**Supplementary Materials:**

Supplementary table 1: Complete list of percentiles of BSL-23 mean scores.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Percentiles** | **BPD\_CAL** | **BPD\_VAL** | **CC** | **HC** |
| 1**%** | .087 | .391 | .000 | .000 |
| 2**%** | .261 | .522 | .043 | .000 |
| 3**%** | .304 | .652 | .080 | .000 |
| 4**%** | .391 | .696 | .087 | .000 |
| 5**%** | .522 | .696 | .087 | .000 |
| 6**%** | .652 | .826 | .087 | .000 |
| 7**%** | .652 | .913 | .130 | .000 |
| 8**%** | .739 | .913 | .174 | .000 |
| 9**%** | .739 | 1.000 | .217 | .000 |
| 10**%** | .783 | 1.087 | .217 | .000 |
| 11**%** | .826 | 1.174 | .261 | .000 |
| 12**%** | .826 | 1.217 | .261 | .000 |
| 13**%** | .913 | 1.261 | .261 | .000 |
| 14**%** | .957 | 1.304 | .261 | .000 |
| 15**%** | 1.000 | 1.366 | .304 | .000 |
| 16**%** | 1.043 | 1.435 | .304 | .000 |
| 17**%** | 1.043 | 1.478 | .304 | .000 |
| 18**%** | 1.043 | 1.522 | .304 | .000 |
| 19**%** | 1.087 | 1.565 | .304 | .000 |
| 20**%** | 1.130 | 1.565 | .320 | .000 |
| 21**%** | 1.174 | 1.609 | .348 | .000 |
| 22**%** | 1.217 | 1.652 | .348 | .000 |
| 23**%** | 1.217 | 1.652 | .435 | .000 |
| 24**%** | 1.217 | 1.696 | .435 | .000 |
| 25**%** | 1.261 | 1.701 | .476 | .000 |
| 26**%** | 1.261 | 1.739 | .478 | .000 |
| 27**%** | 1.348 | 1.783 | .522 | .000 |
| 28**%** | 1.391 | 1.798 | .522 | .000 |
| 29**%** | 1.391 | 1.870 | .565 | .000 |
| 30**%** | 1.435 | 1.913 | .565 | .000 |
| 31**%** | 1.478 | 1.913 | .589 | .000 |
| 32**%** | 1.522 | 1.957 | .609 | .000 |
| 33**%** | 1.565 | 2.000 | .609 | .000 |
| 34**%** | 1.565 | 2.043 | .609 | .043 |
| 35**%** | 1.609 | 2.043 | .624 | .043 |
| 36**%** | 1.609 | 2.087 | .652 | .043 |
| 37**%** | 1.609 | 2.130 | .652 | .043 |
| 38**%** | 1.652 | 2.130 | .652 | .043 |
| 39**%** | 1.652 | 2.130 | .696 | .043 |
| 40**%** | 1.652 | 2.174 | .696 | .043 |
| 41**%** | 1.670 | 2.217 | .697 | .043 |
| 42**%** | 1.696 | 2.217 | .711 | .043 |
| 43**%** | 1.696 | 2.261 | .739 | .043 |
| 44**%** | 1.739 | 2.261 | .739 | .043 |
| 45**%** | 1.739 | 2.304 | .754 | .043 |
| 46**%** | 1.739 | 2.348 | .783 | .043 |
| 47**%** | 1.783 | 2.348 | .783 | .043 |
| 48**%** | 1.783 | 2.391 | .826 | .043 |
| 49**%** | 1.870 | 2.391 | .826 | .043 |
| 50**%** | 1.870 | 2.407 | .848 | .043 |
| 51**%** | 1.885 | 2.435 | .870 | .043 |
| 52**%** | 1.957 | 2.435 | .913 | .043 |
| 53**%** | 2.000 | 2.435 | .920 | .043 |
| 54**%** | 2.043 | 2.478 | .928 | .087 |
| 55**%** | 2.087 | 2.522 | .957 | .087 |
| 56**%** | 2.087 | 2.522 | 1.000 | .087 |
| 57**%** | 2.087 | 2.565 | 1.043 | .087 |
| 58**%** | 2.087 | 2.602 | 1.043 | .087 |
| 59**%** | 2.130 | 2.609 | 1.087 | .087 |
| 60**%** | 2.130 | 2.652 | 1.130 | .087 |
| 61**%** | 2.174 | 2.652 | 1.174 | .087 |
| 62**%** | 2.174 | 2.696 | 1.217 | .087 |
| 63**%** | 2.174 | 2.696 | 1.233 | .087 |
| 64**%** | 2.217 | 2.783 | 1.261 | .087 |
| 65**%** | 2.217 | 2.826 | 1.261 | .087 |
| 66**%** | 2.261 | 2.870 | 1.304 | .087 |
| 67**%** | 2.304 | 2.870 | 1.304 | .130 |
| 68**%** | 2.304 | 2.870 | 1.391 | .130 |
| 69**%** | 2.348 | 2.913 | 1.435 | .130 |
| 70**%** | 2.348 | 2.913 | 1.478 | .130 |
| 71**%** | 2.391 | 2.957 | 1.478 | .130 |
| 72**%** | 2.391 | 3.000 | 1.478 | .130 |
| 73**%** | 2.391 | 3.000 | 1.565 | .130 |
| 74**%** | 2.391 | 3.043 | 1.609 | .174 |
| 75**%** | 2.435 | 3.043 | 1.674 | .174 |
| 76**%** | 2.435 | 3.087 | 1.696 | .174 |
| 77**%** | 2.478 | 3.087 | 1.739 | .174 |
| 78**%** | 2.478 | 3.087 | 1.739 | .174 |
| 79**%** | 2.522 | 3.130 | 1.754 | .174 |
| 80**%** | 2.565 | 3.130 | 1.798 | .174 |
| 81**%** | 2.652 | 3.130 | 1.826 | .174 |
| 82**%** | 2.739 | 3.174 | 1.870 | .217 |
| 83**%** | 2.783 | 3.174 | 1.913 | .217 |
| 84**%** | 2.783 | 3.217 | 1.913 | .217 |
| 85**%** | 2.826 | 3.217 | 2.000 | .217 |
| 86**%** | 2.826 | 3.261 | 2.000 | .217 |
| 87**%** | 2.870 | 3.304 | 2.043 | .261 |
| 88**%** | 2.870 | 3.304 | 2.087 | .261 |
| 89**%** | 2.913 | 3.348 | 2.217 | .304 |
| 90**%** | 2.913 | 3.391 | 2.261 | .304 |
| 91**%** | 2.957 | 3.435 | 2.304 | .348 |
| 92**%** | 2.957 | 3.478 | 2.363 | .348 |
| 93**%** | 3.000 | 3.478 | 2.435 | .391 |
| 94**%** | 3.043 | 3.522 | 2.519 | .391 |
| 95**%** | 3.087 | 3.565 | 2.624 | .478 |
| 96**%** | 3.217 | 3.609 | 2.696 | .478 |
| 97**%** | 3.217 | 3.652 | 2.826 | .609 |
| 98**%** | 3.304 | 3.739 | 2.870 | .696 |
| 99**%** | 3.478 | 3.783 | 3.304 | .783 |
| 100**%** | 3.565 | 4.000 | 3.435 | 1.304 |

Supplementary table 2: Youden’s Index and Coordinates of the ROC curve for BPD\_VAL vs HC.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sensitivity, Specificity & Youden's Index** | | | | |
|  | Positive if Greater Than or Equal To | Sensitivity | Specificity | Youden |
| 1 | ,0217 | 1,000 | ,331 | ,331 |
| 2 | ,0493 | 1,000 | ,534 | ,534 |
| 3 | ,0570 | 1,000 | ,537 | ,537 |
| 4 | ,0728 | 1,000 | ,539 | ,539 |
| 5 | ,1087 | 1,000 | ,660 | ,660 |
| 6 | ,1522 | ,997 | ,739 | ,736 |
| 7 | ,1957 | ,997 | ,817 | ,814 |
| 8 | ,2391 | ,994 | ,865 | ,859 |
| 9 | ,2826 | ,994 | ,888 | ,881 |
| 10 | ,3261 | ,994 | ,902 | ,895 |
| 11 | ,3696 | ,994 | ,930 | ,923 |
| 12 | ,4130 | ,987 | ,944 | ,931 |
| 13 | ,4541 | ,987 | ,949 | ,937 |
| 14 | ,4759 | ,984 | ,949 | ,934 |
| 15 | ,5000 | ,984 | ,961 | ,945 |
| 16 | ,5435 | ,978 | ,963 | ,941 |
| 17 | ,5870 | ,978 | ,966 | ,944 |
| 18 | ,6213 | ,972 | ,975 | ,946 |
| 19 | ,6430 | ,972 | ,978 | ,949 |
| 20 | ,6739 | ,965 | ,978 | ,943 |
| 21 | ,7174 | ,950 | ,980 | ,930 |
| 22 | ,7609 | ,946 | ,989 | ,935 |
| 23 | ,7902 | ,946 | ,992 | ,938 |
| 24 | ,8120 | ,943 | ,992 | ,935 |
| 25 | ,8478 | ,937 | ,992 | ,928 |
| 26 | ,8913 | ,931 | ,992 | ,922 |
| 27 | ,9348 | ,915 | ,992 | ,906 |
| 28 | ,9783 | ,915 | ,994 | ,909 |
| 29 | 1,0059 | ,909 | ,997 | ,906 |
| 30 | 1,0276 | ,905 | ,997 | ,903 |
| 31 | 1,0652 | ,902 | ,997 | ,899 |
| 32 | 1,1087 | ,899 | ,997 | ,896 |
| 33 | 1,1522 | ,893 | ,997 | ,890 |
| 34 | 1,1957 | ,880 | ,997 | ,877 |
| 35 | 1,2391 | ,877 | ,997 | ,874 |
| 36 | 1,2826 | ,861 | ,997 | ,858 |
| 37 | 1,3261 | ,855 | 1,000 | ,855 |
| 38 | 1,3567 | ,852 | 1,000 | ,852 |
| 39 | 1,3785 | ,849 | 1,000 | ,849 |
| 40 | 1,4130 | ,842 | 1,000 | ,842 |
| 41 | 1,4565 | ,833 | 1,000 | ,833 |
| 42 | 1,5000 | ,826 | 1,000 | ,826 |
| 43 | 1,5435 | ,814 | 1,000 | ,814 |
| 44 | 1,5870 | ,798 | 1,000 | ,798 |
| 45 | 1,6304 | ,789 | 1,000 | ,789 |
| 46 | 1,6739 | ,760 | 1,000 | ,760 |
| 47 | 1,6985 | ,751 | 1,000 | ,751 |
| 48 | 1,7202 | ,748 | 1,000 | ,748 |
| 49 | 1,7400 | ,738 | 1,000 | ,738 |
| 50 | 1,7476 | ,735 | 1,000 | ,735 |
| 51 | 1,7685 | ,732 | 1,000 | ,732 |
| 52 | 1,7902 | ,722 | 1,000 | ,722 |
| 53 | 1,8096 | ,719 | 1,000 | ,719 |
| 54 | 1,8237 | ,716 | 1,000 | ,716 |
| 55 | 1,8478 | ,713 | 1,000 | ,713 |
| 56 | 1,8913 | ,700 | 1,000 | ,700 |
| 57 | 1,9139 | ,688 | 1,000 | ,688 |
| 58 | 1,9357 | ,685 | 1,000 | ,685 |
| 59 | 1,9783 | ,672 | 1,000 | ,672 |
| 60 | 2,0217 | ,662 | 1,000 | ,662 |
| 61 | 2,0652 | ,650 | 1,000 | ,650 |
| 62 | 2,1087 | ,631 | 1,000 | ,631 |
| 63 | 2,1522 | ,606 | 1,000 | ,606 |
| 64 | 2,1815 | ,596 | 1,000 | ,596 |
| 65 | 2,2033 | ,593 | 1,000 | ,593 |
| 66 | 2,2391 | ,571 | 1,000 | ,571 |
| 67 | 2,2826 | ,555 | 1,000 | ,555 |
| 68 | 2,3261 | ,543 | 1,000 | ,543 |
| 69 | 2,3687 | ,530 | 1,000 | ,530 |
| 70 | 2,3904 | ,527 | 1,000 | ,527 |
| 71 | 2,3989 | ,502 | 1,000 | ,502 |
| 72 | 2,4091 | ,498 | 1,000 | ,498 |
| 73 | 2,4233 | ,495 | 1,000 | ,495 |
| 74 | 2,4565 | ,467 | 1,000 | ,467 |
| 75 | 2,5000 | ,451 | 1,000 | ,451 |
| 76 | 2,5435 | ,438 | 1,000 | ,438 |
| 77 | 2,5837 | ,423 | 1,000 | ,423 |
| 78 | 2,6054 | ,420 | 1,000 | ,420 |
| 79 | 2,6304 | ,401 | 1,000 | ,401 |
| 80 | 2,6739 | ,385 | 1,000 | ,385 |
| 81 | 2,7391 | ,366 | 1,000 | ,366 |
| 82 | 2,8043 | ,356 | 1,000 | ,356 |
| 83 | 2,8337 | ,347 | 1,000 | ,347 |
| 84 | 2,8554 | ,344 | 1,000 | ,344 |
| 85 | 2,8724 | ,319 | 1,000 | ,319 |
| 86 | 2,8783 | ,315 | 1,000 | ,315 |
| 87 | 2,8972 | ,312 | 1,000 | ,312 |
| 88 | 2,9348 | ,297 | 1,000 | ,297 |
| 89 | 2,9783 | ,281 | 1,000 | ,281 |
| 90 | 3,0217 | ,265 | 1,000 | ,265 |
| 91 | 3,0652 | ,249 | 1,000 | ,249 |
| 92 | 3,1087 | ,215 | 1,000 | ,215 |
| 93 | 3,1522 | ,189 | 1,000 | ,189 |
| 94 | 3,1957 | ,167 | 1,000 | ,167 |
| 95 | 3,2391 | ,148 | 1,000 | ,148 |
| 96 | 3,2826 | ,136 | 1,000 | ,136 |
| 97 | 3,3261 | ,117 | 1,000 | ,117 |
| 98 | 3,3596 | ,107 | 1,000 | ,107 |
| 99 | 3,3813 | ,104 | 1,000 | ,104 |
| 100 | 3,4130 | ,091 | 1,000 | ,091 |
| 101 | 3,4565 | ,088 | 1,000 | ,088 |
| 102 | 3,5000 | ,066 | 1,000 | ,066 |
| 103 | 3,5435 | ,054 | 1,000 | ,054 |
| 104 | 3,5870 | ,041 | 1,000 | ,041 |
| 105 | 3,6304 | ,035 | 1,000 | ,035 |
| 106 | 3,6739 | ,028 | 1,000 | ,028 |
| 107 | 3,7174 | ,025 | 1,000 | ,025 |
| 108 | 3,7467 | ,019 | 1,000 | ,019 |
| 109 | 3,7685 | ,016 | 1,000 | ,016 |
| 110 | 3,8043 | ,009 | 1,000 | ,009 |
| 111 | 3,9130 | ,006 | 1,000 | ,006 |

Supplementary table 3: Youden’s Index and Coordinates of the ROC curve for BPD\_VAL vs CC.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sensitivity, Specificity & Youden's Index** | | | | |
|  | Positive if Greater Than or Equal To | Sensitivity | Specificity | Youden |
| 1 | ,0217 | 1,000 | ,011 | ,011 |
| 2 | ,0507 | 1,000 | ,023 | ,023 |
| 3 | ,0691 | 1,000 | ,028 | ,028 |
| 4 | ,0837 | 1,000 | ,034 | ,034 |
| 5 | ,1087 | 1,000 | ,063 | ,063 |
| 6 | ,1522 | ,997 | ,074 | ,071 |
| 7 | ,1957 | ,997 | ,085 | ,082 |
| 8 | ,2274 | ,994 | ,102 | ,096 |
| 9 | ,2491 | ,994 | ,108 | ,102 |
| 10 | ,2685 | ,994 | ,142 | ,136 |
| 11 | ,2902 | ,994 | ,148 | ,141 |
| 12 | ,3120 | ,994 | ,199 | ,193 |
| 13 | ,3337 | ,994 | ,205 | ,198 |
| 14 | ,3696 | ,994 | ,227 | ,221 |
| 15 | ,4130 | ,987 | ,227 | ,215 |
| 16 | ,4541 | ,987 | ,244 | ,232 |
| 17 | ,4759 | ,984 | ,250 | ,234 |
| 18 | ,5000 | ,984 | ,267 | ,251 |
| 19 | ,5435 | ,978 | ,290 | ,268 |
| 20 | ,5748 | ,978 | ,301 | ,279 |
| 21 | ,5865 | ,978 | ,307 | ,285 |
| 22 | ,5987 | ,978 | ,313 | ,290 |
| 23 | ,6163 | ,972 | ,347 | ,318 |
| 24 | ,6380 | ,972 | ,358 | ,330 |
| 25 | ,6739 | ,965 | ,381 | ,346 |
| 26 | ,6965 | ,950 | ,409 | ,359 |
| 27 | ,7041 | ,950 | ,415 | ,364 |
| 28 | ,7250 | ,950 | ,420 | ,370 |
| 29 | ,7467 | ,946 | ,449 | ,395 |
| 30 | ,7685 | ,946 | ,455 | ,401 |
| 31 | ,7902 | ,946 | ,472 | ,418 |
| 32 | ,8120 | ,943 | ,472 | ,415 |
| 33 | ,8478 | ,937 | ,500 | ,437 |
| 34 | ,8913 | ,931 | ,511 | ,442 |
| 35 | ,9167 | ,915 | ,528 | ,443 |
| 36 | ,9243 | ,915 | ,534 | ,449 |
| 37 | ,9424 | ,915 | ,545 | ,460 |
| 38 | ,9783 | ,915 | ,551 | ,466 |
| 39 | 1,0059 | ,909 | ,563 | ,471 |
| 40 | 1,0276 | ,905 | ,563 | ,468 |
| 41 | 1,0652 | ,902 | ,585 | ,487 |
| 42 | 1,1087 | ,899 | ,597 | ,496 |
| 43 | 1,1422 | ,893 | ,602 | ,495 |
| 44 | 1,1639 | ,893 | ,608 | ,501 |
| 45 | 1,1957 | ,880 | ,619 | ,499 |
| 46 | 1,2250 | ,877 | ,625 | ,502 |
| 47 | 1,2443 | ,877 | ,631 | ,508 |
| 48 | 1,2585 | ,877 | ,636 | ,513 |
| 49 | 1,2826 | ,861 | ,659 | ,520 |
| 50 | 1,3261 | ,855 | ,670 | ,525 |
| 51 | 1,3567 | ,852 | ,676 | ,528 |
| 52 | 1,3785 | ,849 | ,676 | ,525 |
| 53 | 1,4130 | ,842 | ,688 | ,530 |
| 54 | 1,4552 | ,833 | ,693 | ,526 |
| 55 | 1,4770 | ,833 | ,699 | ,532 |
| 56 | 1,5000 | ,826 | ,722 | ,548 |
| 57 | 1,5435 | ,814 | ,727 | ,541 |
| 58 | 1,5870 | ,798 | ,739 | ,537 |
| 59 | 1,6304 | ,789 | ,744 | ,533 |
| 60 | 1,6739 | ,760 | ,750 | ,510 |
| 61 | 1,6985 | ,751 | ,767 | ,518 |
| 62 | 1,7202 | ,748 | ,767 | ,515 |
| 63 | 1,7400 | ,738 | ,784 | ,522 |
| 64 | 1,7476 | ,735 | ,784 | ,519 |
| 65 | 1,7685 | ,732 | ,795 | ,527 |
| 66 | 1,7902 | ,722 | ,795 | ,518 |
| 67 | 1,8096 | ,719 | ,801 | ,520 |
| 68 | 1,8237 | ,716 | ,801 | ,517 |
| 69 | 1,8478 | ,713 | ,813 | ,525 |
| 70 | 1,8772 | ,700 | ,824 | ,524 |
| 71 | 1,8989 | ,700 | ,830 | ,530 |
| 72 | 1,9139 | ,688 | ,841 | ,529 |
| 73 | 1,9357 | ,685 | ,841 | ,525 |
| 74 | 1,9783 | ,672 | ,847 | ,519 |
| 75 | 2,0217 | ,662 | ,864 | ,526 |
| 76 | 2,0652 | ,650 | ,875 | ,525 |
| 77 | 2,1087 | ,631 | ,881 | ,512 |
| 78 | 2,1522 | ,606 | ,886 | ,492 |
| 79 | 2,1815 | ,596 | ,886 | ,483 |
| 80 | 2,2033 | ,593 | ,886 | ,479 |
| 81 | 2,2391 | ,571 | ,898 | ,469 |
| 82 | 2,2698 | ,555 | ,903 | ,459 |
| 83 | 2,2915 | ,555 | ,909 | ,464 |
| 84 | 2,3261 | ,543 | ,915 | ,457 |
| 85 | 2,3554 | ,530 | ,915 | ,445 |
| 86 | 2,3763 | ,530 | ,920 | ,450 |
| 87 | 2,3904 | ,527 | ,920 | ,447 |
| 88 | 2,3989 | ,502 | ,926 | ,428 |
| 89 | 2,4091 | ,498 | ,926 | ,425 |
| 90 | 2,4233 | ,495 | ,926 | ,421 |
| 91 | 2,4565 | ,467 | ,932 | ,399 |
| 92 | 2,4987 | ,451 | ,938 | ,389 |
| 93 | 2,5204 | ,451 | ,943 | ,394 |
| 94 | 2,5435 | ,438 | ,943 | ,382 |
| 95 | 2,5837 | ,423 | ,949 | ,372 |
| 96 | 2,6054 | ,420 | ,949 | ,368 |
| 97 | 2,6163 | ,401 | ,949 | ,349 |
| 98 | 2,6380 | ,401 | ,955 | ,355 |
| 99 | 2,6739 | ,385 | ,955 | ,339 |
| 100 | 2,7174 | ,366 | ,960 | ,326 |
| 101 | 2,7609 | ,366 | ,966 | ,332 |
| 102 | 2,8043 | ,356 | ,966 | ,322 |
| 103 | 2,8337 | ,347 | ,977 | ,324 |
| 104 | 2,8554 | ,344 | ,977 | ,321 |
| 105 | 2,8724 | ,319 | ,983 | ,302 |
| 106 | 2,8783 | ,315 | ,983 | ,298 |
| 107 | 2,8972 | ,312 | ,983 | ,295 |
| 108 | 2,9348 | ,297 | ,983 | ,279 |
| 109 | 2,9783 | ,281 | ,983 | ,264 |
| 110 | 3,0217 | ,265 | ,989 | ,254 |
| 111 | 3,0652 | ,249 | ,989 | ,238 |
| 112 | 3,1087 | ,215 | ,989 | ,203 |
| 113 | 3,1522 | ,189 | ,989 | ,178 |
| 114 | 3,1957 | ,167 | ,989 | ,156 |
| 115 | 3,2391 | ,148 | ,989 | ,137 |
| 116 | 3,2826 | ,136 | ,989 | ,124 |
| 117 | 3,3261 | ,117 | ,994 | ,111 |
| 118 | 3,3596 | ,107 | ,994 | ,102 |
| 119 | 3,3813 | ,104 | ,994 | ,098 |
| 120 | 3,4130 | ,091 | ,994 | ,086 |
| 121 | 3,4565 | ,088 | 1,000 | ,088 |
| 122 | 3,5000 | ,066 | 1,000 | ,066 |
| 123 | 3,5435 | ,054 | 1,000 | ,054 |
| 124 | 3,5870 | ,041 | 1,000 | ,041 |
| 125 | 3,6304 | ,035 | 1,000 | ,035 |
| 126 | 3,6739 | ,028 | 1,000 | ,028 |
| 127 | 3,7174 | ,025 | 1,000 | ,025 |
| 128 | 3,7467 | ,019 | 1,000 | ,019 |
| 129 | 3,7685 | ,016 | 1,000 | ,016 |
| 130 | 3,8043 | ,009 | 1,000 | ,009 |
| 131 | 3,9130 | ,006 | 1,000 | ,006 |