CLAIMS

1. A method for pretreating blood, comprising

bringing the blood containing cells into contact with a porous surface of a porous material before flowing the blood through a microchannel to classify the cells in the blood, wherein

the blood containing the cells is brought into contact with the porous surface by adding the porous material to the blood containing the cells and mixing them, and

the porous material has particles with the porous surface comprising polysaccharides, and is added as a suspension in a liquid to the blood containing the cells.

~~2. The pretreatment method according to claim 1, wherein~~

~~the blood containing the cells is brought into contact with the porous surface by adding the porous material to the blood containing the cells and mixing them.~~

~~3. The pretreatment method according to claim 2, wherein~~

~~the porous material has particles with the porous surface comprising polysaccharides, and is added as a suspension in a liquid to the blood containing the cells.~~

2~~4~~. The pretreatment method according to claim 1~~3~~, wherein

the particles have a particle size distribution and a median particle size d50V in the volume-based cumulative distribution of 25 to 280 μm.

3~~5~~. The pretreatment method according to claim 2~~4~~, wherein

the porous material is capable of fractionating DNA when the porous material is used for gel filtration chromatography, and the porous material has an exclusion limit for DNA of 45 base pairs or more.

4~~6~~. The pretreatment method according to claim 2~~4~~, wherein

the porous material is capable of fractionating a protein when the porous

material is used for gel filtration chromatography, and at least any one of the conditions that the porous material has a lower limit of a fractionation range for the protein of 1×10^4 Da or more and that the porous material has an upper limit of the fractionation range for the protein of 4×10^6 Da or more is satisfied.

57. The pretreatment method according to claim 24, wherein

small particles having a particle size smaller than or equal to a cutoff diameter are previously removed from the particles, and

the cutoff diameter is within a range of 25 to 100 μm.

68. The pretreatment method according to claim 13, wherein:

the blood to be brought into contact with the surface of the porous material is whole blood that is not diluted with another liquid, and the whole blood is diluted with another liquid after the contact with the surface of the porous material; or

the blood to be brought into contact with the surface of the porous material is whole blood previously diluted with another liquid.

79. A method for classifying cells in blood, comprising:

pretreating the blood containing the cells according to the pretreatment method according to claim 13; and thereafter

flowing the blood pretreated through the microchannel to hydraulically classify the cells in the blood.

810. The classification method according to claim 79, wherein

in the pretreatment,

the particles have a particle size distribution and a median particle size d50V in the volume-based cumulative distribution of 25 to 280 μm, and

small particles having a particle size smaller than or equal to a cutoff diameter are previously removed from the particles by sieving, and

in the classification,

a flat entry channel that makes the blood flow planar is provided upstream of a point where the hydraulic classification is performed in the microchannel,

and

the cutoff diameter is larger than a length in a short direction of a cross section of the entry channel.

9~~11~~. The classification method according to claim 8~~10~~, wherein

a pillar dense area is provided in the entry channel so as to across the blood flow, and

each pillar in the pillar dense area stands along the short direction.

10~~12~~. The classification method according to claim 9~~11~~, wherein

the classification enriches any of fetal nucleated red blood cells (fNRBC), circulating tumor cells (CTCs), and myeloma cells.

~~13. A method for evaluating pretreatment of blood, comprising:~~

~~flowing the blood containing cells through a microchannel after the pretreatment of the blood, wherein a pillar dense area provided in the microchannel so as to across the blood flow, and~~

~~observing debris spreading in the pillar dense area and a section adjacent to the pillar dense area downstream thereof where pillars are sparse after a certain time has elapsed from the start of flowing the blood.~~

~~14. The evaluation method according to claim 13, wherein~~

~~the section is surrounded by the most upstream pillar dense area, the pillar dense area located next to the most upstream pillar dense area, and a sidewall of the microchannel, and~~

~~a ratio of the debris spreading with respect to the section, as the section is seen in planar view, is determined as an area ratio.~~

~~15. The evaluation method according to claim 14, wherein~~

~~the pretreatment is performed by bringing the blood containing the cells into contact with a surface of a test material.~~

~~16. The evaluation method according to claim 14, wherein~~

~~the pretreatment is performed by adding a test material to the blood containing the cells and mixing.~~