

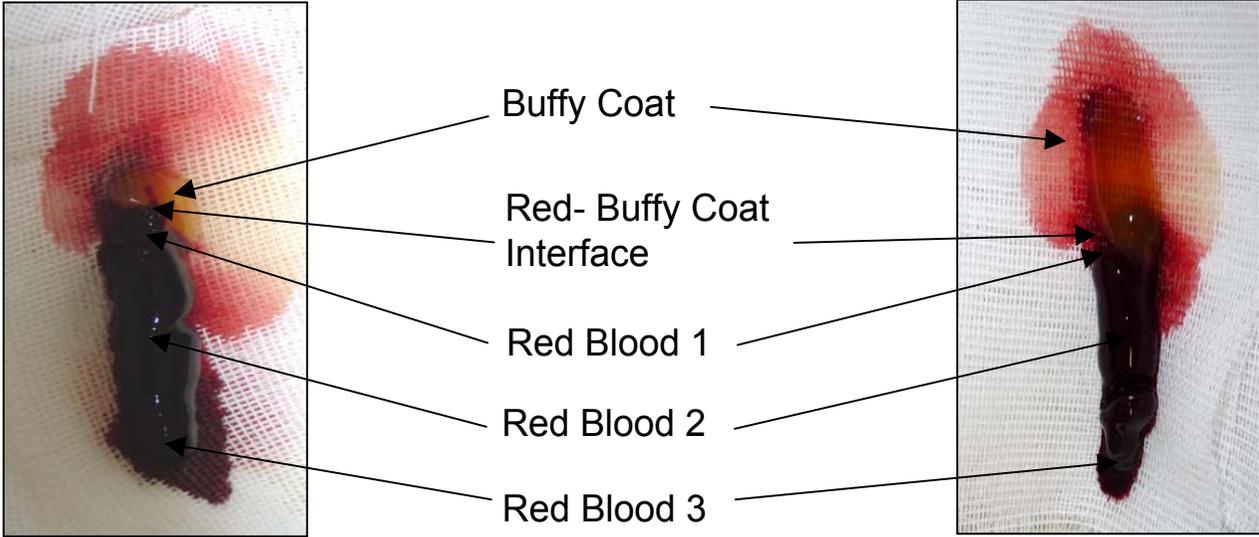
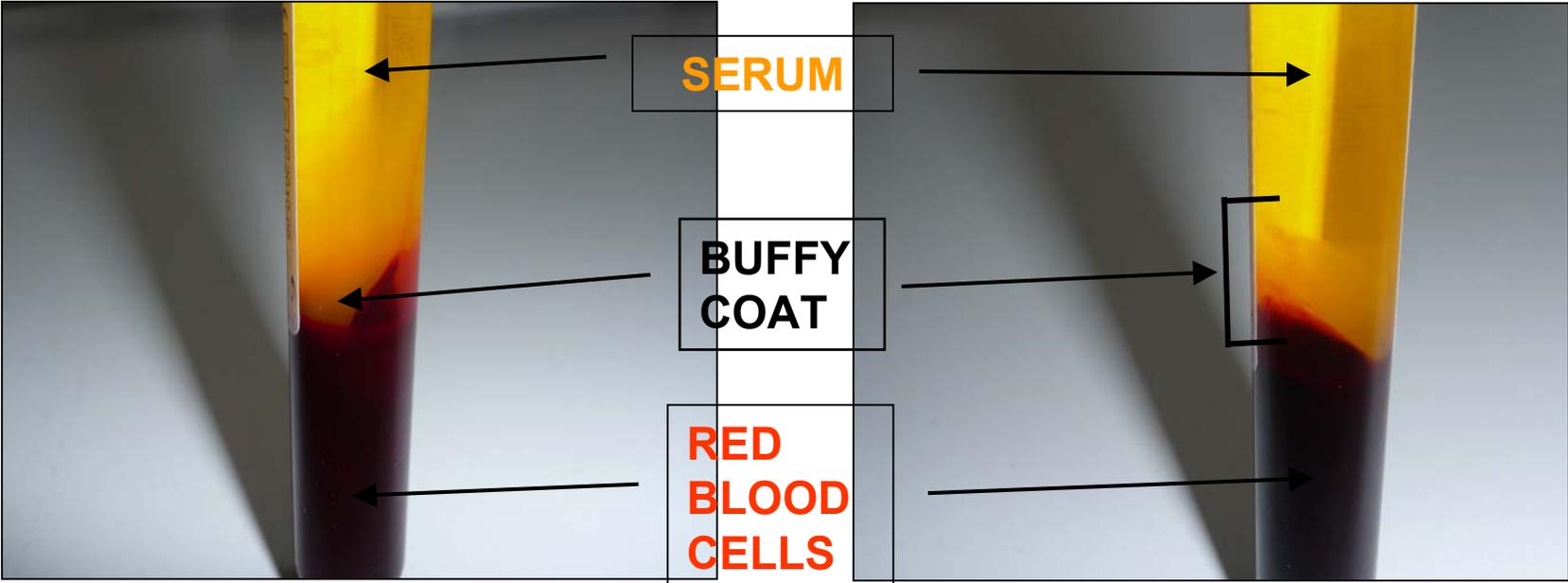
CENTRIFUGES AND GROWTH FACTORS

Method:

- 6 samples of blood;
- Centrifuge (Silfradent protocol);
- Histomorphometrical analysis of growth factors: TGF- β 1 e VEGF-A in Buffy Coat:
 - 1) *Buffy Coat*, 2) *Red-buffy coat Interface* e 3) *Red Blood Cells 1, 2, 3*;
- Quantitative analysis of TGF- β 1 e VEGF-A in blood serum;
- Histomorphometrical analysis of CD34+ cells in Red-Buffy Coat Interface.

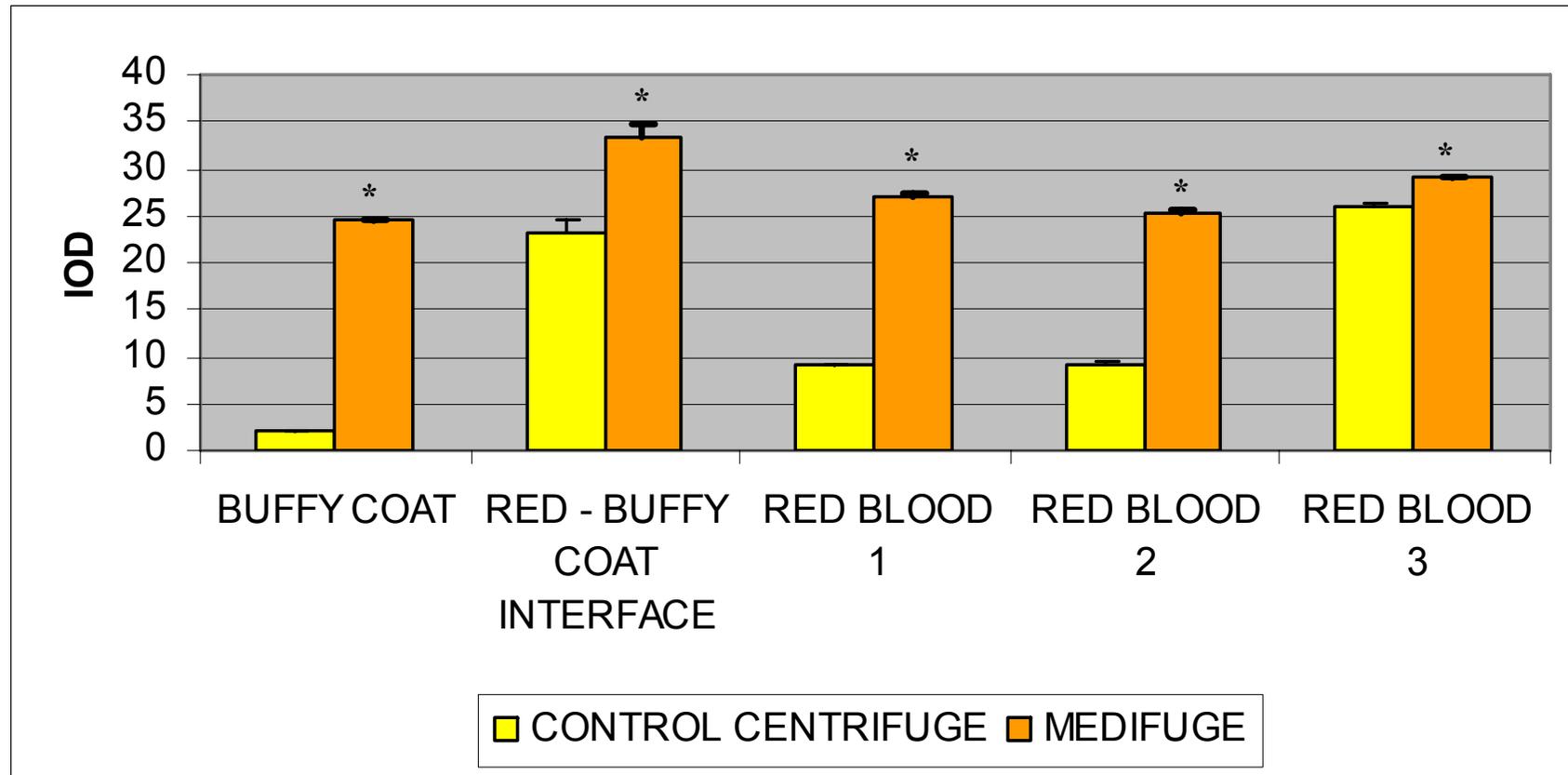
**PRF CONTROL
CENTRIFUGE**

**CGF MEDIFUGE
SILFRADENT**



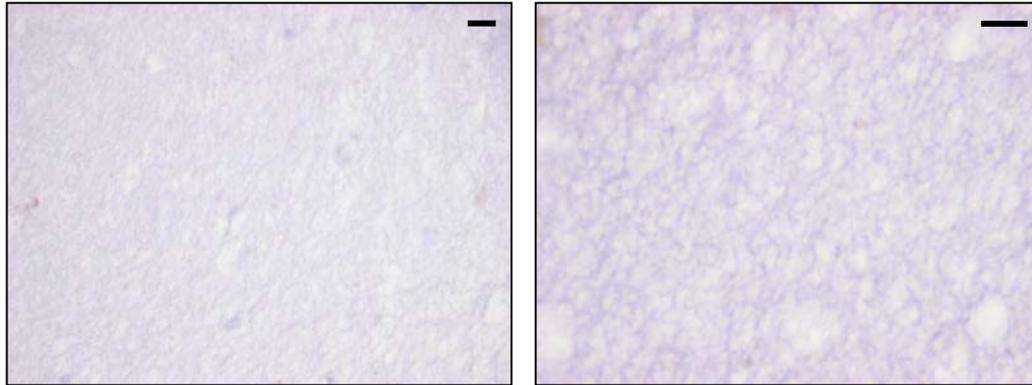


VEGF-A expression



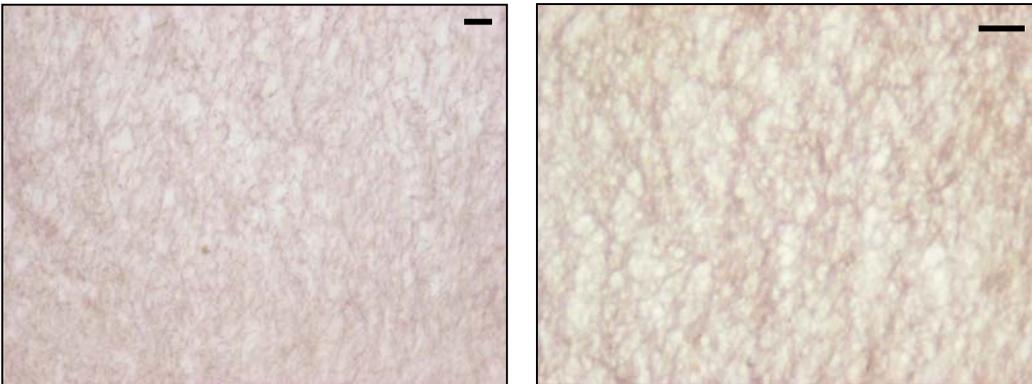
* $P < 0,05$ vs control centrifuge

The histomorphometrical analysis showed a greater expression of VEGF-A in the samples treated with Medifuge-Silfradent compared with control centrifuge.



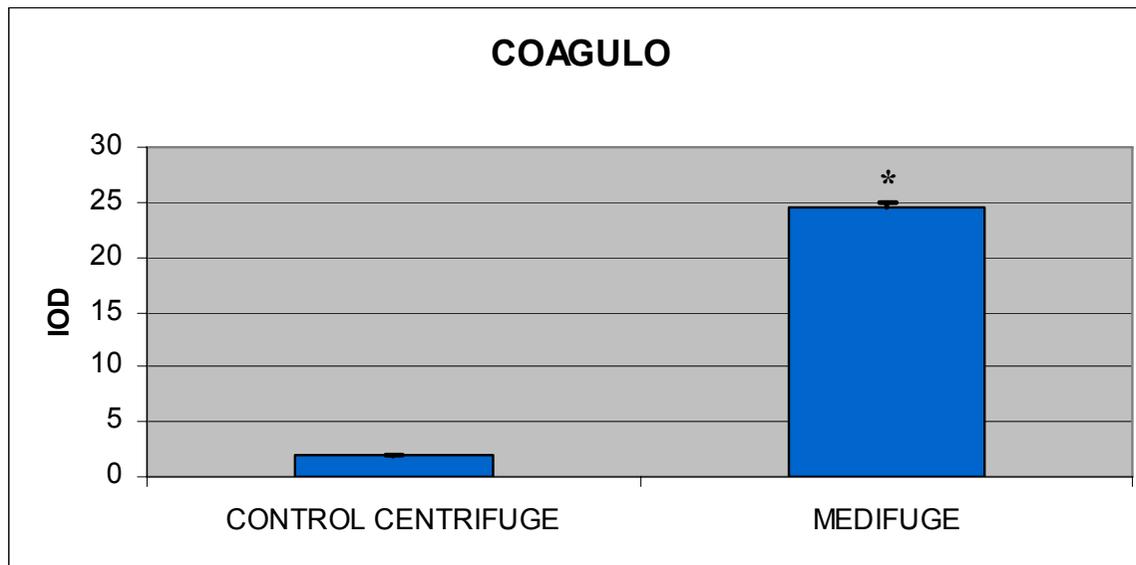
*PRF
CONTROL
CENTRIFUGE*

**VEGF-A
Buffy
Coat**

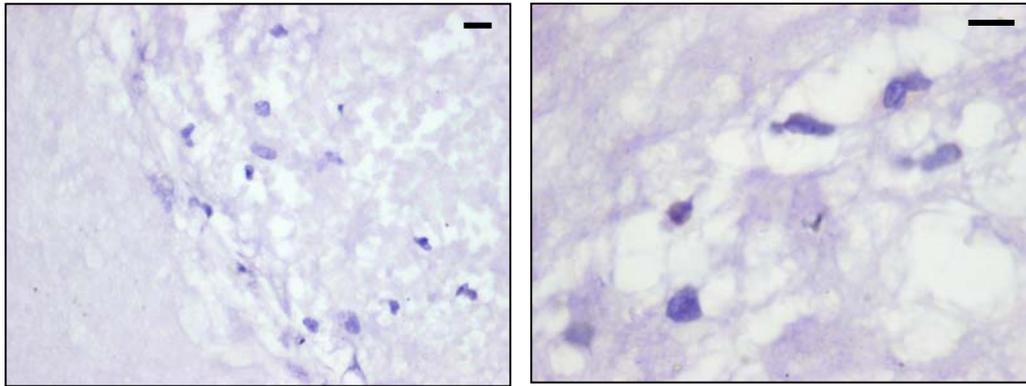


*CGF
MEDIFUGE*

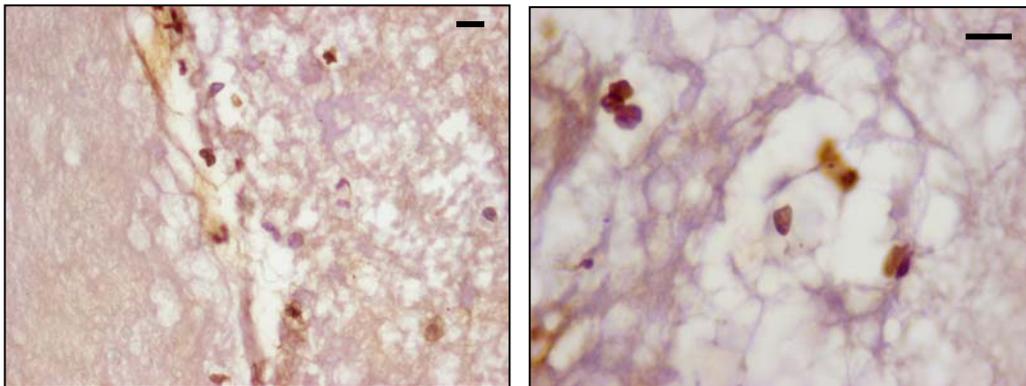
Histomorphometrical analysis (IOD) of VEGF-A showed a greater expression of this growth factor in the Buffy Coat of samples treated with Medifuge-Silfradent compared with control centrifuge.



* P < 0,05 vs control centrifuge



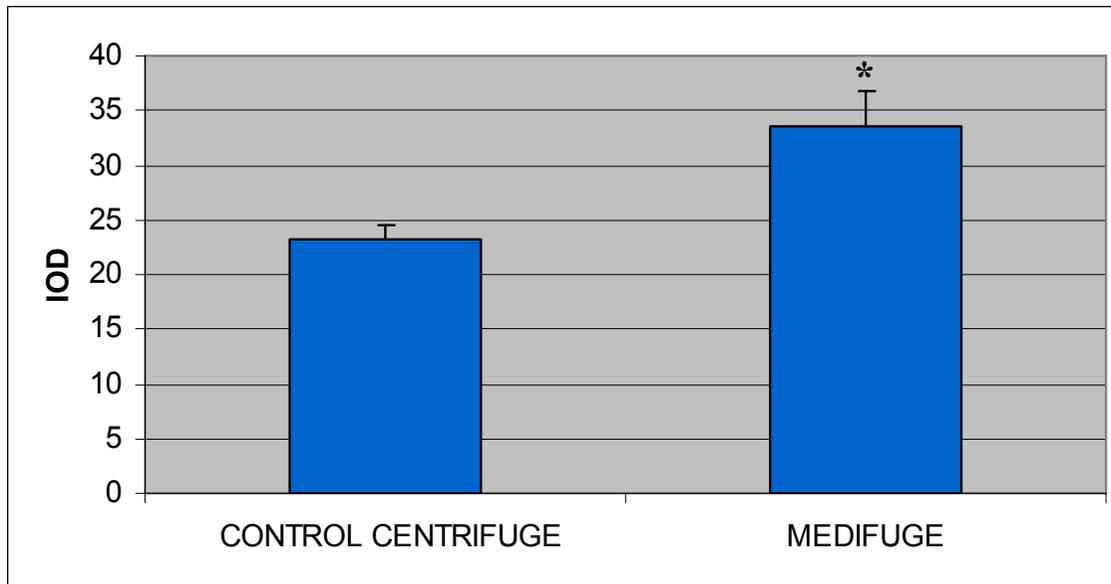
PRF
CONTROL
CENTRIFUGE



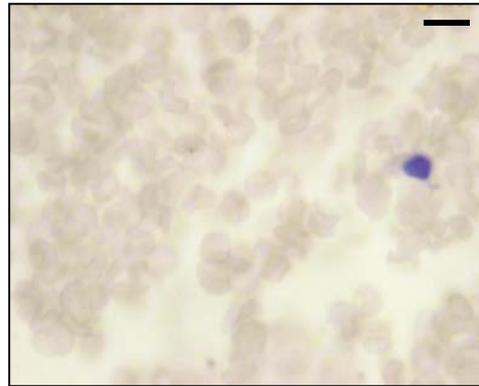
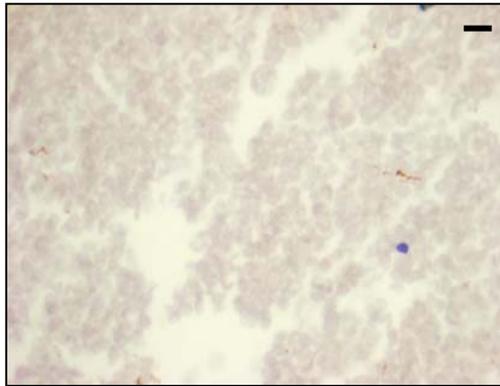
CGF
MEDIFUGE

VEGF-A
Red – Buffy Coat
Interface

Histomorphometrical analysis (IOD) of VEGF-A showed a greater expression of this growth factor in the Buffy Coat of samples treated with Medifuge-Silfradent compared with control centrifuge.

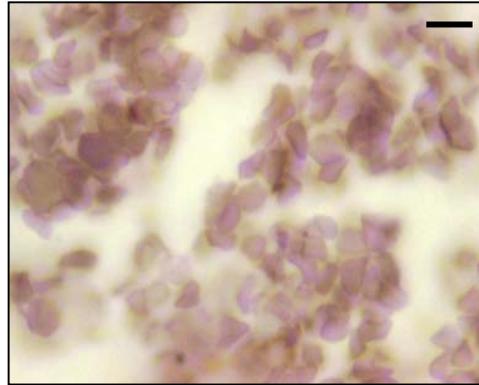
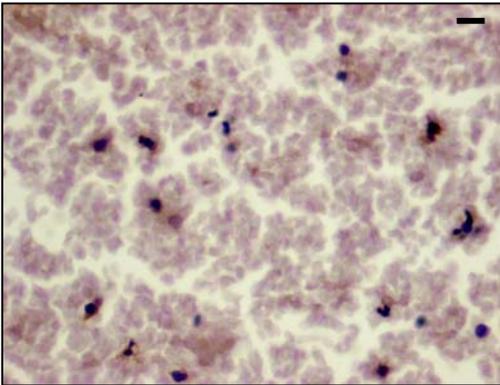


* P < 0,05 vs control centrifuge



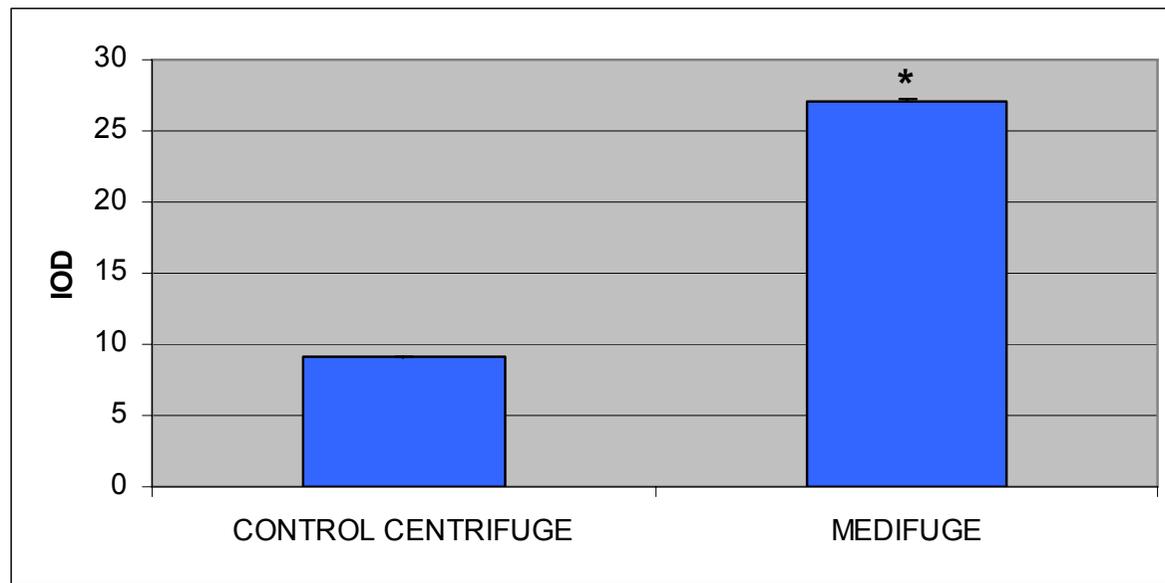
VEGF-A
Red Blood 1

PRF
CONTROL
CENTRIFUGE

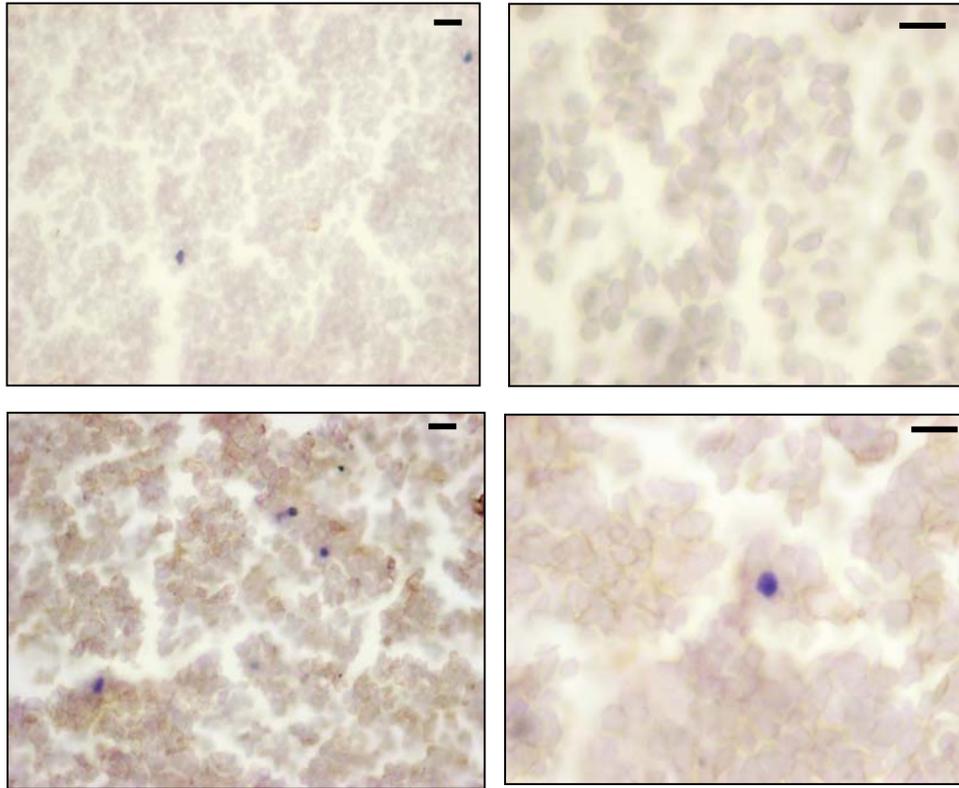


Histomorphometrical analysis (IOD) of VEGF-A showed a greater expression of this growth factor in the Red Blood 1 of samples treated with Medifuge-Silfradent compared with control centrifuge.

CGF
MEDIFUGE



* P < 0,05 vs control centrifuge

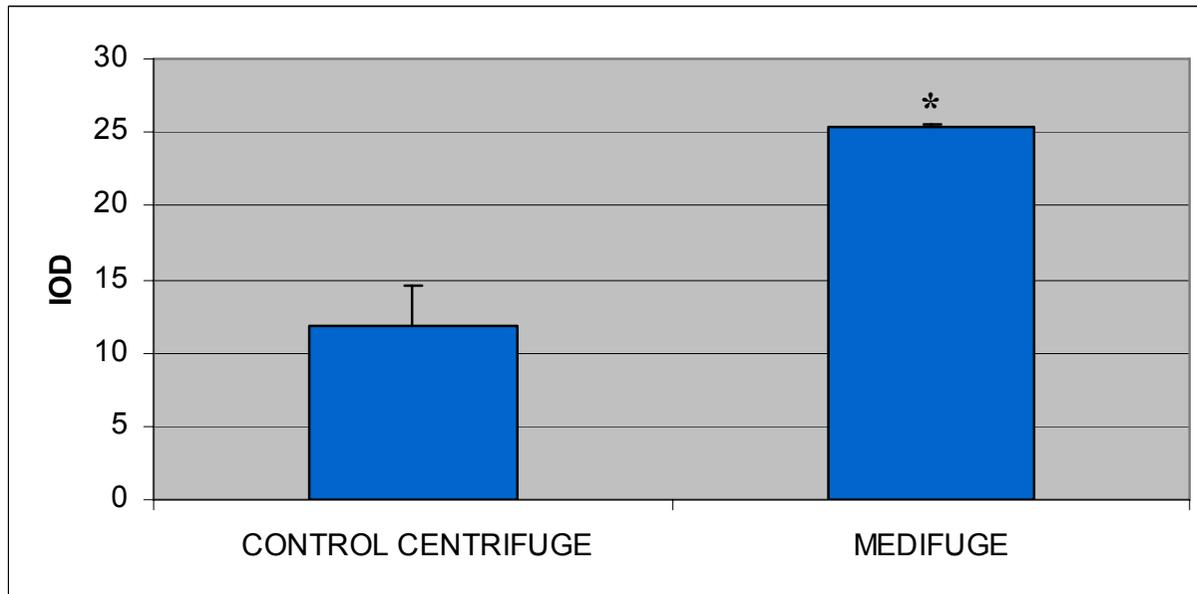


VEGF-A
Red Blood 2

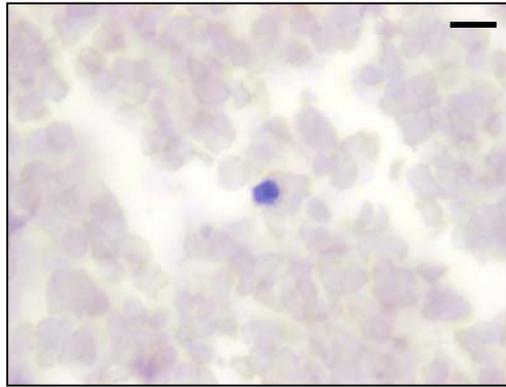
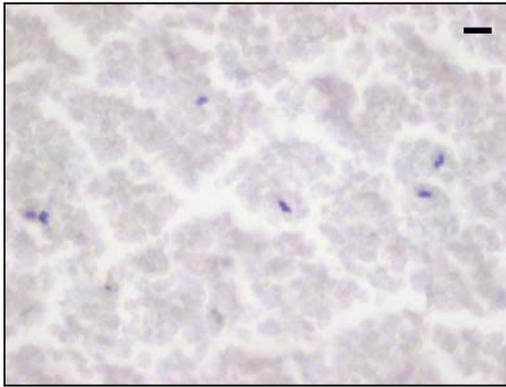
PRF
CONTROL
CENTRIFUGE

Histomorphometrical analysis (IOD) of VEGF-A showed a greater expression of this growth factor in the Red Blood 2 of samples treated with Medifuge-Silfradent compared with control centrifuge.

CGF
MEDIFUGE

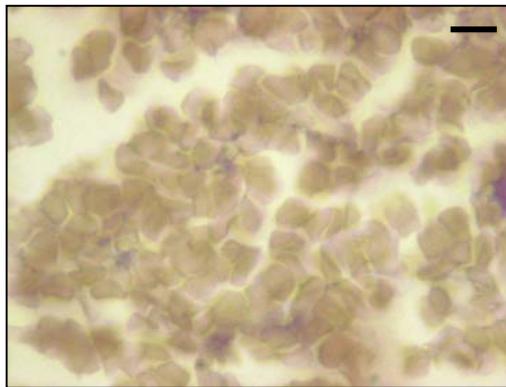
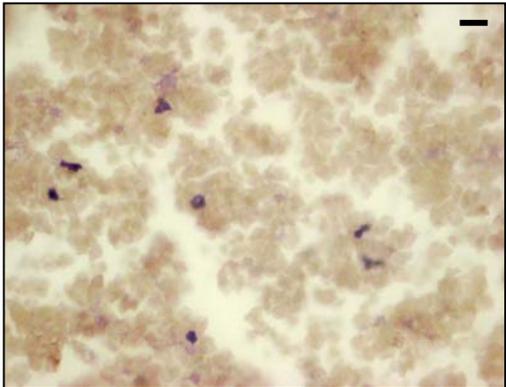


* P < 0,05 vs control centrifuge



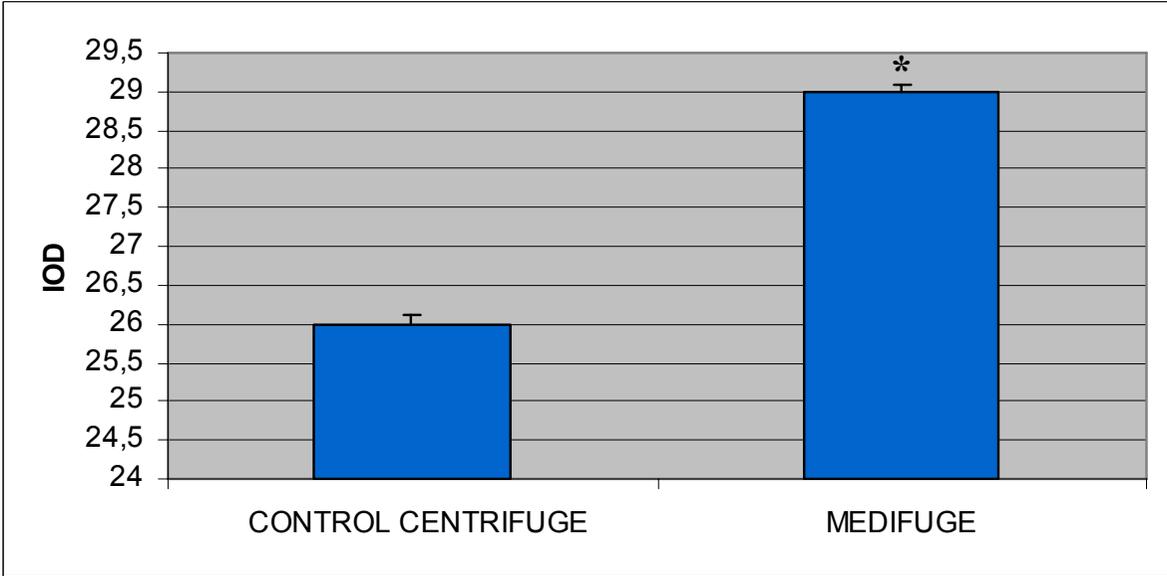
VEGF-A
Red Blood 3

PRF
CONTROL
CENTRIFUGE



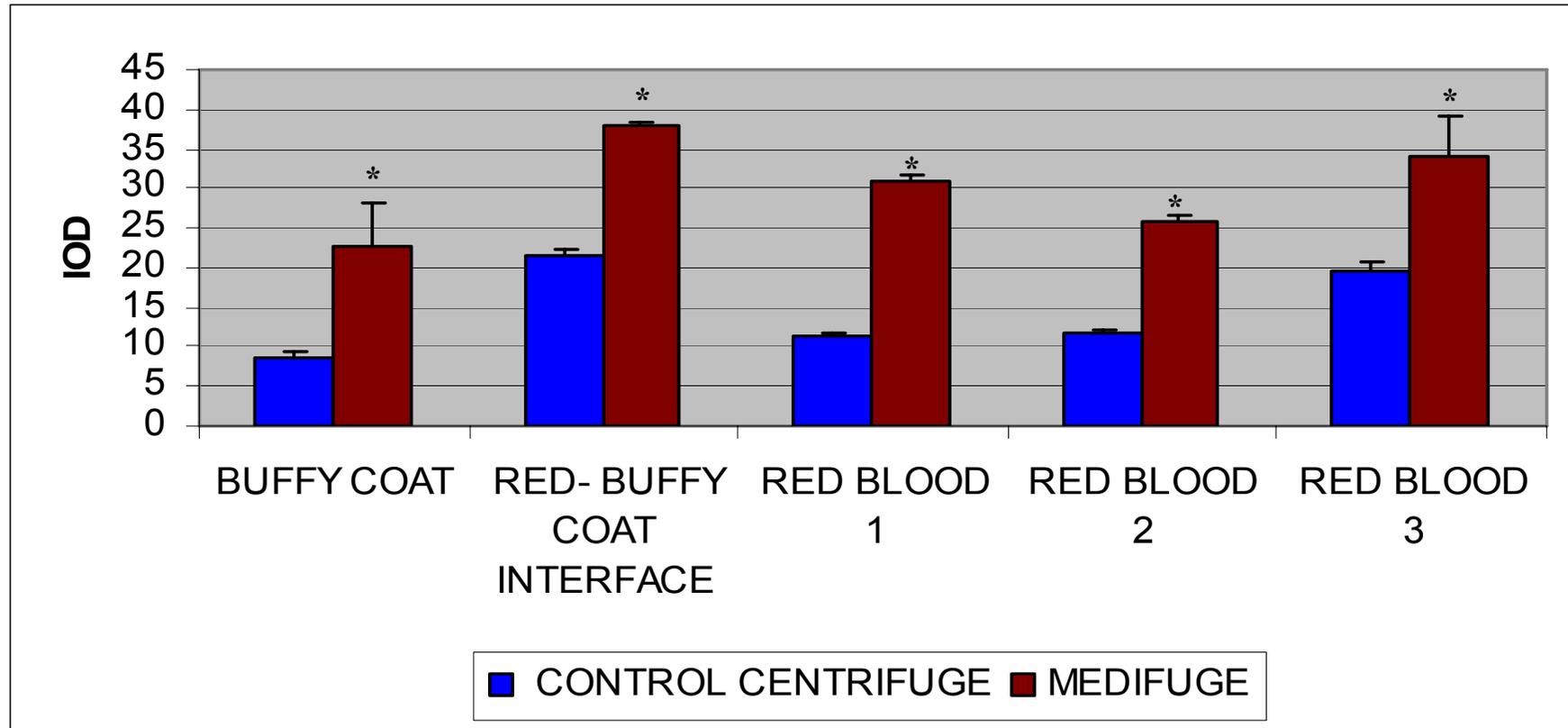
Histomorphometrical analysis (IOD) of VEGF-A showed a greater expression of this growth factor in the Red Blood 3 of samples treated with Medifuge-Silfradent with control centrifuge.

CGF
MEDIFUGE



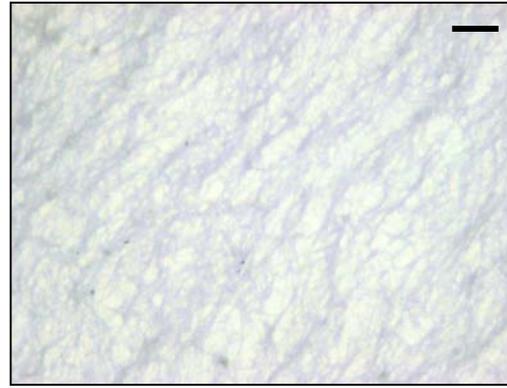
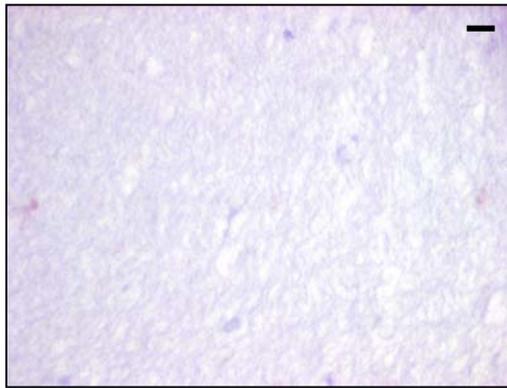
* P < 0,05 vs control centrifuge

TGF- β 1 expression



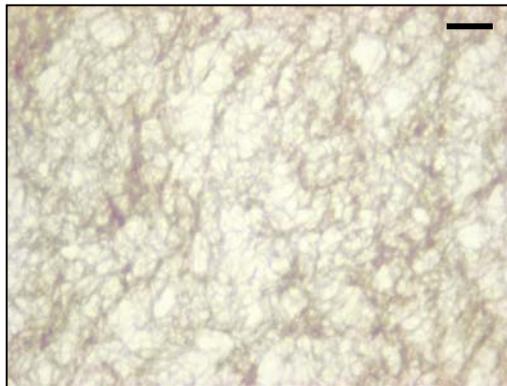
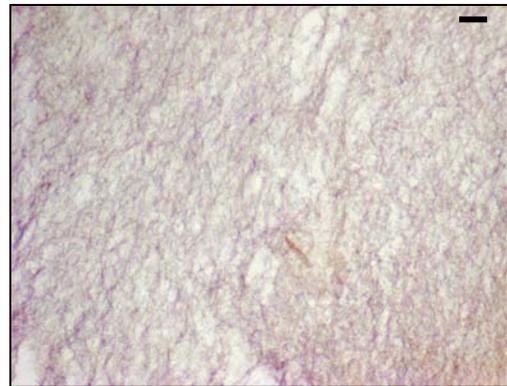
* P < 0,05 vs control centrifuge

The histomorphometrical analysis showed a greater expression of TGF- β 1 in samples treated with Medifuge-Silfradent compared with control centrifuge.



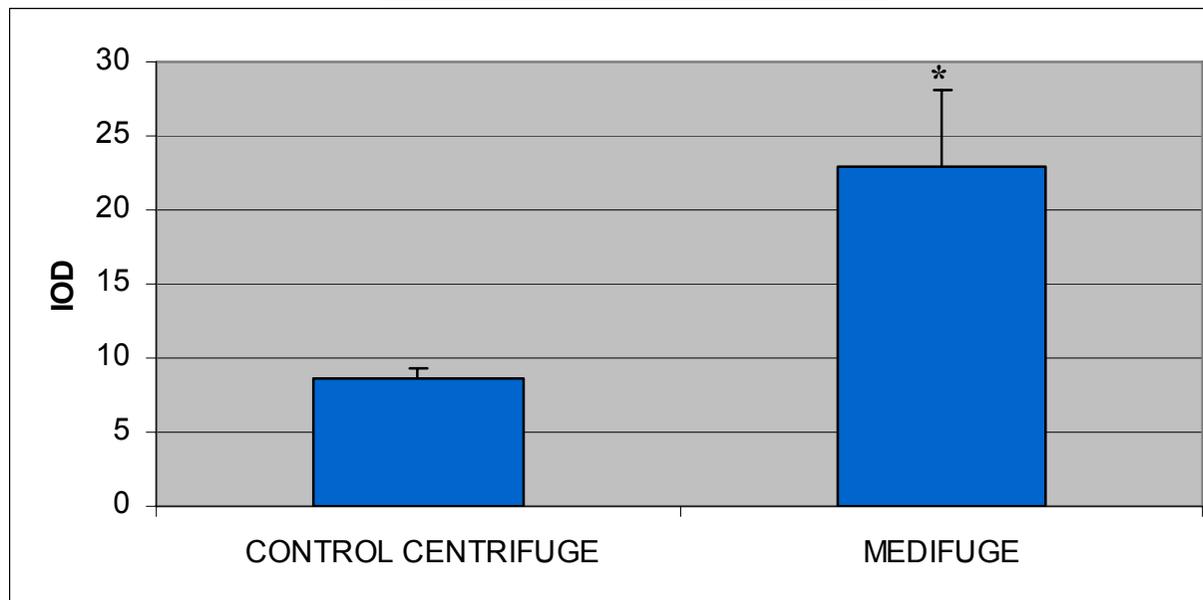
PRF
CONTROL
CENTRIFUGE

TGF- β 1
Buffy
Coat

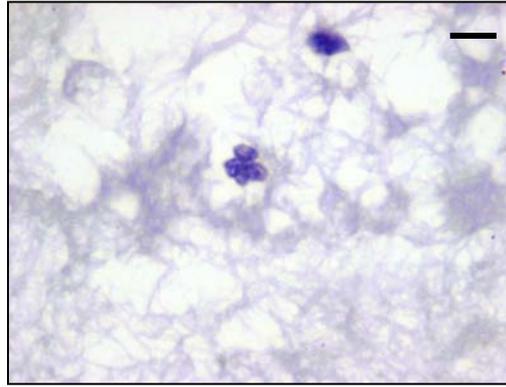
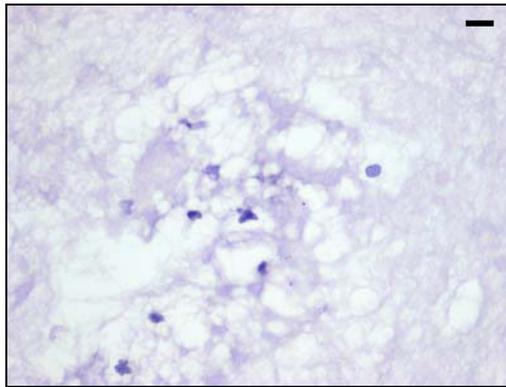


CGF
MEDIFUGE

Histomorphometrical analysis (IOD) of TGF- β 1 showed a greater expression of this growth factor in the Buffy Coat of samples treated with Medifuge-Silfradent compared with control centrifuge.

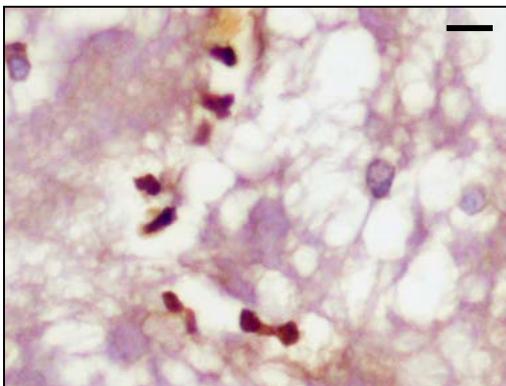
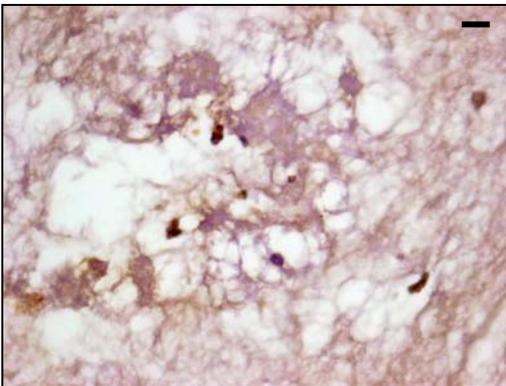


* P < 0,05 vs control centrifuge



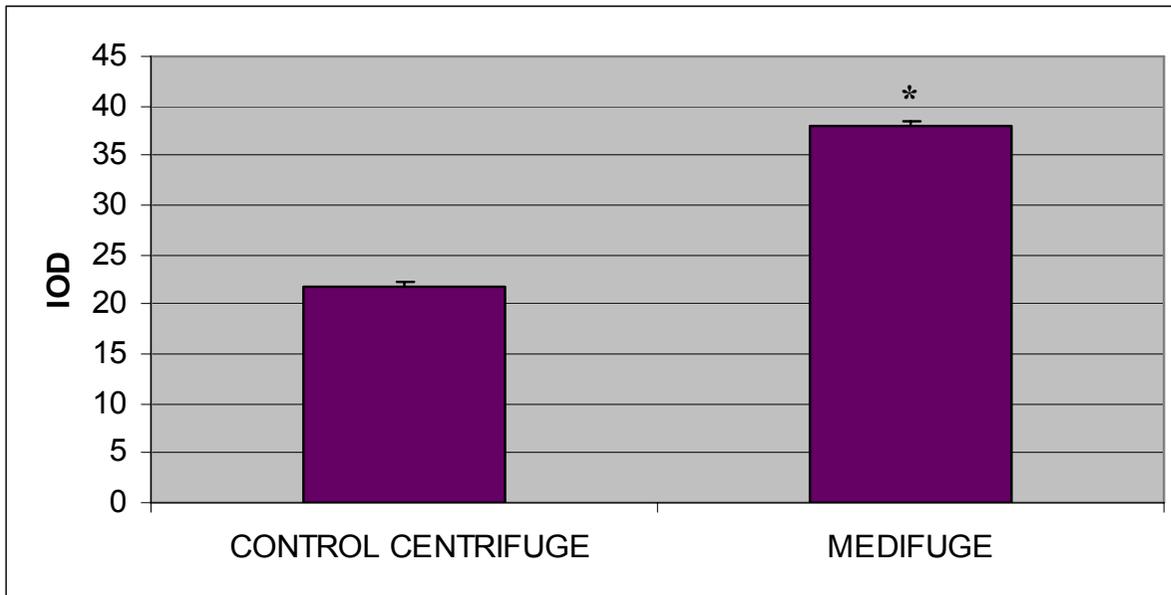
TGF-β1
Red – Buffy Coat
Interface

PRF
CONTROL
CENTRIFUGE

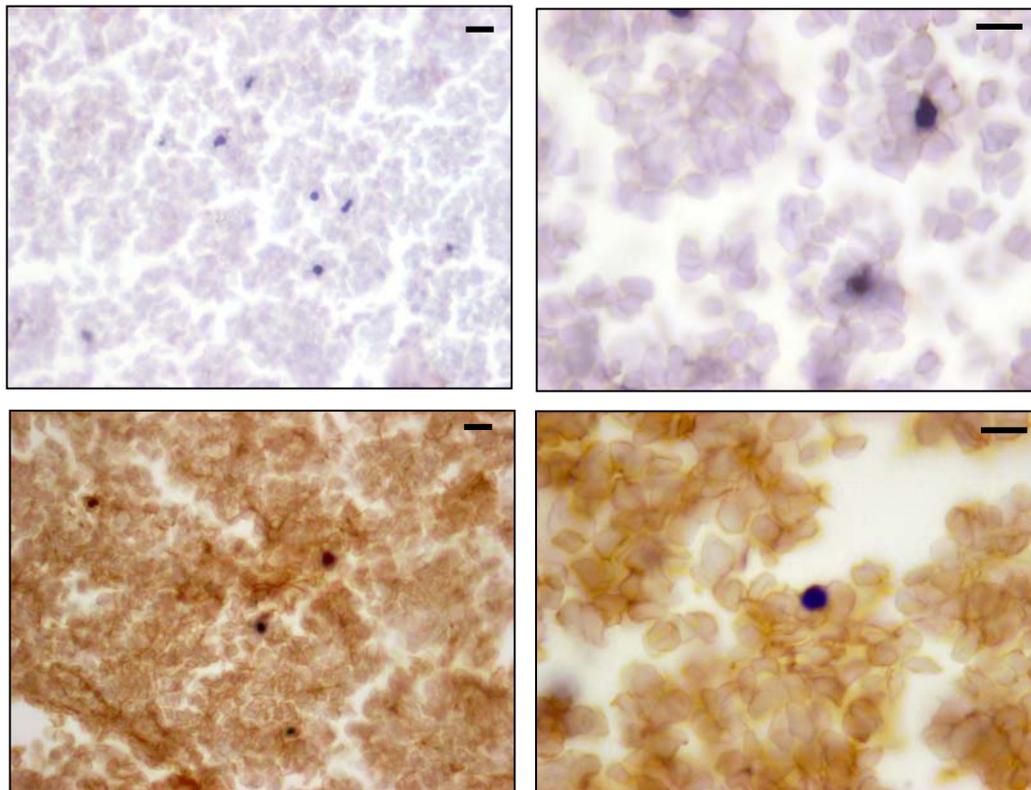


Histomorphometrical analysis (IOD) of TGF-β1 showed a greater expression of this growth factor in the Red-Buffy Coat of samples treated with Medifuge-Silfrudent compared with control centrifuge.

CGF
MEDIFUGE



* P < 0,05 vs control centrifuge

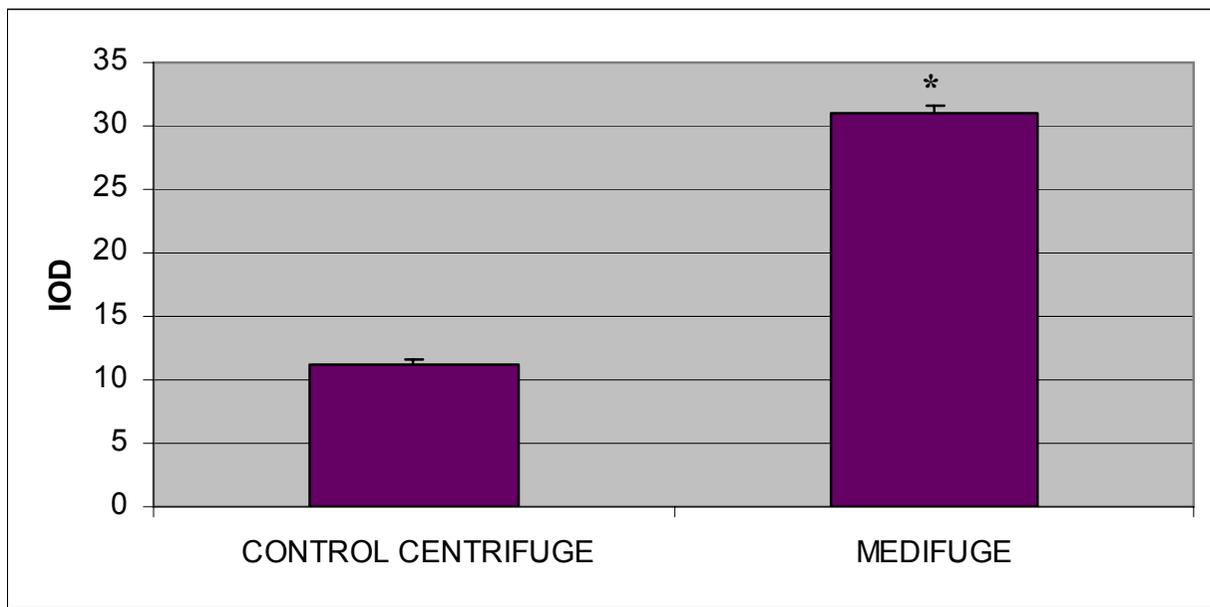


TGF-β1
Red Blood 1

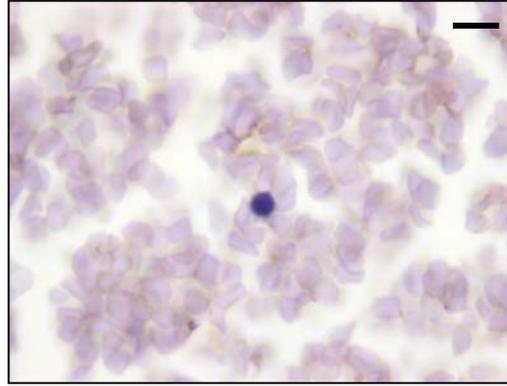
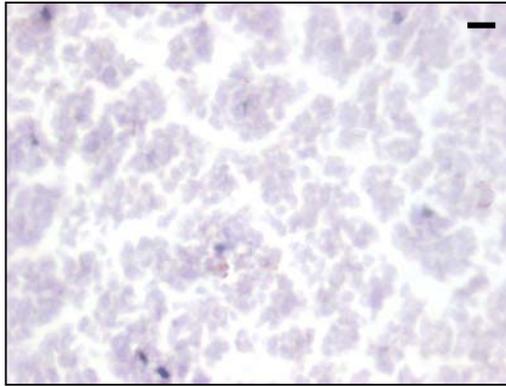
PRF
CONTROL
CENTRIFUGE

Histomorphometrical analysis (IOD) of TGF-β1 showed a greater expression of this growth factor in the Red Blood 1 of samples treated with Medifuge-Silfradent compared with control centrifuge.

CGF
MEDIFUGE

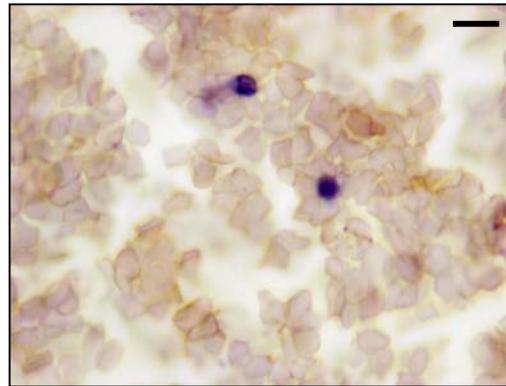
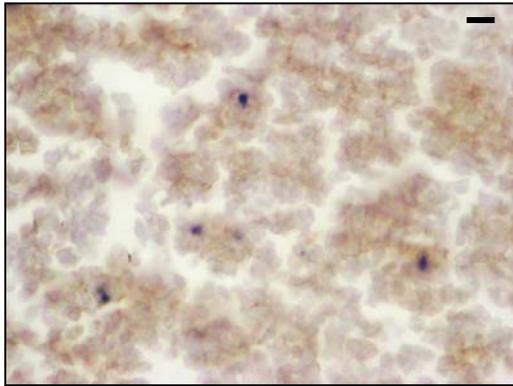


* P < 0,05 vs control centrifuge



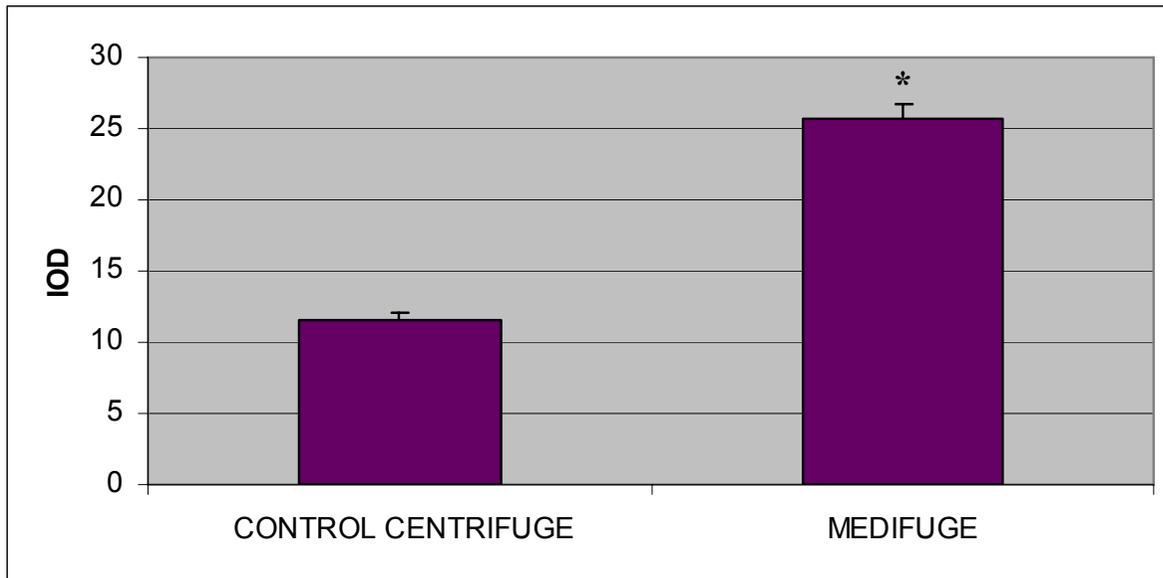
PRF
CONTROL
CENTRIFUGE

TGF-β1
Red Blood 2

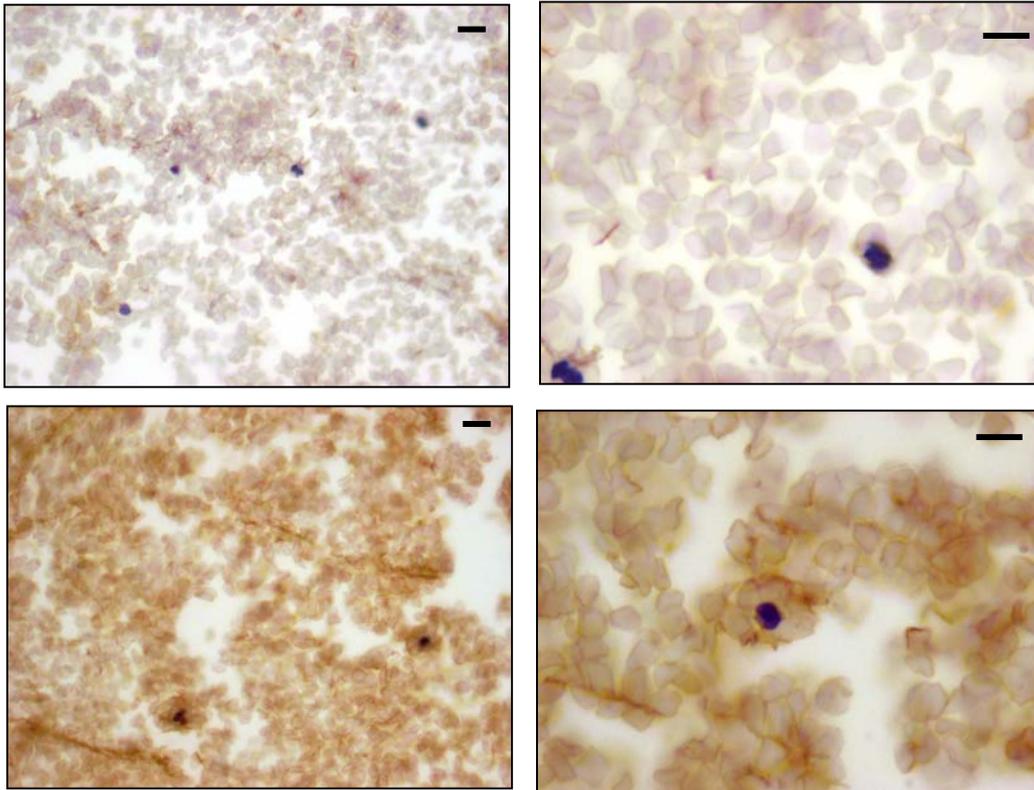


CGF
MEDIFUGE

Histomorphometrical analysis (IOD) of TGF-β1 showed a greater expression of this growth factor in the Red Blood 2 of samples treated with Medifuge-Silfradent compared with control centrifuge.



* P < 0,05 vs control centrifuge

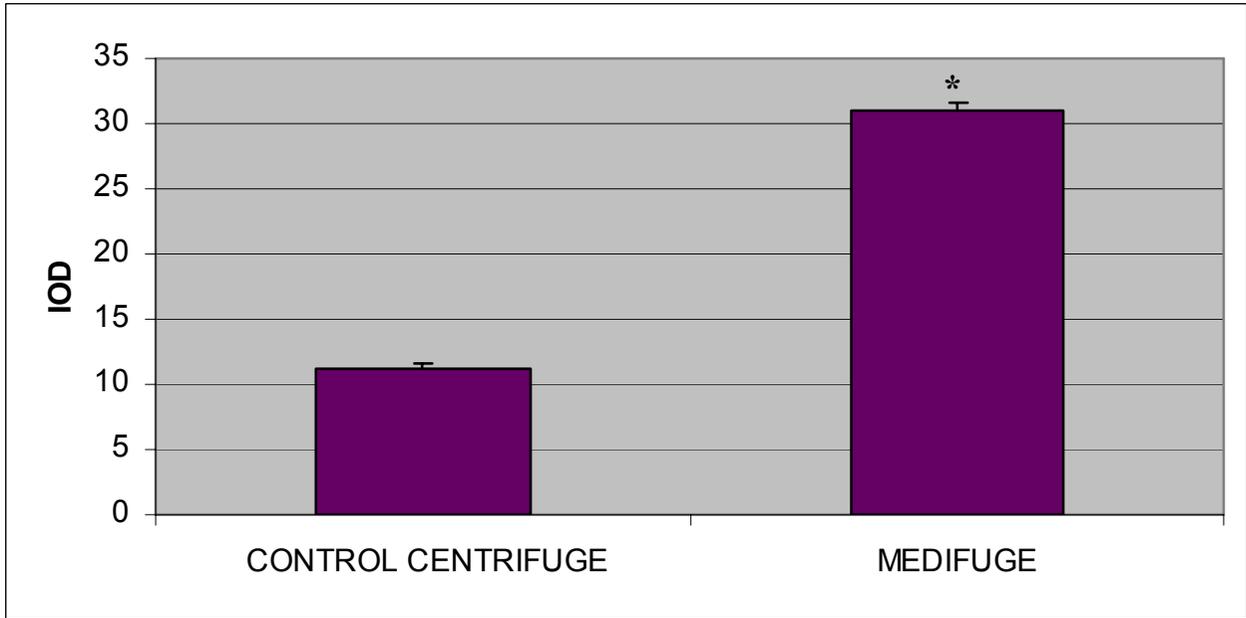


TGF-β1
Red Blood 3

PRF
CONTROL
CENTRIFUGE

Histomorphometrical analysis (IOD) of TGF-β1 showed a greater expression of this growth factor in the Red Blood 3 of samples treated with Medifuge-Silfradent compared with control centrifuge.

CGF
MEDIFUGE



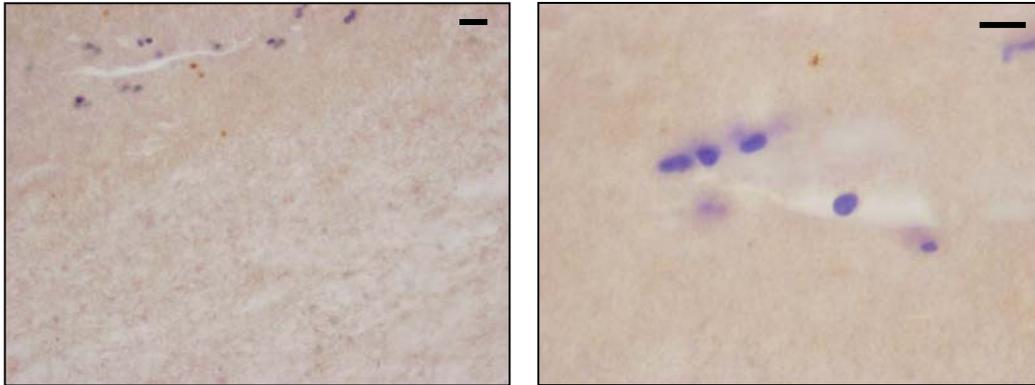
* P < 0,05 vs control centrifuge

VEGF-A and TGF- β 1 results

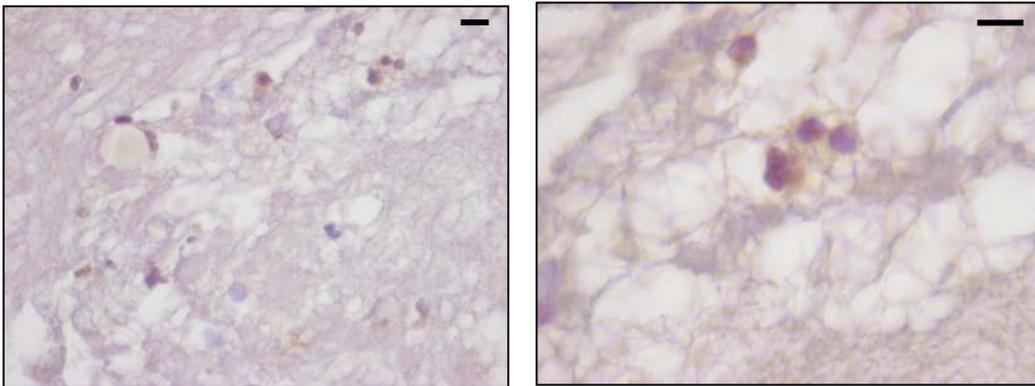
- The histomorphometric analysis (IOD) of blood growth factors TGF- β 1 and VEGF-A showed a greater expression of these growth factors in the samples treated with Medifuge-Silfradent compared with control centrifuge.

- Enzymatic analysis of VEGF-A e TGF- β 1 has confirmed our previous results showing a significant difference of both growth factors serum concentration: in particular, we found a lower serum concentration of both growth factors in the samples treated with Medifuge-Silfradent compared with control centrifuge.

CD 34 Stem cells
Red- Buffy Coat
Interface



PRF
CONTROL
CENTRIFUGE



CGF
MEDIFUGE

- The immunohistochemical analysis of the Red-Buffy Coat Interface showed a greater number of white cells in samples treated with Medifuge-Silfradent centrifuge with control centrifuge, as suggest by our previous analysis.
- The immunohistochemical analysis of cells CD34+ expressed in the Red-Buffy Coat Interface showed a number of cells CD34+ four time greater in the samples trated with Medifuge-Silfradent centrifuge compared with control centrifuge.