## **Bacterial vaginosis**

Bacterial vaginosis (BV) is considered to be the most common cause of vaginal inflammation among both pregnant and non-pregnant women and prevalences between 4.9% and 36.0% have been reported from European and American studies. It previously was called nonspecific vaginitis or Gardnerella-associated vaginitis. The adult human vagina is a complex ecosystem containing an abundance of microorganisms. In women of childbearing age this system is dominated by *Lactobacillus* spp., a genus of gram-positive, nonmotile rod-like bacteria, a defining characteristic of which is the ability to grow in acid media and tolerate acid conditions (pH < 4.5); lactobacilli also ferment carbohydrates to produce lactic acid and produce  $H_2O_2$  which provides a natural defense against *Gardnerella vaginalis*. In bacterial vaginosis (BV) the balance of flora is changed with reduced numbers of lactobacilli (normal concentration  $10^6 - 10^{10}$  CFU/ml) and an increase in numbers of other facultative and anaerobic species such as anaerobic cocci *Prevotella* spp., *Gardnerella vaginalis*, and *Mobiluncus* spp. (normal concentration <  $10^3$ - $10^5$  CFU/ml). *G. vaginalis* is virtually always present at high concentrations in women who have BV but is also detected frequently in normal women and in some cases the concentration of *Gardnerella vaginalis* can reach  $10^7$ - $10^8$  CFU/ml also in absence of BV, so the most important maker of BV is the ratio of logarithm concentration *Lactobacillus* spp and *G. vaginalis*.

The clinical significance of studying vaginal flora is that it helps determine the quantity of microorganisms and assess the ratio between the different groups of conditionally pathogenic microorganisms and the normal flora. The total quantity of bacteria serves as an indicator of infection level in the vaginal environment: under normal conditions it can vary between 10<sup>6</sup> and 10<sup>9</sup> (6-9 Log). The ratio between lactobacilli and the total bacterial quantity can be used as an indicator of the balance between the normal and conditionally pathogenic flora: the normal proportion of lactobacilly should be 95 to 100% of the total bacterial quantity.

## **Bacterial vaginosis Kits**

TR-B7-100FRT SA, RG, iQ, SC,MX, A, B	G.vaginalis/Lactobac. species Real-TM Quant Complete Real Time Test with DNA-Sorb-A extraction kit	R	C€	100	2,5 x10 <sup>3</sup> copies/ml
R-B7-100FRT SA, RG, iQ, SC,MX, A, B	G.vaginalis/Lactobac. species Real-TM Quant Real Time Amplification kit	R	C€	100	2,5 x10 <sup>3</sup> copies/ml
TB7-100FRT SA, RG, iQ, MX, SC, A, B	Gardnerella vaginalis Real-TM Complete Real Time Test with DNA-Sorb-A extraction kit	R	C€	100	2,5 x10 <sup>3</sup> copies/ml
B7-100FRT SA, RG, iQ, MX, SC, A, B	Gardnerella vaginalis Real-TM Real Time Amplification kit	R	C€	100	2,5 x10 <sup>3</sup> copies/ml
TB74-100FRT SA, RG, iQ, MX, SC, A, B	Bacterial Vaginosis Real-TM Quant Complete Real Time Test for quantitative detection of Gardnerella vaginalis, Atopobium vaginae, Lactobacillus spp. and total bacteriae quantity in the vaginal biotope with DNA-Sorb-A extraction kit	R	C€	100	2,5 x10 <sup>3</sup> copies/ml
B74-100FRT SA, RG, iQ, MX, SC, A, B	Bacterial Vaginosis Real-TM Quant Multiplex RT-PCR for quantitative detection of Gardnerella vaginalis, Atopobium vaginae, Lactobacillus spp. and total bacteriae quantity in the vaginal biotope	R	C€	100	2,5 x10 <sup>3</sup> copies/ml
B-138-100F	Bacterial Vaginosis Screen NEW Agarose gel multitube kit for detection of Gardnerella vaginalis, Lactobacillus spp., Ureaplasma spp., Mycoplasma hominis, Prevotella spp., Mobiluncus curtiisi	А		110	
B-159-100F	Gardnerella vaginalis 340/220 IC	Α		110	2,5 x10 <sup>3</sup> copies/ml