



Figure S1 Bland-Altman plots of 20 fetal heart examinations by two ultrasound physicians using Fetal HQ. Each point on the plots represents an individual patient's data. The two red dashed lines above and below represent the upper and lower limits of the 95% limits of agreement (95%LoA). GLS, global longitudinal strain; FAC, fraction of area change; EF, ejection fraction; SV, stroke volume; CO, cardiac output; GSI, global spherical index.

Table S1 Regression analysis of overall cardiac parameters with gestational week

| Parameter | R ² | b | P |
|------------------|----------------|--------|-------|
| Length ED | 0.888 | 0.189 | <0.01 |
| Width ED | 0.905 | 0.172 | <0.01 |
| Area ED | 0.910 | 10.162 | <0.01 |
| Fetal heart rate | 0.099 | -0.071 | <0.01 |
| LV | | | |
| ED area | 0.783 | 0.018 | <0.01 |
| ED length | 0.690 | 0.010 | <0.01 |
| EF | 0.064 | -0.054 | <0.01 |
| SV | 0.682 | 0.011 | <0.01 |
| CO | 0.681 | 1.454 | <0.01 |
| GLS | 0.089 | -0.041 | <0.01 |
| FAC | 0.087 | -0.054 | <0.01 |
| RV | | | |
| ED area | 0.823 | 0.018 | <0.01 |
| ED length | 0.747 | 0.009 | <0.01 |
| GLS | 0.024 | -0.017 | <0.01 |
| FAC | 0.051 | -0.037 | <0.01 |

ED, end diastolic; Length, long cardiac diameter; Width, wide cardiac diameter; Area, heart area; GSI, global spherical index; EF, ejection fraction; SV, stroke volume; CO, cardiac output; GLS, global longitudinal strain; FAC, fraction of area change. R², coefficient of determination; b, regression coefficient; P values indicate statistical significance for the correlations, a P value less than 0.05 is considered statistically significant.

Table S2 Regression analysis of left ventricular EDD and gestational week

| Segment | R ² | b | P |
|---------|----------------|-------|-------|
| 1 | 0.695 | 0.045 | <0.01 |
| 2 | 0.723 | 0.047 | <0.01 |
| 3 | 0.738 | 0.049 | <0.01 |
| 4 | 0.745 | 0.051 | <0.01 |
| 5 | 0.747 | 0.052 | <0.01 |
| 6 | 0.747 | 0.052 | <0.01 |
| 7 | 0.742 | 0.052 | <0.01 |
| 8 | 0.733 | 0.050 | <0.01 |
| 9 | 0.719 | 0.049 | <0.01 |
| 10 | 0.704 | 0.047 | <0.01 |
| 11 | 0.689 | 0.046 | <0.01 |
| 12 | 0.673 | 0.044 | <0.01 |
| 13 | 0.656 | 0.043 | <0.01 |
| 14 | 0.639 | 0.041 | <0.01 |
| 15 | 0.622 | 0.039 | <0.01 |
| 16 | 0.606 | 0.038 | <0.01 |
| 17 | 0.593 | 0.036 | <0.01 |
| 18 | 0.579 | 0.034 | <0.01 |
| 19 | 0.558 | 0.032 | <0.01 |
| 20 | 0.527 | 0.030 | <0.01 |
| 21 | 0.492 | 0.026 | <0.01 |
| 22 | 0.465 | 0.021 | <0.01 |
| 23 | 0.448 | 0.015 | <0.01 |
| 24 | 0.437 | 0.007 | <0.01 |

EDD, end-diastolic diameter; R², coefficient of determination; b, regression coefficient; P values indicate statistical significance for the correlations, a P value less than 0.05 is considered statistically significant.

Table S3 Regression analysis of right ventricular EDD and gestational week

| Segment | R ² | b | P |
|---------|----------------|-------|-------|
| 1 | 0.640 | 0.051 | <0.01 |
| 2 | 0.664 | 0.054 | <0.01 |
| 3 | 0.677 | 0.057 | <0.01 |
| 4 | 0.684 | 0.059 | <0.01 |
| 5 | 0.691 | 0.061 | <0.01 |
| 6 | 0.702 | 0.063 | <0.01 |
| 7 | 0.714 | 0.064 | <0.01 |
| 8 | 0.724 | 0.064 | <0.01 |
| 9 | 0.732 | 0.064 | <0.01 |
| 10 | 0.736 | 0.063 | <0.01 |
| 11 | 0.739 | 0.062 | <0.01 |
| 12 | 0.738 | 0.060 | <0.01 |
| 13 | 0.735 | 0.058 | <0.01 |
| 14 | 0.729 | 0.056 | <0.01 |
| 15 | 0.721 | 0.054 | <0.01 |
| 16 | 0.712 | 0.051 | <0.01 |
| 17 | 0.705 | 0.048 | <0.01 |
| 18 | 0.698 | 0.045 | <0.01 |
| 19 | 0.684 | 0.041 | <0.01 |
| 20 | 0.656 | 0.037 | <0.01 |
| 21 | 0.619 | 0.031 | <0.01 |
| 22 | 0.587 | 0.025 | <0.01 |
| 23 | 0.564 | 0.017 | <0.01 |
| 24 | 0.551 | 0.009 | <0.01 |

EDD, end-diastolic diameter; R², coefficient of determination; b, regression coefficient; P values indicate statistical significance for the correlations, a P value less than 0.05 is considered statistically significant.

Table S4 Regression analysis of left ventricular SI and gestational week

| Segment | R ² | b | P |
|---------|----------------|-------|-------|
| 20 | 0.008 | 0.001 | 0.046 |
| 21 | 0.010 | 0.002 | 0.023 |
| 22 | 0.012 | 0.002 | 0.015 |
| 23 | 0.013 | 0.003 | 0.011 |
| 24 | 0.013 | 0.007 | 0.010 |

SI, sphericity index; R², coefficient of determination; b, regression coefficient; P values indicate statistical significance for the correlations, a P value less than 0.05 is considered statistically significant.

Table S5 Regression analysis of right ventricular SI and gestational week

| Segment | R ² | b | P |
|---------|----------------|--------|-------|
| 2 | 0.008 | -0.001 | 0.043 |
| 3 | 0.012 | -0.001 | 0.015 |
| 4 | 0.016 | -0.001 | <0.01 |
| 5 | 0.020 | -0.001 | <0.01 |
| 6 | 0.025 | -0.001 | <0.01 |
| 7 | 0.030 | -0.001 | <0.01 |
| 8 | 0.035 | -0.001 | <0.01 |
| 9 | 0.039 | -0.002 | <0.01 |
| 10 | 0.043 | -0.002 | <0.01 |
| 11 | 0.045 | -0.002 | <0.01 |
| 12 | 0.046 | -0.002 | <0.01 |
| 13 | 0.046 | -0.022 | <0.01 |
| 14 | 0.043 | -0.002 | <0.01 |
| 15 | 0.040 | -0.002 | <0.01 |
| 16 | 0.037 | -0.002 | <0.01 |
| 17 | 0.033 | -0.002 | <0.01 |
| 18 | 0.029 | -0.002 | <0.01 |
| 19 | 0.025 | -0.002 | <0.01 |
| 20 | 0.019 | -0.002 | <0.01 |
| 21 | 0.014 | -0.002 | <0.01 |
| 22 | 0.010 | -0.002 | 0.024 |
| 23 | 0.008 | -0.003 | 0.044 |

SI, sphericity index; R², coefficient of determination; b, regression coefficient; P values indicate statistical significance for the correlations, a P value less than 0.05 is considered statistically significant.

Table S6 Regression analysis of left ventricular FS and gestational week

| Segment | R ² | b | P |
|---------|----------------|--------|-------|
| 1 | 0.008 | -0.020 | 0.047 |
| 2 | 0.010 | -0.019 | 0.026 |
| 3 | 0.012 | -0.020 | 0.016 |
| 4 | 0.013 | -0.020 | 0.011 |
| 5 | 0.014 | -0.021 | <0.01 |
| 6 | 0.016 | -0.023 | <0.01 |
| 7 | 0.019 | -0.024 | <0.01 |
| 8 | 0.021 | -0.026 | <0.01 |
| 9 | 0.024 | -0.029 | <0.01 |
| 10 | 0.027 | -0.031 | <0.01 |
| 11 | 0.031 | -0.034 | <0.01 |
| 12 | 0.035 | -0.037 | <0.01 |
| 13 | 0.038 | -0.040 | <0.01 |
| 14 | 0.043 | -0.044 | <0.01 |
| 15 | 0.048 | -0.048 | <0.01 |
| 16 | 0.055 | -0.053 | <0.01 |
| 17 | 0.063 | -0.059 | <0.01 |
| 18 | 0.071 | -0.066 | <0.01 |
| 19 | 0.075 | -0.072 | <0.01 |
| 20 | 0.076 | -0.078 | <0.01 |
| 21 | 0.073 | -0.083 | <0.01 |
| 22 | 0.071 | -0.086 | <0.01 |
| 23 | 0.070 | -0.088 | <0.01 |
| 24 | 0.068 | -0.089 | <0.01 |

EDD, end-diastolic diameter; R², coefficient of determination; b, regression coefficient; P values indicate statistical significance for the correlations, a P value less than 0.05 is considered statistically significant.

Table S7 Regression analysis of right ventricular FS and gestational week

| Segment | R ² | b | P |
|---------|----------------|--------|-------|
| 1 | 0.040 | -0.044 | <0.01 |
| 2 | 0.043 | -0.040 | <0.01 |
| 3 | 0.040 | -0.037 | <0.01 |
| 4 | 0.035 | -0.034 | <0.01 |
| 5 | 0.032 | -0.032 | <0.01 |
| 6 | 0.031 | -0.031 | <0.01 |
| 7 | 0.031 | -0.031 | <0.01 |
| 8 | 0.031 | -0.030 | <0.01 |
| 9 | 0.029 | -0.029 | <0.01 |
| 10 | 0.026 | -0.028 | <0.01 |
| 11 | 0.022 | -0.026 | <0.01 |
| 12 | 0.019 | -0.024 | <0.01 |
| 13 | 0.017 | -0.023 | <0.01 |
| 14 | 0.016 | -0.024 | <0.01 |
| 15 | 0.017 | -0.026 | <0.01 |
| 16 | 0.018 | -0.028 | <0.01 |
| 17 | 0.018 | -0.029 | <0.01 |
| 18 | 0.016 | -0.029 | <0.01 |
| 19 | 0.013 | -0.028 | 0.010 |
| 20 | 0.009 | -0.026 | 0.031 |

FS, fractional shortening; R², coefficient of determination; b, regression coefficient; P values indicate statistical significance for the correlations, a P value less than 0.05 is considered statistically significant.

Table S8 Repeatability test

| Parameter | Inter-observer | | Intra-observer | |
|-----------|----------------|-------------|----------------|-------------|
| | ICC | 95% CI | ICC | 95% CI |
| GLS_L | 0.660 | 0.327–0.849 | 0.781 | 0.534–0.907 |
| GLS_R | 0.839 | 0.637–0.933 | 0.889 | 0.741–0.955 |
| FAC_L | 0.725 | 0.424–0.881 | 0.814 | 0.587–0.922 |
| FAC_R | 0.811 | 0.589–0.920 | 0.887 | 0.739–0.953 |
| EF | 0.744 | 0.454–0.890 | 0.847 | 0.652–0.937 |
| SV | 0.940 | 0.856–0.976 | 0.949 | 0.875–0.979 |
| CO | 0.938 | 0.851–0.975 | 0.939 | 0.851–0.975 |
| GSI | 0.838 | 0.642–0.932 | 0.892 | 0.751–0.956 |

GLS, global longitudinal strain; FAC, fraction of area change; EF, ejection fraction; SV, stroke volume; CO, cardiac output; GSI, global spherical index; ICC, intraclass correlation coefficient; CI, confidence interval.

Table S9 Reference values for overall ventricular morphologic and functional parameters

| Parameter | 20–23 ⁺⁶ W | | | | | 24–27 ⁺⁶ W | | | | | 28–31 ⁺⁶ W | | | | | 32–36 ⁺⁶ W | | | | | 37–40 ⁺⁶ W | | | | |
|--------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|
| | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ |
| Length ED | 25.53 | 26.19 | 29.02 | 31.50 | 32.24 | 26.93 | 27.41 | 30.24 | 33.31 | 34.36 | 32.44 | 33.45 | 38.02 | 43.09 | 45.89 | 38.00 | 39.91 | 43.60 | 48.87 | 51.04 | 44.09 | 44.39 | 48.64 | 53.32 | 53.59 |
| Width ED | 22.38 | 23.24 | 25.15 | 27.76 | 28.13 | 23.55 | 24.20 | 26.34 | 28.92 | 30.20 | 29.65 | 30.69 | 33.51 | 37.23 | 39.78 | 33.68 | 34.36 | 39.15 | 43.41 | 44.75 | 39.18 | 39.90 | 43.1 | 45.84 | 46.73 |
| Area ED | 466.93 | 489.89 | 564.43 | 689.01 | 698.53 | 509.04 | 529.29 | 623.51 | 760.12 | 792.90 | 770.42 | 803.86 | 997.90 | 1289.41 | 1405.07 | 1037.91 | 1093.71 | 1356.04 | 1669.05 | 1755.92 | 1369.47 | 1413.36 | 1635.4 | 1877.81 | 1922.29 |
| GSI | 1.06 | 1.08 | 1.15 | 1.24 | 1.27 | 1.06 | 1.07 | 1.15 | 1.23 | 1.28 | 1.04 | 1.06 | 1.12 | 1.21 | 1.26 | 1.03 | 1.05 | 1.12 | 1.22 | 1.24 | 1.04 | 1.06 | 1.12 | 1.22 | 1.25 |
| LV ED area | 0.79 | 0.93 | 1.13 | 1.43 | 1.47 | 0.91 | 1.01 | 1.25 | 1.61 | 1.69 | 1.30 | 1.43 | 1.94 | 2.37 | 2.82 | 1.65 | 1.90 | 2.63 | 3.52 | 3.82 | 2.12 | 2.21 | 2.90 | 3.62 | 4.03 |
| LV ED length | 1.47 | 1.55 | 1.79 | 2.00 | 2.11 | 1.49 | 1.58 | 1.82 | 2.12 | 2.25 | 1.84 | 1.86 | 2.20 | 2.65 | 2.86 | 2.03 | 2.16 | 2.64 | 3.18 | 3.27 | 2.22 | 2.35 | 2.84 | 3.12 | 3.30 |
| RV ED area | 0.65 | 0.70 | 0.89 | 1.16 | 1.21 | 0.74 | 0.77 | 1.00 | 1.30 | 1.45 | 1.13 | 1.32 | 1.64 | 2.30 | 2.56 | 1.55 | 1.76 | 2.23 | 3.13 | 3.47 | 1.89 | 2.12 | 2.78 | 3.65 | 3.83 |
| RV ED length | 1.19 | 1.23 | 1.42 | 1.60 | 1.64 | 1.18 | 1.26 | 1.48 | 1.71 | 1.81 | 1.53 | 1.54 | 1.87 | 2.20 | 2.27 | 1.74 | 1.80 | 2.12 | 2.61 | 2.73 | 1.92 | 2.04 | 2.38 | 2.81 | 2.90 |
| SV (mL) | 0.22 | 0.26 | 0.39 | 0.53 | 0.59 | 0.27 | 0.30 | 0.42 | 0.62 | 0.70 | 0.45 | 0.49 | 0.82 | 1.07 | 1.44 | 0.65 | 0.75 | 1.23 | 1.97 | 2.19 | 0.80 | 0.84 | 1.38 | 2.28 | 2.39 |
| CO (mL/min) | 30.75 | 38.64 | 56.03 | 80.19 | 82.45 | 39.20 | 43.50 | 59.86 | 90.00 | 102.22 | 66.68 | 71.90 | 119.62 | 156.15 | 193.76 | 89.43 | 105.02 | 177.85 | 269.19 | 297.53 | 109.35 | 127.59 | 190.96 | 294.82 | 317.46 |
| EF (%) | 49.85 | 51.70 | 63.02 | 69.10 | 69.88 | 43.90 | 46.42 | 58.64 | 68.26 | 70.84 | 42.19 | 47.59 | 57.32 | 67.08 | 68.90 | 45.60 | 46.53 | 55.72 | 66.35 | 68.80 | 36.41 | 41.12 | 55.21 | 64.17 | 65.18 |
| GLS_L (%) | -33.19 | -30.70 | -23.84 | -18.10 | -17.29 | -31.83 | -30.49 | -22.84 | -16.18 | -14.03 | -30.49 | -27.57 | -21.44 | -15.92 | -12.93 | -27.35 | -26.35 | -20.12 | -15.74 | -13.97 | -25.72 | -24.57 | -19.04 | -15.19 | -14.25 |
| FAC_L (%) | 36.48 | 39.06 | 47.53 | 53.69 | 55.93 | 32.14 | 35.24 | 44.99 | 53.08 | 55.75 | 32.93 | 34.89 | 43.10 | 50.18 | 53.06 | 34.06 | 35.12 | 41.15 | 51.03 | 51.46 | 27.85 | 29.66 | 40.36 | 48.06 | 49.66 |
| GLS_R (%) | -29.81 | -27.61 | -22.65 | -17.75 | -17.03 | -29.84 | -27.67 | -22.03 | -17.13 | -15.93 | -28.24 | -26.83 | -21.22 | -15.61 | -11.28 | -26.74 | -24.04 | -20.90 | -15.14 | -14.27 | -29.92 | -27.52 | -21.23 | -16.18 | -15.12 |
| FAC_R (%) | 32.69 | 34.23 | 41.34 | 49.52 | 50.45 | 30.04 | 32.87 | 39.75 | 47.81 | 51.51 | 26.76 | 28.84 | 38.34 | 45.90 | 47.44 | 26.67 | 28.84 | 36.23 | 44.55 | 46.82 | 29.83 | 30.51 | 38.44 | 47.82 | 50.00 |

ED, end diastolic; Length, long cardiac diameter; Width, wide cardiac diameter; Area, heart area; LV, left ventricle; RV right ventricle; GSI, global spherical index; EF, ejection fraction; SV, stroke volume; CO, cardiac output; GLS, global longitudinal strain; FAC, fraction of area change. P₅, 5%; P₁₀, 10%; P₅₀, 50%; P₉₀, 90%; P₉₅, 95%.

Table S10 Reference values for EDD in left ventricular segments

| Segment | 20–23 ⁺⁶ W | | | | | 24–27 ⁺⁶ W | | | | | 28–31 ⁺⁶ W | | | | | 32–36 ⁺⁶ W | | | | | 37–40 ⁺⁶ W | | | | |
|---------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|
| | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ |
| 1 | 6.14 | 6.64 | 7.61 | 8.73 | 9.03 | 6.53 | 6.77 | 8.12 | 9.65 | 9.98 | 7.82 | 8.28 | 9.96 | 11.36 | 11.93 | 9.00 | 9.61 | 11.45 | 13.39 | 13.80 | 9.36 | 10.44 | 12.39 | 14.53 | 15.20 |
| 2 | 6.35 | 6.93 | 7.75 | 8.97 | 9.23 | 6.81 | 7.09 | 8.39 | 9.83 | 10.12 | 8.29 | 8.83 | 10.24 | 11.83 | 12.39 | 9.24 | 10.01 | 11.79 | 13.89 | 14.19 | 9.92 | 11.04 | 12.82 | 15.00 | 15.78 |
| 3 | 6.57 | 7.16 | 8.00 | 9.18 | 9.48 | 7.06 | 7.34 | 8.63 | 10.03 | 10.36 | 8.45 | 9.11 | 10.64 | 12.25 | 12.72 | 9.62 | 10.45 | 12.22 | 14.21 | 14.78 | 10.54 | 11.42 | 13.27 | 15.45 | 16.42 |
| 4 | 6.77 | 7.29 | 8.18 | 9.39 | 9.72 | 7.22 | 7.57 | 8.87 | 10.23 | 10.57 | 8.60 | 9.30 | 10.91 | 12.66 | 12.97 | 9.98 | 10.72 | 12.69 | 14.69 | 15.24 | 11.11 | 11.65 | 13.58 | 15.72 | 16.89 |
| 5 | 6.90 | 7.31 | 8.32 | 9.53 | 9.84 | 7.40 | 7.68 | 8.97 | 10.37 | 10.69 | 8.73 | 9.59 | 11.12 | 12.92 | 13.27 | 10.18 | 10.88 | 12.95 | 15.13 | 15.53 | 11.48 | 11.71 | 13.82 | 15.94 | 17.01 |
| 6 | 6.93 | 7.25 | 8.36 | 9.43 | 9.86 | 7.36 | 7.70 | 8.97 | 10.34 | 10.66 | 8.69 | 9.64 | 11.13 | 12.90 | 13.50 | 10.24 | 10.87 | 12.87 | 15.06 | 15.55 | 11.40 | 11.69 | 13.75 | 15.83 | 16.70 |
| 7 | 6.87 | 7.14 | 8.31 | 9.26 | 9.80 | 7.21 | 7.67 | 8.86 | 10.23 | 10.6 | 8.73 | 9.59 | 10.95 | 12.67 | 13.55 | 10.08 | 10.82 | 12.60 | 14.72 | 15.44 | 11.27 | 11.58 | 13.57 | 15.52 | 16.31 |
| 8 | 6.78 | 7.03 | 8.22 | 9.06 | 9.72 | 7.15 | 7.55 | 8.67 | 10.02 | 10.46 | 8.69 | 9.52 | 10.69 | 12.44 | 13.50 | 9.88 | 10.53 | 12.31 | 14.27 | 15.12 | 10.94 | 11.37 | 13.26 | 15.05 | 16.23 |
| 9 | 6.73 | 6.88 | 8.05 | 8.95 | 9.54 | 6.93 | 7.36 | 8.50 | 9.83 | 10.20 | 8.50 | 9.24 | 10.41 | 12.22 | 13.28 | 9.72 | 10.12 | 12.06 | 14.04 | 14.74 | 10.57 | 11.03 | 12.83 | 14.53 | 16.30 |
| 10 | 6.60 | 6.75 | 7.84 | 8.79 | 9.29 | 6.74 | 7.22 | 8.31 | 9.57 | 9.93 | 8.21 | 8.97 | 10.04 | 11.97 | 12.96 | 9.53 | 9.79 | 11.78 | 13.79 | 14.38 | 10.19 | 10.80 | 12.62 | 14.11 | 16.19 |
| 11 | 6.46 | 6.57 | 7.67 | 8.58 | 8.98 | 6.59 | 6.96 | 8.21 | 9.43 | 9.78 | 7.97 | 8.65 | 9.73 | 11.76 | 12.56 | 9.17 | 9.46 | 11.48 | 13.58 | 14.18 | 9.76 | 10.44 | 12.27 | 13.88 | 15.98 |
| 12 | 6.22 | 6.47 | 7.47 | 8.38 | 8.72 | 6.41 | 6.63 | 7.99 | 9.23 | 9.58 | 7.76 | 8.39 | 9.62 | 11.60 | 12.14 | 8.90 | 9.05 | 11.19 | 13.40 | 14.02 | 9.46 | 10.17 | 11.86 | 13.85 | 15.69 |
| 13 | 5.98 | 6.22 | 7.26 | 8.17 | 8.45 | 6.00 | 6.52 | 7.74 | 8.96 | 9.34 | 7.46 | 8.16 | 9.48 | 11.36 | 11.73 | 8.50 | 8.84 | 10.80 | 13.08 | 13.83 | 9.08 | 9.83 | 11.35 | 13.78 | 15.35 |
| 14 | 5.71 | 5.99 | 7.08 | 7.94 | 8.16 | 5.70 | 6.31 | 7.44 | 8.78 | 9.02 | 7.19 | 7.83 | 9.29 | 11.13 | 11.39 | 8.12 | 8.64 | 10.39 | 12.57 | 13.51 | 8.73 | 9.19 | 10.98 | 13.67 | 14.99 |
| 15 | 5.45 | 5.80 | 6.85 | 7.69 | 8.05 | 5.44 | 6.02 | 7.14 | 8.50 | 8.78 | 7.09 | 7.32 | 9.07 | 10.74 | 11.13 | 7.82 | 8.40 | 9.94 | 12.16 | 13.16 | 8.36 | 8.72 | 10.55 | 13.36 | 14.57 |
| 16 | 5.29 | 5.58 | 6.58 | 7.51 | 7.86 | 5.40 | 5.72 | 6.89 | 8.16 | 8.55 | 6.80 | 6.88 | 8.79 | 10.38 | 10.92 | 7.59 | 8.10 | 9.61 | 11.91 | 12.79 | 7.93 | 8.57 | 10.08 | 12.87 | 14.10 |
| 17 | 5.14 | 5.39 | 6.39 | 7.29 | 7.61 | 5.26 | 5.57 | 6.64 | 7.96 | 8.30 | 6.39 | 6.61 | 8.59 | 9.97 | 10.78 | 7.39 | 7.77 | 9.30 | 11.54 | 12.42 | 7.68 | 8.42 | 9.61 | 12.36 | 13.48 |
| 18 | 5.02 | 5.18 | 6.21 | 7.16 | 7.44 | 5.09 | 5.36 | 6.47 | 7.76 | 8.01 | 6.07 | 6.44 | 8.24 | 9.72 | 10.66 | 7.02 | 7.52 | 9.11 | 11.14 | 11.96 | 7.53 | 7.90 | 9.26 | 12.01 | 12.66 |
| 19 | 4.72 | 4.95 | 5.99 | 7.00 | 7.32 | 4.90 | 5.10 | 6.27 | 7.54 | 7.91 | 5.77 | 6.16 | 7.83 | 9.47 | 10.28 | 6.56 | 7.03 | 8.66 | 10.69 | 11.37 | 7.16 | 7.45 | 8.91 | 11.44 | 11.78 |
| 20 | 4.29 | 4.54 | 5.54 | 6.74 | 7.18 | 4.49 | 4.77 | 5.89 | 7.12 | 7.47 | 5.32 | 5.63 | 7.21 | 8.93 | 9.61 | 5.80 | 6.54 | 8.10 | 10.04 | 10.56 | 6.57 | 6.78 | 8.43 | 10.46 | 10.79 |
| 21 | 3.77 | 3.96 | 4.93 | 6.12 | 6.61 | 3.92 | 4.17 | 5.28 | 6.32 | 6.78 | 4.61 | 4.97 | 6.39 | 7.92 | 8.49 | 4.91 | 5.63 | 7.20 | 9.21 | 9.39 | 5.60 | 5.96 | 7.49 | 9.25 | 9.62 |
| 22 | 3.04 | 3.18 | 4.03 | 5.00 | 5.48 | 3.11 | 3.34 | 4.27 | 5.14 | 5.54 | 3.71 | 3.93 | 5.15 | 6.46 | 6.87 | 3.88 | 4.43 | 5.81 | 7.52 | 7.72 | 4.34 | 4.76 | 6.07 | 7.51 | 7.87 |
| 23 | 2.11 | 2.22 | 2.85 | 3.57 | 3.88 | 2.15 | 2.33 | 3.00 | 3.65 | 3.92 | 2.59 | 2.75 | 3.61 | 4.57 | 4.82 | 2.69 | 3.05 | 4.10 | 5.31 | 5.51 | 2.98 | 3.29 | 4.27 | 5.28 | 5.56 |
| 24 | 1.07 | 1.14 | 1.47 | 1.86 | 2.01 | 1.10 | 1.19 | 1.55 | 1.89 | 2.03 | 1.34 | 1.42 | 1.86 | 2.36 | 2.48 | 1.38 | 1.56 | 2.12 | 2.73 | 2.87 | 1.52 | 1.68 | 2.20 | 2.73 | 2.87 |

EDD, end-diastolic diameter. P₅, 5%; P₁₀, 10%; P₅₀, 50%; P₉₀, 90%; P₉₅, 95%.

Table S11 Reference values for EDD in right ventricular segments

| Segment | 20–23 ⁺⁶ W | | | | | 24–27 ⁺⁶ W | | | | | 28–31 ⁺⁶ W | | | | | 32–36 ⁺⁶ W | | | | | 37–40 ⁺⁶ W | | | | |
|---------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|
| | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ |
| 1 | 5.49 | 5.75 | 7.14 | 9.21 | 9.67 | 5.81 | 6.23 | 7.54 | 9.69 | 10.13 | 7.58 | 7.75 | 9.85 | 12.23 | 12.94 | 8.64 | 9.08 | 11.78 | 13.92 | 14.9 | 9.08 | 9.95 | 12.52 | 14.86 | 15.20 |
| 2 | 5.78 | 6.01 | 7.39 | 9.54 | 9.78 | 6.14 | 6.47 | 7.87 | 9.96 | 10.49 | 7.95 | 8.13 | 10.36 | 12.82 | 13.26 | 9.04 | 9.38 | 12.18 | 14.32 | 15.67 | 9.55 | 10.52 | 13.20 | 15.46 | 15.97 |
| 3 | 5.93 | 6.29 | 7.69 | 9.42 | 10.05 | 6.41 | 6.64 | 8.13 | 10.14 | 10.87 | 8.20 | 8.61 | 10.80 | 13.36 | 13.68 | 9.50 | 9.70 | 12.59 | 14.88 | 16.29 | 10.00 | 11.02 | 13.54 | 15.96 | 16.80 |
| 4 | 6.00 | 6.52 | 7.95 | 9.50 | 10.28 | 6.58 | 6.76 | 8.32 | 10.38 | 11.19 | 8.48 | 8.94 | 11.16 | 13.83 | 14.17 | 9.77 | 10.06 | 13.05 | 15.46 | 16.93 | 10.4 | 11.24 | 13.95 | 16.28 | 17.33 |
| 5 | 6.04 | 6.61 | 8.17 | 9.45 | 10.51 | 6.69 | 6.88 | 8.47 | 10.60 | 11.36 | 8.69 | 9.18 | 11.40 | 14.15 | 14.66 | 9.97 | 10.42 | 13.25 | 16.00 | 17.34 | 10.66 | 11.36 | 14.15 | 16.50 | 17.76 |
| 6 | 6.06 | 6.59 | 8.24 | 9.36 | 10.62 | 6.76 | 6.94 | 8.54 | 10.70 | 11.30 | 8.76 | 9.06 | 11.54 | 14.23 | 14.65 | 10.13 | 10.48 | 13.26 | 16.20 | 17.22 | 10.93 | 11.37 | 14.46 | 16.53 | 18.06 |
| 7 | 6.05 | 6.55 | 8.21 | 9.34 | 10.53 | 6.77 | 6.99 | 8.50 | 10.52 | 11.01 | 8.70 | 8.90 | 11.52 | 14.14 | 14.57 | 10.27 | 10.73 | 13.26 | 16.10 | 16.84 | 11.11 | 11.46 | 14.54 | 16.41 | 18.25 |
| 8 | 6.04 | 6.47 | 8.06 | 9.26 | 10.25 | 6.69 | 6.95 | 8.44 | 10.36 | 10.80 | 8.62 | 8.82 | 11.36 | 13.99 | 14.56 | 10.32 | 10.94 | 13.09 | 15.93 | 16.59 | 11.07 | 11.74 | 14.65 | 16.09 | 18.33 |
| 9 | 6.04 | 6.33 | 7.91 | 9.09 | 10.00 | 6.58 | 6.89 | 8.33 | 10.14 | 10.68 | 8.55 | 8.76 | 11.13 | 13.75 | 14.50 | 10.27 | 10.98 | 12.96 | 15.84 | 16.31 | 10.99 | 11.84 | 14.47 | 15.99 | 18.32 |
| 10 | 5.99 | 6.17 | 7.72 | 8.91 | 9.71 | 6.42 | 6.80 | 8.07 | 9.91 | 10.58 | 8.59 | 8.72 | 10.91 | 13.42 | 14.42 | 10.06 | 10.93 | 12.65 | 15.53 | 15.98 | 10.88 | 11.47 | 14.27 | 15.69 | 18.17 |
| 11 | 5.78 | 6.03 | 7.50 | 8.70 | 9.38 | 6.26 | 6.57 | 7.93 | 9.71 | 10.25 | 8.22 | 8.57 | 10.65 | 13.13 | 14.28 | 9.75 | 10.62 | 12.46 | 15.15 | 15.62 | 10.69 | 11.06 | 13.95 | 15.20 | 17.88 |
| 12 | 5.57 | 5.85 | 7.23 | 8.43 | 9.07 | 6.01 | 6.35 | 7.73 | 9.37 | 9.89 | 7.71 | 7.98 | 10.39 | 12.61 | 14.07 | 9.41 | 10.33 | 12.19 | 14.72 | 15.29 | 10.29 | 10.86 | 13.61 | 14.83 | 17.34 |
| 13 | 5.37 | 5.65 | 7.02 | 8.20 | 8.64 | 5.73 | 6.15 | 7.48 | 9.06 | 9.65 | 7.34 | 7.52 | 10.07 | 12.37 | 13.74 | 9.12 | 9.94 | 11.82 | 14.22 | 14.96 | 9.86 | 10.65 | 13.11 | 14.49 | 16.41 |
| 14 | 5.17 | 5.34 | 6.74 | 7.80 | 8.30 | 5.47 | 5.92 | 7.17 | 8.72 | 9.37 | 6.86 | 7.23 | 9.69 | 12.07 | 13.28 | 8.76 | 9.40 | 11.28 | 13.78 | 14.44 | 9.43 | 10.35 | 12.51 | 14.05 | 15.43 |
| 15 | 4.89 | 5.25 | 6.52 | 7.65 | 7.98 | 5.20 | 5.69 | 6.90 | 8.47 | 8.89 | 6.42 | 6.98 | 9.23 | 11.66 | 12.69 | 8.45 | 8.79 | 10.84 | 13.28 | 13.75 | 9.01 | 9.85 | 11.85 | 13.53 | 14.69 |
| 16 | 4.67 | 5.02 | 6.16 | 7.48 | 7.62 | 4.99 | 5.44 | 6.64 | 8.16 | 8.44 | 6.10 | 6.79 | 8.77 | 11.20 | 12.02 | 8.04 | 8.26 | 10.39 | 12.68 | 13.35 | 8.73 | 9.31 | 11.46 | 12.95 | 14.09 |
| 17 | 4.46 | 4.83 | 5.83 | 7.03 | 7.34 | 4.80 | 5.11 | 6.31 | 7.75 | 8.09 | 5.93 | 6.54 | 8.18 | 10.80 | 11.28 | 7.59 | 7.92 | 9.79 | 12.02 | 12.66 | 8.41 | 8.69 | 10.96 | 12.36 | 13.35 |
| 18 | 4.31 | 4.55 | 5.52 | 6.49 | 7.05 | 4.66 | 4.83 | 5.99 | 7.32 | 7.73 | 5.91 | 6.10 | 7.87 | 10.45 | 10.52 | 7.10 | 7.43 | 9.20 | 11.40 | 11.75 | 7.69 | 8.30 | 10.28 | 11.85 | 12.37 |
| 19 | 4.03 | 4.18 | 5.13 | 6.20 | 6.66 | 4.41 | 4.52 | 5.54 | 6.92 | 7.33 | 5.46 | 5.95 | 7.29 | 9.70 | 10.06 | 6.67 | 6.84 | 8.58 | 10.71 | 11.08 | 7.15 | 7.65 | 9.53 | 11.16 | 11.50 |
| 20 | 3.53 | 3.81 | 4.69 | 5.68 | 6.13 | 3.94 | 4.10 | 5.06 | 6.28 | 6.71 | 4.82 | 5.51 | 6.51 | 8.67 | 9.36 | 5.94 | 6.13 | 7.74 | 9.87 | 10.16 | 6.58 | 6.73 | 8.65 | 10.45 | 10.57 |
| 21 | 2.91 | 3.24 | 4.04 | 4.94 | 5.44 | 3.32 | 3.51 | 4.33 | 5.42 | 5.87 | 4.08 | 4.76 | 5.60 | 7.52 | 8.25 | 4.89 | 5.21 | 6.65 | 8.64 | 8.90 | 5.34 | 5.68 | 7.51 | 9.20 | 9.46 |
| 22 | 2.34 | 2.58 | 3.22 | 4.04 | 4.39 | 2.62 | 2.78 | 3.48 | 4.30 | 4.73 | 3.20 | 3.73 | 4.45 | 5.97 | 6.67 | 3.87 | 4.06 | 5.35 | 6.85 | 7.20 | 4.01 | 4.43 | 5.89 | 7.38 | 7.72 |
| 23 | 1.61 | 1.78 | 2.25 | 2.86 | 3.09 | 1.80 | 1.92 | 2.41 | 2.99 | 3.32 | 2.20 | 2.58 | 3.11 | 4.20 | 4.67 | 2.67 | 2.79 | 3.73 | 4.73 | 5.05 | 2.68 | 3.05 | 4.04 | 5.16 | 5.45 |
| 24 | 0.81 | 0.91 | 1.16 | 1.48 | 1.60 | 0.91 | 0.98 | 1.23 | 1.54 | 1.71 | 1.13 | 1.31 | 1.60 | 2.17 | 2.40 | 1.36 | 1.43 | 1.90 | 2.43 | 2.60 | 1.34 | 1.55 | 2.07 | 2.65 | 2.81 |

EDD, end-diastolic diameter. P₅, 5%; P₁₀, 10%; P₅₀, 50%; P₉₀, 90%; P₉₅, 95%.

Table S12 Reference values for SI in left ventricular segments

| Segment | 20–23 ⁺⁶ W | | | | | 24–27 ⁺⁶ W | | | | | 28–31 ⁺⁶ W | | | | | 32–36 ⁺⁶ W | | | | | 37–40 ⁺⁶ W | | | | |
|---------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|
| | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ |
| 1 | 1.91 | 2.03 | 2.32 | 2.68 | 2.81 | 1.74 | 1.85 | 2.28 | 2.68 | 2.89 | 1.83 | 1.95 | 2.23 | 2.67 | 2.79 | 1.86 | 2.00 | 2.38 | 2.75 | 2.94 | 1.75 | 1.84 | 2.20 | 2.72 | 2.88 |
| 2 | 1.85 | 1.99 | 2.27 | 2.56 | 2.71 | 1.71 | 1.79 | 2.21 | 2.58 | 2.76 | 1.81 | 1.89 | 2.14 | 2.54 | 2.64 | 1.79 | 1.93 | 2.30 | 2.62 | 2.84 | 1.70 | 1.81 | 2.14 | 2.60 | 2.75 |
| 3 | 1.83 | 1.92 | 2.21 | 2.46 | 2.62 | 1.64 | 1.75 | 2.14 | 2.49 | 2.68 | 1.75 | 1.84 | 2.09 | 2.44 | 2.51 | 1.73 | 1.87 | 2.21 | 2.51 | 2.71 | 1.64 | 1.77 | 2.08 | 2.49 | 2.61 |
| 4 | 1.81 | 1.88 | 2.16 | 2.43 | 2.55 | 1.60 | 1.72 | 2.09 | 2.42 | 2.60 | 1.69 | 1.80 | 2.03 | 2.41 | 2.50 | 1.68 | 1.80 | 2.16 | 2.44 | 2.62 | 1.61 | 1.76 | 2.01 | 2.40 | 2.54 |
| 5 | 1.79 | 1.86 | 2.13 | 2.43 | 2.50 | 1.59 | 1.70 | 2.06 | 2.39 | 2.54 | 1.67 | 1.77 | 2.00 | 2.38 | 2.55 | 1.65 | 1.75 | 2.09 | 2.42 | 2.61 | 1.60 | 1.73 | 1.99 | 2.37 | 2.47 |
| 6 | 1.78 | 1.86 | 2.12 | 2.44 | 2.48 | 1.59 | 1.72 | 2.06 | 2.40 | 2.55 | 1.67 | 1.75 | 2.00 | 2.39 | 2.63 | 1.64 | 1.73 | 2.10 | 2.44 | 2.66 | 1.61 | 1.73 | 1.98 | 2.36 | 2.51 |
| 7 | 1.81 | 1.87 | 2.15 | 2.45 | 2.51 | 1.62 | 1.73 | 2.07 | 2.43 | 2.62 | 1.69 | 1.76 | 2.01 | 2.41 | 2.75 | 1.63 | 1.75 | 2.11 | 2.48 | 2.75 | 1.65 | 1.74 | 2.01 | 2.40 | 2.62 |
| 8 | 1.84 | 1.89 | 2.18 | 2.51 | 2.57 | 1.65 | 1.75 | 2.11 | 2.50 | 2.65 | 1.73 | 1.76 | 2.04 | 2.45 | 2.89 | 1.64 | 1.76 | 2.14 | 2.54 | 2.87 | 1.71 | 1.76 | 2.03 | 2.48 | 2.77 |
| 9 | 1.88 | 1.92 | 2.22 | 2.56 | 2.66 | 1.71 | 1.78 | 2.16 | 2.56 | 2.70 | 1.76 | 1.79 | 2.07 | 2.53 | 2.97 | 1.67 | 1.79 | 2.17 | 2.61 | 2.99 | 1.76 | 1.81 | 2.08 | 2.60 | 2.91 |
| 10 | 1.91 | 1.96 | 2.28 | 2.63 | 2.72 | 1.75 | 1.82 | 2.20 | 2.63 | 2.79 | 1.77 | 1.83 | 2.13 | 2.62 | 3.00 | 1.70 | 1.83 | 2.24 | 2.71 | 3.11 | 1.81 | 1.85 | 2.16 | 2.72 | 2.96 |
| 11 | 1.95 | 1.99 | 2.34 | 2.70 | 2.80 | 1.80 | 1.87 | 2.27 | 2.72 | 2.87 | 1.79 | 1.85 | 2.18 | 2.68 | 3.02 | 1.72 | 1.85 | 2.29 | 2.81 | 3.21 | 1.83 | 1.90 | 2.24 | 2.87 | 2.99 |
| 12 | 1.99 | 2.04 | 2.38 | 2.77 | 2.89 | 1.83 | 1.91 | 2.32 | 2.78 | 2.99 | 1.82 | 1.86 | 2.26 | 2.74 | 3.05 | 1.75 | 1.89 | 2.36 | 2.92 | 3.30 | 1.86 | 1.95 | 2.29 | 2.94 | 3.10 |
| 13 | 2.02 | 2.11 | 2.43 | 2.86 | 2.99 | 1.88 | 1.95 | 2.40 | 2.87 | 3.11 | 1.84 | 1.88 | 2.33 | 2.84 | 3.10 | 1.80 | 1.94 | 2.44 | 3.06 | 3.39 | 1.90 | 1.99 | 2.40 | 2.99 | 3.19 |
| 14 | 2.06 | 2.17 | 2.53 | 2.96 | 3.11 | 1.94 | 2.02 | 2.48 | 3.01 | 3.23 | 1.88 | 1.92 | 2.38 | 3.04 | 3.17 | 1.85 | 2.02 | 2.51 | 3.20 | 3.50 | 1.93 | 2.06 | 2.49 | 3.08 | 3.26 |
| 15 | 2.14 | 2.24 | 2.63 | 3.06 | 3.25 | 2.00 | 2.10 | 2.55 | 3.09 | 3.36 | 1.93 | 1.99 | 2.46 | 3.15 | 3.27 | 1.92 | 2.11 | 2.61 | 3.35 | 3.64 | 1.98 | 2.14 | 2.55 | 3.25 | 3.36 |
| 16 | 2.23 | 2.29 | 2.73 | 3.17 | 3.40 | 2.08 | 2.19 | 2.65 | 3.23 | 3.44 | 1.98 | 2.04 | 2.57 | 3.24 | 3.49 | 1.99 | 2.17 | 2.71 | 3.48 | 3.75 | 2.03 | 2.22 | 2.65 | 3.35 | 3.49 |
| 17 | 2.29 | 2.39 | 2.83 | 3.30 | 3.52 | 2.16 | 2.25 | 2.73 | 3.33 | 3.53 | 2.03 | 2.12 | 2.65 | 3.38 | 3.66 | 2.09 | 2.25 | 2.81 | 3.52 | 3.80 | 2.09 | 2.31 | 2.74 | 3.42 | 3.52 |
| 18 | 2.31 | 2.46 | 2.89 | 3.39 | 3.52 | 2.24 | 2.34 | 2.82 | 3.42 | 3.60 | 2.08 | 2.22 | 2.77 | 3.48 | 3.82 | 2.20 | 2.30 | 2.92 | 3.62 | 3.91 | 2.19 | 2.33 | 2.89 | 3.48 | 3.59 |
| 19 | 2.38 | 2.52 | 2.98 | 3.52 | 3.64 | 2.33 | 2.43 | 2.92 | 3.53 | 3.71 | 2.21 | 2.35 | 2.92 | 3.66 | 3.86 | 2.34 | 2.42 | 3.06 | 3.75 | 4.03 | 2.31 | 2.39 | 3.09 | 3.66 | 3.73 |
| 20 | 2.50 | 2.64 | 3.18 | 3.84 | 3.99 | 2.49 | 2.57 | 3.11 | 3.76 | 4.02 | 2.40 | 2.56 | 3.15 | 3.95 | 4.14 | 2.49 | 2.65 | 3.33 | 4.15 | 4.36 | 2.47 | 2.56 | 3.27 | 3.95 | 4.03 |
| 21 | 2.78 | 2.96 | 3.55 | 4.39 | 4.66 | 2.76 | 2.88 | 3.54 | 4.28 | 4.59 | 2.70 | 2.92 | 3.58 | 4.48 | 4.74 | 2.77 | 3.02 | 3.77 | 4.72 | 5.01 | 2.73 | 2.90 | 3.72 | 4.50 | 4.71 |
| 22 | 3.40 | 3.57 | 4.38 | 5.47 | 5.80 | 3.38 | 3.55 | 4.37 | 5.34 | 5.66 | 3.29 | 3.59 | 4.43 | 5.47 | 5.92 | 3.37 | 3.62 | 4.65 | 5.89 | 6.25 | 3.32 | 3.61 | 4.58 | 5.60 | 5.87 |
| 23 | 4.82 | 5.00 | 6.26 | 7.87 | 8.25 | 4.78 | 5.03 | 6.22 | 7.68 | 8.14 | 4.66 | 5.14 | 6.34 | 8.01 | 8.49 | 4.74 | 5.17 | 6.57 | 8.40 | 8.94 | 4.68 | 5.14 | 6.55 | 8.08 | 8.45 |
| 24 | 9.31 | 9.65 | 12.18 | 15.37 | 16.01 | 9.22 | 9.79 | 12.07 | 14.95 | 15.91 | 9.01 | 9.97 | 12.31 | 15.69 | 16.54 | 9.17 | 10.04 | 12.72 | 16.39 | 17.46 | 9.03 | 9.96 | 12.76 | 15.83 | 16.51 |

SI, sphericity index. P₅, 5%; P₁₀, 10%; P₅₀, 50%; P₉₀, 90%; P₉₅, 95%.

Table S13 Reference values for SI in right ventricular segments

| Segment | 20–23 ⁺⁶ W | | | | | 24–27 ⁺⁶ W | | | | | 28–31 ⁺⁶ W | | | | | 32–36 ⁺⁶ W | | | | | 37–40 ⁺⁶ W | | | | |
|---------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|
| | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ |
| 1 | 1.40 | 1.62 | 1.96 | 2.33 | 2.52 | 1.34 | 1.47 | 1.95 | 2.40 | 2.49 | 1.33 | 1.51 | 1.91 | 2.43 | 2.56 | 1.40 | 1.55 | 1.85 | 2.27 | 2.36 | 1.43 | 1.59 | 1.93 | 2.33 | 2.47 |
| 2 | 1.39 | 1.56 | 1.88 | 2.29 | 2.41 | 1.30 | 1.42 | 1.89 | 2.29 | 2.38 | 1.31 | 1.43 | 1.82 | 2.25 | 2.39 | 1.36 | 1.47 | 1.79 | 2.16 | 2.27 | 1.40 | 1.55 | 1.88 | 2.22 | 2.37 |
| 3 | 1.37 | 1.49 | 1.80 | 2.26 | 2.33 | 1.26 | 1.38 | 1.85 | 2.22 | 2.32 | 1.28 | 1.38 | 1.72 | 2.18 | 2.25 | 1.31 | 1.39 | 1.73 | 2.08 | 2.18 | 1.36 | 1.48 | 1.82 | 2.11 | 2.25 |
| 4 | 1.32 | 1.46 | 1.78 | 2.21 | 2.29 | 1.23 | 1.34 | 1.79 | 2.19 | 2.27 | 1.26 | 1.33 | 1.69 | 2.12 | 2.17 | 1.28 | 1.33 | 1.68 | 2.01 | 2.10 | 1.31 | 1.42 | 1.74 | 2.05 | 2.18 |
| 5 | 1.29 | 1.44 | 1.76 | 2.20 | 2.28 | 1.21 | 1.31 | 1.76 | 2.17 | 2.25 | 1.24 | 1.30 | 1.66 | 2.03 | 2.16 | 1.26 | 1.31 | 1.65 | 1.98 | 2.03 | 1.29 | 1.37 | 1.70 | 1.97 | 2.16 |
| 6 | 1.30 | 1.41 | 1.77 | 2.20 | 2.30 | 1.20 | 1.30 | 1.74 | 2.15 | 2.24 | 1.23 | 1.28 | 1.67 | 2.02 | 2.15 | 1.25 | 1.31 | 1.62 | 1.96 | 1.97 | 1.27 | 1.35 | 1.69 | 1.94 | 2.12 |
| 7 | 1.32 | 1.41 | 1.74 | 2.21 | 2.31 | 1.22 | 1.31 | 1.73 | 2.15 | 2.24 | 1.20 | 1.26 | 1.63 | 2.03 | 2.13 | 1.24 | 1.31 | 1.63 | 1.93 | 1.96 | 1.26 | 1.33 | 1.68 | 1.95 | 2.13 |
| 8 | 1.34 | 1.43 | 1.77 | 2.22 | 2.34 | 1.23 | 1.32 | 1.75 | 2.17 | 2.28 | 1.21 | 1.26 | 1.64 | 2.05 | 2.17 | 1.25 | 1.33 | 1.63 | 1.92 | 1.96 | 1.27 | 1.32 | 1.67 | 1.96 | 2.14 |
| 9 | 1.38 | 1.48 | 1.81 | 2.26 | 2.37 | 1.25 | 1.35 | 1.78 | 2.20 | 2.34 | 1.24 | 1.28 | 1.66 | 2.10 | 2.19 | 1.27 | 1.36 | 1.65 | 1.94 | 2.00 | 1.28 | 1.33 | 1.68 | 1.99 | 2.16 |
| 10 | 1.42 | 1.51 | 1.88 | 2.30 | 2.41 | 1.28 | 1.36 | 1.81 | 2.25 | 2.38 | 1.24 | 1.30 | 1.69 | 2.17 | 2.20 | 1.29 | 1.38 | 1.70 | 2.01 | 2.05 | 1.29 | 1.35 | 1.72 | 2.03 | 2.19 |
| 11 | 1.48 | 1.54 | 1.94 | 2.34 | 2.44 | 1.32 | 1.41 | 1.86 | 2.31 | 2.43 | 1.26 | 1.34 | 1.73 | 2.21 | 2.29 | 1.32 | 1.40 | 1.73 | 2.06 | 2.16 | 1.31 | 1.39 | 1.76 | 2.08 | 2.23 |
| 12 | 1.54 | 1.62 | 2.00 | 2.39 | 2.54 | 1.36 | 1.47 | 1.91 | 2.38 | 2.51 | 1.30 | 1.37 | 1.78 | 2.27 | 2.42 | 1.36 | 1.45 | 1.78 | 2.15 | 2.23 | 1.33 | 1.44 | 1.82 | 2.12 | 2.31 |
| 13 | 1.60 | 1.70 | 2.08 | 2.44 | 2.63 | 1.38 | 1.54 | 1.96 | 2.48 | 2.61 | 1.35 | 1.41 | 1.85 | 2.36 | 2.53 | 1.41 | 1.48 | 1.83 | 2.26 | 2.33 | 1.36 | 1.48 | 1.88 | 2.20 | 2.35 |
| 14 | 1.67 | 1.77 | 2.19 | 2.56 | 2.75 | 1.45 | 1.58 | 2.02 | 2.59 | 2.77 | 1.38 | 1.46 | 1.94 | 2.54 | 2.66 | 1.46 | 1.51 | 1.89 | 2.38 | 2.53 | 1.41 | 1.54 | 1.96 | 2.31 | 2.44 |
| 15 | 1.76 | 1.84 | 2.29 | 2.67 | 2.90 | 1.53 | 1.66 | 2.10 | 2.69 | 2.93 | 1.41 | 1.53 | 2.01 | 2.66 | 2.74 | 1.52 | 1.57 | 1.98 | 2.49 | 2.66 | 1.47 | 1.59 | 2.03 | 2.39 | 2.53 |
| 16 | 1.84 | 1.90 | 2.40 | 2.79 | 3.08 | 1.61 | 1.74 | 2.20 | 2.84 | 3.06 | 1.47 | 1.61 | 2.11 | 2.74 | 2.94 | 1.57 | 1.64 | 2.08 | 2.62 | 2.82 | 1.55 | 1.65 | 2.10 | 2.50 | 2.66 |
| 17 | 1.92 | 2.01 | 2.51 | 2.93 | 3.12 | 1.69 | 1.81 | 2.31 | 2.97 | 3.17 | 1.55 | 1.67 | 2.20 | 2.81 | 3.07 | 1.64 | 1.74 | 2.21 | 2.80 | 2.95 | 1.67 | 1.72 | 2.24 | 2.65 | 2.78 |
| 18 | 2.02 | 2.14 | 2.64 | 3.05 | 3.28 | 1.76 | 1.93 | 2.45 | 3.13 | 3.29 | 1.69 | 1.79 | 2.33 | 2.95 | 3.10 | 1.76 | 1.86 | 2.31 | 2.99 | 3.10 | 1.78 | 1.87 | 2.35 | 2.84 | 3.00 |
| 19 | 2.18 | 2.27 | 2.82 | 3.31 | 3.52 | 1.91 | 2.05 | 2.66 | 3.35 | 3.50 | 1.86 | 1.97 | 2.53 | 3.17 | 3.31 | 1.93 | 2.01 | 2.48 | 3.21 | 3.35 | 1.93 | 2.07 | 2.55 | 3.14 | 3.38 |
| 20 | 2.33 | 2.47 | 3.07 | 3.70 | 3.94 | 2.12 | 2.27 | 2.92 | 3.68 | 3.84 | 2.05 | 2.24 | 2.81 | 3.45 | 3.54 | 2.13 | 2.26 | 2.72 | 3.51 | 3.63 | 2.12 | 2.27 | 2.86 | 3.58 | 3.69 |
| 21 | 2.62 | 2.77 | 3.54 | 4.34 | 4.66 | 2.44 | 2.64 | 3.39 | 4.27 | 4.41 | 2.36 | 2.60 | 3.24 | 3.95 | 4.12 | 2.48 | 2.59 | 3.19 | 4.10 | 4.32 | 2.42 | 2.59 | 3.29 | 4.17 | 4.39 |
| 22 | 3.22 | 3.41 | 4.43 | 5.50 | 5.80 | 3.07 | 3.28 | 4.23 | 5.39 | 5.60 | 2.97 | 3.28 | 4.06 | 4.92 | 5.25 | 3.10 | 3.23 | 4.03 | 5.18 | 5.58 | 3.02 | 3.25 | 4.18 | 5.24 | 5.74 |
| 23 | 4.56 | 4.85 | 6.37 | 8.05 | 8.42 | 4.40 | 4.71 | 6.07 | 7.81 | 8.10 | 4.28 | 4.75 | 5.86 | 7.03 | 7.65 | 4.42 | 4.61 | 5.80 | 7.57 | 8.11 | 4.33 | 4.69 | 6.05 | 7.57 | 8.51 |
| 24 | 8.81 | 9.41 | 12.37 | 15.66 | 16.52 | 8.58 | 9.19 | 11.8 | 15.22 | 15.85 | 8.35 | 9.23 | 11.43 | 13.69 | 15.05 | 8.58 | 8.97 | 11.35 | 14.94 | 15.89 | 8.43 | 9.15 | 11.82 | 14.82 | 16.91 |

SI, sphericity index. P₅, 5%; P₁₀, 10%; P₅₀, 50%; P₉₀, 90%; P₉₅, 95%.

Table S14 Reference values for FS in left ventricular segments

| Segment | 20–23 ⁺⁶ W | | | | | 24–27 ⁺⁶ W | | | | | 28–31 ⁺⁶ W | | | | | 32–36 ⁺⁶ W | | | | | 37–40 ⁺⁶ W | | | | |
|---------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|
| | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ |
| 1 | -0.01 | 3.37 | 11.75 | 24.74 | 27.46 | -4.28 | -0.57 | 10.41 | 22.32 | 23.62 | -8.93 | -0.82 | 10.23 | 20.24 | 21.99 | -3.65 | 1.26 | 9.66 | 18.07 | 23.61 | -2.09 | -0.33 | 9.46 | 17.91 | 19.81 |
| 2 | 3.62 | 7.24 | 14.22 | 26.67 | 29.07 | 0.18 | 3.59 | 12.54 | 23.14 | 24.85 | -3.02 | 4.17 | 13.17 | 20.54 | 23.16 | 2.52 | 5.13 | 12.32 | 20.77 | 25.91 | 2.26 | 2.92 | 11.03 | 18.85 | 20.66 |
| 3 | 7.05 | 10.08 | 15.80 | 28.20 | 30.90 | 3.86 | 6.89 | 14.68 | 24.20 | 26.91 | 2.24 | 6.64 | 16.12 | 22.56 | 25.29 | 6.43 | 7.20 | 14.25 | 23.16 | 28.54 | 2.69 | 6.44 | 13.55 | 20.73 | 21.78 |
| 4 | 9.56 | 11.40 | 18.77 | 30.28 | 31.45 | 6.52 | 9.39 | 17.06 | 26.02 | 29.36 | 6.25 | 8.63 | 18.23 | 24.25 | 28.31 | 8.32 | 9.17 | 17.00 | 26.26 | 31.31 | 3.86 | 8.54 | 15.24 | 22.49 | 25.01 |
| 5 | 11.84 | 13.86 | 21.34 | 31.59 | 33.25 | 8.52 | 11.53 | 19.08 | 27.78 | 30.84 | 8.16 | 9.97 | 19.48 | 26.90 | 31.40 | 9.79 | 11.39 | 19.56 | 29.68 | 33.13 | 5.83 | 9.62 | 16.98 | 25.34 | 27.88 |
| 6 | 14.90 | 16.20 | 23.81 | 32.84 | 34.50 | 11.11 | 13.76 | 21.12 | 29.63 | 32.91 | 10.25 | 12.59 | 22.37 | 29.61 | 33.91 | 11.36 | 13.45 | 21.24 | 32.26 | 34.11 | 8.42 | 10.30 | 19.22 | 28.17 | 29.93 |
| 7 | 17.80 | 19.03 | 25.92 | 33.84 | 36.67 | 13.59 | 15.40 | 23.74 | 31.62 | 34.29 | 12.63 | 15.37 | 24.15 | 32.52 | 35.88 | 12.87 | 15.54 | 23.46 | 33.97 | 36.46 | 9.59 | 12.33 | 21.14 | 30.65 | 31.55 |
| 8 | 20.73 | 21.73 | 29.00 | 36.25 | 38.56 | 15.01 | 17.35 | 25.98 | 33.96 | 36.34 | 13.88 | 18.76 | 26.34 | 34.54 | 37.77 | 15.27 | 17.98 | 25.07 | 36.38 | 38.89 | 9.94 | 13.35 | 22.89 | 33.19 | 34.78 |
| 9 | 22.62 | 23.94 | 30.77 | 38.97 | 40.52 | 16.32 | 19.00 | 27.87 | 36.23 | 38.64 | 15.31 | 20.91 | 27.70 | 37.03 | 39.92 | 16.45 | 19.68 | 27.33 | 38.42 | 40.00 | 11.92 | 15.66 | 24.37 | 35.39 | 36.29 |
| 10 | 23.83 | 25.70 | 33.34 | 40.93 | 41.52 | 17.97 | 20.00 | 29.76 | 38.47 | 41.32 | 16.81 | 24.05 | 29.72 | 38.31 | 42.58 | 18.02 | 20.74 | 28.29 | 39.07 | 41.81 | 13.59 | 17.08 | 27.19 | 36.83 | 38.08 |
| 11 | 25.32 | 26.98 | 35.38 | 41.86 | 43.21 | 19.52 | 21.46 | 31.63 | 40.57 | 43.76 | 18.20 | 24.60 | 31.08 | 40.01 | 45.57 | 19.97 | 22.47 | 30.78 | 40.48 | 42.85 | 16.43 | 18.92 | 29.24 | 38.80 | 39.78 |
| 12 | 25.95 | 28.25 | 37.11 | 43.77 | 45.38 | 20.68 | 23.47 | 33.50 | 43.19 | 46.05 | 20.14 | 24.70 | 32.63 | 42.29 | 47.71 | 21.34 | 23.38 | 32.40 | 41.55 | 44.95 | 18.29 | 20.73 | 31.22 | 40.29 | 41.98 |
| 13 | 26.00 | 29.01 | 37.74 | 46.45 | 47.95 | 20.86 | 25.25 | 35.39 | 45.89 | 49.46 | 21.94 | 25.24 | 34.87 | 43.48 | 48.78 | 23.43 | 24.17 | 33.91 | 42.42 | 46.71 | 20.37 | 22.15 | 31.60 | 41.97 | 44.37 |
| 14 | 26.47 | 29.60 | 39.73 | 48.85 | 50.99 | 21.79 | 26.44 | 36.54 | 48.05 | 51.16 | 22.90 | 26.08 | 36.89 | 45.25 | 49.99 | 24.37 | 25.75 | 35.10 | 42.94 | 48.01 | 21.75 | 23.23 | 32.76 | 43.99 | 46.71 |
| 15 | 27.32 | 30.08 | 40.71 | 51.40 | 53.50 | 22.71 | 28.05 | 37.99 | 49.16 | 53.41 | 23.59 | 27.26 | 38.20 | 47.74 | 51.24 | 25.32 | 27.63 | 36.62 | 43.74 | 48.35 | 23.01 | 24.49 | 33.58 | 45.94 | 49.12 |
| 16 | 28.34 | 31.09 | 42.38 | 53.51 | 55.71 | 24.79 | 29.24 | 39.79 | 50.51 | 55.82 | 25.43 | 28.33 | 39.81 | 49.89 | 51.81 | 26.32 | 27.65 | 37.72 | 45.98 | 48.30 | 24.09 | 24.58 | 34.37 | 47.25 | 50.25 |
| 17 | 29.13 | 32.57 | 43.67 | 55.41 | 57.89 | 26.54 | 29.30 | 41.45 | 52.55 | 57.37 | 26.06 | 28.86 | 41.13 | 51.70 | 53.44 | 27.09 | 28.27 | 39.15 | 46.89 | 49.45 | 23.67 | 25.20 | 36.34 | 48.09 | 50.45 |
| 18 | 30.34 | 32.94 | 45.80 | 57.90 | 60.85 | 26.08 | 30.42 | 42.93 | 55.18 | 58.42 | 27.78 | 28.94 | 41.00 | 52.91 | 55.77 | 27.31 | 29.15 | 39.43 | 48.41 | 50.53 | 22.58 | 25.62 | 37.25 | 48.18 | 49.55 |
| 19 | 31.31 | 33.61 | 46.64 | 59.45 | 62.87 | 25.85 | 30.81 | 44.95 | 57.06 | 59.49 | 24.03 | 29.08 | 41.61 | 54.60 | 58.52 | 27.07 | 28.44 | 39.27 | 50.36 | 51.77 | 20.68 | 24.94 | 38.69 | 47.88 | 49.42 |
| 20 | 30.39 | 34.34 | 47.34 | 60.81 | 63.32 | 25.58 | 29.94 | 45.99 | 58.27 | 61.26 | 20.51 | 29.28 | 41.13 | 55.13 | 60.38 | 24.75 | 28.47 | 39.76 | 51.96 | 53.77 | 19.25 | 23.68 | 39.53 | 48.08 | 50.15 |
| 21 | 30.22 | 34.55 | 47.60 | 61.64 | 64.18 | 24.52 | 28.77 | 46.62 | 59.57 | 62.30 | 18.36 | 28.71 | 42.24 | 55.31 | 61.64 | 21.95 | 28.48 | 39.93 | 52.77 | 56.21 | 17.56 | 21.22 | 39.56 | 48.19 | 50.76 |
| 22 | 29.19 | 32.75 | 47.87 | 62.12 | 65.21 | 22.53 | 27.66 | 47.26 | 60.80 | 63.16 | 16.77 | 28.01 | 42.55 | 55.93 | 62.42 | 19.89 | 28.26 | 40.65 | 53.51 | 57.57 | 16.00 | 19.59 | 39.79 | 48.58 | 50.82 |
| 23 | 28.41 | 33.25 | 47.97 | 63.28 | 65.84 | 21.75 | 27.54 | 47.83 | 61.47 | 63.79 | 15.80 | 27.55 | 42.76 | 56.31 | 62.88 | 18.55 | 28.04 | 41.41 | 54.08 | 58.31 | 14.99 | 19.01 | 39.73 | 49.44 | 50.83 |
| 24 | 27.78 | 33.65 | 47.92 | 63.66 | 66.18 | 21.37 | 27.50 | 48.17 | 61.82 | 64.12 | 15.26 | 27.30 | 43.12 | 56.46 | 63.14 | 17.79 | 27.92 | 41.55 | 54.41 | 58.72 | 14.44 | 18.69 | 39.90 | 49.93 | 51.24 |

FS, fractional shortening. P₅, 5%; P₁₀, 10%; P₅₀, 50%; P₉₀, 90%; P₉₅, 95%.

Table S15 Reference values for FS in right ventricular segments

| Segment | 20–23 ⁺⁶ W | | | | | 24–27 ⁺⁶ W | | | | | 28–31 ⁺⁶ W | | | | | 32–36 ⁺⁶ W | | | | | 37–40 ⁺⁶ W | | | | |
|---------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|-----------------|-----------------|-----------------|
| | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ | P ₅ | P ₁₀ | P ₅₀ | P ₉₀ | P ₉₅ |
| 1 | -1.99 | 0.59 | 15.70 | 25.22 | 26.64 | 1.56 | 4.06 | 14.26 | 24.32 | 26.29 | -5.83 | -3.98 | 11.79 | 18.87 | 22.84 | -8.10 | -1.40 | 9.64 | 21.39 | 22.28 | -0.40 | 3.25 | 10.34 | 18.44 | 24.23 |
| 2 | 3.29 | 4.83 | 18.15 | 26.25 | 27.66 | 5.89 | 7.25 | 16.05 | 25.59 | 27.80 | -1.34 | 1.55 | 15.15 | 22.45 | 25.41 | -3.56 | 2.30 | 13.33 | 23.07 | 23.37 | 3.17 | 5.47 | 13.31 | 20.18 | 25.36 |
| 3 | 6.27 | 10.51 | 19.84 | 27.30 | 29.14 | 8.22 | 9.77 | 18.37 | 26.41 | 29.38 | 3.00 | 7.11 | 17.53 | 24.50 | 27.85 | 1.48 | 3.48 | 15.98 | 24.63 | 26.18 | 6.39 | 7.50 | 16.53 | 24.33 | 26.11 |
| 4 | 9.16 | 13.22 | 21.22 | 29.31 | 31.04 | 9.56 | 12.00 | 20.02 | 28.39 | 30.25 | 6.30 | 9.97 | 18.88 | 27.92 | 29.33 | 3.71 | 8.01 | 18.17 | 26.04 | 28.44 | 6.80 | 9.69 | 19.00 | 27.38 | 28.20 |
| 5 | 12.68 | 14.88 | 22.40 | 31.42 | 33.34 | 11.01 | 13.16 | 21.70 | 30.16 | 32.08 | 8.89 | 11.72 | 20.21 | 30.34 | 31.33 | 6.32 | 11.21 | 19.10 | 27.66 | 31.28 | 7.87 | 11.42 | 20.50 | 28.74 | 31.06 |
| 6 | 14.84 | 16.61 | 24.25 | 32.02 | 34.43 | 12.20 | 14.22 | 22.91 | 31.02 | 33.05 | 10.25 | 11.88 | 21.54 | 31.88 | 32.87 | 8.54 | 12.83 | 20.36 | 29.11 | 31.16 | 8.50 | 12.92 | 21.20 | 30.57 | 32.14 |
| 7 | 15.44 | 17.55 | 25.05 | 32.40 | 34.42 | 13.15 | 15.34 | 23.91 | 31.78 | 33.90 | 11.72 | 12.33 | 22.23 | 32.46 | 33.93 | 10.55 | 13.61 | 21.14 | 29.91 | 31.72 | 8.30 | 13.89 | 21.58 | 30.98 | 33.15 |
| 8 | 16.16 | 17.50 | 25.19 | 33.46 | 35.15 | 13.46 | 15.89 | 24.23 | 32.62 | 34.61 | 12.99 | 13.43 | 22.57 | 32.23 | 34.89 | 11.30 | 14.41 | 21.27 | 30.65 | 32.77 | 9.83 | 13.80 | 22.85 | 31.77 | 33.61 |
| 9 | 15.22 | 18.51 | 25.62 | 34.42 | 35.39 | 13.81 | 16.66 | 24.06 | 33.40 | 35.56 | 14.10 | 15.06 | 23.17 | 31.91 | 35.46 | 12.30 | 15.45 | 21.98 | 31.21 | 33.46 | 11.86 | 13.81 | 23.34 | 32.61 | 33.65 |
| 10 | 15.71 | 18.96 | 26.22 | 34.94 | 36.51 | 13.68 | 17.51 | 24.31 | 33.66 | 36.17 | 15.17 | 16.72 | 23.10 | 33.53 | 36.51 | 12.79 | 16.26 | 21.83 | 31.97 | 34.39 | 12.00 | 15.68 | 23.78 | 32.68 | 33.69 |
| 11 | 16.37 | 19.13 | 25.81 | 35.97 | 37.80 | 14.70 | 17.46 | 24.68 | 33.53 | 37.08 | 16.23 | 17.28 | 23.45 | 34.99 | 36.40 | 13.69 | 16.73 | 22.50 | 32.30 | 34.11 | 12.35 | 16.27 | 24.23 | 33.05 | 34.35 |
| 12 | 17.07 | 19.37 | 25.87 | 36.27 | 38.39 | 14.87 | 17.65 | 24.99 | 34.07 | 37.57 | 15.24 | 17.47 | 24.13 | 34.62 | 36.88 | 13.54 | 16.61 | 22.74 | 32.75 | 33.47 | 12.84 | 16.23 | 24.73 | 33.12 | 34.87 |
| 13 | 16.80 | 19.93 | 26.37 | 36.11 | 39.28 | 15.44 | 17.28 | 25.35 | 35.30 | 37.34 | 13.38 | 17.23 | 24.50 | 35.27 | 37.06 | 13.59 | 16.38 | 23.03 | 32.93 | 33.46 | 13.29 | 15.36 | 25.77 | 33.33 | 35.04 |
| 14 | 16.69 | 20.29 | 26.90 | 37.33 | 39.11 | 14.98 | 16.74 | 26.03 | 36.12 | 37.82 | 13.64 | 16.95 | 25.34 | 36.43 | 37.17 | 13.41 | 15.75 | 23.79 | 32.74 | 34.03 | 13.74 | 15.60 | 26.56 | 34.64 | 34.88 |
| 15 | 15.87 | 20.21 | 28.04 | 37.15 | 39.31 | 14.41 | 16.12 | 27.10 | 37.49 | 38.78 | 13.00 | 16.80 | 25.52 | 36.90 | 37.55 | 12.40 | 15.37 | 24.37 | 33.28 | 34.53 | 14.50 | 15.48 | 27.86 | 35.01 | 36.00 |
| 16 | 14.98 | 20.37 | 28.52 | 37.86 | 40.66 | 12.98 | 15.88 | 28.14 | 38.26 | 40.34 | 12.98 | 16.80 | 25.49 | 36.46 | 38.51 | 11.87 | 16.33 | 24.46 | 33.17 | 35.39 | 14.11 | 15.53 | 28.19 | 36.19 | 36.86 |
| 17 | 12.51 | 20.07 | 28.12 | 36.95 | 41.42 | 12.09 | 15.05 | 28.63 | 38.74 | 42.02 | 11.87 | 16.24 | 25.03 | 36.34 | 39.09 | 12.57 | 16.67 | 24.44 | 35.11 | 36.14 | 12.09 | 14.75 | 28.24 | 35.99 | 37.59 |
| 18 | 11.27 | 19.11 | 27.60 | 37.22 | 41.93 | 11.40 | 13.27 | 28.24 | 38.86 | 42.48 | 11.74 | 15.23 | 24.89 | 36.58 | 38.89 | 12.95 | 15.31 | 23.84 | 35.18 | 36.41 | 9.43 | 13.33 | 28.83 | 35.39 | 37.37 |
| 19 | 9.64 | 15.88 | 27.10 | 37.55 | 41.85 | 10.10 | 13.41 | 27.30 | 39.23 | 43.28 | 9.61 | 13.70 | 24.59 | 37.70 | 38.80 | 10.13 | 13.96 | 22.91 | 35.59 | 36.44 | 7.26 | 8.33 | 27.17 | 36.02 | 37.23 |
| 20 | 8.89 | 10.86 | 26.27 | 37.69 | 41.06 | 7.16 | 11.93 | 25.74 | 39.64 | 45.07 | 7.16 | 12.05 | 23.47 | 36.84 | 39.13 | 10.70 | 12.25 | 22.07 | 35.44 | 37.08 | 2.48 | 6.66 | 25.85 | 36.46 | 37.63 |
| 21 | 2.81 | 8.28 | 25.68 | 37.19 | 41.18 | 4.59 | 8.73 | 25.05 | 40.92 | 45.07 | 7.09 | 9.00 | 23.32 | 36.38 | 40.25 | 8.21 | 11.24 | 21.30 | 35.24 | 37.47 | -2.35 | 5.07 | 24.85 | 36.44 | 38.51 |
| 22 | -3.67 | 5.50 | 24.54 | 37.95 | 41.30 | 0.50 | 6.42 | 24.17 | 41.81 | 45.32 | 5.62 | 7.50 | 23.16 | 36.59 | 41.03 | 5.53 | 9.12 | 20.79 | 35.55 | 37.71 | -6.19 | 1.68 | 24.29 | 36.58 | 39.19 |
| 23 | -8.21 | 3.06 | 23.71 | 38.52 | 41.46 | -2.29 | 4.34 | 23.59 | 42.30 | 46.04 | 3.63 | 5.07 | 22.42 | 37.12 | 41.53 | 3.24 | 7.50 | 20.52 | 35.81 | 37.86 | -8.98 | -2.12 | 24.28 | 36.85 | 39.61 |
| 24 | -10.30 | 1.63 | 22.79 | 38.83 | 41.55 | -3.38 | 4.08 | 23.34 | 42.12 | 46.38 | 2.45 | 4.38 | 22.01 | 37.40 | 41.81 | 1.37 | 6.48 | 20.39 | 35.95 | 37.94 | -10.82 | -4.66 | 24.19 | 37.01 | 39.85 |

FS, fractional shortening. P₅, 5%; P₁₀, 10%; P₅₀, 50%; P₉₀, 90%; P₉₅, 95%.