

**Supplementary Table 1.** Diagnostic performance of individual TMs

TM	Sensitivity (%)	Specificity (%)	Youden index
AFP	0.68	99.42	0.01
PSA	6.35	80.37	0.05
FPSA	13.89	87.59	0.12
SCC	29.27	59.05	0.17
CA724	22.36	95.13	0.21
TSGF	33.33	71.43	0.24
CA242	28.47	93.19	0.27
NSE	30.70	91.80	0.28
CA199	31.90	89.96	0.29
CA153	33.87	84.90	0.29
CA125	34.08	92.18	0.31
CA50	48.94	77.14	0.38
CYFRA2	51.43	78.81	0.41
11			
CEA	52.70	91.19	0.48



**Supplementary Table 2.** Factors influencing each expense.

Dependent variable	R	R <sup>2</sup>	Independent variable	P
TM expense	0.990	0.980	Number of TMs	<0.05
			Age	<0.05
			Year of discharge	<0.05
			Number of diagnoses	<0.05
			Hospital stay	<0.05
Examination expense	0.603	0.364	Number of TMs	<0.05
			Age	<0.05
			Number of diagnoses	<0.05
			Hospital stay	<0.05
			Year of discharge	0.141
Hospitalization expense	0.859	0.737	Age	<0.05
			Number of	<0.05

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diagnoses

Hospital stay <0.05

Year of discharge <0.05

Examination <0.05

expense

Number of TMs 0.124

TM expense 0.23

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