

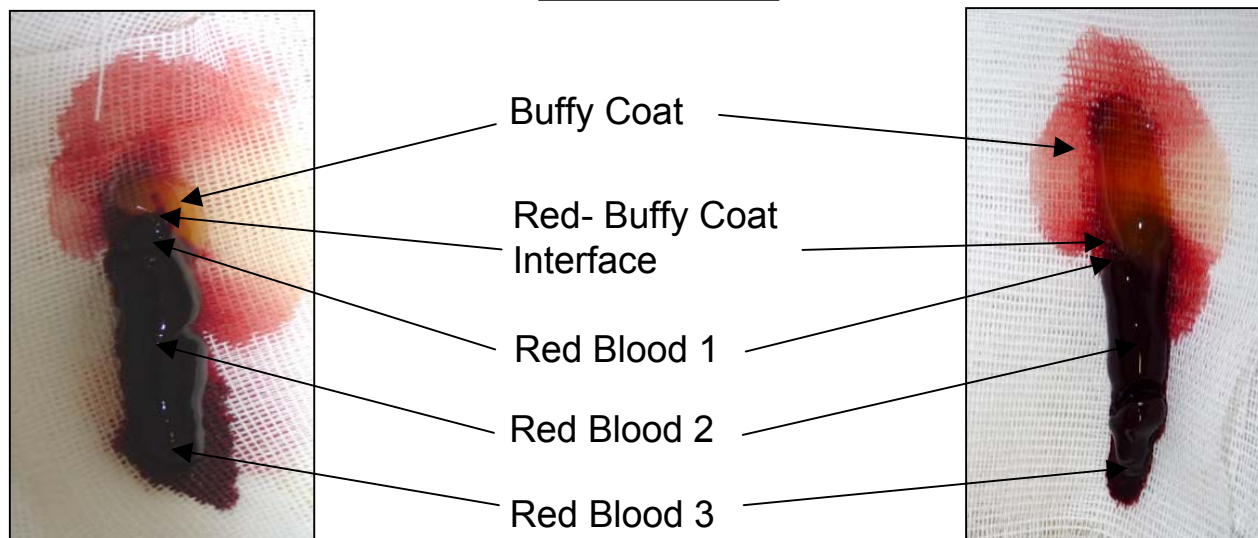
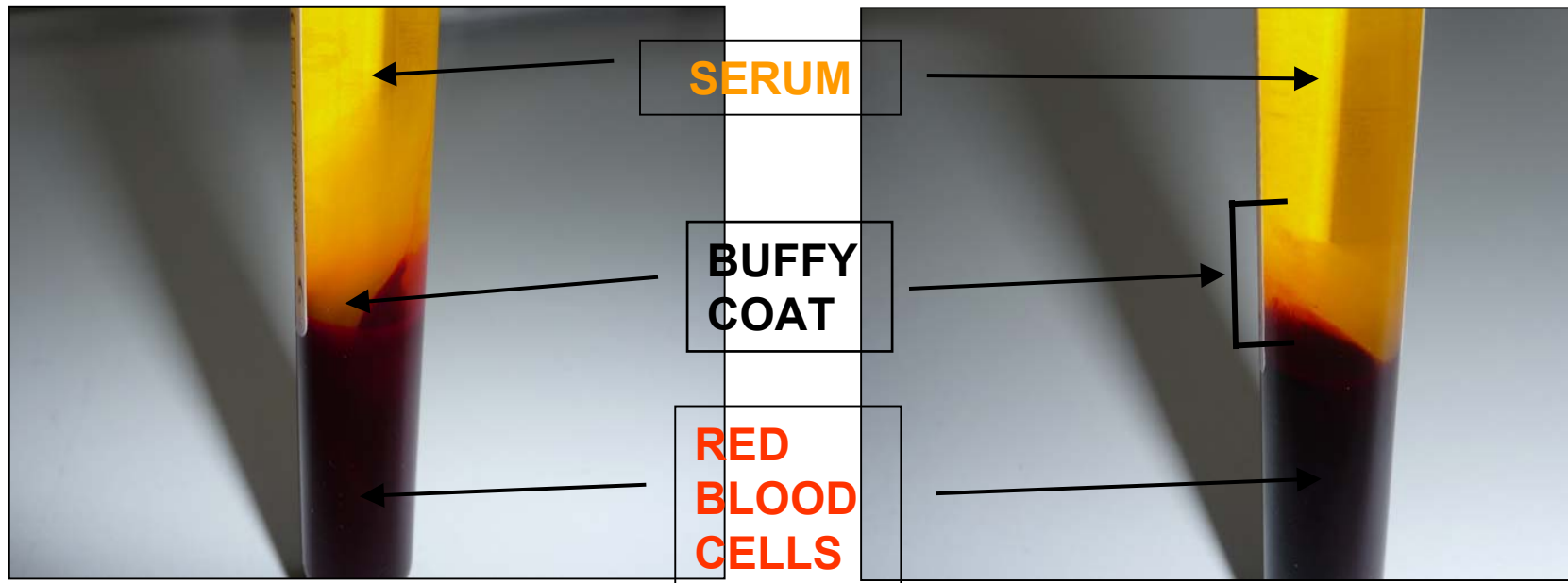
CENTRIFUGES AND GROWTH FACTORS

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.

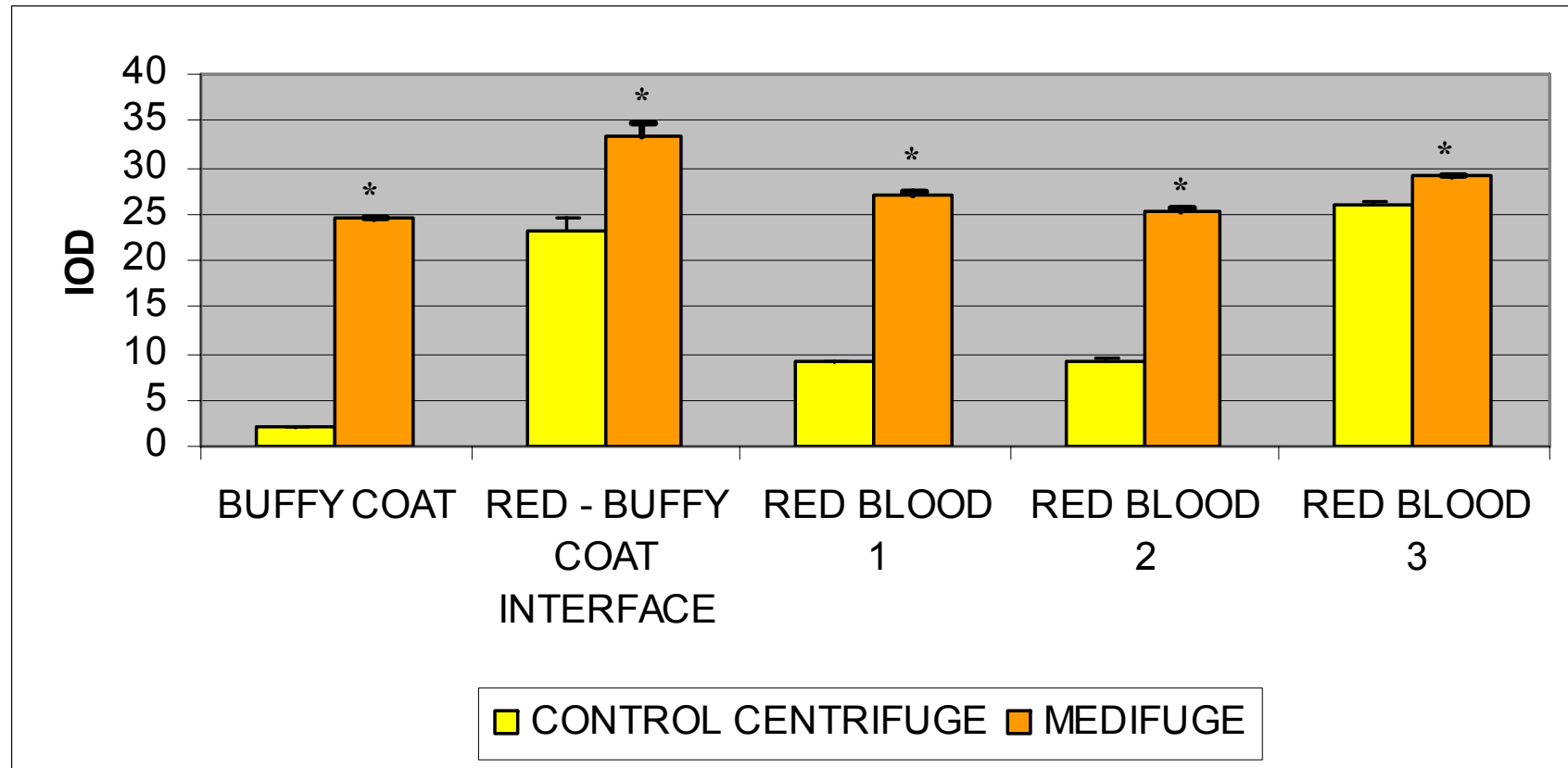
**PRF CONTROL
CENTRIFUGE**

**CGF MEDIFUGE
SILFRADENT**



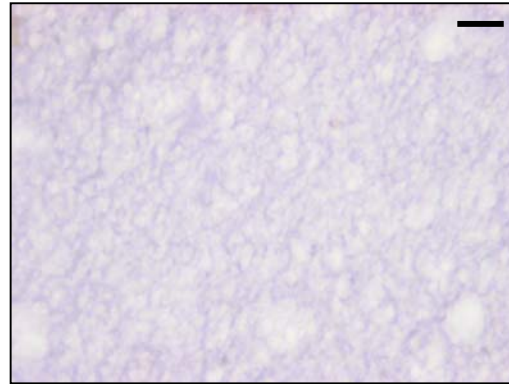


VEGF-A expression



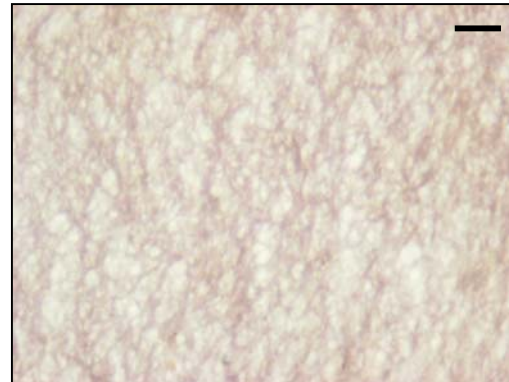
* $P < 0,05$ vs control centrifuge

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



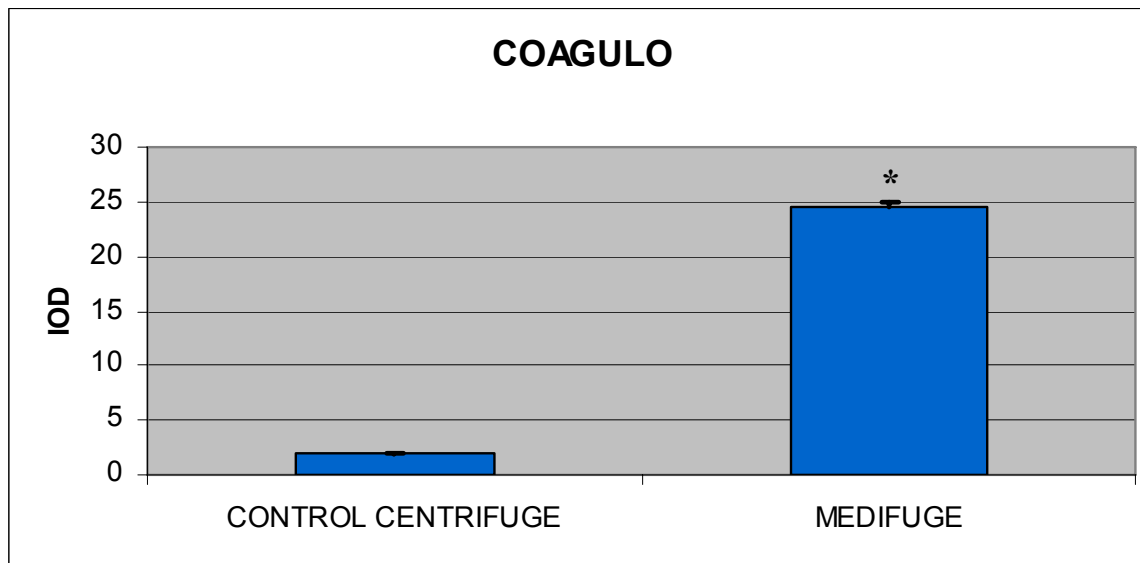
PRF
CONTROL
CENTRIFUGE

VEGF-A
Buffy
Coat

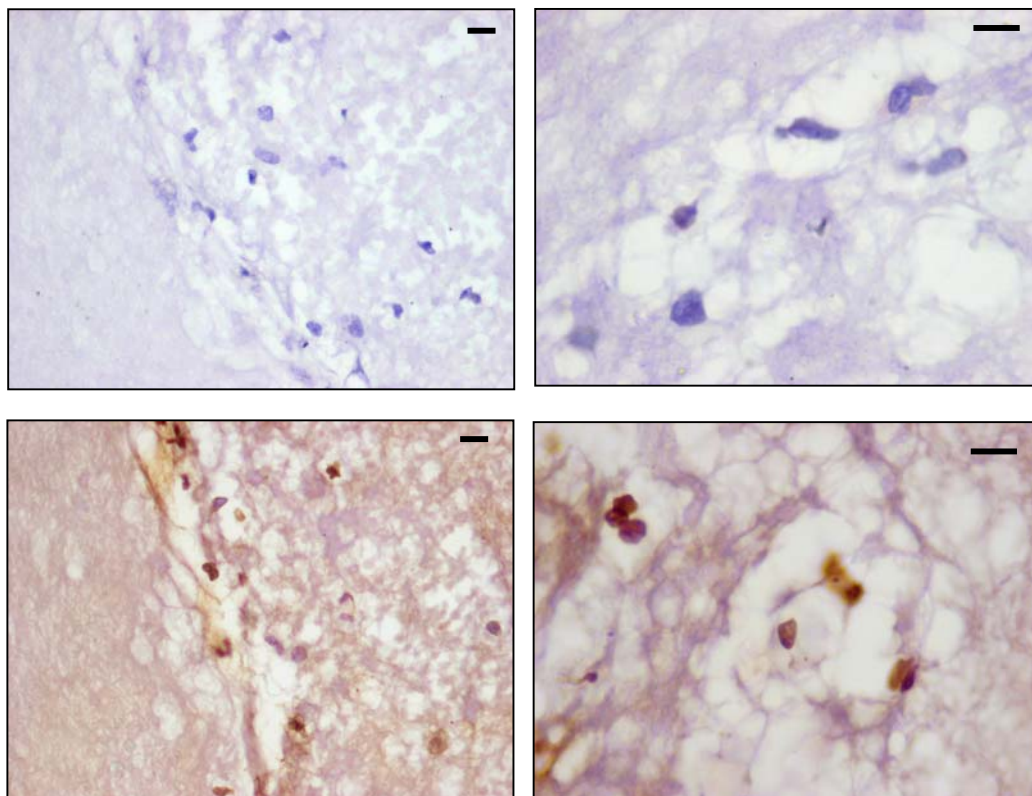


Histomorphometrical analysis (IOD) of VEGF-A showed a greater expression of this growth factor in the Buffy Coat of samples treated with Medifuge-Silfradent compared with control centrifuge.

CGF
MEDIFUGE



* P < 0,05 vs control centrifuge

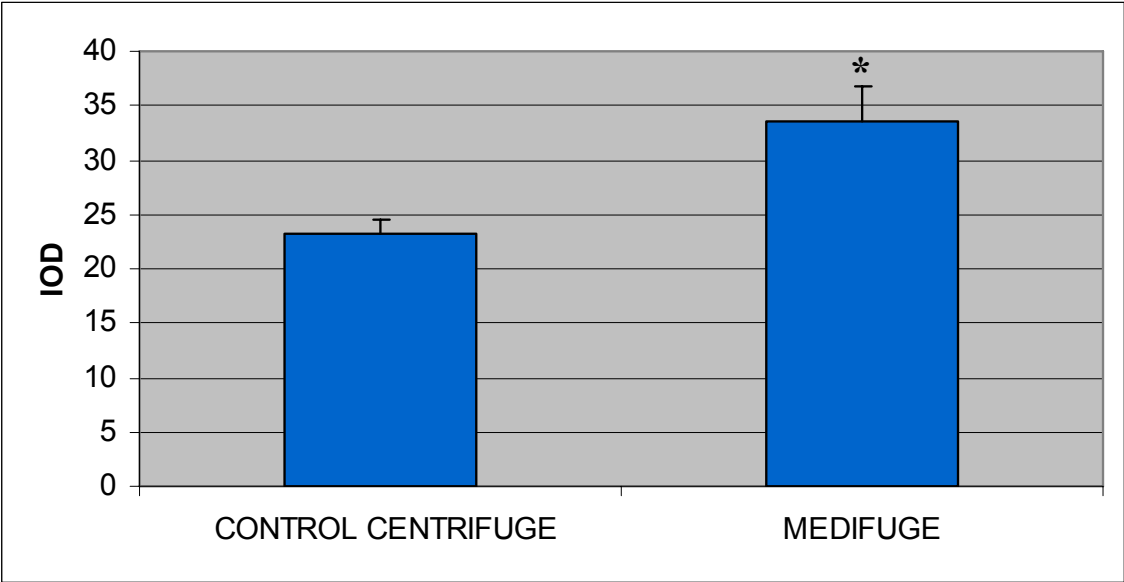


VEGF-A **Red – Buffy Coat Interface**

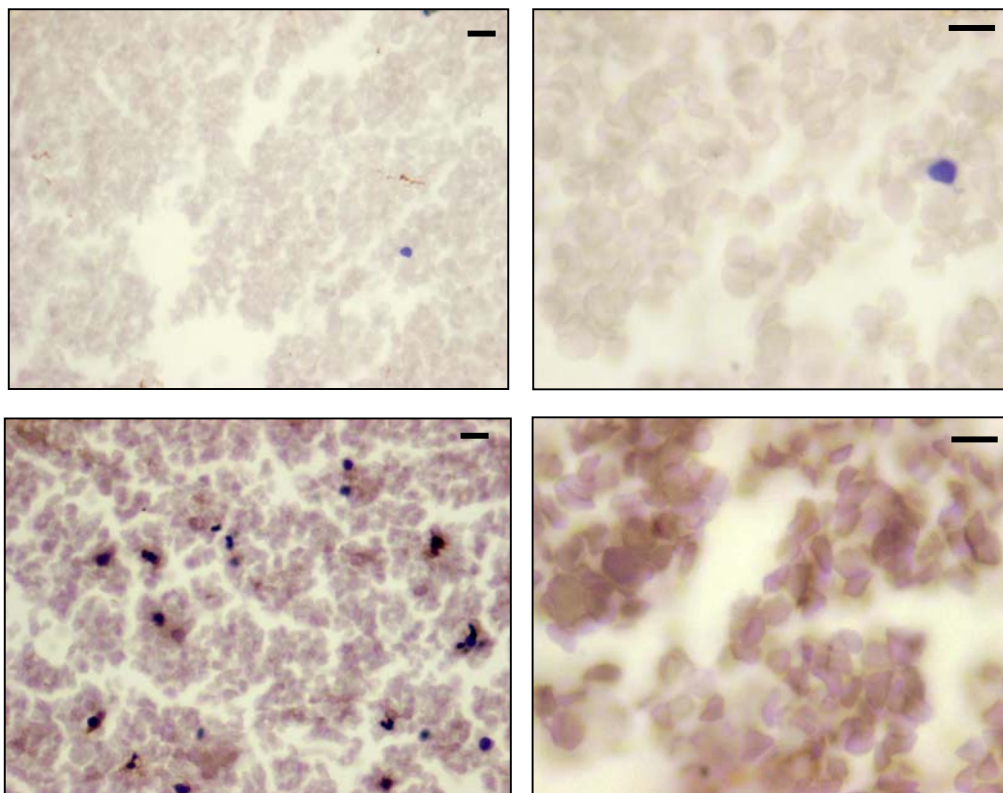
PRF
CONTROL
CENTRIFUGE

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.

CGF
MEDIFUGE



* P< 0,05 vs control centrifuge



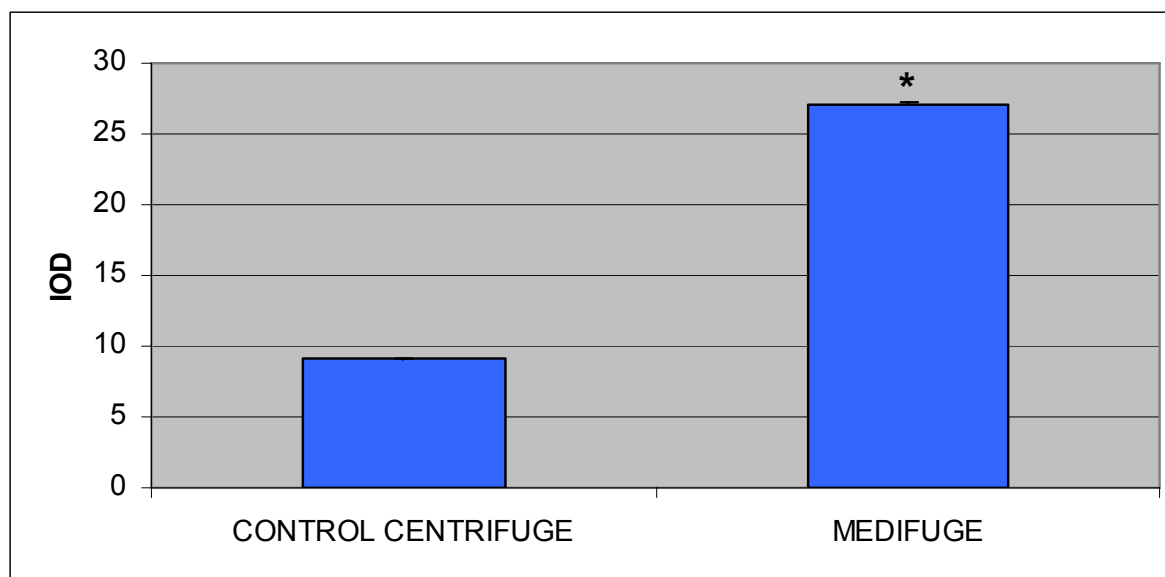
VEGF-A

Red Blood 1

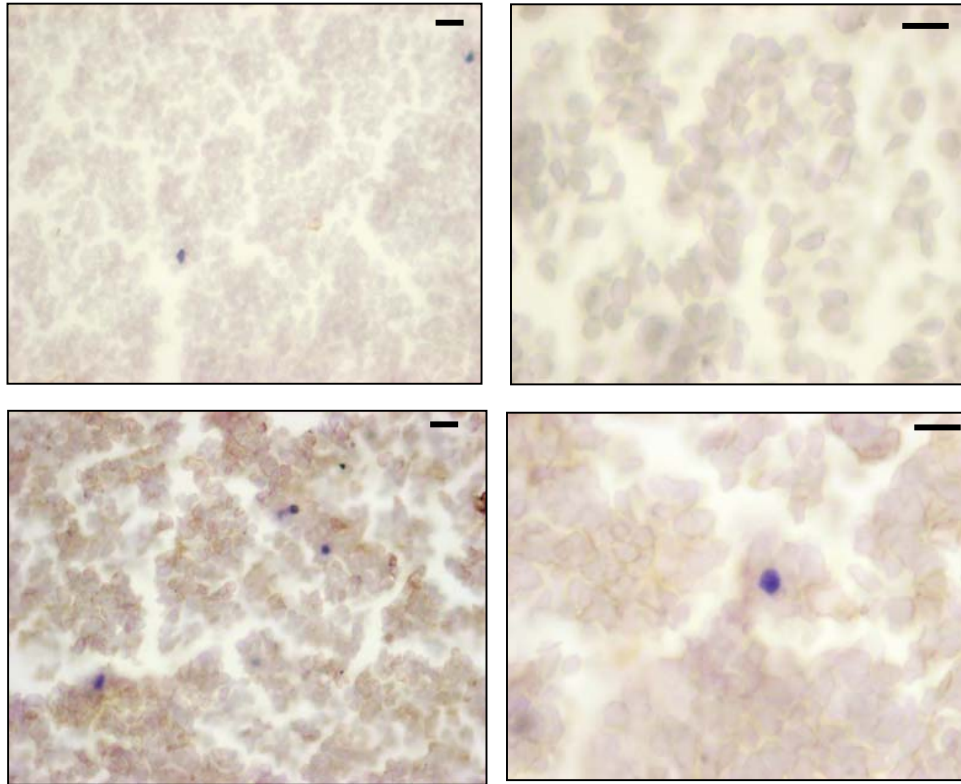
PRF
CONTROL
CENTRIFUGE

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

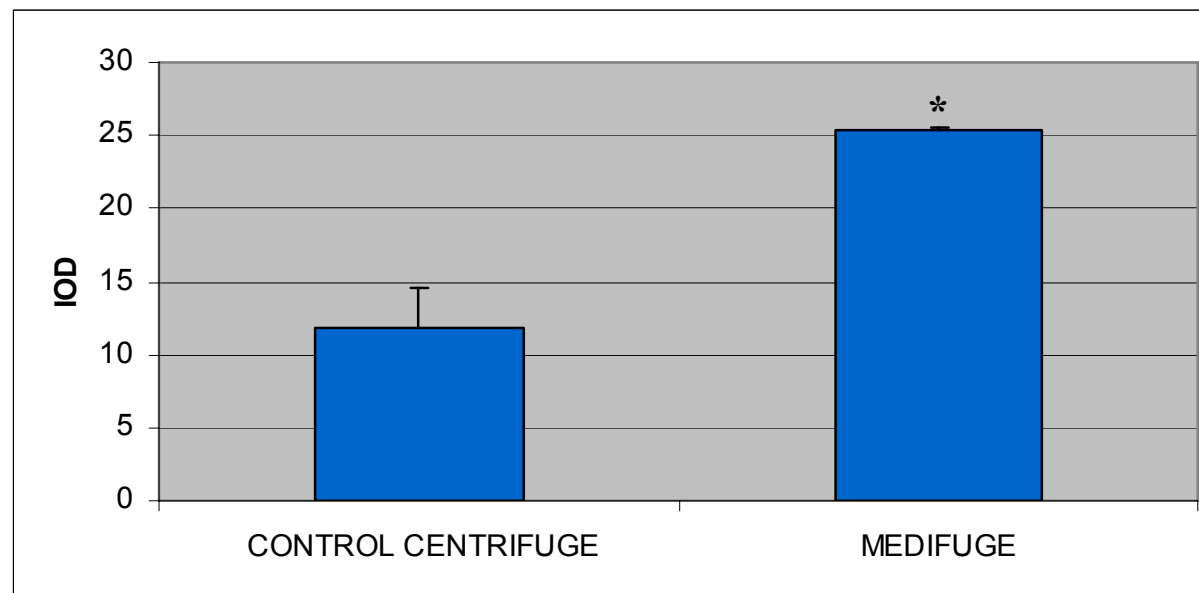


PRF
CONTROL
CENTRIFUGE

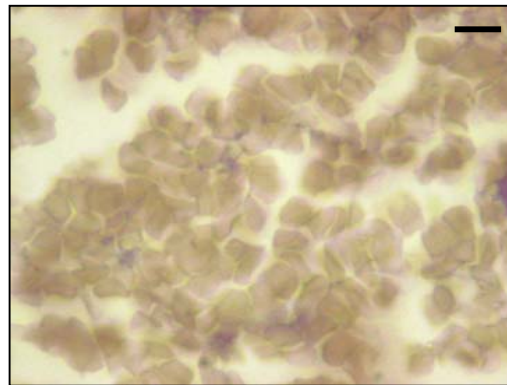
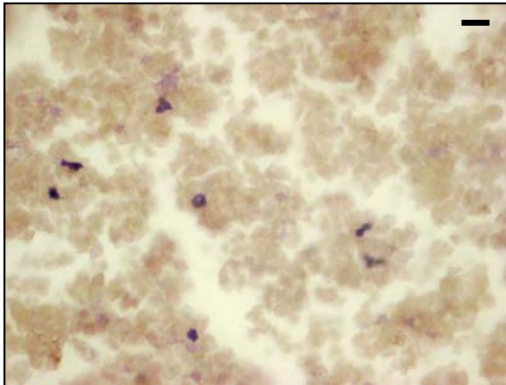
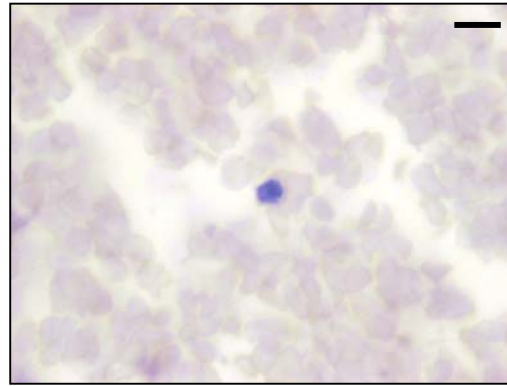
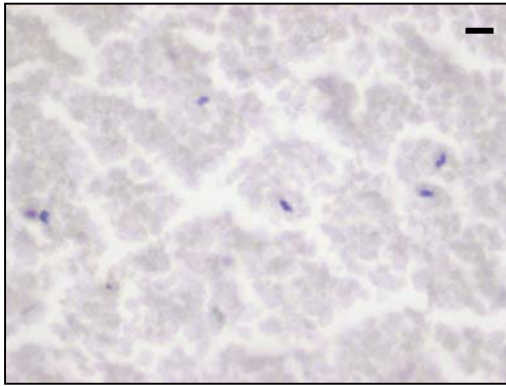
VEGF-A
Red Blood 2

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

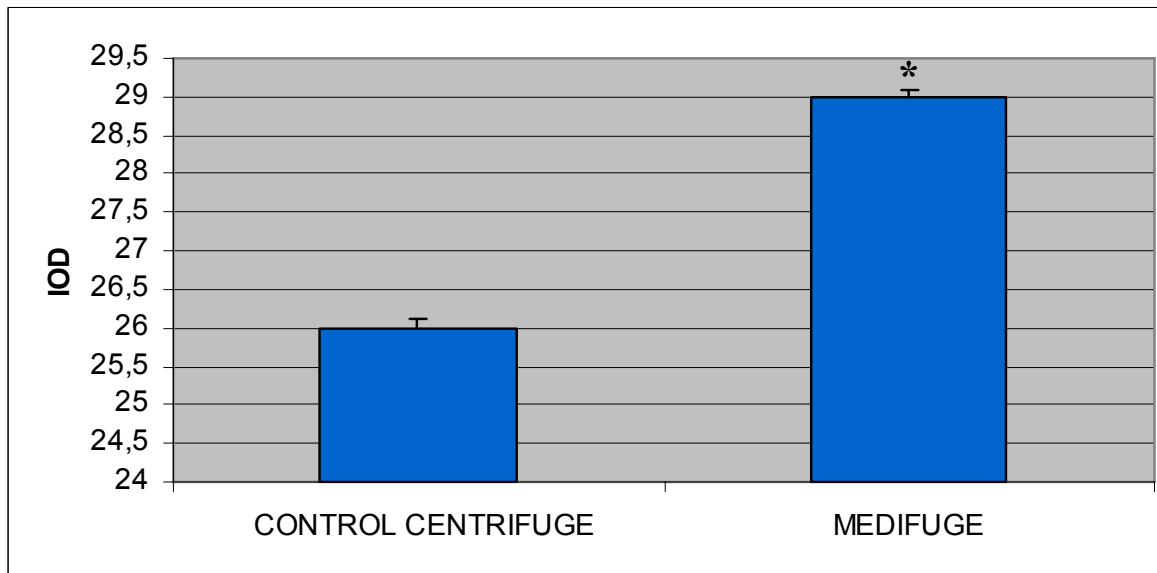


VEGF-A **Red Blood 3**

PRF
CONTROL
CENTRIFUGE

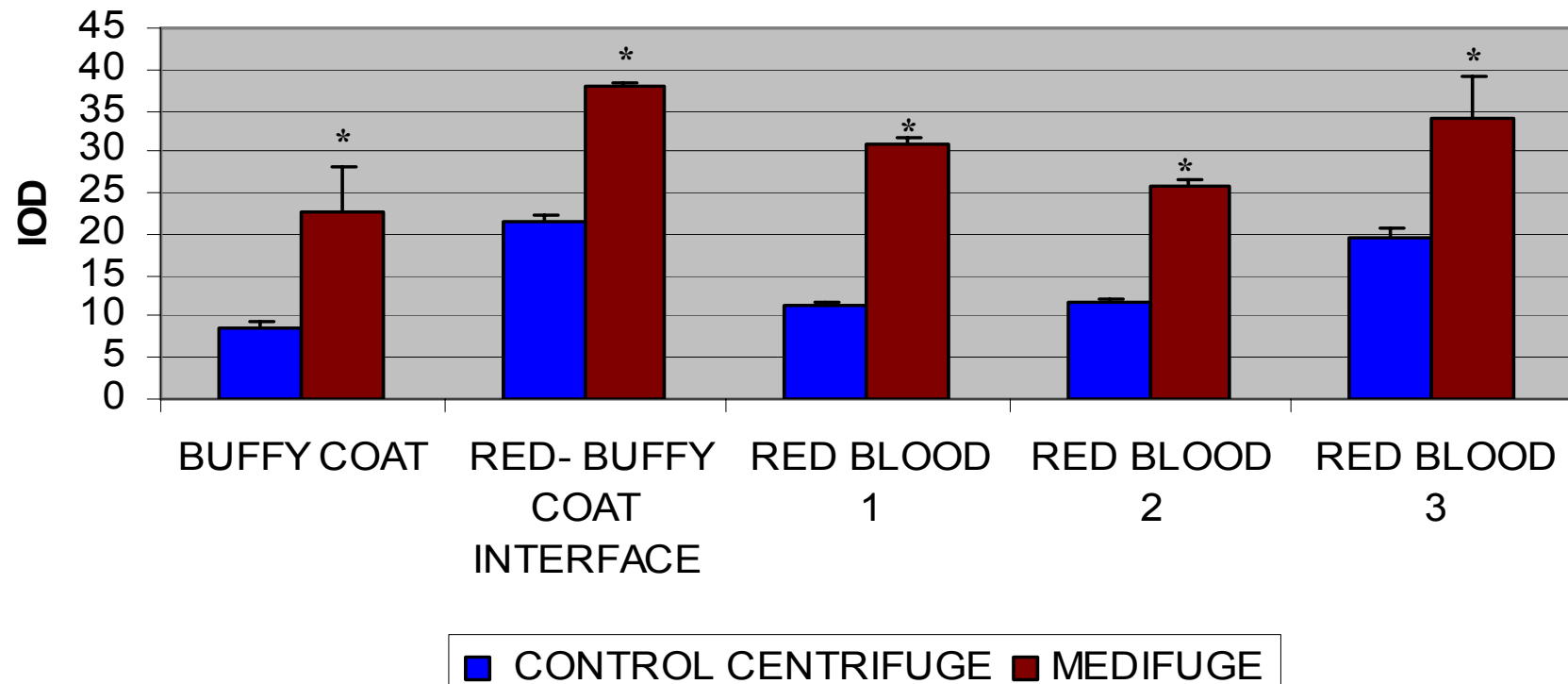
Histomorphometrical analysis (IOD) of VEGF-A showed a greater expression of this growth factor in the Red Blood 3 of samples treated with Medifuge-Silfradent with control centrifuge.

CGF
MEDIFUGE



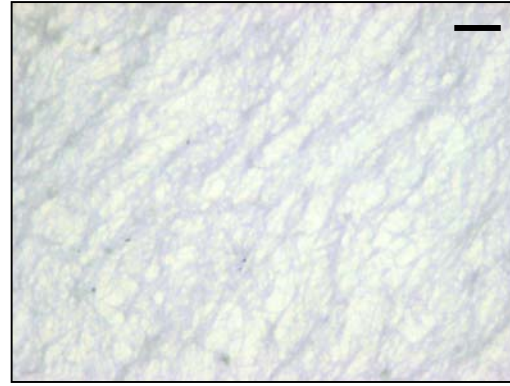
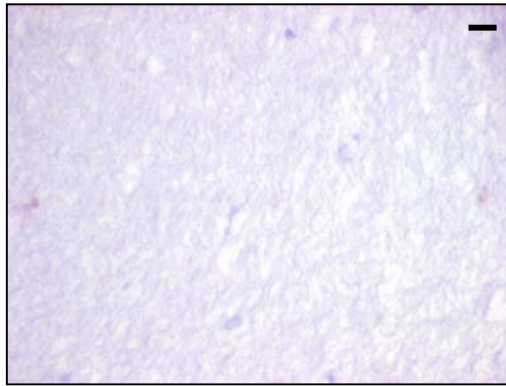
* P < 0,05 vs control centrifuge

TGF- β 1 expression



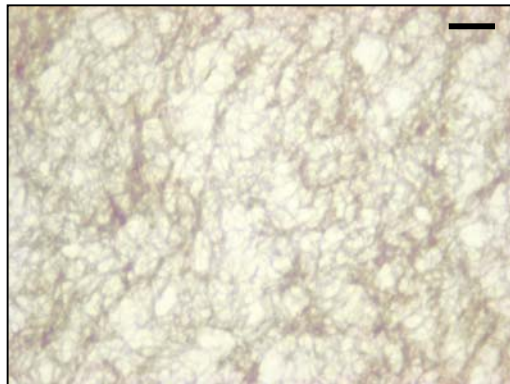
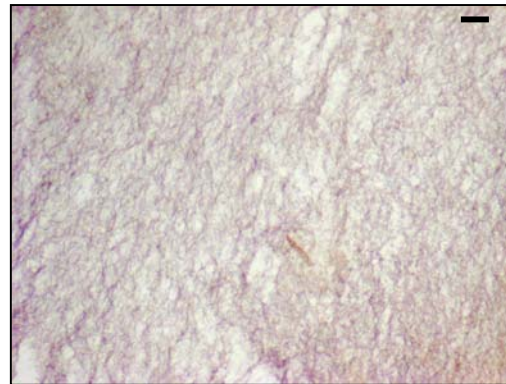
* P < 0,05 vs control centrifuge

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



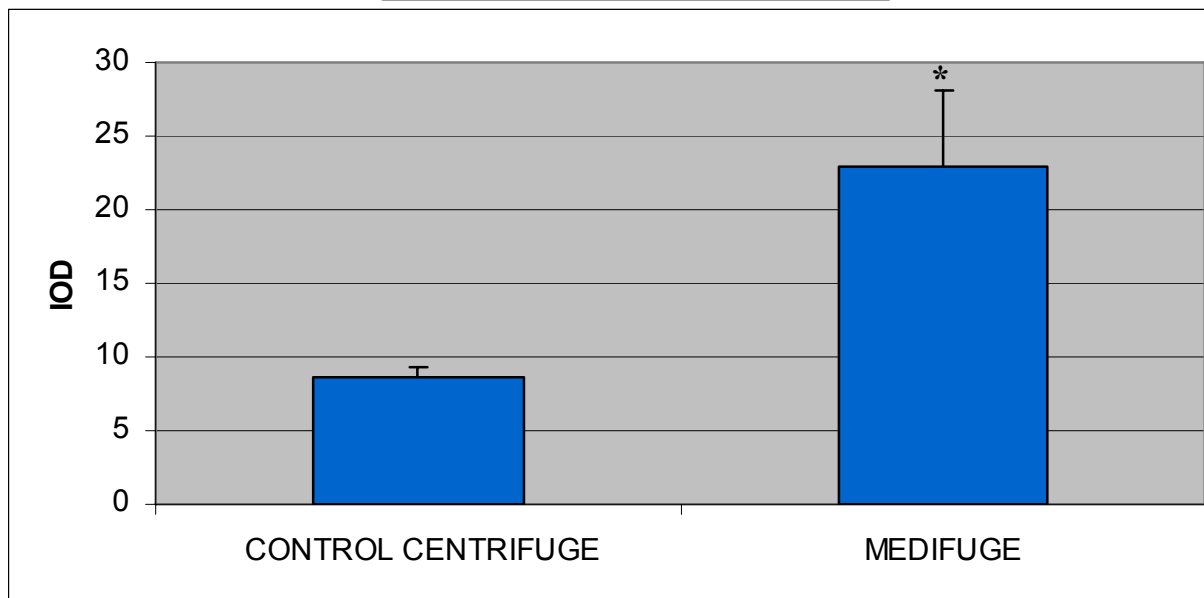
PRF
CONTROL
CENTRIFUGE

TGF- β 1
Buffy
Coat

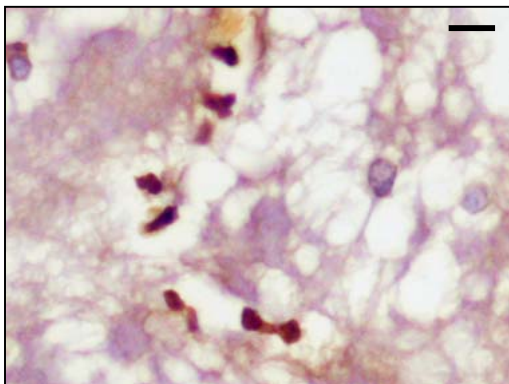
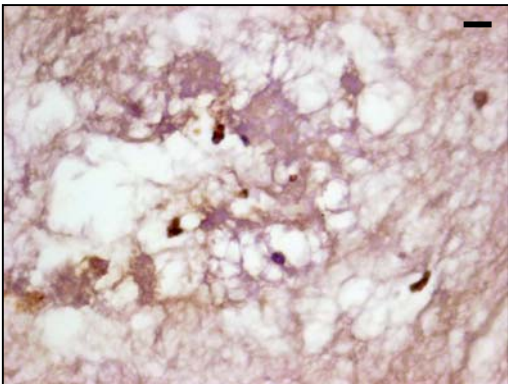
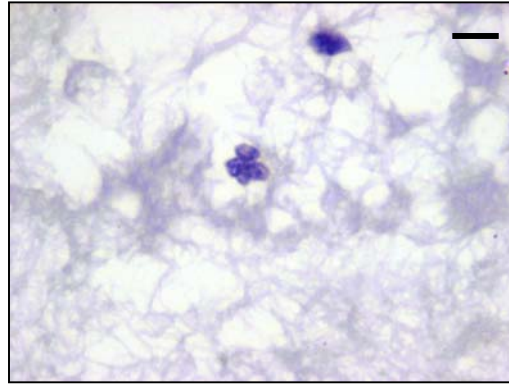
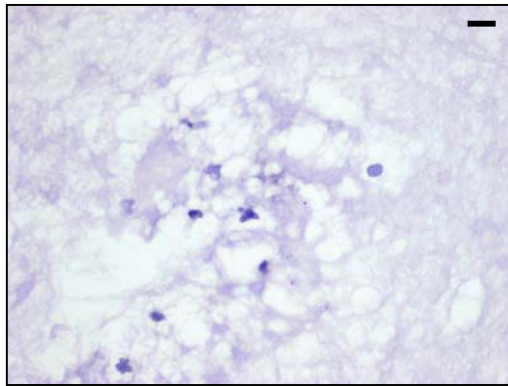


CGF
MEDIFUGE

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

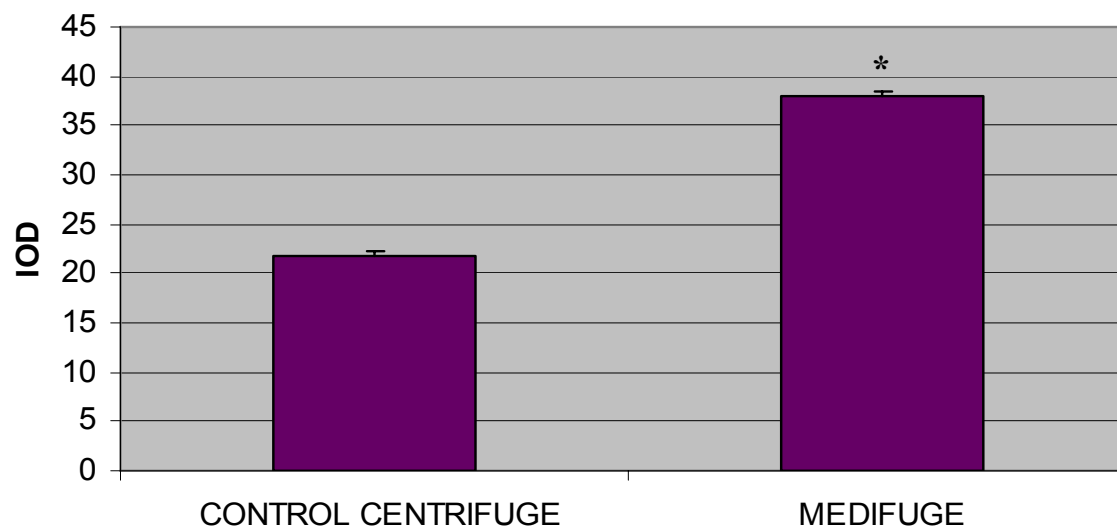


TGF- β 1 **Red – Buffy Coat** **Interface**

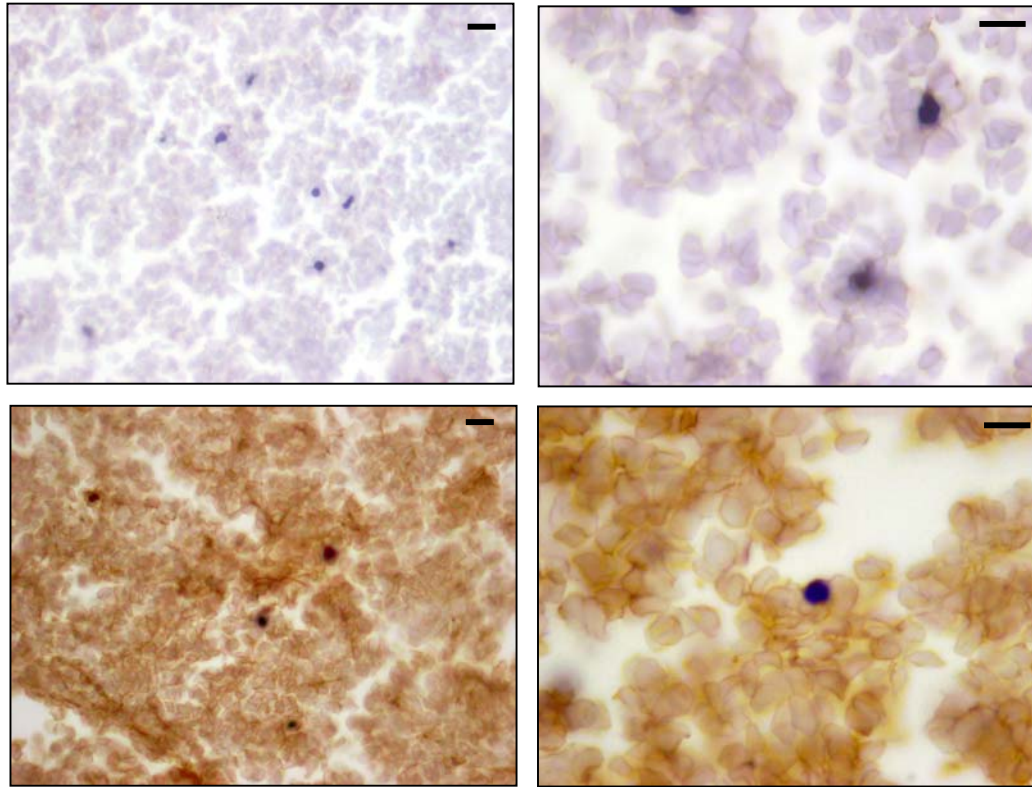
PRF
CONTROL
CENTRIFUGE

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

CGF
MEDIFUGE



* P < 0,05 vs control centrifuge



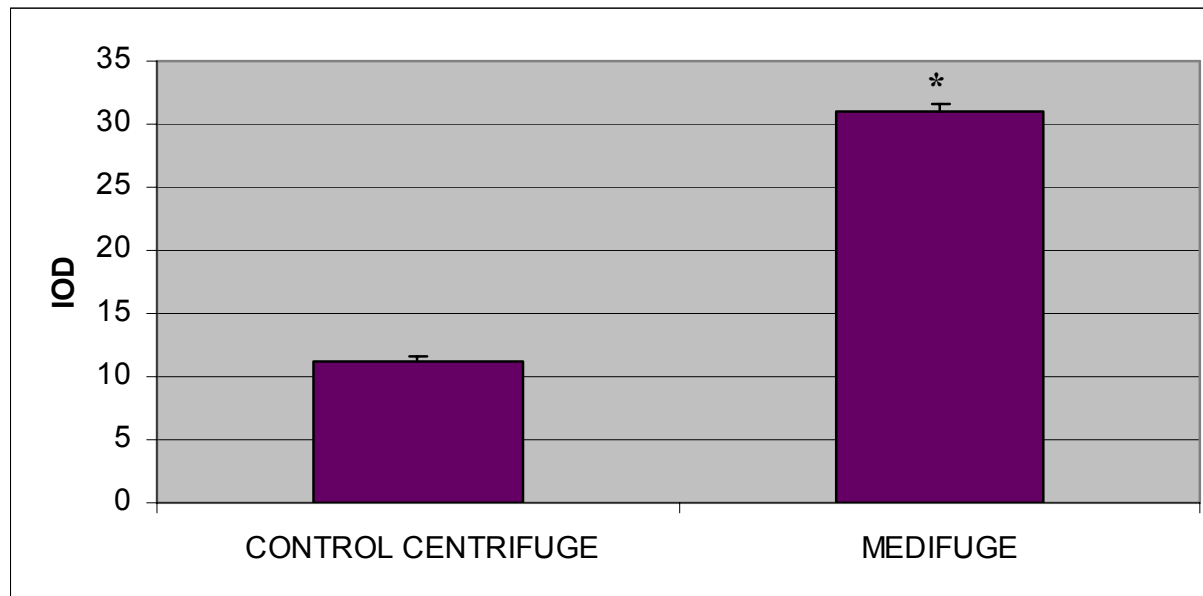
TGF- β 1

Red Blood 1

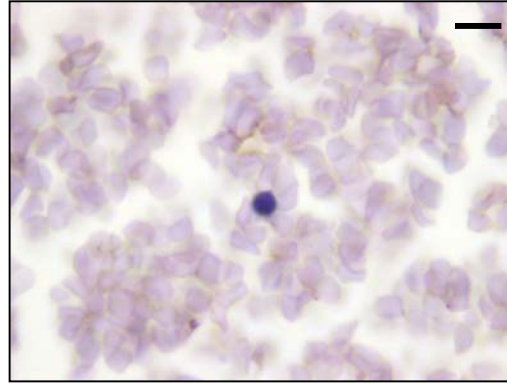
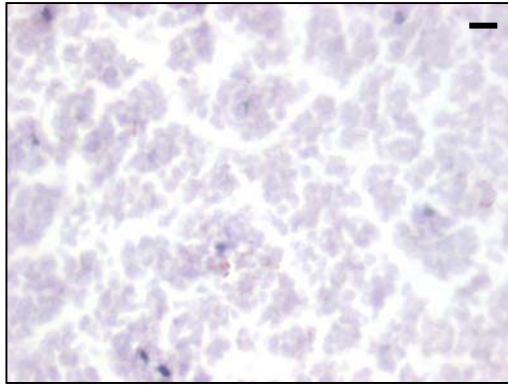
PRF
CONTROL
CENTRIFUGE

Histomorphometrical analysis (IOD) of TGF- β 1 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

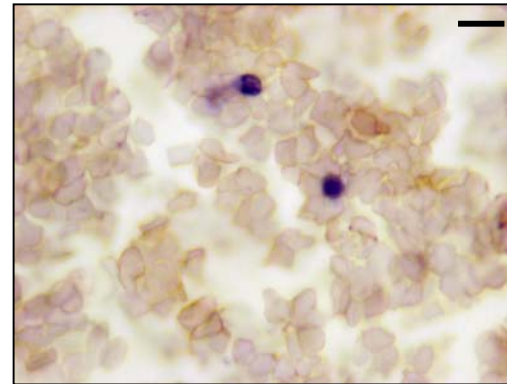
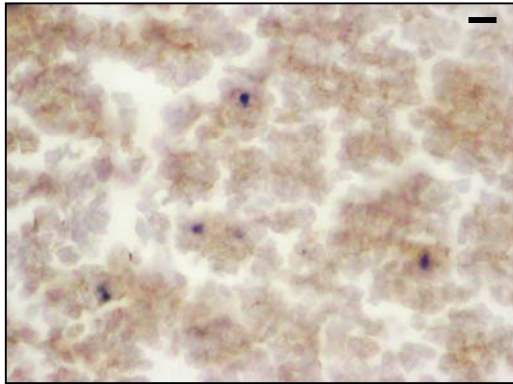


* P < 0,05 vs control centrifuge



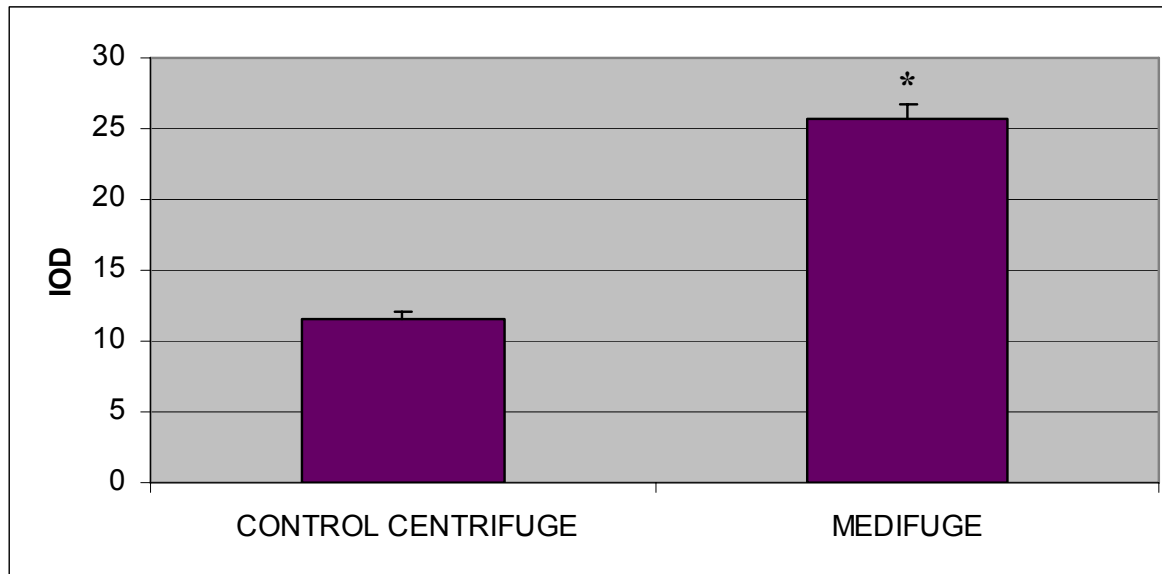
PRF
CONTROL
CENTRIFUGE

TGF- β 1
Red Blood 2

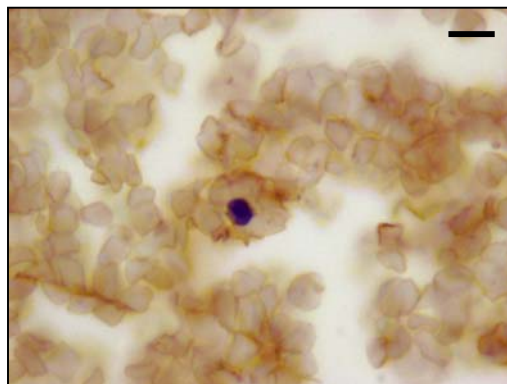
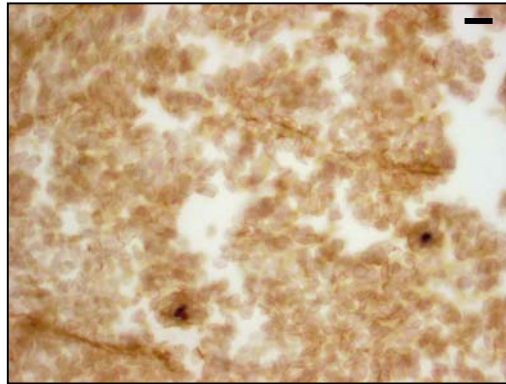
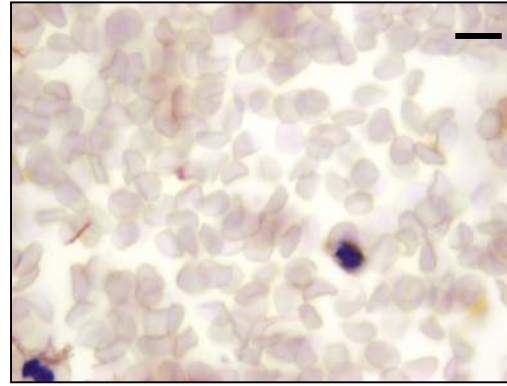
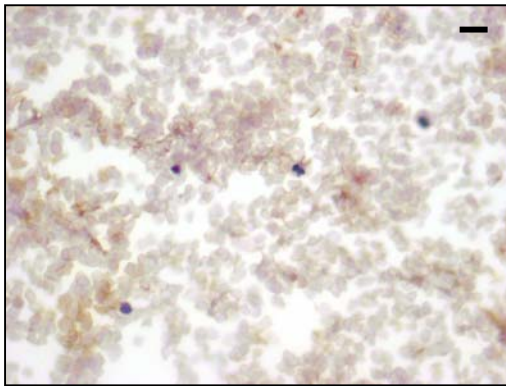


CGF
MEDIFUGE

Histomorphometrical analysis (IOD) of TGF- β 1 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



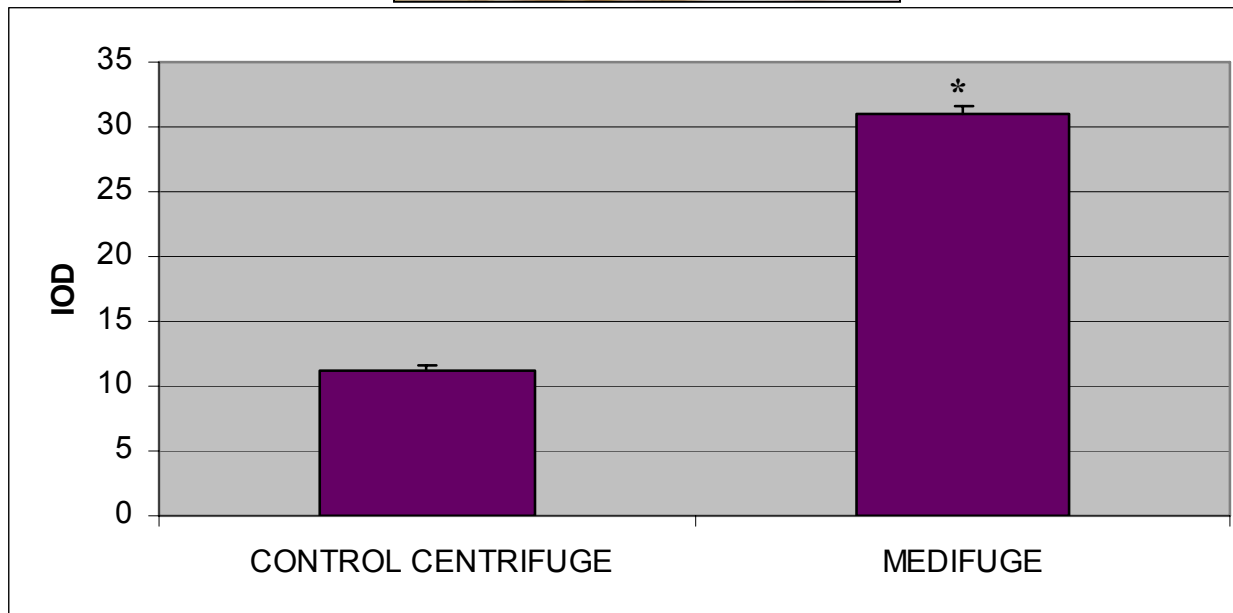
TGF- β 1

Red Blood 3

PRF
CONTROL
CENTRIFUGE

Histomorphometrical analysis (IOD) of TGF- β 1 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

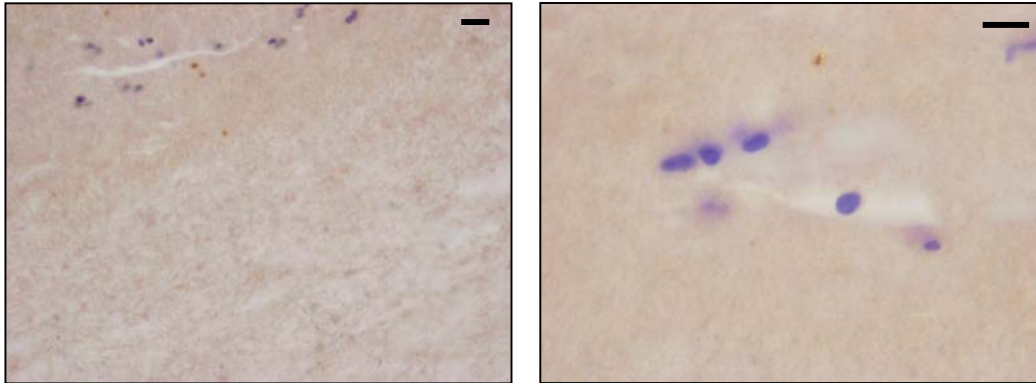


* P < 0,05 vs control centrifuge

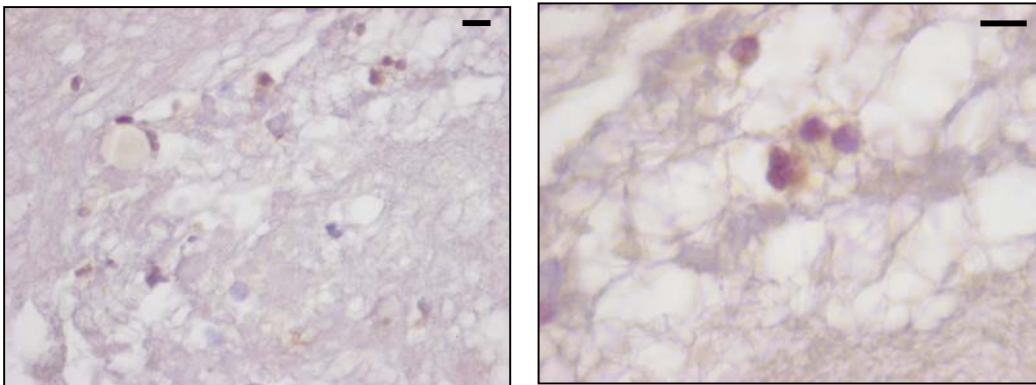
VEGF-A and TGF- β 1 results

- 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.