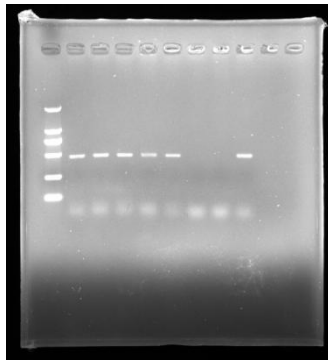
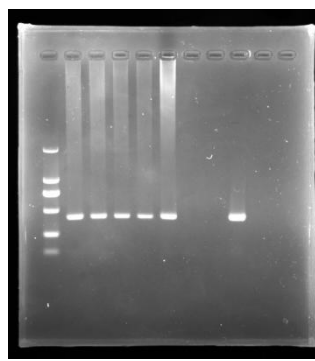


Supplementary Figure 1 The 1.5% agarose gel electrophoresis to visualize NPCR amplified *H. pylori* specific gene. A: (a): Approximately 1.5% agarose gel electrophoresis visualizing NPCR-amplified *H. pylori* 16S *rDNA* gene of mice modeling strains; (b): Approximately 1.5% agarose gel electrophoresis visualizing NPCR-amplified *H. pylori* *ureA* gene of mice modeling strains; B: Approximately 1.5% agarose gel electrophoresis visualizing NPCR-amplified *H. pylori* *ureA* gene of vaginal *Candida* from groups V1 V2 V3 and VC.

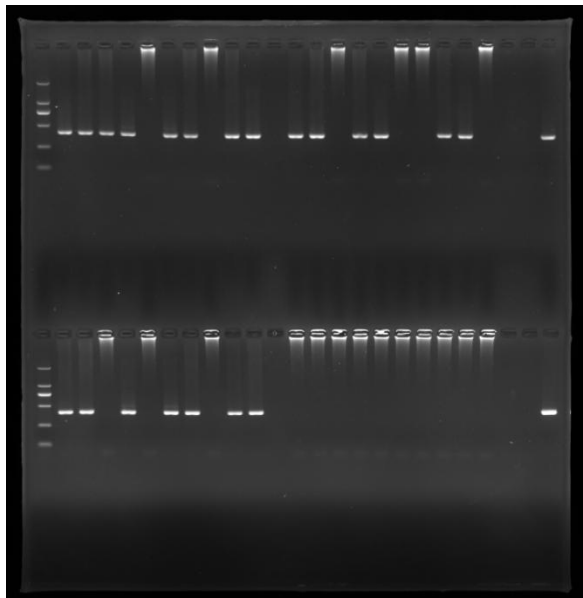
A (a)



(b)

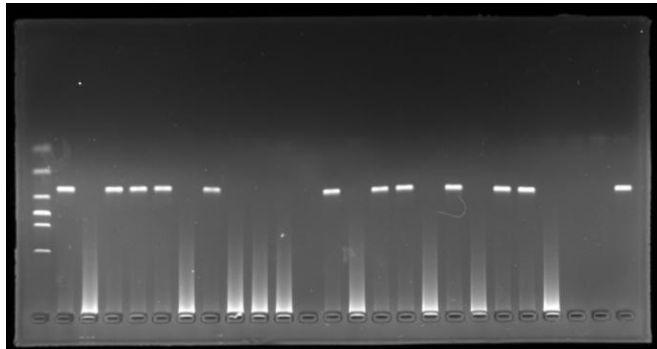


B

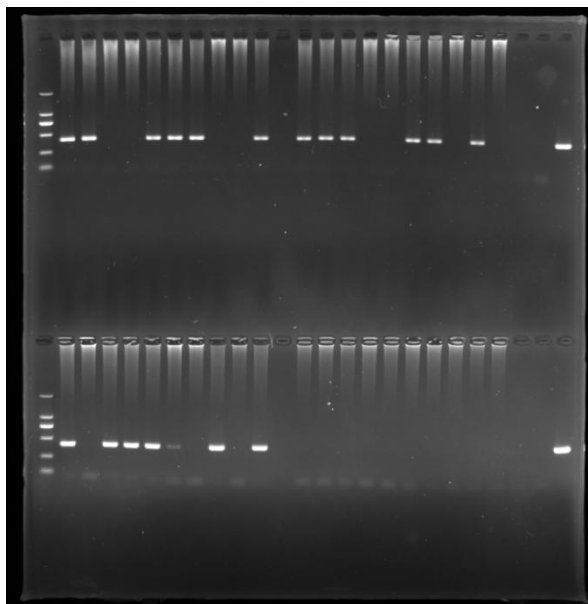


Supplementary Figure 2 A: Approximately 1.5% agarose gel electrophoresis visualizing NPCR-amplified *H. pylori ureA* gene of fecal and vaginal *Candida* from group G1; B: Approximately 1.5% agarose gel electrophoresis visualizing NPCR-amplified *H. pylori ureA* gene of vaginal *Candida* from groups G2 G3 G4 and GC.

A



B



Supplementary Table 1

Group	Maternal mice				3-week offspring mice				6-week offspring mice			
	Values	means	SD	mean ± SD	Values	means	SD	mean ± SD	Values	means	SD	mean ± SD
V1	138.7408	142.71291	8.07739324	142.71 ± 8.08	122.866275	128.13454	8.469699123	128.13 ± 8.47	140.76052	135.0436	3.863256324	135.04 ± 3.86
	140.53038				123.759465				132.691365			
	154.62912				125.1519				134.03115			
	136.95134				140.76052				132.691365			
V2	184.527702	145.5722753	34.04315474	145.57 ± 34.04	159.22632	144.45368	25.37508217	144.45 ± 25.38	112.105566	137.911102	22.22019019	137.91 ± 22.22
	126.893718				140.76052				153.401352			
	161.936856				167.53593				159.22632			
	108.930825				110.29195				126.91117			
V3	113.57475	141.7393375	23.8632598	141.74 ± 23.86	118.400325	133.6085288	21.12716991	133.61 ± 21.13	148.56728	132.8430768	11.35090934	132.84 ± 11.35
	137.653475				119.74011				132.577042			
	144.1099				132.45091				128.2549			
	171.619225				163.84277				121.973085			
VC	67.2497	81.094205	23.26302963	81.09 ± 23.26	69.77412	60.9226675	8.970821205	60.92 ± 8.97	90.75108	76.0646475	21.56872061	76.06 ± 21.57
	81.53354				48.43152				44.73836			
	61.89512				63.20416				89.86906			
	113.69846				62.28087				78.90009			
VN	60.11048	71.725885	31.69937326	71.73 ± 31.7	20.73282	28.3499625	6.924675	28.35 ± 6.92	59.511	47.0894725	32.0409814	47.09 ± 32.04
	65.46474				29.04243				36.42875			
	44.05374				37.35204				83.69492			
	117.27458				26.27256				8.72322			
G1	142.621995	145.4121728	27.94238246	145.41 ± 27.94	108.944384	121.141756	12.47578116	121.14 ± 12.48	165.058641	148.6341815	30.96906005	148.63 ± 30.97
	155.241036				112.779032				166.93733			
	108.62748				135.715144				160.162215			
	175.15818				127.128464				102.37854			

G2	102.94653	143.30255	37.65096687	143.3 ± 37.65	162.32032	148.9841058	21.28758569	148.98 ± 21.29	155.2668	164.3168375	8.718573056	164.32 ± 8.72
	119.982				171.782632				176.01406			
	169.99415				128.795796				161.28905			
	180.28752				133.037675				164.69744			
G3	114.30597	140.731434	28.94873955	140.73 ± 28.95	178.393976	141.848669	29.73930098	141.85 ± 29.74	114.72579	125.9168385	22.95058537	125.92 ± 22.95
	163.64005				114.30597				114.72579			
	167.835416				153.45008				160.3375			
	117.1443				121.24465				113.878274			
G4	110.20106	135.7705763	23.05065112	135.77 ± 23.05	168.434136	159.5371518	17.41671781	159.54 ± 17.42	119.392	124.3244865	30.7409416	124.32 ± 30.74
	151.1246				158.555415				112.334256			
	158.937575				175.561776				168.3086			
	122.81907				135.59728				97.26309			
GC	38.495895	58.93231425	23.44043373	58.93 ± 23.44	50.866005	53.545515	8.109550882	53.55 ± 8.11	41.42953	51.28872	30.79541679	51.29 ± 30.8
	40.136175				46.26951				16.78332			
	71.206152				65.14212				56.54266			
	85.891035				51.904425				90.39937			
GN	63.11025	71.84297375	18.32444103	71.84 ± 18.32	69.57797	76.7593925	6.844350157	76.76 ± 6.84	34.69845	61.26009125	19.25813772	61.26 ± 19.26
	85.88877				72.8333				61.428745			
	50.216775				79.878				69.03517			
	88.1561				84.7483				79.878			

Groups V1 V2 and V3 were intravaginally inoculated with J115, H100, and Ca-co-Hp, respectively. Group VC was intravaginally inoculated with Ca10231. Group VN received normal saline (NS). Group G1 infected with *H. pylori* via gavage and Ca10231 was inoculated intravaginally. Groups G2, G3, G4, and GC were infected with W49, F67, Ca-co-Hp, and Ca10231 via gavage, respectively. Group GN received NS via gavage.

Supplementary Table 2 OD₄₅₀ value of *H. pylori* IgM antibody from offspring mice

Model of vaginal infection										Model of gastric infection											
3-week offspring mice					6-week offspring mice					3-week offspring mice						6-week offspring mice					
V1	V2	V3	VC	VN	V1	V2	V3	VC	VN	G1	G2	G3	G4	GC	GN	G1	G2	G3	G4	GC	GN
0.496	0.414	0.391	0.214	0.213	0.659	0.752	0.585	0.312	0.098	0.391	0.368	0.326	0.496	0.101	0.139	0.418	0.314	0.598	0.446	0.063	0.193
0.372	0.665	0.409	0.146	0.294	0.6	0.531	0.36	0.217	0.126	0.383	0.332	0.369	0.403	0.085	0.141	0.49	0.252	0.52	0.499	0.087	0.128
0.543	0.891	0.781	0.216	0.28	0.381	0.625	0.461	0.192	0.191	0.337	0.371	0.385	0.356	0.087	0.149	0.401	0.368	0.454	0.249	0.108	0.167
0.593	0.937	0.641	0.156	0.165	0.758	0.491	0.363	0.22	0.136	0.4	0.344	0.424	0.37	0.063	0.145	0.414	0.309	0.316	0.358	0.094	0.164

Groups V1 V2 and V3 were intravaginally inoculated with J115, H100, and Ca-co-Hp, respectively. Group VC was intravaginally inoculated with Ca10231. Group VN received normal saline (NS). Group G1 infected with *H. pylori* via gavage and Ca10231 was inoculated intravaginally. Groups G2, G3, G4, and GC were infected with W49, F67, Ca-co-Hp, and Ca10231 via gavage, respectively. Group GN received NS via gavage.

Supplementary Table 3 The results of PCR for *H. pylori* 16S *rDNA* or *ureA* gene in maternal mice and offspring mice tissue from vaginal infection model

		Maternal mice				Offspring mice									
		No.	Gastric samples	mucosa	Intestinal contents	Vaginal tissues	No.	Weeks of age	of	Gastric samples	mucosa	Intestinal contents	tissues	or Placenta	Fetal membranes
Group V1	Vaginal delivery	A1	-		-	-	A1-1	0		-		S+U+			
							A1-2	3		-		-			
							A1-3	3		-		-			
							A1-4	3		-		-			
							A1-5	6		-		-			
							A1-6	6		-		-			
							A1-7	6		-		-			
		A8	-		-	S+	A8-1	0		-		S+U+			
							A8-2	3		-		-			
							A8-3	3		-		-			
							A8-4	3		-		-			
							A8-5	6		-		-			
							A8-6	6		-		-			
							A8-7	6		-		-			
		A9	S+ U+		S+	-	A9-1	0		-		S+			
							A9-2	3		-		-			
							A9-3	6		-		-			
							A9-4	6		-		U+			
		A10	S+ U+		S+ U+	-	A10-1	0		U+		U+			
							A10-2	3		-		-			
							A10-3	3		-		-			
							A10-4	3		-		-			
							A10-5	6		-		-			
							A10-6	6		-		-			

Group V2	Cesarean section	A2	-		-	-	A10-4	6	S+	U+		-		
							A10-5	6		-		-		
							A10-6	6		-		-		
							A2-1	0		-		-		-
		A7	S+	S+	S+	A2-2	3		-		-			
						A2-3	6		-		-			
						A2-4	6	S+		U+				
						A7-1	0	S+		S+		S+	-	
						A7-2	3		-		-			
						A7-3	3		-		-			
						A7-4	3		-		S+			
						A7-5	6		-		-			
						A7-6	6		-		-			
						A7-7	6		-		-			
	A4	-	-	S+	A4-1	0	S+		S+		-	-		
					A4-2	3		-		-				
					A4-3	6		-		-				
	A6	-	-	-	A6-1	0	S+		-		-	S+		
					A6-2	3		-		-				
	Vaginal delivery	B2	-	S+	-	B2-1	0	S+		-				
						B2-2	3	S+		-				
						B2-3	3		-		-			
						B2-4	6		-		-			
						B2-5	6		-		-			

Cesarean section	B10	-	-	-	B10-1	0	-	-				
					B10-2	3	S+	-				
					B10-3	3	-	-				
					B10-4	6	S+	-				
					B10-5	6	S+	S+				
					B10-6	6	-	-				
	B11	-	-	-	B11-1	0	-	-				
					B11-2	3	-	-				
					B11-3	3	-	-				
					B11-4	6	-	-				
					B11-5	6	-	-				
					B4	-	-	-				B4-1
	B4-2	3	-	-								
	B6	-	-	-	B6-1	0	U+	-				S+
					B6-2	3	-	-				
					B6-3	3	-	-				
					B6-4	3	-	-				
					B6-5	6	-	-				
					B6-6	6	-	-				
					B6-7	6	-	-				
	B5	-	S+	-	B5-1	0	U+	S+	-	-		
					B5-2	3	-	-				
					B5-3	3	-	-				
					B5-4	6	-	-				
					B5-5	6	-	-				
					B5-6	6	-	-				
					B1	-	-	-	B1-1	0	-	

Group V3	Vaginal dilivery	B12	-	-	-	B1-2	3	-	-	-	-
						B1-3	6	-	-		
						B1-4	6	-	-		
						B12-1	0	-	-		
		B3	U+	-	-	B12-2	3	-	-	S+	S+
						B12-3	6	-	-		
						B12-4	6	-	-		
						B3-1	0	-	S+		
		B9	-	-	S+	B3-2	3	-	-	-	U+
						B9-1	0	S+	-		
						B9-2	3	-	-		
						C3	-	-	-		
		C3	-	-	-	C3-1	0	-	-	U+	-
						C3-2	3	-	-		
						C3-3	3	S+	-		
						C3-4	6	-	-		
		C9	S+	-	-	C3-5	6	S+	-	S+	S+
						C9-1	0	S+	-		
						C9-2	3	S+	U+		
						C9-3	6	-	-		
		C10	S+	S+	-	C10-1	0	-	-	-	-
						C10-2	3	S+	S+		
						C10-3	3	-	S+		
						C10-4	6	-	-		
		C5	-	-	U+	C10-5	6	-	-	-	-
						C5-1	0	-	-		
						C5-2	3	-	-		
						C5-3	3	-	-		

Cesarean section	C2	-	S+	-	C5-4	6	-	-	-	-
					C5-5	6	-	-		
					C5-6	6	-	-		
					C2-1	0	S+	U+		
					C2-2	3	-	-		
					C2-3	3	S+	S+		
	C4	-	-	-	C2-4	6	-	-	-	-
					C2-5	6	-	-		
					C4-1	0	-	-		
					C4-2	3	S+	-		
					C4-3	3	S+	-		
					C4-4	3	-	-		
	C6	S+	U+	U+	C4-5	6	S+	S+	-	-
					C4-6	6	-	-		
					C4-7	6	-	-		
					C6-1	0	S+	-		
					C6-2	3	-	-		
					C6-3	3	-	-		
	C1	-	-	U+	C6-4	6	-	S+	-	U+
					C1-1	0	-	S+		
					C1-2	3	-	-		
	C8	-	S+	-	C1-3	6	-	-	S+	-
					C8-1	0	-	-		
					C8-2	3	-	U+		
	C7	U+	-	U+	C7-1	0	-	-	-	U+
					C7-2	3	-	-		
					C7-3	6	-	-		

Group VC	Vaginal dilivery	D2	-		-	-	C7-4	6	-		-			
							C7-5	6	-		-			
							D2-1	0	-		-			
							D2-2	3	-		-			
							D2-3	3	-		-			
		D8	-		-	-	D2-4	6	-		-			
							D2-5	6	-		-			
							D8-1	0	-		-			
							D8-2	3	-		-			
							D8-3	6	-		-			
	Cesarean section	D1	-		-	-	D1-1	0	-		-		-	-
							D1-2	3	-		-			
							D1-3	6	-		-			
							D1-4	6	-		-			
							D4	-		-	-	D4-1	0	-
		D4-2	3	-		-								
		D4-3	3	-		-								
		D4-4	6	-		-								
		D4-5	6	-		-								
		D7	-		-	-	D7-1	0	-		-		-	-
D7-2	3						-		-					
D7-3	6						-		-					
D7-4	6						-		-					
D10	-							-	-	D10-	0	-		-
		1												
		D10-	3	-		-								
						2								

Group	Vaginal	E4	-	-	-	E4-1	0	-	-		
						E4-2	3	-	-		
VN	dilivery	E5	-	-	-	E5-1	0	-	-		
						E5-2	3	-	-		
						E5-3	3	-	-		
						E5-4	3	-	-		
						E5-5	6	-	-		
						E5-6	6	-	-		
						E5-7	6	-	-		
		E7	-	-	-	E7-1	0	-	-		
						E7-2	3	-	-		
						E7-3	3	-	-		
						E7-4	6	-	-		
						E7-5	6	-	-		
						E7-6	6	-	-		
		E10	-	-	-	E10-1	0	-	-		
						E10-2	3	-	-		
						E10-3	3	-	-		
						E10-4	3	-	-		
						E10-5	6	-	-		
						E10-6	6	-	-		
	Cesarean section	E1	-	-	-	E1-1	0	-	-	-	-
						E1-2	3	-	-		
						E1-3	6	-	-		
		E2	-	-	-	E2-1	0	-	-	-	-
						E2-2	3	-	-		
						E2-3	6	-	-		

				E2-4	6	-	-		
E8	-	-	-	E8-1	0	-	-	-	-
				E8-2	3	-	-		
				E8-3	3	-	-		
				E8-4	3	-	-		
				E8-5	6	-	-		
				E8-6	6	-	-		
				E8-7	6	-	-		
E9	-	-	-	E9-1	0	-	-	-	-
				E9-2	3	-	-		

Group G1 was infected with *H. pylori* via gavage, while Ca10231 was inoculated intravaginally. Groups G2, G3, G4, and GC were infected with W49, F67, Ca-co-Hp, and Ca10231 via gavage, respectively. Group GN received normal saline (NS) via gavage. S+: *H. pylori* 16S *rDNA* positive tissue, U+: *H. pylori* ureA gene positive tissue, S+U+: *H. pylori* 16S *rDNA* and *ureA* gene positive tissue, -: *H. pylori* 16S *rDNA* and/or *ureA* gene negative tissue.

Supplementary Table 4

		Maternal mice				Offspring mice									
		No	gastric samples	mucosa	Intestinal contents	Vaginal tissues	No	Weeks of age	of	Gastric samples	mucosa	Intestinal contents	tissues	or	Placenta Fetal membranes
Group G1	Vaginal delivery	A8	S+		S+	-	A8-1	0		-		-			
							A8-2	3		U+		S+			
							A8-3	6		-		-			
							A8-4	6		-		-			
		A104	-		-	-	A104-1	0		-		-			
							A104-2	3		-		-			
							A104-3	6		S+		-			
		A10	-		-	-	A10-1	0		-		-			
							A10-2	3		U+		-			
							A10-3	3		-		-			
							A10-4	6		S+		S+			
							A10-5	6		-		-			
		A101	S+		-	-	101-1	0		-		-			
							101-2	3		-		-			
							101-3	3		U+		-			
							101-4	3		U+		-			
							101-5	6		-		-			
							101-6	6		-		S+			
		A9	S+		S+	U+	A9-1	0		-		-			
							A9-2	3		-		-			
							A9-3	3		-		-			
							A102-1	0		-		-		-	-
	Cesarean section	A102	-		-	-	A102-2	3		-		-			

Group G2	Vaginal dilivery	A64	-	-	-	A102-3	3	-	-	-	-	-				
						A102-4	6	U+	-							
						A102-5	6	U+	-							
						A64-1	0	U+	-				-	-		
						A64-2	3	-	-							
		A4	-	-	-	A4-1	0	U+	U+	U+	U+					
						A4-2	3	-	-							
						A4-3	3	-	-							
						A4-4	6	S+	-							
						A4-5	6	-	-							
		A57	S+	S+	S+U+	The maternal mice died before giving birth										
		B19	-	S+	-	B19-1	0	-	-							
						B19-2	3	-	-							
						B19-3	3	-	-							
						B23	-	-	-				B23-1	0	-	-
													B23-2	3	-	-
		B23-3	3	-	-											
		B23-4	3	-	-											
		B23-5	6	U+	-											
						B23-6	6	S+U+	-							
						B23-7	6	U+	-							
						B21	S+	S+	S+				B21-1	0	-	-
													B21-2	3	-	-
													B21-3	3	-	-
		B21-4	3	U+	-											
		B21-5	3	-	S+											
		B21-6	6	-	-											

Group G3	Vaginal dilivery	B22	S+	S+	U+	B21-7	6	-	-		
						B21-8	6	-	-		
						B21-9	6	-	-		
						B22-1	0	S+	-		
						B22-2	3	S+	S+		
						B22-3	3	-	S+		
						B22-4	6	-	S+		
		B59	-	-	-	B22-5	6	S+	-		
						B58-1	0	U+	-	-	-
						B58-2	3	-	-		
						B58-3	6	S+U+	-		
		B15	-	-	S+	B58-4	6	-	-		
						B15-1	0	-	S+ U+	-	-
						B15-2	3	-	-		
						B15-3	3	-	-		
						B15-4	3	U+	-		
						B15-5	3	-	-		
						B15-6	6	-	-		
						B15-7	6	-	-		
		B105	S+	S+	-	B15-8	6	-	-		
						B105-1	0	-	-	-	-
		B16	S+	-	-	B105-2	3	-	-		
						B16-1	0	-	-		
		C31	S+	-	-	B16-2	3	-	-		
						C31-1	0	-	-		
C31-2	3					S+	S+				
C107	-	S+	-	C107-1	0	-	-				

Cesarean section	C108	S+	S+	-	C107-2	3	-	-						
					C107-3	3	-	-						
					C107-4	3	-	S+						
					C107-5	3	-	-						
					C107-6	6	-	-						
					C107-7	6	-	-						
					C107-8	6	-	-						
					C107-9	6	-	-						
					C108-1	0	-	S+						
	C106	-	S+	-	C108-2	3	-	-						
					C108-3	3	-	-						
					C108-4	6	-	-						
					C106-1	0	U+	U+						
					C106-2	3	-	-						
					C106-3	3	-	-						
					C106-4	6	-	-						
					C106-5	6	-	-						
					C24	-	-	-	C24-1	0	-	U+	-	-
					C24-2	3	-	S+						
					C24-3	3	-	-						
					C24-4	3	-	-						
					C24-5	6	S+	-						
					C24-6	6	S+	S+						
					C24-7	6	-	-						
					C24-8	6	-	-						
					C60	-	U+	-	C60-1	0	S+	S+	S+ U+	U+
									C60-2	3	-	S+		

Group G4	Vaginal delivery	C28	U+	-	-	C60-3	3	-	-	-	-
						C60-4	3	-	-		
						C60-5	6	-	-		
						C60-6	6	-	-		
						C60-7	6	-	-		
						C60-8	6	-	S+		
						C28-1	0	-	-	-	-
						C28-2	3	-	-	-	-
		C34	-	-	-	C28-3	3	U+	-		
						C28-4	3	U+	-		
						C28-5	6	-	-		
						C28-6	6	S+	-		
						C28-7	6	-	-		
						C34-1	0	-	-	-	-
		D63	-	-	S+	C34-2	3	-	-	-	-
						C34-3	3	U+	-		
						C34-4	6	-	-		
						D63-1	0	U+	-		
						D63-2	3	-	-		
						D63-3	3	-	S+		
						D63-4	3	-	S+		
						D63-5	3	-	S+		
		D37	S+	S+	-	D63-6	6	-	-		
						D63-7	6	-	-		
						D63-8	6	S+	S+		
						D63-9	6	-	S+ U+		
						D37-1	0	-	-		

Group GC	Cesarean section	D62	-	-	U+	D37-2	3	-	-		
						D62-1	0	-	-		
		D38	-	-	-	D62-2	3	-	-		
						D38-1	0	U+	-	-	-
		D61	-	-	-	D38-2	3	-	-		
						D61-1	0	U+	-	-	-
						D61-2	3	-	-		
						D61-3	3	-	-		
						D61-4	3	-	S+		
						D61-5	6	-	-		
						D61-6	6	-	S+		
						D61-7	6	-	-		
						D61-8	6	-	-		
		D43	S+	S+	-	D43-1	0	-	-	-	-
		D44	S+	-	-	D43-2	3	-	-		
						D44-1	0	-	-	-	-
		D40	-	S+	S+	D44-2	3	-	-		
						D40-1	0	-	-	-	-
						D40-2	3	-	S+		
						D40-3	3	-	-		
						D40-4	6	-	-		
						D40-5	6	-	-		
						E50-1	0	-	-		
Group GC	Vaginal dilivery	E50	-	-	-	E50-2	3	-	-		
						E50-3	3	-	-		
						E50-4	3	-	-		
						E50-5	6	-	-		

Cesarean section	E87	-	-	-	E50-6	6	-	-		
					E87-1	0	-	-		
					E87-2	3	-	-		
					E87-3	3	-	-		
					E87-4	3	-	-		
					E87-5	6	-	-		
					E87-6	6	-	-		
	E47	-	-	-	E47-1	0	-	-		
					E47-2	3	-	-		
					E47-3	3	-	-		
					E47-4	3	-	-		
	E55	-	-	-	E55-1	0	-	-		
					E55-2	3	-	-		
					E55-3	3	-	-		
					E55-4	3	-	-		
					E55-5	3	-	-		
					E55-6	6	-	-		
					E55-7	6	-	-		
					E55-8	6	-	-		
	E46	-	-	-	E46-1	0	-	-	-	-
					E46-2	3	-	-		
	E85	-	-	-	E85-1	0	-	-	-	-
					E85-2	3	-	-		
					E85-3	3	-	-		
					E85-4	3	-	-		
					E85-5	6	-	-		
					E85-6	6	-	-		

Group GN	Vaginal delivery	E51	-	-	-	E85-7	6	-	-	-	-									
						E85-8	6	-	-											
						E51-1	0	-	-			-	-							
						E51-2	3	-	-											
						E51-3	3	-	-											
						E51-4	3	-	-											
						E51-5	6	-	-											
		E48	-	-	-	The maternal mice died before giving birth														
		F1	-	-	-	F1-1	0	-	-											
						F1-2	3	-	-											
	F1-3					3	-	-												
	F1-4					6	-	-												
	F2					-	-	-	F2-1	0	-	-								
									F2-2	3	-	-								
									F2-3	6	-	-								
									F3	-	-	-	F3-1	0	-	-				
	F3-2					3	-	-												
	F3-3					3	-	-												
	F3-4					6	-	-												
	F5					-	-	-	F5-1	0	-	-								
									F5-2	3	-	-								
									F4	-	-	-	F4-1	0	-	-	-	-		
													F4-2	3	-	-				
	F4-3					6	-	-												
	F6					-	-	-					F6-1	0	-	-			-	-
													F6-2	3	-	-				
													F6-3	3	-	-				

				F6-4	6	-	-		
				F6-5	6	-	-		
F7	-	-	-	F7-1	0	-	-	-	-
				F7-2	3	-	-		
				F7-3	3	-	-		
				F7-4	6	-	-		
				F7-5	6	-	-		
				F7-6	6	-	-		
F10	-	-	-	F10-1	0	-	-	-	-
				F10-2	3	-	-		
				F10-3	6	-	-		

Group G1 was infected with *H. pylori* via gavage, while *C. albicans* 10231 was inoculated intravaginally. Groups G2, G3, G4, and GC were infected with W49, F67, Ca-co-Hp, and *C. albicans* 10231 via gavage, respectively. Group GN received normal saline (NS) via gavage. S+: *H. pylori* 16S *rDNA* positive tissue, U+: *H. pylori ureA* positive tissue, S+U+: *H. pylori* 16S *rDNA* and *ureA* positive tissue, -: *H. pylori* 16S *rDNA* and/or *ureA* negative tissue.

Supplementary Table 5 The pathological scores of the gastric mucosa in maternal mice and offspring mice from vaginal infection model

Source of gastric samples	Groups	Samples number	Pathological score
maternal mice	V1	1	2
		2	3
		3	2
	V2	1	2
		2	2
		3	1
	V3	1	2
		2	2
		3	2
	VC	1	2
		2	1
		3	1
	VN	1	1
		2	2
		3	1
3 weeks offspring mice	V1	1	1
		2	1
		3	2
	V2	1	1
		2	2
		3	1
	V3	1	2
		2	1
		3	2
	VC	1	2

6 weeks offspring mice	VN		2	1
			3	1
			1	1
			2	1
			3	1
		V1	1	1
			2	3
			3	2
		V2	1	2
			2	1
			3	1
		V3	1	2
			2	1
			3	1
		VC	1	1
			2	1
			3	2
		VN	1	1
			2	2
			3	1

Groups V1-V3 were intravaginally inoculated with J115, H100, and Ca-co-Hp, respectively. Group VC was intravaginally inoculated with Ca10231. Group VN received normal saline (NS).

Supplementary Table 6 The pathological scores of the gastric mucosa in maternal mice and offspring mice from gastric infection model

	Groups	Samples number	pathological score
maternal mice	G1	1	3
		2	2
		3	2
	G2	1	1
		2	2
		3	2
	G3	1	2
		2	1
		3	2
	G4	1	2
		2	2
		3	3
	GC	1	2
		2	2
		3	3
	GN	1	2
		2	1
		3	1
3 weeks offspring mice	G1	1	3
		2	2
		3	3
	G2	1	2
		2	3
		3	2
	G3	1	2

6 weeks offspring	mice	G4	2	2
			3	4
			1	2
			2	2
			3	2
		GC	1	2
			2	2
			3	2
		GN	1	1
			2	1
			3	2
		G1	1	2
			2	2
			3	2
		G2	1	2
			2	2
			3	2
		G3	1	2
			2	3
			3	2
		G4	1	2
			2	4
			3	2
		GC	1	2
			2	2
			3	2
		GN	1	1
			2	2
			3	1

Group G1 infected with *H. pylori* via gavage and Ca10231 was inoculated intravaginally. Groups G2, G3, G4, and GC were infected with W49, F67, Caco-Hp, and Ca10231 via gavage, respectively. Group GN received normal saline (NS) via gavage.

