**Supplementary Information for:** 

Assessing Balance in People with Bilateral Vestibulopathy using the Mini-

Balance Evaluation Systems Test (Mini-BESTest): Feasibility

**Comparison with Healthy Control Data** 

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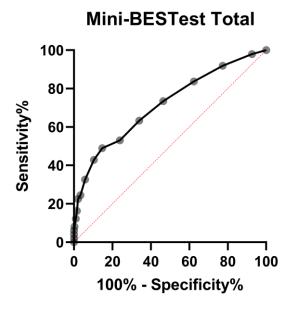
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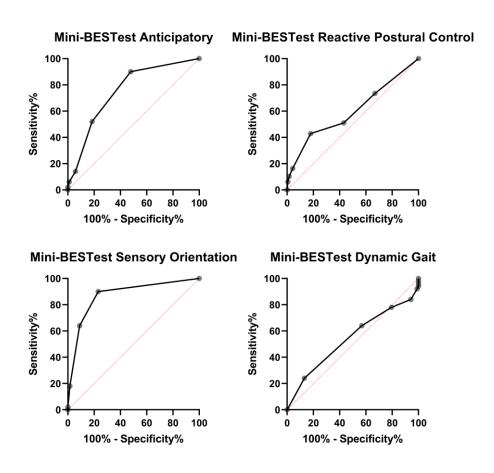
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**Supplementary Figure 1**: Receiver operator characteristic (ROC) curve for prediction of BVP based on the Mini-BESTest total score.



**Supplementary Figure 2**: Receiver operator characteristic (ROC) curves for prediction of BVP based on the Mini-BESTest sub scores.

## **Supplementary Table 1**: Receiver Operator Characteristic Curve Outcomes for the Mini-BESTest Total and Sub Scores

| Area under the ROC curve | Mini-BEST Total | Anticipatory | Reactive<br>Postural Control | Sensory<br>Orientation | Dynamic<br>Gait |
|--------------------------|-----------------|--------------|------------------------------|------------------------|-----------------|
| Area                     | 0.72            | 0.75         | 0.60                         | 0.87                   | 0.54            |
| Std. Error               | 0.043           | 0.036        | 0.050                        | 0.030                  | 0.050           |
| 95% CI                   | 0.63 to 0.80    | 0.68 to 0.82 | 0.50 to 0.70                 | 0.81 to 0.93           | 0.44 to 0.64    |
| P value                  | < 0.0001        | < 0.0001     | 0.0334                       | < 0.0001               | 0.3900          |
| Controls                 | 327             | 190          | 190                          | 190                    | 190             |
| Patients                 | 49              | 50           | 49                           | 50                     | 50              |

## Supplementary Table 2: Sensitivity and Specificity Outcomes for the Mini-BESTest Total Score

| Cut-off | Sensitivity % | 95% CI            | Specificity % | 95% CI           | Likelihood<br>ratio |
|---------|---------------|-------------------|---------------|------------------|---------------------|
| < 4.000 | 2.041         | 0.1047% to 10.69% | 100.0         | 98.84% to 100.0% |                     |
| < 8.500 | 4.082         | 0.7252% to 13.71% | 100.0         | 98.84% to 100.0% |                     |
| < 11.50 | 6.122         | 2.104% to 16.52%  | 100.0         | 98.84% to 100.0% |                     |
| < 14.50 | 8.163         | 3.220% to 19.19%  | 99.69         | 98.29% to 99.98% | 26.69               |
| < 15.50 | 12.24         | 5.735% to 24.24%  | 99.08         | 97.34% to 99.75% | 13.35               |
| < 16.50 | 16.33         | 8.513% to 29.04%  | 98.47         | 96.47% to 99.35% | 10.68               |
| < 17.50 | 22.45         | 13.02% to 35.88%  | 97.86         | 95.65% to 98.96% | 10.49               |
| < 18.50 | 24.49         | 14.60% to 38.09%  | 96.64         | 94.08% to 98.11% | 7.280               |
| < 19.50 | 32.65         | 21.21% to 46.62%  | 94.19         | 91.10% to 96.25% | 5.620               |
| < 20.50 | 42.86         | 30.02% to 56.73%  | 89.60         | 85.82% to 92.46% | 4.122               |
| < 21.50 | 48.98         | 35.58% to 62.53%  | 85.32         | 81.08% to 88.75% | 3.337               |
| < 22.50 | 53.06         | 39.38% to 66.30%  | 76.15         | 71.24% to 80.45% | 2.224               |
| < 23.50 | 63.27         | 49.27% to 75.33%  | 66.06         | 60.76% to 70.97% | 1.864               |
| < 24.50 | 73.47         | 59.74% to 83.79%  | 53.52         | 48.10% to 58.85% | 1.581               |
| < 25.50 | 83.67         | 70.96% to 91.49%  | 37.61         | 32.54% to 42.98% | 1.341               |
| < 26.50 | 91.84         | 80.81% to 96.78%  | 22.63         | 18.43% to 27.47% | 1.187               |
| < 27.50 | 97.96         | 89.31% to 99.90%  | 7.339         | 4.981% to 10.69% | 1.057               |

## Supplementary Table 3: Sensitivity and Specificity Outcomes for the Mini-BESTest Sub Scores

| Sub Score            | Cut-off  | Sensitivity % | 95% CI            | Specificity % | 95% CI            | Likelihood<br>ratio |
|----------------------|----------|---------------|-------------------|---------------|-------------------|---------------------|
| Anticipatory         | < 1.000  | 2.000         | 0.1026% to 10.50% | 100.0         | 98.02% to 100.0%  |                     |
|                      | < 2.500  | 6.000         | 1.635% to 16.22%  | 98.95         | 96.24% to 99.81%  | 5.700               |
|                      | < 3.500  | 14.00         | 6.951% to 26.19%  | 94.21         | 89.93% to 96.74%  | 2.418               |
|                      | < 4.500  | 52.00         | 38.51% to 65.20%  | 81.58         | 75.46% to 86.45%  | 2.823               |
|                      | < 5.500  | 90.00         | 78.64% to 95.65%  | 52.11         | 45.03% to 59.10%  | 1.879               |
|                      |          |               |                   |               |                   |                     |
| D. C                 | < 0.5000 | 6.122         | 2.104% to 16.52%  | 99.47         | 97.08% to 99.97%  | 11.63               |
|                      | < 1.500  | 10.20         | 4.438% to 21.76%  | 98.42         | 95.46% to 99.57%  | 6.463               |
| Reactive<br>Postural | < 2.500  | 16.33         | 8.513% to 29.04%  | 95.79         | 91.91% to 97.85%  | 3.878               |
| Control              | < 3.500  | 42.86         | 30.02% to 56.73%  | 82.11         | 76.04% to 86.90%  | 2.395               |
| Control              | < 4.500  | 51.02         | 37.47% to 64.42%  | 56.84         | 49.73% to 63.68%  | 1.182               |
|                      | < 5.500  | 73.47         | 59.74% to 83.79%  | 33.16         | 26.86% to 40.13%  | 1.099               |
|                      |          |               |                   |               |                   |                     |
|                      | < 1.500  | 2.000         | 0.1026% to 10.50% | 100.0         | 98.02% to 100.0%  |                     |
| Sensory              | < 3.500  | 18.00         | 9.770% to 30.80%  | 98.42         | 95.46% to 99.57%  | 11.40               |
| Orientation          | < 4.500  | 64.00         | 50.14% to 75.86%  | 91.05         | 86.14% to 94.34%  | 7.153               |
|                      | < 5.500  | 90.00         | 78.64% to 95.65%  | 76.84         | 70.35% to 82.27%  | 3.886               |
|                      |          |               |                   |               |                   |                     |
|                      | > 1.000  | 98.00         | 89.50% to 99.90%  | 0.000         | 0.000% to 1.982%  | 0.9800              |
|                      | > 2.500  | 96.00         | 86.54% to 99.29%  | 0.000         | 0.000% to 1.982%  | 0.9600              |
|                      | > 4.000  | 94.00         | 83.78% to 98.36%  | 0.000         | 0.000% to 1.982%  | 0.9400              |
| Dynamic              | > 5.500  | 92.00         | 81.16% to 96.85%  | 1.053         | 0.1870% to 3.756% | 0.9298              |
| Gait                 | > 6.500  | 84.00         | 71.49% to 91.66%  | 5.789         | 3.263% to 10.07%  | 0.8916              |
|                      | > 7.500  | 78.00         | 64.76% to 87.25%  | 20.53         | 15.39% to 26.83%  | 0.9815              |
|                      | > 8.500  | 64.00         | 50.14% to 75.86%  | 43.16         | 36.32% to 50.27%  | 1.126               |
|                      | > 9.500  | 24.00         | 14.30% to 37.41%  | 86.84         | 81.30% to 90.93%  | 1.824               |