The microbiota in the urogenital tract of healthy reproductive age women is mainly composed of bacteria from the *Lactobacillus* genus; however, structural or compositional variations of this microbiota may impact the function of reproductive organs leading to infertility or other pathological conditions. For this reason, assessment of the endometrial microbiome has been proposed as a new factor to be considered in infertile patients to improve our understanding of the reproductive function and develop personalized medicine in assisted reproductive technologies.