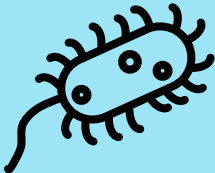



Adverse pregnancy outcomes in women with type 1 diabetes are associated with multiple alterations in the vaginal microbiome

Preterm birth and preeclampsia in women with type 1 diabetes (T1D) are linked to vaginal microbiome changes. Early intervention to treat risk-associated taxa may improve pregnancy outcomes for mothers and babies.


332 third-trimester
vaginal swabs


Bacterial
16s rRNA sequencing


Fungal
ITS1 sequencing

n=171 with T1D	n=161 without T1D
n=160	n=150
n=70	n=77

In T1D compared to pregnancies without T1D:

↑ Abundance of *Lactobacillus* species
L. iners and *L. jensenii*

↑ Dysbiosis-associated anaerobic
genera *Gardnerella*, *Anaerococcus*,
Prevotella, *Dialister*, and *Peptoniphilus*

↑ Abundance of fungi species
Malassezia restricta

In T1D pregnancies with adverse outcomes:

Preterm birth

↑ Bacterial alpha diversity

↓ *Lactobacillus reuteri*

↑ *Malassezia* genus

Preeclampsia

↑ Bacterial alpha diversity

↑ *Gardnerella vaginalis*