.5) | |
| White (Non-Hispanic) | 1341 (62.9) | 115 (71.4) | |
| BMI | 28.17±5.78 | 29.76±5.52 | 0.001 |
| Male | 1699 (79.7) | 126 (78.3) | 0.731 |
| Blood Type | | | 0.001 |
| A | 715 (33.6) | 69 (42.9) | |
| AB | 52 (2.4) | 10 (6.2) | |
| B | 263 (12.3) | 21 (13.0) | |
| O | 1101 (51.7) | 61 (37.9) | |
| Creatinine, mg/dL | 1.39±0.81 | 1.42±0.63 | 0.613 |
| Albumin, g/dL | 3.48±0.67 | 3.13±0.74 | <0.001 |
| INTERMACS Profile | | | <0.001 |
| 1 | 319 (15.0) | 25 (15.5) | |
| 2 | 908 (42.6) | 32 (19.9) | |
| 3 | 590 (27.7) | 57 (35.4) | |
| 4+ | 314 (14.7) | 47 (29.2) | |

*Categorical measures are presented as the number of patients and (%). Continuous measures are presented as median [interquartile range (IQR)] or mean ± standard deviation (SD).

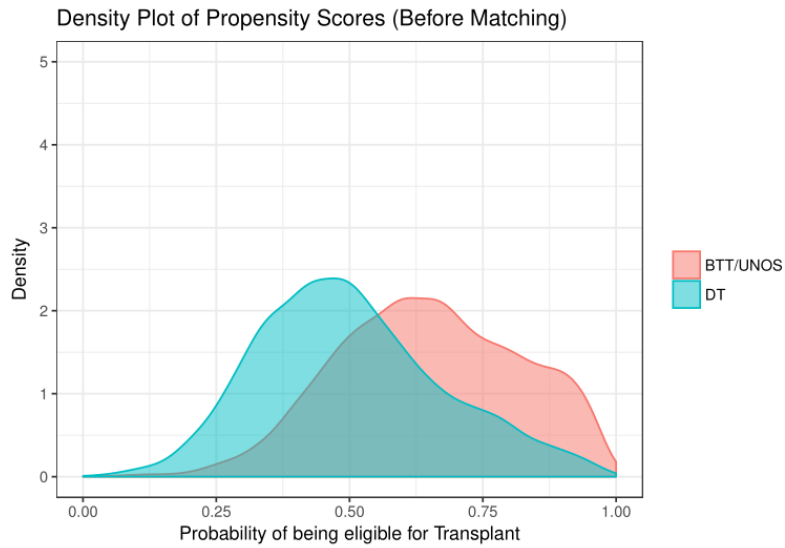
eTable 5. Patients From Analysis Dataset Compared to Patients Who Were Excluded Solely for Missing Albumin

| | Total Cohort (N=8281) | Missing Albumin (N=2316) | p Value |
|----------------------|--------------------------|-----------------------------|---------|
| Age, yrs | 59.00 [50.00, 66.00] | 57.00 [47.00, 64.00] | <0.001 |
| Race | | | <0.001 |
| Asian (Non-Hispanic) | 176 (2.1) | 65 (2.8) | |
| Black (Non-Hispanic) | 1919 (23.2) | 555 (24.0) | |
| Hispanic | 418 (5.0) | 169 (7.3) | |
| Other | 367 (4.4) | 53 (2.3) | |
| White (Non-Hispanic) | 5401 (65.2) | 1474 (63.6) | |
| BMI | 27.96±6.08 | 27.64±5.99 | 0.024 |
| Male | 6335 (76.5) | 1703 (73.5) | 0.003 |
| Blood Type | | | 0.551 |
| A | 3183 (38.4) | 866 (37.4) | |
| AB | 400 (4.8) | 115 (5.0) | |
| B | 1113 (13.4) | 336 (14.5) | |
| O | 3585 (43.3) | 999 (43.1) | |
| Creatinine, mg/dL | 1.37±0.67 | 1.44±0.75 | <0.001 |
| Albumin, g/dL | 3.48±0.67 | --- | NA |

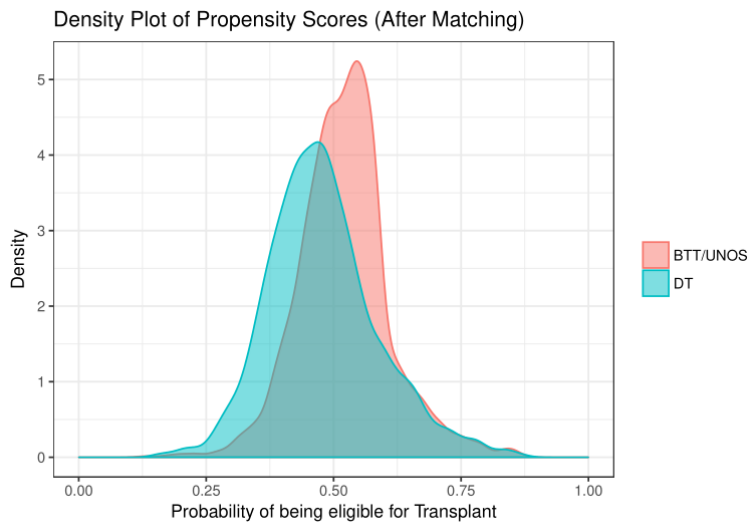
*Categorical measures are presented as the number of patients and (%). Continuous measures are presented as median [interquartile range (IQR)] or mean ± standard deviation (SD).

eFigure 1. Propensity Matching

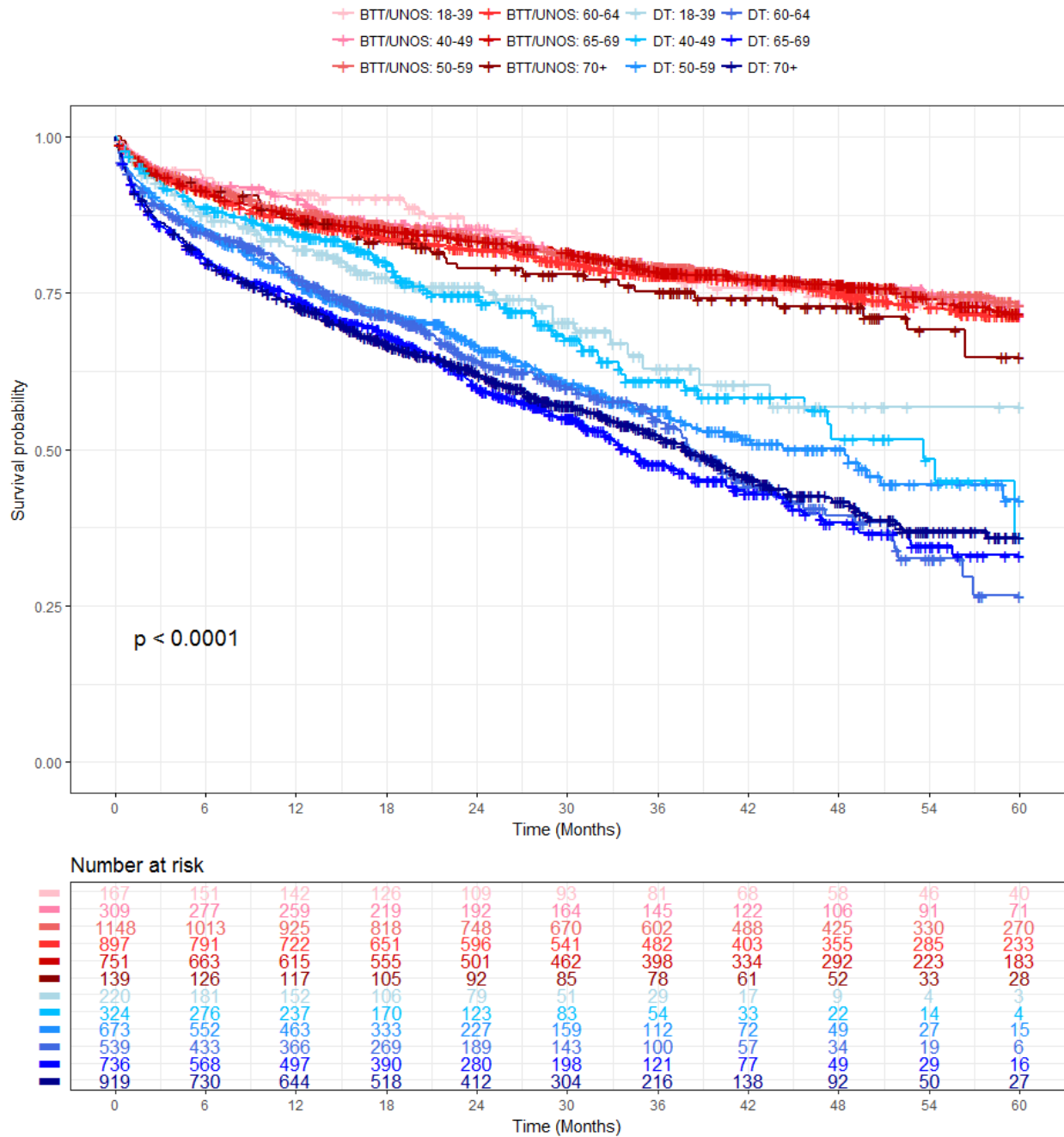
- a. Predicted overlap with propensity matching for key clinical factors between patients listed for transplant (with or without BTT LVAD) and DT LVAD patients



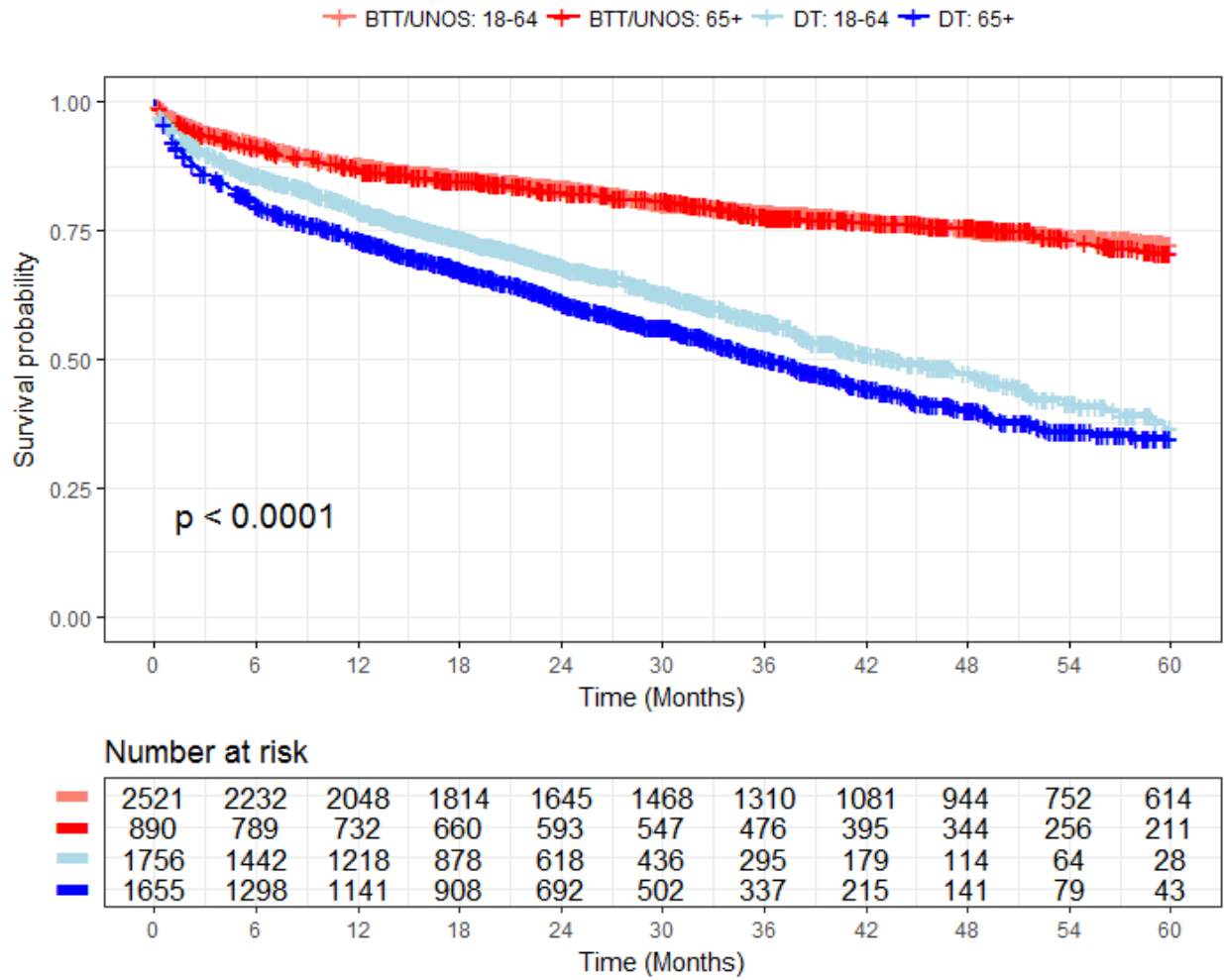
- b. Actual overlap after matching



eFigure 2. Strategy of Listing for Transplant vs DT LVAD Broken Down by 6 Age Groups



eFigure 3. Survival Analysis by Younger (<65 Years) and Older (≥65 Years) Patients According to Strategy



eFigure 4. Worst-case Scenario Survival Curves Comparing Strategies of Listing of Transplant (With or Without LVAD) to DT LVAD Where Delisted Patients Are Assumed Dead Within 1 Week

