

Supplemental Table 1 Sample score

Project	Variable	Group	Standard evaluation	for Score
Sample information	Solid sample (A)	Surgery	10	
		Endoscopic/puncture/forceps biopsy	5	
	The time between sample isolation and storage solution (B)	< 10 minutes	15	
		10-20 minutes	10	
		> 20 minutes	0	
	Sample isolation time (C)	< 12 hours	10	
		12-24 hours	5	
		> 24 hours	0	
	Sample weight (D)	> 0.5 g	10	
		0.1-0.5 g	5	
		< 0.1 g	0	
	Proportion of tissue cells in the sample (E)	> 70%	10	
		20%-70%	8	
5%-20%		5		

		< 5%	0
	Cell activity (F)	> 50%	10
		15%-50%	8
		5%-15%	5
		< 5%	0
Proliferation capacity	The time from sample processing to the growth of the first organoids (G)	< 1 day	10
		2-3 days	5
		> 3 days	0
	Organoid growth (H)	Fast	15
		Moderate	10
		Slow	5
		Not grow and die	0
	Organoid activity (I)	> 50%	10
		15%-50%	5
		< 15%	0
Other	Temperature (J)	< 8 °C	0
		8-20 °C	-5

	> 20 °C	-10
Retention period (K)	Not expired	0
	Expired	-10
Combined score (A + B + C + D + E + F + G + H + I + J + K)		

Supplemental Table 2 Organoid score

Variable	Group	Standard for evaluation	Score
Sample score (A)	≥ 80	10	
	60-79	8	
	41-59	1	
	≤ 40	0	
Proportion rate (B)	Fast	10	
	Moderate	8	
	Slow	6	
Incubation days (C)	≤ 14 days	10	
	> 14 days	5	
Organoid number after digestion (D)	> 5×10 ⁵ and ≤ 1×10 ⁶	30	

	$> 1.26 \times 10^5$ and $\leq 5 \times 10^5$	20
	$> 1.8 \times 10^4$ and $\leq 1.26 \times 10^5$	15
	$\leq 1.8 \times 10^4$	10
Organoid activity after digestion (E)	$> 80\%$	30
	50%-79%	20
	$< 50\%$	10
Combined score (A + B + C + D + E)		
