Example:IVD and Lymnode

Yi

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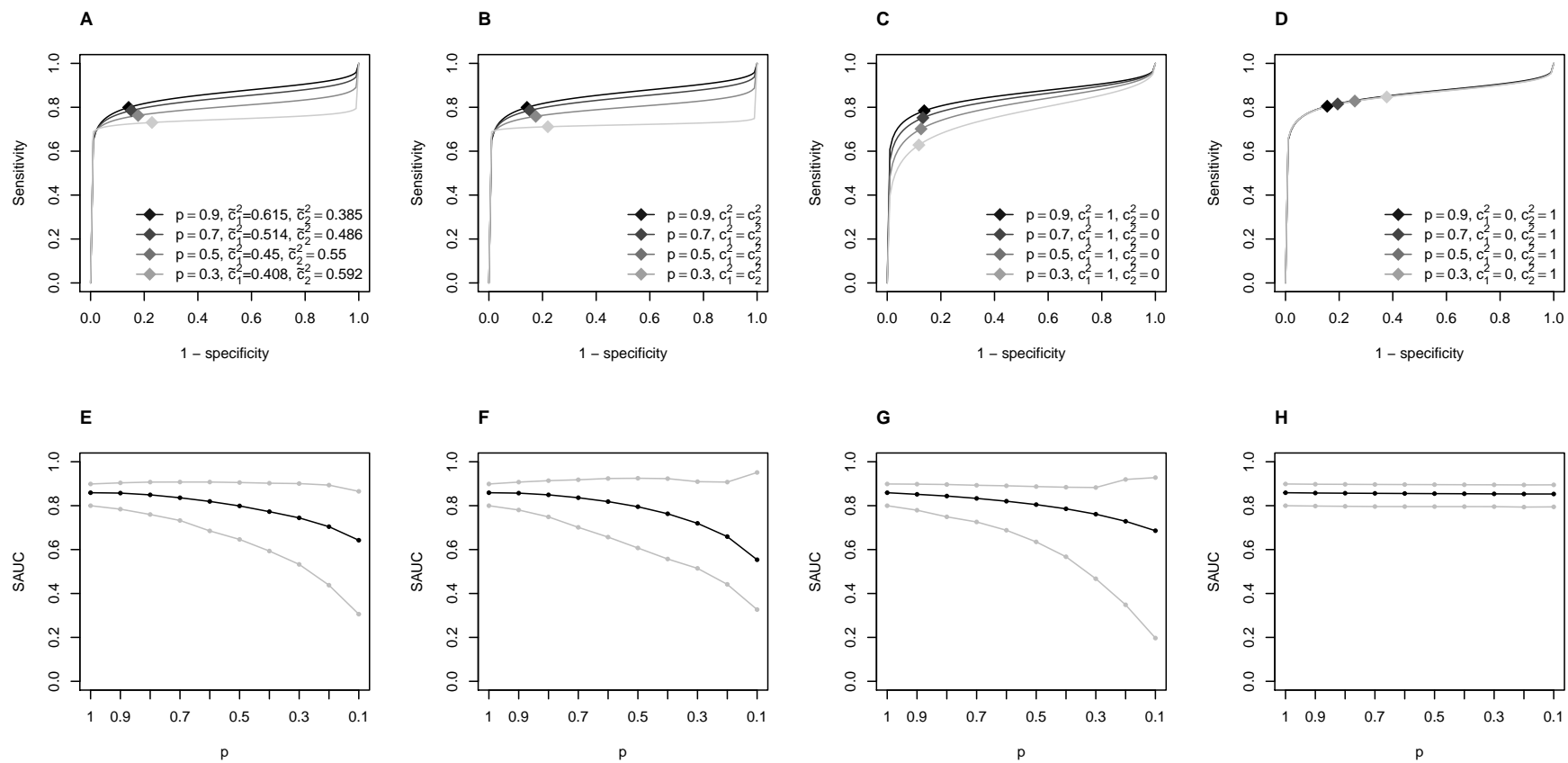# IVD

A

Sensitivity

1 − specificity

- ◆ $p = 0.9$, $\tilde{c}_1^2 = 0.615$, $\tilde{c}_2^2 = 0.385$
- ◆ $p = 0.7$, $\tilde{c}_1^2 = 0.514$, $\tilde{c}_2^2 = 0.486$
- ◆ $p = 0.5$, $\tilde{c}_1^2 = 0.45$, $\tilde{c}_2^2 = 0.55$
- ◆ $p = 0.3$, $\tilde{c}_1^2 = 0.408$, $\tilde{c}_2^2 = 0.592$

B

Sensitivity

1 − specificity

- ◆ $p = 0.9$, $c_1^2 = c_2^2$
- ◆ $p = 0.7$, $c_1^2 = c_2^2$
- ◆ $p = 0.5$, $c_1^2 = c_2^2$
- ◆ $p = 0.3$, $c_1^2 = c_2^2$

C

Sensitivity

1 − specificity

- ◆ $p = 0.9$, $c_1^2 = 1$, $c_2^2 = 0$
- ◆ $p = 0.7$, $c_1^2 = 1$, $c_2^2 = 0$
- ◆ $p = 0.5$, $c_1^2 = 1$, $c_2^2 = 0$
- ◆ $p = 0.3$, $c_1^2 = 1$, $c_2^2 = 0$

D

Sensitivity

1 − specificity

- ◆ $p = 0.9$, $c_1^2 = 0$, $c_2^2 = 1$
- ◆ $p = 0.7$, $c_1^2 = 0$, $c_2^2 = 1$
- ◆ $p = 0.5$, $c_1^2 = 0$, $c_2^2 = 1$
- ◆ $p = 0.3$, $c_1^2 = 0$, $c_2^2 = 1$

E

SAUC

p

F

SAUC

p

G

SAUC

p

H

SAUC

p

Table 1: IVD

p	Estimated c_1^2, c_2^2					$c_1^2 = c_2^2$			$c_1^2 = 1, c_2^2 = 0$			$c_1^2 = 0, c_2^2 = 1$		
	SAUC [95% CI]	c_1^2	c_2^2	se	sp	SAUC [95% CI]	se	sp	SAUC [95% CI]	se	sp	SAUC [95% CI]	se	sp
1.0	0.859 [0.800, 0.899]	0.50	0.50	0.80	0.86	0.859 [0.800, 0.899]	0.80	0.86	0.859 [0.800, 0.899]	0.80	0.86	0.859 [0.800, 0.899]	0.80	0.86
0.9	0.857 [0.784, 0.904]	0.61	0.39	0.80	0.86	0.857 [0.780, 0.907]	0.80	0.86	0.852 [0.779, 0.898]	0.78	0.86	0.858 [0.798, 0.898]	0.80	0.84
0.8	0.849 [0.760, 0.907]	0.56	0.44	0.79	0.85	0.849 [0.749, 0.914]	0.79	0.85	0.844 [0.749, 0.896]	0.77	0.86	0.857 [0.797, 0.897]	0.81	0.83
0.7	0.836 [0.733, 0.908]	0.51	0.49	0.79	0.85	0.836 [0.701, 0.918]	0.79	0.85	0.833 [0.726, 0.893]	0.75	0.87	0.856 [0.796, 0.897]	0.82	0.81
0.6	0.819 [0.685, 0.908]	0.48	0.52	0.77	0.84	0.819 [0.657, 0.924]	0.77	0.84	0.820 [0.688, 0.891]	0.73	0.87	0.855 [0.796, 0.896]	0.82	0.78
0.5	0.799 [0.646, 0.905]	0.45	0.55	0.76	0.82	0.795 [0.607, 0.925]	0.76	0.83	0.805 [0.635, 0.887]	0.70	0.87	0.855 [0.796, 0.896]	0.83	0.74
0.4	0.773 [0.593, 0.902]	0.43	0.57	0.75	0.80	0.763 [0.557, 0.923]	0.74	0.81	0.786 [0.567, 0.884]	0.67	0.88	0.854 [0.796, 0.895]	0.84	0.69
0.3	0.744 [0.533, 0.901]	0.41	0.59	0.73	0.77	0.720 [0.514, 0.909]	0.71	0.78	0.761 [0.467, 0.883]	0.63	0.88	0.854 [0.796, 0.895]	0.85	0.62
0.2	0.704 [0.438, 0.894]	0.39	0.61	0.70	0.72	0.659 [0.442, 0.907]	0.67	0.74	0.729 [0.348, 0.919]	0.58	0.89	0.853 [0.794, 0.894]	0.86	0.52
0.1	0.643 [0.306, 0.865]	0.38	0.62	0.65	0.60	0.554 [0.327, 0.951]	0.58	0.64	0.686 [0.197, 0.928]	0.54	0.89	0.853 [0.795, 0.895]	0.87	0.40

Estimates

Lym
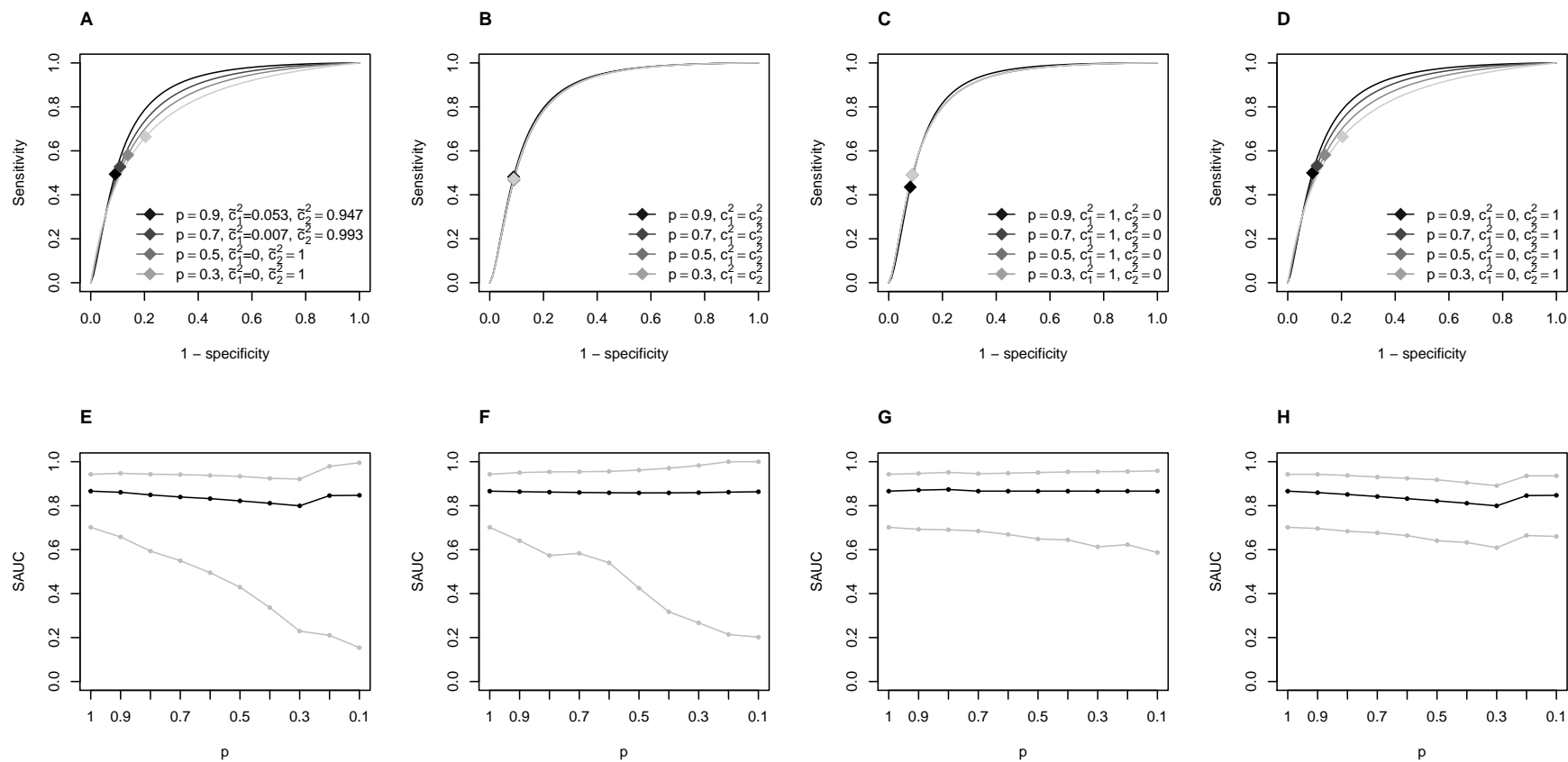
Table 2: Lym

p	Estimated c_1^2, c_2^2					$c_1^2 = c_2^2$			$c_1^2 = 1, c_2^2 = 0$			$c_1^2 = 0, c_2^2 = 1$		
	SAUC [95% CI]	c_1^2	c_2^2	se	sp	SAUC [95% CI]	se	sp	SAUC [95% CI]	se	sp	SAUC [95% CI]	se	sp
1.0	0.866 [0.702, 0.943]	0.50	0.50	0.49	0.91	0.866 [0.702, 0.943]	0.49	0.91	0.866 [0.702, 0.943]	0.49	0.91	0.866 [0.702, 0.943]	0.49	0.91
0.9	0.861 [0.658, 0.947]	0.05	0.95	0.49	0.91	0.864 [0.641, 0.951]	0.48	0.91	0.871 [0.692, 0.947]	0.44	0.92	0.859 [0.696, 0.943]	0.50	0.91
0.8	0.849 [0.593, 0.943]	0.03	0.97	0.51	0.90	0.862 [0.573, 0.954]	0.48	0.91	0.874 [0.690, 0.952]	0.37	0.93	0.851 [0.684, 0.938]	0.51	0.90
0.7	0.840 [0.550, 0.941]	0.01	0.99	0.53	0.89	0.860 [0.583, 0.954]	0.47	0.91	0.866 [0.685, 0.946]	0.49	0.91	0.842 [0.677, 0.930]	0.53	0.89
0.6	0.832 [0.495, 0.938]	0.00	1.00	0.55	0.88	0.859 [0.540, 0.956]	0.47	0.91	0.866 [0.669, 0.948]	0.49	0.91	0.832 [0.664, 0.924]	0.55	0.88
0.5	0.822 [0.429, 0.934]	0.00	1.00	0.58	0.86	0.858 [0.425, 0.962]	0.47	0.91	0.866 [0.648, 0.951]	0.49	0.91	0.822 [0.641, 0.918]	0.58	0.86
0.4	0.811 [0.336, 0.924]	0.00	1.00	0.62	0.84	0.858 [0.317, 0.970]	0.47	0.91	0.866 [0.644, 0.954]	0.49	0.91	0.811 [0.633, 0.905]	0.62	0.84
0.3	0.799 [0.229, 0.921]	0.00	1.00	0.66	0.80	0.860 [0.267, 0.983]	0.47	0.91	0.866 [0.613, 0.955]	0.49	0.91	0.799 [0.609, 0.891]	0.66	0.80
0.2	0.846 [0.210, 0.979]	0.00	1.00	0.54	0.89	0.862 [0.214, 1.000]	0.48	0.91	0.866 [0.623, 0.956]	0.49	0.91	0.846 [0.664, 0.936]	0.54	0.89
0.1	0.847 [0.154, 0.995]	0.00	1.00	0.54	0.89	0.863 [0.202, 1.000]	0.48	0.91	0.866 [0.587, 0.959]	0.49	0.91	0.847 [0.660, 0.936]	0.54	0.89

Estimates