

**Table S1.** The Compounds of BPIS.

No.	RT [min]	Class of compound	Name	Molecular formula	[M-H] <sup>-</sup>	MW
1	7.48	Polyphenols	4-Hydroxybenzoic acid	C <sub>7</sub> H <sub>6</sub> O <sub>3</sub>	137	138
2	10.8	Polyphenols	<i>p</i> -Coumaric acide	C <sub>9</sub> H <sub>8</sub> O <sub>3</sub>	165	166
3	8.51	Polyphenols	Vanillic acid	C <sub>8</sub> H <sub>8</sub> O <sub>4</sub>	167	168
4	12.3	Polyphenols	Isoferulic acid	C <sub>10</sub> H <sub>10</sub> O <sub>4</sub>	193	194
5	11.7	Polyphenols	Ferulic acid	C <sub>10</sub> H <sub>10</sub> O <sub>4</sub>	193	194
6	8.97	Polyphenols	Syringic acid	C <sub>9</sub> H <sub>10</sub> O <sub>5</sub>	197	198
7	4.75	Polyphenols	Vanillic acid 4- <i>O</i> -β-D-glucopyranoside	C <sub>14</sub> H <sub>18</sub> O <sub>9</sub>	329	330
8	7.0	Polyphenols	Ferulic acid 4- <i>O</i> -β-D-glucopyranoside	C <sub>16</sub> H <sub>20</sub> O <sub>9</sub>	355	356
9	5.56	Polyphenols	Glucosyringic acid	C <sub>15</sub> H <sub>20</sub> O <sub>10</sub>	359	360
10	16.4	Polyphenols	4,4'-Dihydroxy-3,5'-dimethoxy,3'-bicinnameic acid	C <sub>20</sub> H <sub>18</sub> O <sub>8</sub>	385	386
11	14.2	Polyphenols	Biferulic acid	C <sub>20</sub> H <sub>18</sub> O <sub>9</sub>	401	402
12	11.3	Polyphenols	Vitexin	C <sub>21</sub> H <sub>20</sub> O <sub>10</sub>	431	432

**Table S2.** The scoring criteria of strip injury.

Scoring criteria of strip injury		Scoring criteria of flaky injury	
Length of damaged part	Scoring	Damage area	Scoring
Normal mucosa	0	1-12 mm <sup>2</sup>	1
Every spot bleeding	1	13-25 mm <sup>2</sup>	2
The length of each damage is less than 1 mm	2	26-37 mm <sup>2</sup>	3
The length of each damage is between 1 mm and 2 mm	3	38-50 mm <sup>2</sup>	4
The length of each damage is between 2 mm and 4 mm	4	Greater than 51 mm <sup>2</sup> or perforated	5
The length of each damage is greater than 4 mm	5		
		Ulcer area= $\pi \times (\text{Length} \times \text{Width})/4$	
Damage width greater than 2 mm	Multiply the score by 2		

**Table S3.** The scoring criteria of gastric mucosal pathological damage.

The damage of gastric mucosa	Scoring
Gastric superficial epithelial cell injury	1
edema and congestion in the upper gastric mucosa	2
edema and congestion in the middle and lower of gastric	3
Necrosis and disorder of the upper gland structure of the	4
Deep ulcer and necrosis of gastric mucosa	5

**Table S4.** Sequence of Forward and Reverse primers in

MUC5AC、MUC6、GAPDH.

Primer name		primer sequences
MUC5AC	Forward	5'-TCACTCTACCACTCCCTGCTTCTG-3'
	Reverse	5'-CACCTGACAATCCTGGCTACACATC-3'
MUC6	Forward	5'-CATCCTACACGACGCAGCATCAG-3'
	Reverse	5'-TGGCAACGAGTTAGAGTCACATTGG-3'
GAPDH	Forward	5'-GCACCGTCAAGGCTGAGAAC-3'
	Reverse	5'-TGGTGAAGACGCCAGTGGA-3'