

## **CA19-9 for detecting recurrence of pancreatic cancer**

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### **Supplementary tables' legends**

**Supplementary table S1:** Youden index (Youden), sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) for all points of the ROC curve in figure 3A (initial set).

**Supplementary table S2:** Youden index (Youden), sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) for all points of the ROC curve in figure 3B (validation)

**Supplementary figure 1: (A)** Overall survival for test set (red) and validation set (light blue) as Kaplan-Meier-Curve. **(B)** Recurrence-free survival set (red) and validation set (light blue) as Kaplan-Meier-Curve.

Supplementary table S1

Threshold	Sensitivity	Specificity	PPV	NPV	Youden
1	82.5	30.77	78.57	36.36	13.27
1.1	77.5	38.46	79.49	35.71	15.96
1.2	75	38.46	78.95	33.33	13.46
1.3	75	53.85	83.33	41.18	28.85
<b>1.35</b>	<b>72.5</b>	<b>61.54</b>	<b>85.29</b>	<b>42.11</b>	<b>34.04</b>
1.4	70	61.54	84.85	40	31.54
1.45	70	61.54	84.85	40	31.54
1.5	67.5	61.54	84.38	38.1	29.04
1.55	65	61.54	83.87	36.36	26.54
1.6	65	61.54	83.87	36.36	26.54
1.7	62.5	69.23	86.21	37.5	31.73
1.8	60	69.23	85.71	36	29.23
1.9	60	69.23	85.71	36	29.23
2	60	69.23	85.71	36	29.23
2.05	60	69.23	85.71	36	29.23
2.1	55	69.23	84.62	33.33	24.23
2.15	55	69.23	84.62	33.33	24.23
2.2	52.5	69.23	84	32.14	21.73
2.25	47.5	69.23	82.61	30	16.73
2.3	47.5	76.92	86.36	32.26	24.42
2.35	45	76.92	85.71	31.25	21.92

Threshold	Sensitivity	Specificity	PPV	NPV	Youden
2.4	45	84.62	90	33.33	29.62
<b>2.45</b>	<b>45</b>	<b>84.62</b>	<b>90</b>	<b>33.33</b>	<b>29.62</b>
2.5	45	84.62	90	33.33	29.62
2.6	42.5	84.62	89.47	32.35	27.12
2.7	42.5	84.62	89.47	32.35	27.12
2.8	42.5	84.62	89.47	32.35	27.12
2.9	40	84.62	88.89	31.43	24.62
3	40	84.62	88.89	31.43	24.62
3.1	37.5	92.31	93.75	32.43	29.81
3.2	37.5	92.31	93.75	32.43	29.81
3.3	35	92.31	93.33	31.58	27.31
3.4	35	92.31	93.33	31.58	27.31
3.5	32.5	92.31	92.86	30.77	24.81
3.6	32.5	92.31	92.86	30.77	24.81
3.7	32.5	92.31	92.86	30.77	24.81
3.8	32.5	92.31	92.86	30.77	24.81
3.9	32.5	92.31	92.86	30.77	24.81
4	32.5	92.31	92.86	30.77	24.81
4.05	32.5	100	100	32.5	32.5

**Supplementary table S2**

<b>Threshold</b>	<b>Sensitivity</b>	<b>Specificity</b>	<b>PPV</b>	<b>NPV</b>	<b>Youden</b>
1	100	16.67	66.67	100	16.67
1.1	100	16.67	66.67	100	16.67
1.2	100	33.33	71.43	100	33.33
1.3	100	50	76.92	100	50
<b>1.35</b>	100	66.67	83.33	100	66.67
1.4	100	66.67	83.33	100	66.67
1.45	100	66.67	83.33	100	66.67
1.5	100	66.67	83.33	100	66.67
1.55	90	66.67	81.82	80	56.67
1.6	90	83.33	90	83.33	73.33
1.65	90	83.33	90	83.33	73.33
1.7	90	83.33	90	83.33	73.33
1.75	90	83.33	90	83.33	73.33
1.8	90	83.33	90	83.33	73.33
1.85	90	83.33	90	83.33	73.33
1.9	90	83.33	90	83.33	73.33
1.95	90	83.33	90	83.33	73.33
2	90	83.33	90	83.33	73.33
2.1	90	83.33	90	83.33	73.33
2.2	90	83.33	90	83.33	73.33
2.3	90	83.33	90	83.33	73.33

Threshold	Sensitivity	Specificity	PPV	NPV	Youden
2.4	90	83.33	90	83.33	73.33
<b>2.45</b>	45	84.62	90	83.33	73.33
2.5	90	83.33	90	83.33	73.33
2.6	90	83.33	90	83.33	73.33
2.7	80	83.33	88.89	71.43	63.33
2.75	80	83.33	88.89	71.43	63.33
2.8	80	83.33	88.89	71.43	63.33
2.85	80	83.33	88.89	71.43	63.33
2.9	80	83.33	88.89	71.43	63.33
2.95	80	83.33	88.89	71.43	63.33
3	80	83.33	88.89	71.43	63.33
3.05	80	100	100	75	80

# Supplementary figure 1

