Figure 1. The formation of Tube-like structures by endothelial cells of the ЕА.Hy926 cell line. A - tube-like structures formed by intact EC in the presence of 2.5% FBS; B - monoculture, in the presence of 2.5% FBS and bFGF (20 ng / ml); C - in the presence of 2.5% FBS and THP-1 cells; G - monoculture, in the presence of 2.5% FBS and the drug "Avastin". Phase contrast, x100.

Figure 2. Expression of VEGFR1 by EC and THP-1 cells. A - the graph displaying THP-1 cells (monoculture) in forward scatter light (FSC) and side scatter light (SSC) coordinates; B - the graph displaying EC (monoculture) in FSC and SSC coordinates; C — change of the intensity of VEGFR1 expression by THP-1 cells during their cultivation with EC; G – change of the intensity of expression of VEGFR1 by EC during their cultivation with THP-1 cells; D - the graph in FSC and CD45 (PerCP) coordinates reflects the separation of THP-1 cells and EC; E - the graph in FSC and SSC coordinates for the co-cultivation of EC and THP-1 cells.

Figure 3. The effect of IL-1β on the formation of tube-like structures by endothelial cells of the ЕА.Hy926 cell line in the presence of THP-1 cells and the drug "Avastin". (A) the effect on the length of tube-like structures; (B) the effect on the number of tube-like structures. DMEM F12 - cultivation in a medium without HAT, 2.5% FBS (spontaneous level), n = 45; Avastin - cultivation in the presence of the drug "Avastin", n = 45; IL-1 - cultivation in the presence of IL-1β, n = 15; Avastin + IL-1 - cultivation in the presence of the drug "Avastin" and IL-1β, n = 15. The significance of differences between groups: \* - p <0.05; \*\* - p <0.01; \*\*\* - p <0.001 (differs from the spontaneous level); # - p <0.05; ## - p <0.01; ### - p <0.001.

Figure 4. Expression of vascular endothelial growth factor receptors on the surface of endothelial cells of the ЕА.Hy926 cell line. (A) the expression of VEGFR1; (B) VEGFR2; (C) VEGFR3. EC\_unst - untreated EC, n = 8; EC - EC treated with antibodies with a fluorescent label to the corresponding receptor, n = 8; EC (EC + THP) - EC after co-culture with THP-1 cells, treated with antibodies with a fluorescent label to the corresponding receptor, n = 16. The significance of differences: # - p <0.05; ### - p <0.001.

Figure 5. The effect of IL-1β on the expression of VEGFR1 and VEGFR3 by endothelial cells under conditions of their co-cultivation with THP-1 cells. (A), (B) the expression of VEGFR1; (C), (D) the expression of VEGFR3. DMEM F12 - DMEM F12 - cultivation in a medium without HAT, 2.5% FBS (spontaneous level), n = 16; Avastin - Avastin - cultivation in the presence of the drug "Avastin", n = 24; IL-1 - cultivation in the presence of IL-1β, n = 6; Avastin + IL-1 - cultivation in the presence of the drug "Avastin" and IL-1β, n = 6. The significance of differences between groups: \* - p <0.05; \*\* - p <0.01; \*\*\* - p <0.001 (differs from the spontaneous level); # - p <0.05; ## - p <0.01; ### - p <0.001.

Figure 6. The effect of IL-6 on the formation of tube-like structures by endothelial cells of the ЕА.Hy926 cell line in the presence of THP-1 cells and the "Avastin" drug (A) the effect on the length of tube-like structures; (B) the effect on the number of tube-like structures. DMEM F12 - cultivation in a medium without HAT, 2.5% FBS (spontaneous level), n = 45; Avastin - cultivation in the presence of the drug "Avastin", n = 30 (in the absence of THP-1 cells), n = 45 (in the presence of THP-1 cells); IL-6 - cultivation in the presence of IL-6, n = 15; Avastin + IL-6 - cultivation in the presence of the drug "Avastin" and IL-6, n = 15. The significance of differences between groups: \*\* - p <0.01; \*\*\* - p <0.001 (differs from the spontaneous level); ## - p <0.01; ### - p <0.001.

Figure 7. Effect of IL-6 on the expression of VEGFR1 and VEGFR3 by endothelial cells under conditions of co-cultivation with THP-1 cells. (A), (B) the expression of VEGFR1; (C), (D) the expression of VEGFR3. DMEM F12 - cultivation in a medium without HAT, 2.5% FBS (spontaneous level), n = 16; Avastin - cultivation in the presence of the drug "Avastin", n = 24; IL-6 - cultivation in the presence of IL-6, n = 3; Avastin + IL-6 - cultivation in the presence of the drug "Avastin" and IL-6, n = 3. The significance of differences between groups: \* - p <0.05; \*\* - p <0.01; \*\*\* - p <0.001 (differs from the spontaneous level); # - p <0.05; ## - p <0.01; ### - p <0.001.

Figure 8. The effect of TNFα on the formation of tube-like structures by endothelial cells of the ЕА.Hy926 cell line in the presence of THP-1 cells and the drug "Avastin" (A) the effect on the length of tube-like structures; (B) the effect on the number of tube-like structures. DMEM F12 - cultivation in a medium without HAT, 2.5% FBS (spontaneous level), n = 45; Avastin - cultivation in the presence of the drug "Avastin", n = 45; TNFα - cultivation in the presence of TNFα, n = 15; Avastin + TNFα - cultivation in the presence of the drug "Avastin" and TNFα, n = 15. The significance of differences between groups: \*\* - p <0.01; \*\*\* - p <0.001 (differs from the spontaneous level); ## - p <0.01; ### - p <0.001.

Figure 9. The effect of TNFα on the expression of VEGFR1 and VEGFR3 by endothelial cells under conditions of their co-cultivation with THP-1 cells. (A), (B) the expression of VEGFR1; (B), (D) the expression of VEGFR3. DMEM F12 - cultivation in a medium without HAT, 2.5% FBS (spontaneous level), n = 16; Avastin - cultivation in the presence of the drug "Avastin", n = 24; TNFα - cultivation in the presence of TNFα, n = 3; Avastin + TNFα - cultivation in the presence drug "Avastin" and TNFα, n = 3. The significance of differences between groups: \* - p <0.05; \*\* - p <0.01; \*\*\* - p <0.001 (differs from the spontaneous level); # - p <0.05; ## - p <0.01; ### - p <0.001.