

**Vaginal Probiotic *Lactobacillus crispatus* With the Dual Role of Inhibiting
Sperm Activity and Reducing Pregnancies**

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Supplementary Figure 1 | The effect of the tested bacteria on the fetal health. **(A)** The number of living fetus. **(B)** The number of dead fetus. **(C)** The number of absorbed fetus. **(D)** The number of malformed fetus. The data represent means \pm SD of 8-10 animals. $*P < 0.05$, $**P < 0.01$. SD, standard deviation; C, control; V, VNP20009; VD, VNP20009 DNase I; E, *E. coli* O157:H7; L, *L. crispatus*.

Supplementary Figure 2 | The number of microbial groups contained in different samples at different taxonomic levels.

Supplementary Figure 3 | Microbial diversity in the C, V, VD, E and L groups. **(A)** linear discriminant analysis effect size analysis. **(B)** Metastats analysis. LDA, linear discriminant analysis; C, control; V, VNP20009; VD, VNP20009 DNase I; E, *E. coli* O157:H7; L, *L. crispatus*.

Supplementary Figure 4 | The effect of *L. crispatus* and broad-spectrum antibiotics on the vaginal microbiota diversity of rats. **(A)** The observed species; **(B)** the Shannon index; **(C)** the Simpson index. **(D)** Microbial composition at the phylum level. **(E)** Microbial composition at the genus level. **(F)** Venn diagram of the vaginal microbiota among C, ABX, L groups. **(G)** PCoA of vaginal bacterial communities among C, ABX, L groups. The data represent means \pm SD of 4 animals. $*P < 0.05$, $**P < 0.01$. SD, standard deviation; C, control; ABX, wide-spectrum antibiotic; L, *L. crispatus*; PCoA, Principle coordination analysis.