



Table 2 ROC Analysis for Cytokines in Discriminating Patients with TB from CPA-TB Cases

Cytokine	Cutoff Point (pg/mL)	Sensitivity (%)	Specificity (%)	95% Confidence interval	Youden' index
IL-1 $\beta$	>5.7	72.50	78.12	0.663 to 0.866	0.5063
IFN- $\gamma$	$\leq$ 6.3	33.33	92.00	0.387 to 0.663	0.2533
IL-5	$\leq$ 4	50.00	77.27	0.485 to 0.755	0.2727
IL-12P70	>7.2	65.22	72.73	0.521 to 0.846	0.3794
IL-8	>49.9	83.78	94.29	0.870 to 0.987	0.7807
IL-4	$\leq$ 6.1	67.65	45.83	0.400 to 0.668	0.1348
IL-6	>8.9	82.05	55.88	0.611 to 0.826	0.3793
IL-10	>4	77.78	40.74	0.376 to 0.655	0.1852
IFN- $\alpha$	$\leq$ 19.3	90.91	33.33	0.380 to 0.715	0.2424
TNF- $\alpha$	>9.8	52.78	95.83	0.561 to 0.806	0.4861
IL-1 $\beta$ +IL-8	—	83.78	93.75	0.860 to 0.985	0.7753
IL-6+IL-8	—	80.56	97.06	0.880 to 0.991	0.7761
IL-1 $\beta$ +IL-8+IL-6	—	94.44	80.65	0.871 to 0.989	0.7509

ROC, Receiver Operating Characteristic; TB, tuberculosis infection; CPA-TB, tuberculosis infection and GM positive

Table 3 ROC Analysis for Cytokines in Discriminating Patients with TB from CPA+ Cases

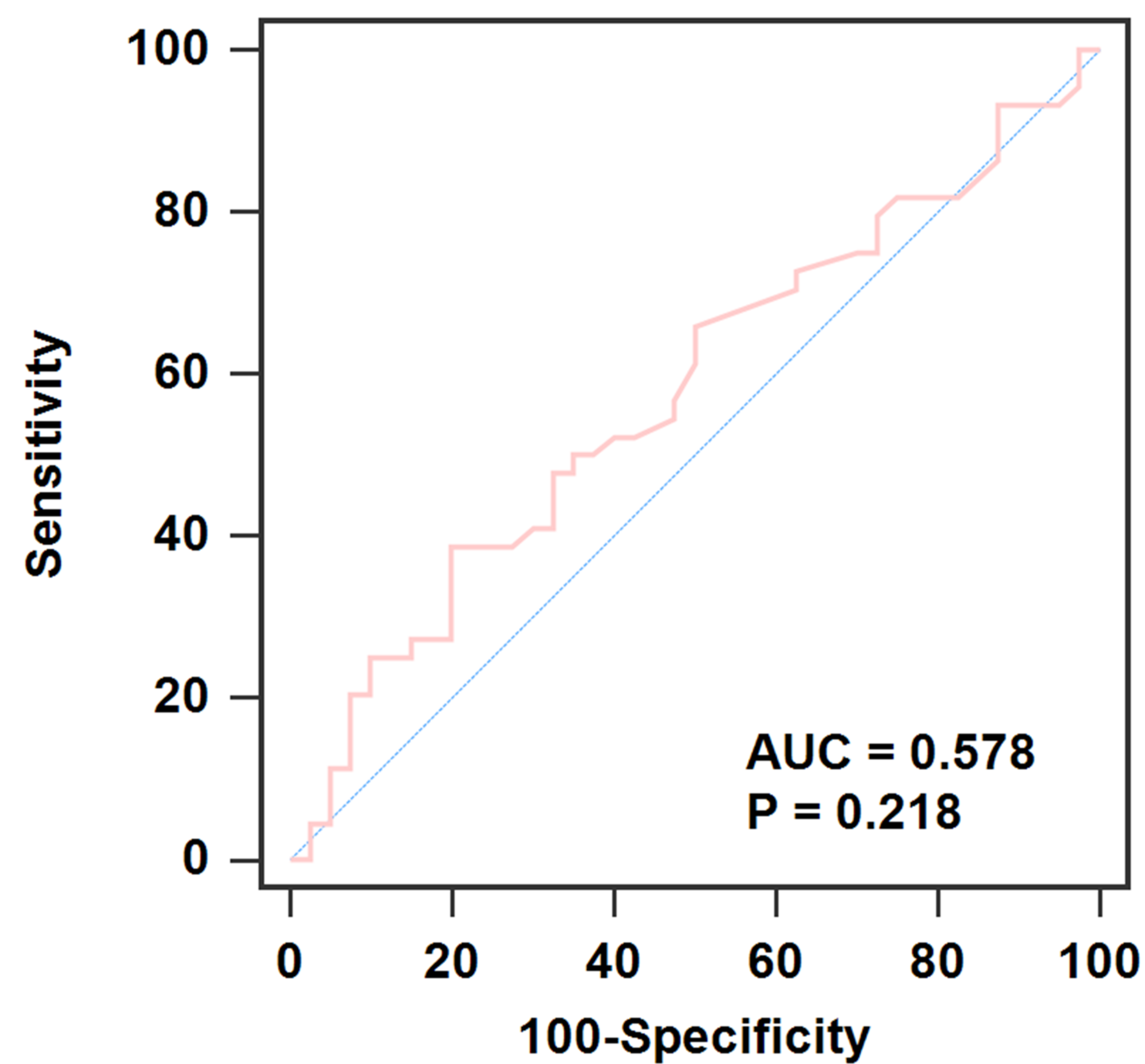
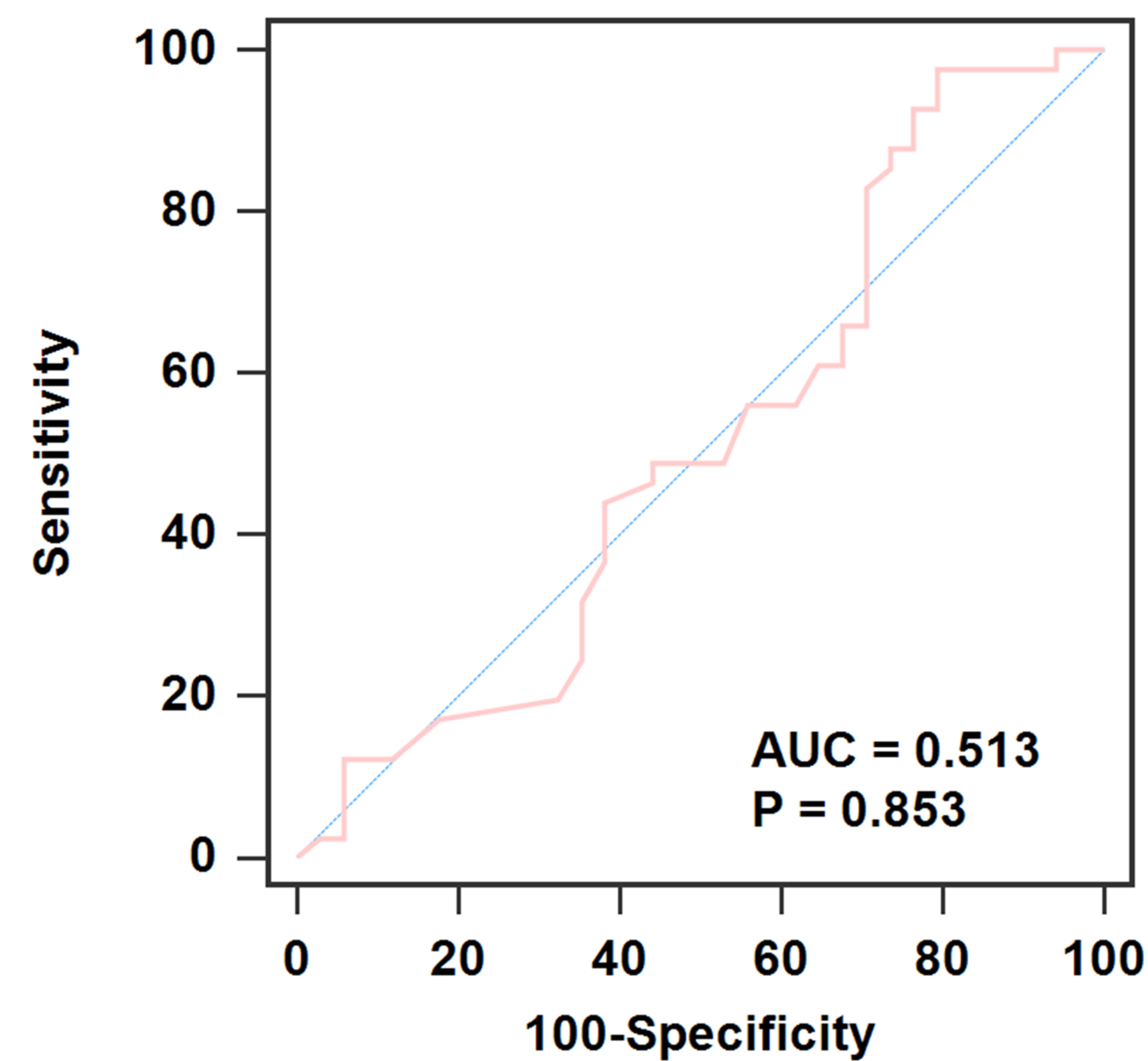
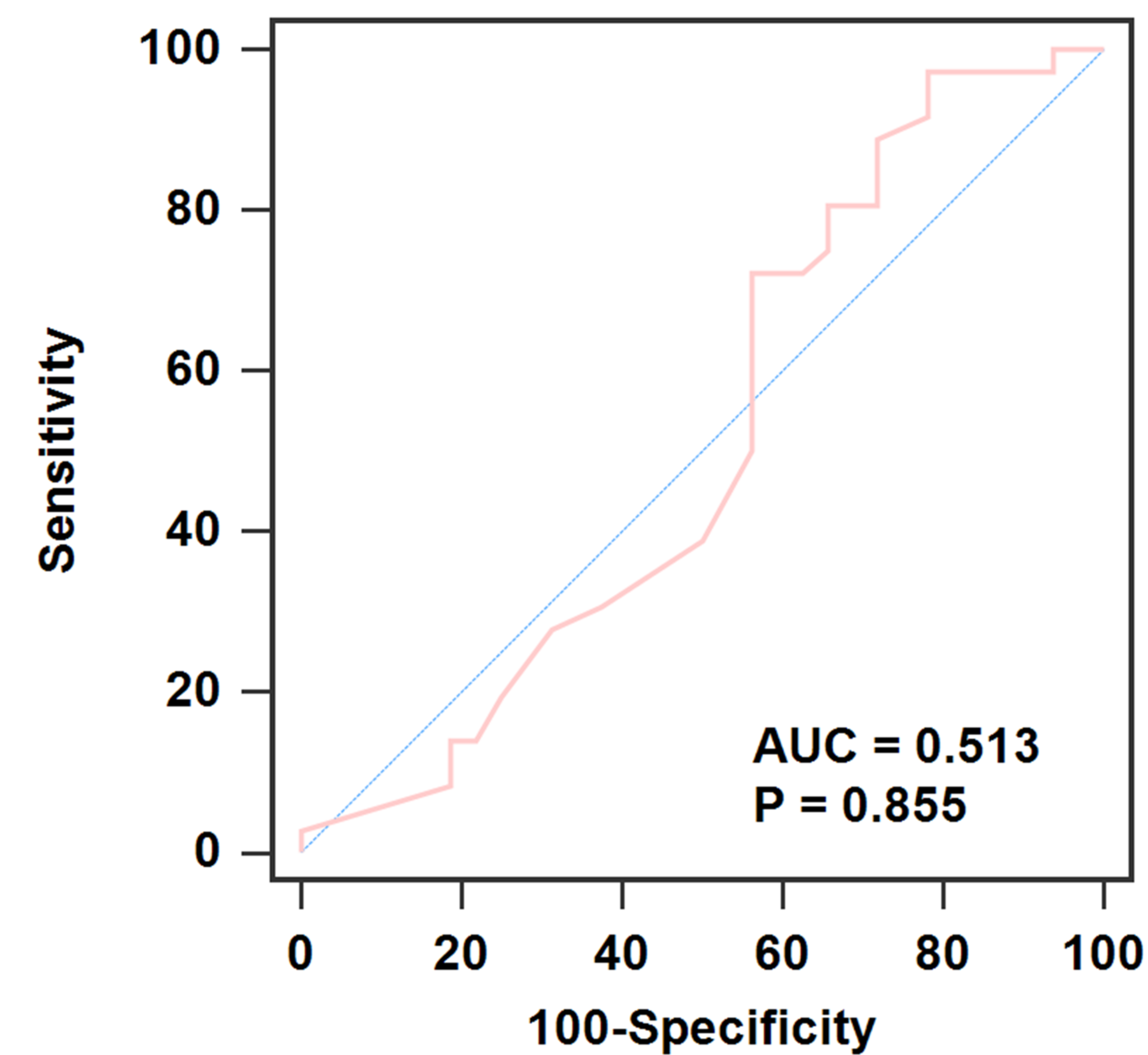
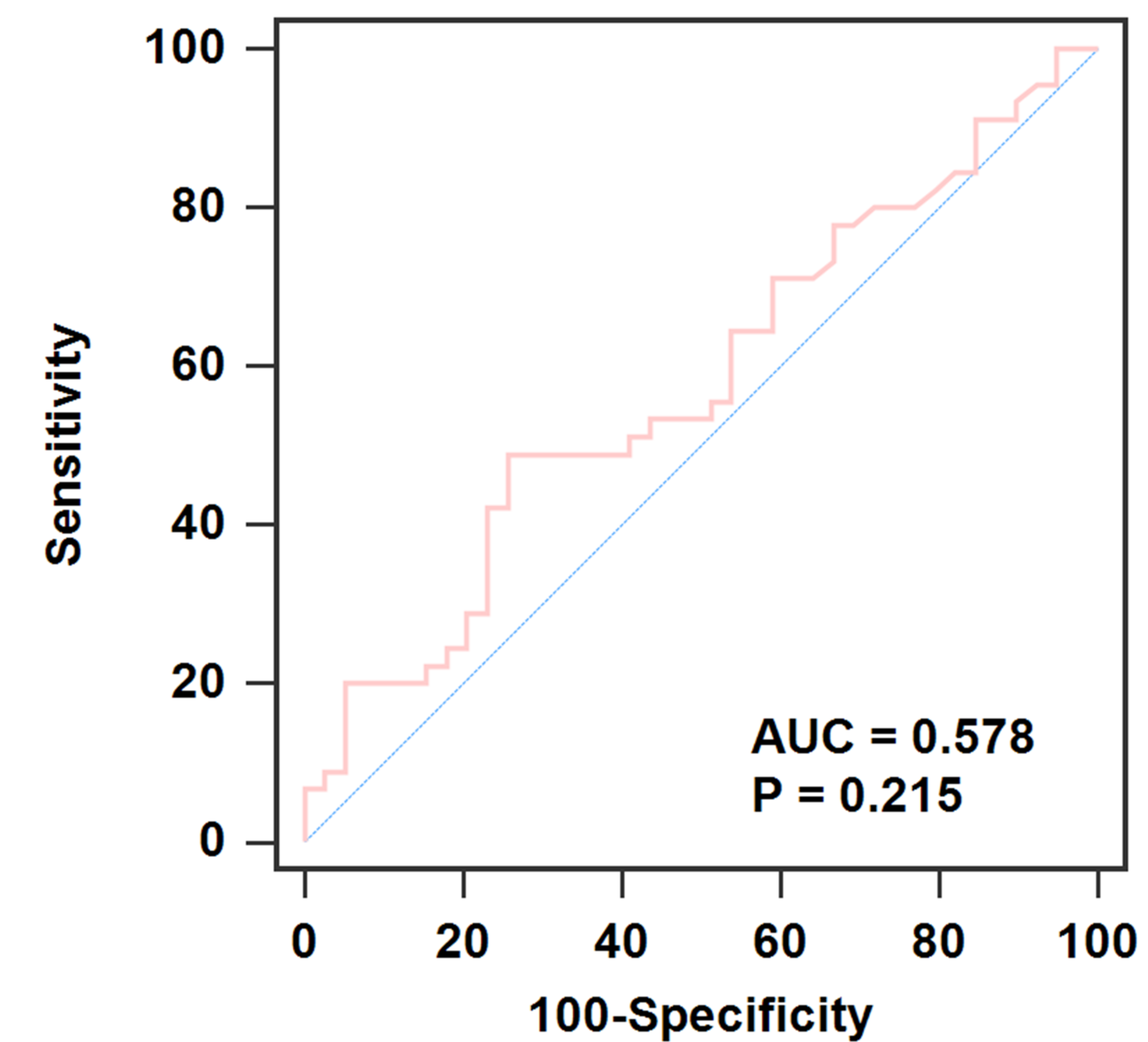
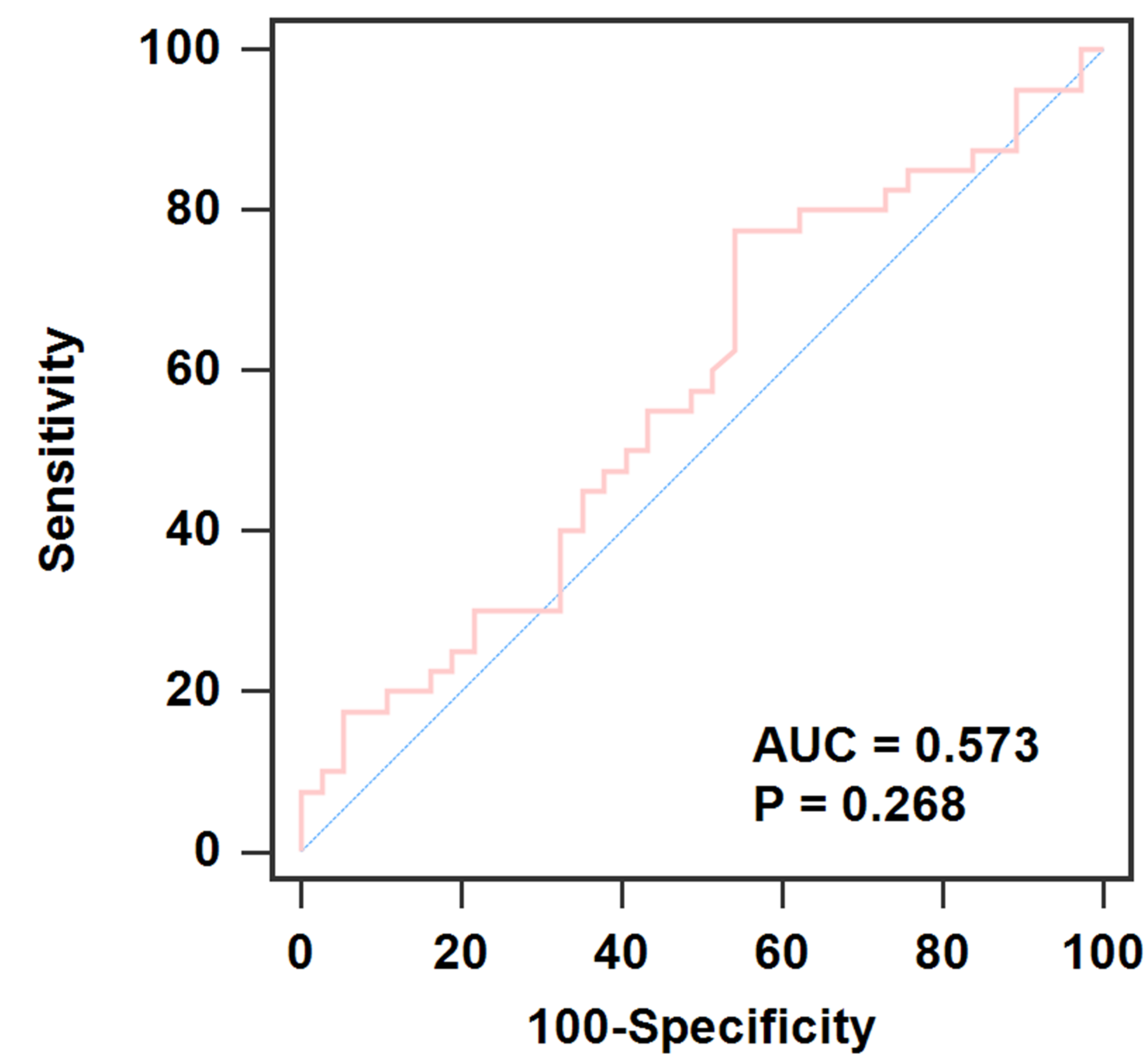
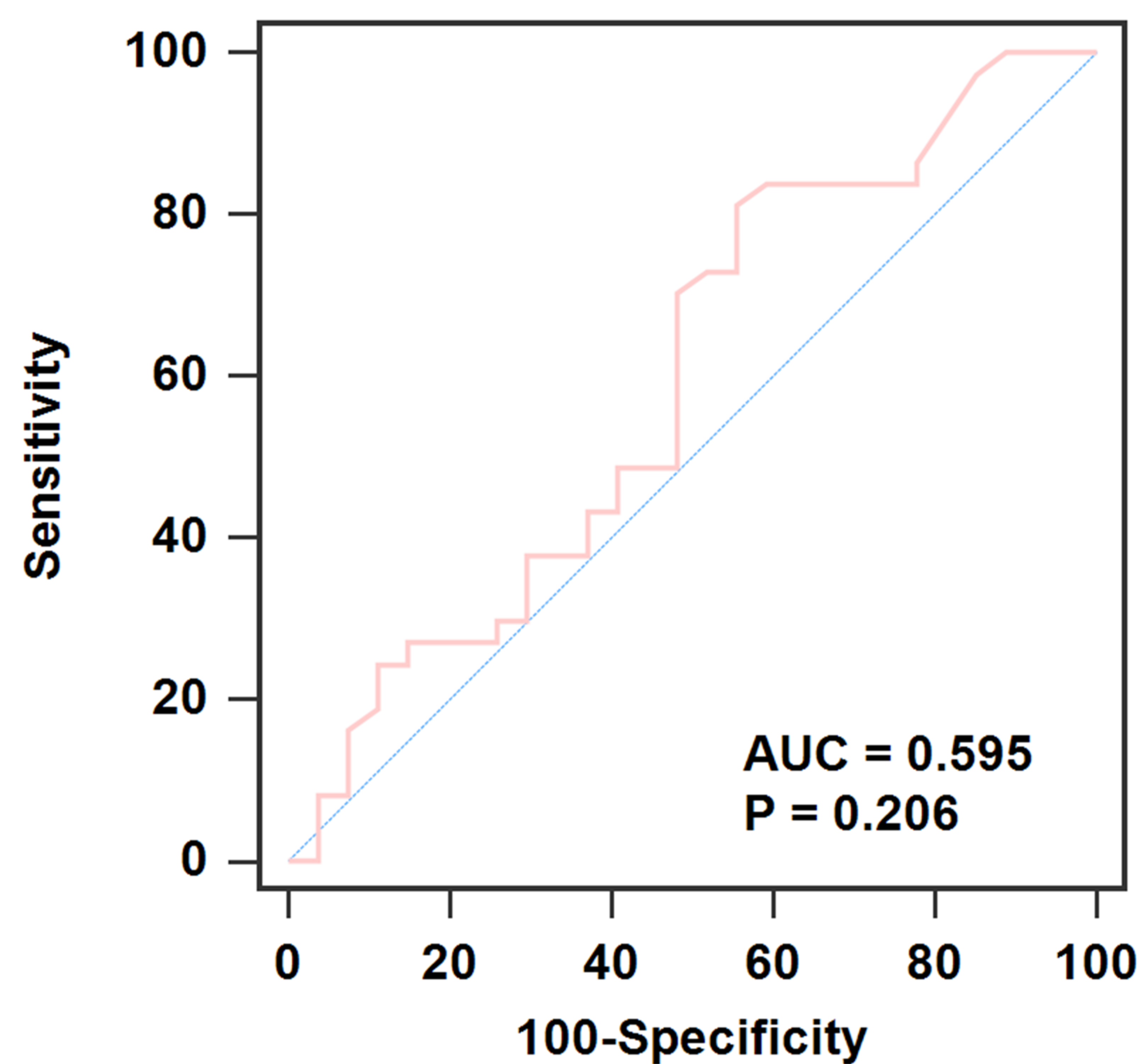
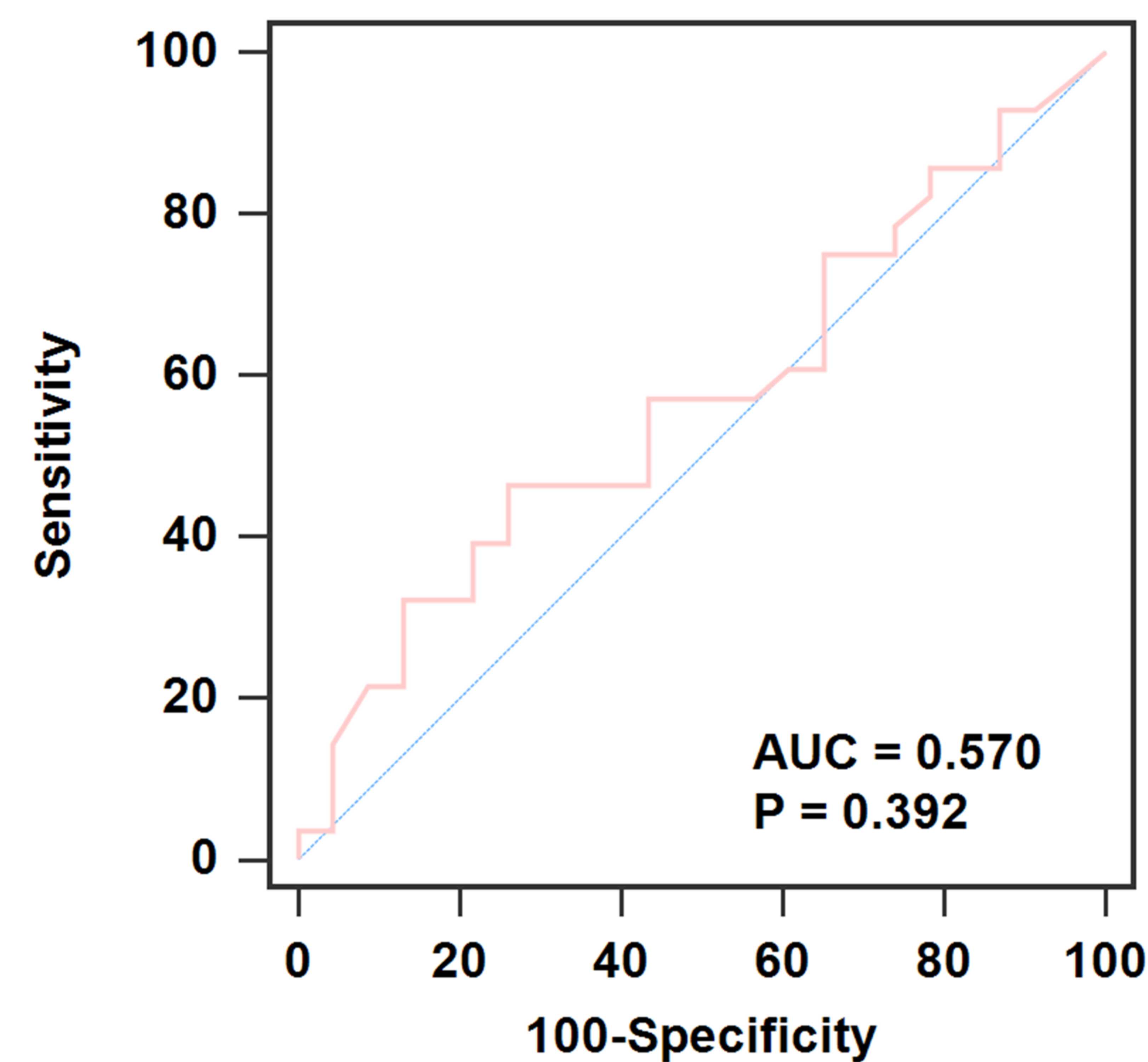
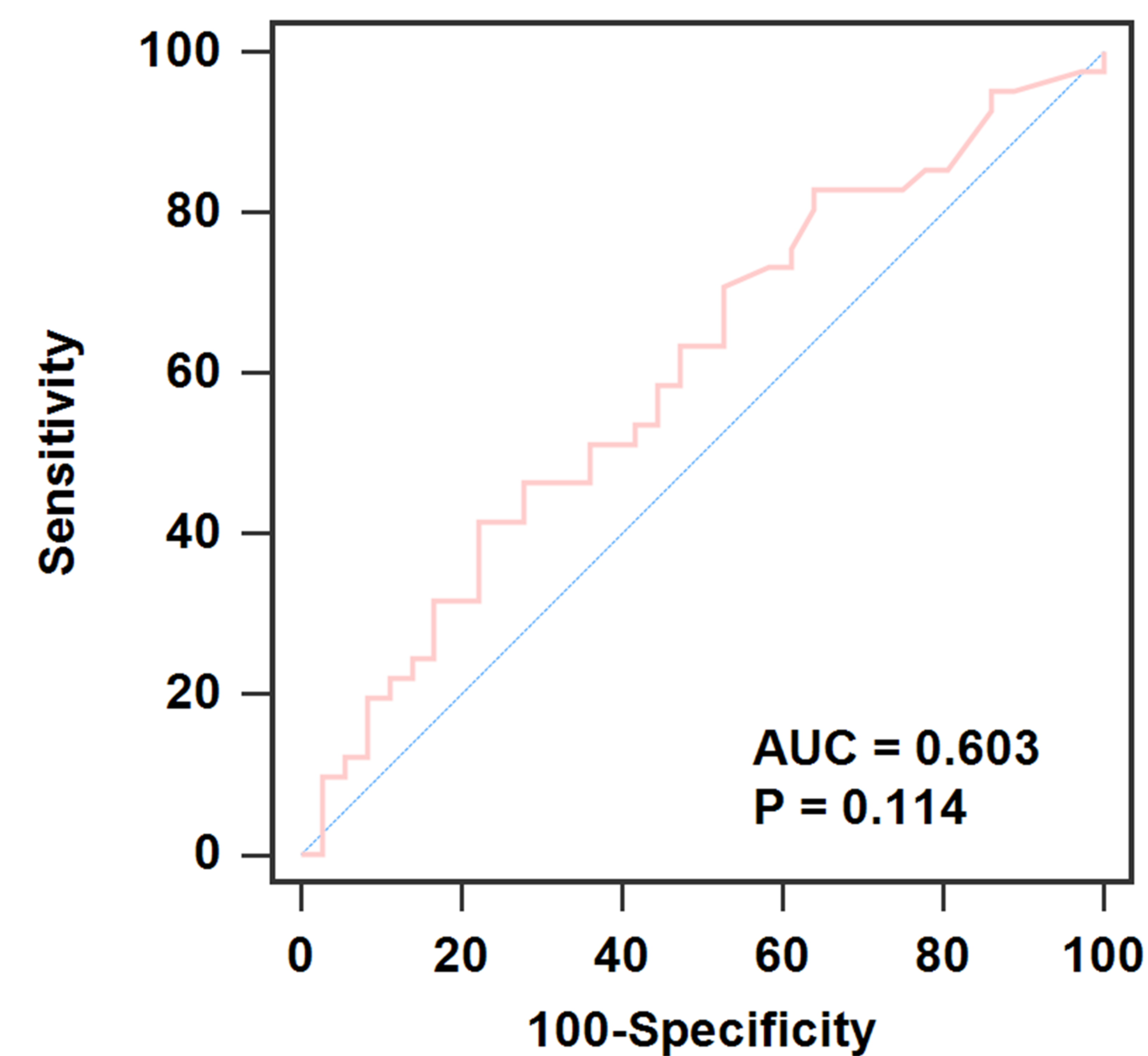
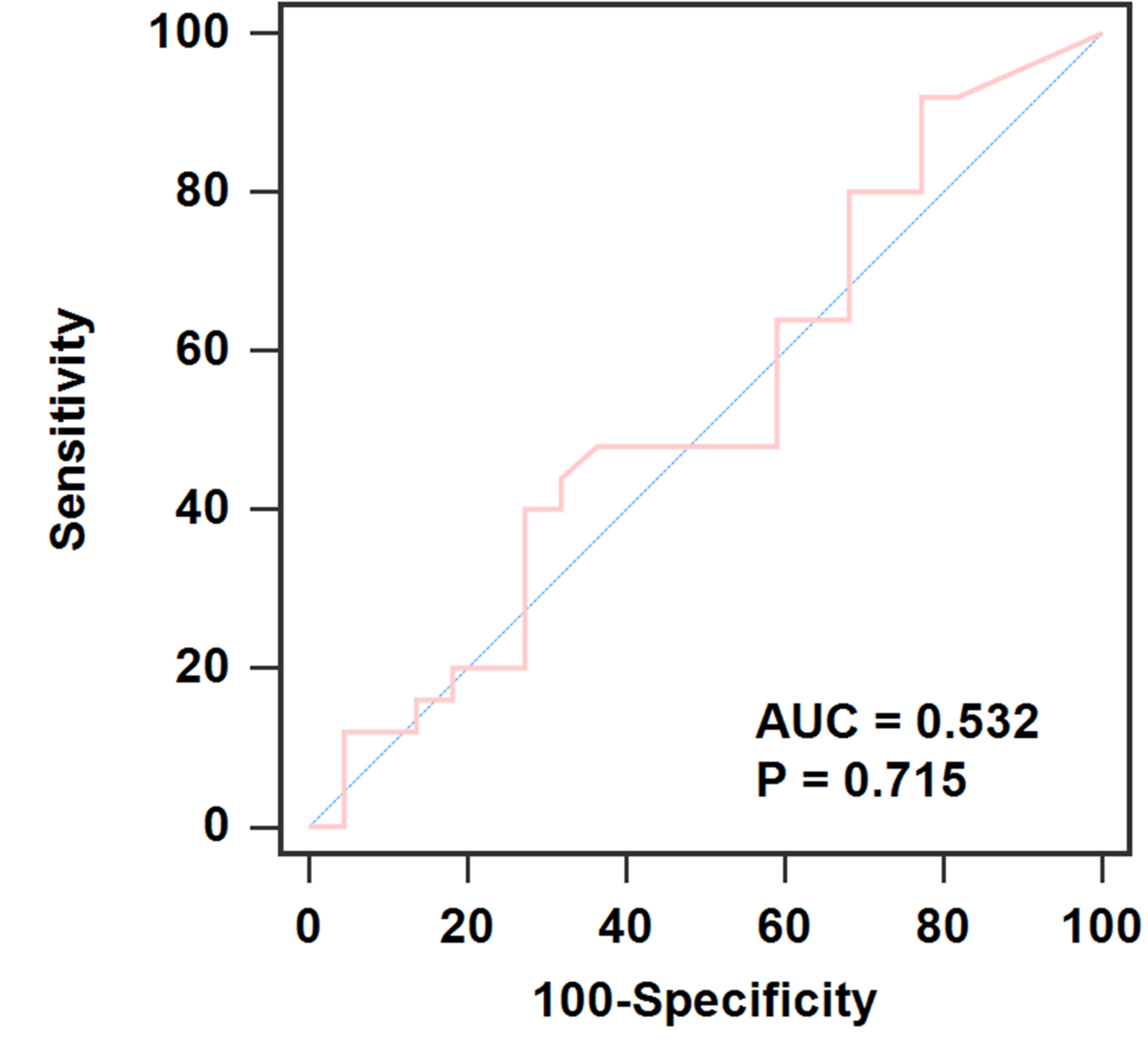
Cytokine	Cutoff Point (pg/mL)	Sensitivity (%)	Specificity (%)	95%Confidence interval	Youden' index
IL-1 $\beta$	>5.7	79.55	78.12	0.713 to 0.897	0.5767
IFN- $\gamma$	$\leq$ 6.6	32.26	92.00	0.418 to 0.690	0.2426
IL-5	$\leq$ 5.9	83.33	54.55	0.531 to 0.786	0.3788
IL-12P70	>19.2	42.86	100.00	0.593 to 0.879	0.4286
IL-8	>65.9	85.00	97.14	0.893 to 0.993	0.8214
IL-4	$\leq$ 10.9	85.37	37.50	0.435 to 0.686	0.2287
IL-6	>12	75.56	67.65	0.681 to 0.872	0.432
IL-10	>3.2	97.30	29.63	0.471 to 0.722	0.2693
IFN- $\alpha$	$\leq$ 19.1	88.00	33.33	0.372 to 0.695	0.2133
TNF- $\alpha$	>10.8	63.41	100.00	0.683 to 0.889	0.6341
IL-1 $\beta$ +IL-8	—	89.47	96.87	0.904 to 0.997	0.8635
TNF- $\alpha$ +IL-8	—	97.14	100.00	0.932 to 1.000	0.9714
IL-1 $\beta$ +IL-8+TNF- $\alpha$	—	97.14	100.00	0.931 to 1.000	0.9714

ROC, Receiver Operating Characteristic; TB, tuberculosis infection; CPA+, GM positive and Tumors/Pneumonia

Table 4 ROC Analysis for Cytokines in Discriminating Patients with TB from CPA-TB + CPA Cases

Cytokine	Cutoff Point (pg/mL)	Sensitivity (%)	Specificity (%)	95%Confidence interval	Youden' index
IL-1 $\beta$	>5.7	76.19	78.12	0.714 to 0.867	0.5432
IFN- $\gamma$	$\leq$ 6.6	32.79	92.00	0.431 to 0.650	0.2479
IL-5	$\leq$ 5.9	77.94	54.55	0.541 to 0.746	0.3249
IL-12P70	>7.2	66.67	72.73	0.604 to 0.836	0.3939
IL-8	>49.9	85.71	94.29	0.901 to 0.986	0.8000
IL-4	$\leq$ 9	76.00	41.67	0.448 to 0.651	0.1767
IL-6	>8.9	83.33	55.88	0.673 to 0.834	0.3922
IL-10	>4	81.25	40.74	0.457 to 0.669	0.2199
IFN- $\alpha$	$\leq$ 19.3	89.36	33.33	0.412 to 0.670	0.2270
TNF- $\alpha$	>10.8	55.84	100.00	0.654 to 0.831	0.5584
IL-1 $\beta$ +IL-8	—	88.00	93.75	0.902 to 0.988	0.8175
IL-6+IL-8	—	89.33	91.18	0.909 to 0.990	0.8051
TNF- $\alpha$ +IL-8	—	92.65	95.83	0.926 to 0.998	0.8848
IL-6+IL-8+TNF- $\alpha$	—	90.91	100.00	0.932 to 0.999	0.9091
IL-1 $\beta$ +IL-8+IL-6	—	79.45	100.00	0.907 to 0.990	0.7945
IL-1 $\beta$ +IL-8+TNF- $\alpha$	—	92.65	95.65	0.930 to 0.999	0.8830
IL-1 $\beta$ +IL-8+TNF- $\alpha$ + IL-6	—	95.45	90.91	0.928 to 0.999	0.8636

ROC, Receiver Operating Characteristic; TB, tuberculosis infection; CPA-TB, tuberculosis infection and GM positive; CPA+, GM positive and Tumors/Pneumonia;

**IL-1 $\beta$** **IL-4****IL-5****IL-6****IL-8****IL-10****IL-12p70****TNF- $\alpha$** **IFN- $\alpha$** **IFN- $\gamma$** 