

**Table2. Diagnostic accuracy of echocardiographic variablesfor the detection of CA in patients with systemic AL amyloidosis (upper panel) and in patients with Increased Wall Thickness (lower panel).**

| Systemic AL amyloidosis      |                  |         |                     |                     |                 |                 |
|------------------------------|------------------|---------|---------------------|---------------------|-----------------|-----------------|
|                              | AUC<br>(95% CI)  | Cut off | Sens, %<br>(95% CI) | Spec, %<br>(95% CI) | +LR<br>(95% CI) | -LR<br>(95% CI) |
| <b>NT-proBNP, ng/mL</b>      | 0.85 (0.75-0.81) | >1302   | 75 (69-80)          | 81 (74-87)          | 3.99 (2.9-5.5)  | 0.31 (0.2-0.4)  |
| <b>IVSd, mm</b>              | 0.85 (0.82-0.88) | > 13    | 72 (67-77)          | 87 (81-91)          | 5.36 (3.6-7.9)  | 0.33 (0.3-0.4)  |
| <b>PWTd, mm</b>              | 0.85 (0.82-0.88) | >13     | 76 (71-80)          | 84 (78-89)          | 4.82 (3.4-6-8)  | 0.29 (0.2-0.4)  |
| <b>LVEDD, mm</b>             | 0.68 (0.64-0.72) | ≤ 42    | 50 (44-55)          | 80 (73-85)          | 2.44 (1.8-3.3)  | 0.63 (0.6-0.7)  |
| <b>RWT</b>                   | 0.86 (0.84-0.90) | > 0.52  | 85 (80-88)          | 75 (68-81)          | 3.39 (2.6-4.4)  | 0.20 (0.2-0.3)  |
| <b>LVEDV, mL</b>             | 0.51 (0.47-0.58) | ≤ 65    | 53 (47-60)          | 56 (45-67)          | 1.21 (0.9-1.6)  | 0.83 (0.7-1.0)  |
| <b>LVESV, mL</b>             | 0.58 (0.52-0.63) | >36     | 36 (30-43)          | 82 (72-90)          | 2.04 (1.3-3.3)  | 0.77 (0.7-0.9)  |
| <b>LVMi, g/m<sup>2</sup></b> | 0.75 (0.70-0.78) | >125    | 57 (51-62)          | 82 (75-88)          | 3.11 (2.2-4.4)  | 0.53 (0.5-0.6)  |
| <b>MCF</b>                   | 0.75 (0.70-0.80) | ≤ 0.15  | 62 (56-68)          | 78 (68-87)          | 2.86 (1.9-4.4)  | 0.48 (0.4-0.6)  |
| <b>LAA, cm<sup>2</sup></b>   | 0.69 (0.64-0.73) | > 19    | 73 (68-78)          | 58 (49-67)          | 1.74 (1.4-2.2)  | 0.46 (0.4-0.6)  |
| <b>LVEF, %</b>               | 0.70 (0.66-0.74) | ≤ 60    | 67 (60-74)          | 67 (60-74)          | 2.06 (1.6-2.6)  | 0.49 (0.4-0.6)  |
| <b>MAPSE, mm</b>             | 0.81 (0.77-0.85) | ≤ 11    | 65 (60-70)          | 84 (78-89)          | 4.14 (2.9-5.9)  | 0.41 (0.4-0.5)  |
| <b>TAPSE, mm</b>             | 0.74 (0.70-0.78) | ≤ 19    | 67 (61-72)          | 76 (69-82)          | 2.78 (2.1-3.7)  | 0.44 (0.4-0.5)  |
| <b>SV, mL</b>                | 0.61 (0.55-0.66) | ≤ 39    | 68 (62-74)          | 54 (42-65)          | 1.46 (1.1-1.9)  | 0.60 (0.5-0.8)  |
| <b>E/A</b>                   | 0.75 (0.71-0.79) | > 1.2   | 60 (55-66)          | 84 (78-90)          | 3.85 (2.7-5.6)  | 0.47 (0.4-0.5)  |
| <b>DT, ms</b>                | 0.72 (0.67-0.76) | ≤ 225   | 78 (73-82)          | 58 (50-66)          | 1.86 (1.5-2.3)  | 0.38 (0.3-0.5)  |
| <b>E/e'</b>                  | 0.81 (0.78-0.85) | >10     | 70 (64-75)          | 81 (74-86)          | 3.60 (2.6-4.9)  | 0.38 (0.3-0.5)  |
| <b>LS, %</b>                 | 0.82 (0.78-0.85) | ≥ -14   | 63 (57-68)          | 87 (81-91)          | 4.68 (3.2-6.9)  | 0.43 (0.4-0.5)  |
| <b>SAB</b>                   | 0.73 (0.69-0.77) | > 3.1   | 51 (45-56)          | 88 (82-92)          | 4.13 (2.7-6.3)  | 0.56 (0.5-0.6)  |
| <b>RALS</b>                  | 0.75 (0.71-0.79) | > 1     | 58 (53-64)          | 83 (77-88)          | 3.47 (2.5-4.9)  | 0.50 (0.4-0.6)  |
| <b>EFSR</b>                  | 0.78 (0.74-0.82) | > 3.8   | 71 (66-76)          | 73 (66-80)          | 2.76 (2.1-3.4)  | 0.39 (0.3-0.5)  |
| <b>AL Score</b>              | 0.90 (0.87-0.92) | ≥ 3     | 83 (79-87)          | 85 (78-90)          | 5.45 (3.8-7.8)  | 0.20 (0.2-0.3)  |

| Increased Wall Thickness     |                  |         |                     |                     |                 |                 |
|------------------------------|------------------|---------|---------------------|---------------------|-----------------|-----------------|
|                              | AUC<br>(95% CI)  | Cut off | Sens, %<br>(95% CI) | Spec, %<br>(95% CI) | +LR<br>(95% CI) | -LR<br>(95% CI) |
| <b>NT-proBNP, ng/mL</b>      | 0.74 (0.70-0.77) | > 1452  | 76 (72-80)          | 62 (55-68)          | 1.98 (1.7-2.3)  | 0.39 (0.3-0.5)  |
| <b>IVSd, mm</b>              | 0.77 (0.74-0.80) | > 15    | 64 (60-68)          | 79 (74-83)          | 3.08 (2.5-3.8)  | 0.45 (0.4-0.5)  |
| <b>PWTd, mm</b>              | 0.83 (0.81-0.85) | > 13    | 82 (79-85)          | 73 (68-78)          | 3.02 (2.5-3.6)  | 0.25 (0.2-0.3)  |
| <b>LVEDD, mm</b>             | 0.64 (0.61-0.67) | ≤ 46    | 65 (61-69)          | 57 (52-63)          | 1.52 (1.3-1.7)  | 0.61 (0.5-0.7)  |
| <b>RWT</b>                   | 0.83 (0.80-0.85) | > 0.6   | 79 (76-82)          | 72 (67-77)          | 2.84 (2.4-3.4)  | 0.29 (0.2-0.3)  |
| <b>LVEDV, mL</b>             | 0.59 (0.55-0.63) | ≤ 79    | 65 (61-69)          | 52 (46-59)          | 1.37 (1.2-1.6)  | 0.67 (0.6-0.8)  |
| <b>LVESV, mL</b>             | 0.50 (0.47-0.54) | > 52    | 17 (14-21)          | 73 (68-79)          | 0.64 (0.5-0.9)  | 1.13 (1.0-1.2)  |
| <b>LVMi, g/m<sup>2</sup></b> | 0.68 (0.64-0.71) | > 141   | 64 (61-68)          | 65 (59-70)          | 1.84 (1.6-2.2)  | 0.55 (0.5-0.6)  |
| <b>MCF</b>                   | 0.74 (0.70-0.76) | ≤ 0.13  | 62 (58-67)          | 75 (69-80)          | 2.45 (2.0-3.1)  | 0.51 (0.4-0.6)  |
| <b>LAA, cm<sup>2</sup></b>   | 0.56 (0.52-0.59) | > 23    | 68 (64-72)          | 45 (39-51)          | 1.24 (1.1-1.4)  | 0.71 (0.6-0.8)  |
| <b>LVEF, %</b>               | 0.60 (0.57-0.63) | ≤ 57    | 67 (63-71)          | 51 (46-57)          | 1.38 (1.2-1.6)  | 0.64 (0.5-0.7)  |
| <b>MAPSE, mm</b>             | 0.70 (0.67-0.73) | ≤ 11    | 72 (69-76)          | 60 (55-65)          | 1.82 (1.6-2.1)  | 0.46 (0.4-0.5)  |
| <b>TAPSE, mm</b>             | 0.70 (0.67-0.73) | ≤ 19    | 67 (64-71)          | 64 (58-69)          | 1.86 (1.6-2.2)  | 0.51 (0.4-0.6)  |
| <b>SV, mL</b>                | 0.66 (0.62-0.69) | ≤ 42    | 70 (66-74)          | 55 (49-62)          | 1.57 (1.3-1.8)  | 0.54 (0.5-0.6)  |
| <b>E/A</b>                   | 0.80 (0.77-0.83) | > 1.1   | 74 (70-78)          | 75 (70-81)          | 3.01 (2.4-3.7)  | 0.35 (0.3-0.4)  |
| <b>DT, ms</b>                | 0.57 (0.53-0.60) | ≤ 210   | 70 (66-73)          | 48 (42-54)          | 1.34 (1.2-1.5)  | 0.63 (0.5-0.7)  |
| <b>E/e'</b>                  | 0.69 (0.66-0.72) | >11     | 70 (66-74)          | 61 (56-67)          | 1.81 (1.6-2.1)  | 0.49 (0.4-0.6)  |
| <b>LS, %</b>                 | 0.69 (0.66-0.72) | ≥ -13   | 67 (63-71)          | 63 (57-68)          | 1.79 (1.5-2.1)  | 0.53 (0.5-0.6)  |
| <b>SAB</b>                   | 0.77 (0.74-0.80) | > 2.9   | 67 (63-71)          | 77 (72-81)          | 2.89 (2.4-3.5)  | 0.43 (0.4-0.5)  |
| <b>RALS</b>                  | 0.77 (0.75-0.80) | > 0.9   | 71 (67-74)          | 73 (68-78)          | 2.67 (2.2-3.2)  | 0.40 (0.3-0.5)  |
| <b>EFSR</b>                  | 0.67 (0.64-0.70) | > 4.3   | 62 (58-66)          | 65 (60-70)          | 1.77 (1.5-2.1)  | 0.59 (0.5-0.7)  |
| <b>IWT Score</b>             | 0.87 (0.85-0.90) | ≥ 6     | 78 (75-81)          | 79 (74-84)          | 3.75 (3.0-4.7)  | 0.28 (0.2-0.3)  |

AL amyloidosis=light chain amyloidosis; Increased Wall Thickness=IVSd or PWTd  $\geq$ 12mm; NT proBNP=N-terminal pro b-type natriuretic peptide; IVSd=interventricular septum in diastole; PWTd=posterior wall thickness in diastole; LVEDD=Left ventricular end diastolic volume; RWT=Relative wall thickness; LVEDV=Left ventricular end diastolic volume; LVESV=Left ventricular end systolic volume; LVMi=LV mass index; MCF=Myocardial contraction fraction; LAA=Left atrium area; LVEF=Left ventricular ejection fraction; MAPSE=Mitral annular plane systolic excursion; TAPSE=Tricuspid annular plane systolic excursion; SV=Stroke volume; E/A=E wave/A wave ratio; DT=Deceleration Time; E/e'=E wave/e'wave; LS=Longitudinal Strain; SAB=Systolic apex to base ratio; RALS=Relative apical longitudinal sparing; EFSR=Ejection fraction/LS ratio.