

**SUPPLEMENTAL TABLE 1. Original Logistic Regression Models for Pattern-based Classification Previously Derived from the North American Training Cohort (I)**

<b>Level-I: Idiopathic Parkinson's disease</b>				
<b>Parameter</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Chi-square</b>	<b>P-value</b>
Intercept	2.7953	0.6819	16.8051	<0.0001
PDRP	1.1642	0.2985	15.2128	<0.0001
MSARP	-1.4057	0.3562	15.5717	<0.0001
PSRP	-0.8382	0.4066	4.2494	0.0393

  

<b>Level-II: Multiple system atrophy</b>				
<b>Parameter</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Chi-square</b>	<b>P-value</b>
Intercept	-1.5199	2.5794	0.3472	0.5557
PDRP	-0.2136	0.6180	0.1195	0.7296
MSARP	2.7217	1.1537	5.5657	0.0183
PSRP	-2.9390	0.9138	10.3444	0.0013

  

<b>Progressive supranuclear palsy</b>				
<b>Parameter</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>Wald Chi-square</b>	<b>P-value</b>
Intercept	1.0546	2.5613	0.1695	0.6805
PDRP	-0.4497	0.4095	1.2056	0.2722
MSARP	-2.6894	1.1133	5.8357	0.0157
PSRP	3.0157	0.8505	12.5734	0.0004

## **SUPPLEMENTAL REFERENCE**

1. Tang C, Poston K, Eckert T, et al. Differential diagnosis of parkinsonism: a metabolic imaging study using pattern analysis. *Lancet Neurol.* 2010;9:149-158.