**Supplementary Table 10. Model performance the on test (*n* = 30) and validation datasets (*n* = 27) for discriminating CEE negative, IPVD and HPS patients based on clinical data and serum level of *VEGF family members and their receptors***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Datasets** | **Class** | **Sens, %** | **Spec, %** | **PPV, %** | **NPV, %** | **Balanced accuracy, %** | **Multi-class AUCROC** | **Overall accuracy** |
| **Model 1: Merely clinical data as input** |
| Test | CEE neg | 44.4% | 71.4% | 40.0% | 75.0% | 57.9% | 0.510 | 0.333 (0.173-0.528) |
| IPVD | 33.3% | 71.4% | 33.3% | 71.4% | 52.4% |
| HPS | 25.0% | 55.6% | 27.3% | 52.6% | 40.3% |
| Validation | CEE neg | 25.0% | 72.7% | 57.1% | 40.0% | 48.9% | 0.776 | 0.222 (0.086-0.423) |
| IPVD | 25.0% | 60.9% | 10.0% | 82.4% | 42.9% |
| HPS | 14.3% | 55.0% | 10.0% | 64.7% | 34.6% |
| **Model 2: Merely serum level of VEGF family members and their receptors as input** |
| Test | CEE neg | 66.7% | 81.0% | 60.0% | 85.0% | 73.8% | 0.726 | 0.567 (0.374-0.745) |
| IPVD | 55.6% | 76.2% | 50.0% | 80.0% | 65.9% |
| HPS | 50.0% | 77.8% | 60.0% | 70.0% | 63.9% |
| Validation | CEE neg | 31.3% | 100.0% | 100.0% | 50.0% | 65.6% | 0.841 | 0.593 (0.388-0.776) |
| IPVD | 100.0% | 73.9% | 40.0% | 100.0% | 87.0% |
| HPS | 100.0% | 75.0% | 58.3% | 100.0% | 87.5% |
| **Model 3: Combination of clinical data and serum level of *VEGF family members and their receptors* as input** |
| Test | CEE neg | 66.7% | 81.0% | 60.0% | 85.0% | 73.8% | 0.645 | 0.6 (0.406-0.773) |
| IPVD | 55.6% | 81.0% | 55.6% | 81.0% | 68.3% |
| HPS | 58.3% | 77.8% | 63.6% | 73.7% | 68.1% |
| Validation | CEE neg | 25.0% | 81.8% | 66.7% | 42.9% | 53.4% | 0.824 | 0.444 (0.255- 0.647) |
| IPVD | 75.0% | 73.9% | 33.3% | 94.4% | 74.5% |
| HPS | 71.4% | 65.0% | 41.7% | 86.7% | 68.2% |
| **Model 4: sFlt-1, sFlt-1/PLGF, Age, PLGF and ALB selected by Boruta as input** |
| Test | CEE neg | 55.6% | 81.0% | 55.6% | 81.0% | 68.3% | 0.681 | 0.533 (0.343-0.717) |
| IPVD | 55.6% | 76.2% | 50.0% | 80.0% | 65.9% |
| HPS | 50.0% | 72.2% | 54.6% | 68.4% | 61.1% |
| Validation | CEE neg | 31.3% | 90.9% | 83.3% | 47.6% | 61.1% | 0.775 | 0.556 (0.353-0.745) |
| IPVD | 100.0% | 69.6% | 36.4% | 100.0% | 84.8% |
| HPS | 85.7% | 80.0% | 60.0% | 94.1% | 82.9% |

NPV, negative predicted value; PPV, positive predicted value; PLGF, placental growth factor; sFlt-1, soluble vegfr1; Sens, sensitivity; Spec, specificity; VEGF, vascular endothelial growth factor; VEGFR, VEGF receptor.