

**Supplementary Table 1 Comparison of repair of epithelial cell injury in each group**

Group	Number	0 h	48 h	96 h
A	20	30	75	80
B	20	33	72	85
Control	20	10	32	35
P	---	0.005	0.004	0.003

**Supplementary Table 2 Comparison of monolayer cell barrier function (TER) in each group**

Group	Number	0 h	3 h	9 h	12 h
A	20	1650	1580	1530	1490
B	20	1620	1540	1520	1450
Control	20	1630	1480	932	500
P	---	0.005	0.004	0.001	0.006

**Supplementary Table 3 The function of monolayer cell barrier was detected by Western blot (Optical density value)**

Group	Number	ZO-1	Occludin	$\beta$ -actin
A	20	896.36 $\pm$ 75.82	631.75 $\pm$ 59.28	901.52 $\pm$ 79.38
B	20	1002.79 $\pm$ 79.23	790.17 $\pm$ 68.57	1527.49 $\pm$ 89.48
Control	20	723.05 $\pm$ 69.25	512.86 $\pm$ 55.02	311.36 $\pm$ 43.75
P	---	0.002	0.001	0.001

**Supplementary Table 4 The expression of tight junction protein in monolayer cells was detected by Western blot (Optical density value)**

Group	Number	ZO-1	Occludin	$\beta$ -actin
-	20	1203.85±102.58	1365.14±113.60	1260.36±90.18
+	20	224.55±32.57	1295.11±98.25	1265.03±115.57
-	20	1320.52±85.71	1251.96±88.25	1209.15±101.23
+	20	1293.17±75.49	127.78±77.19	1299.05±113.26
P	-	0.000	0.129	0.098

**Supplementary Table 5 Effects of monolayer cells on bacterial adhesion and invasion in each group**

Group	A	B	Control	P
Number	20	20	20	---
CFU	$1.7 \times 10^4$	$1.8 \times 10^4$	$3.2 \times 10^4$	0.007