

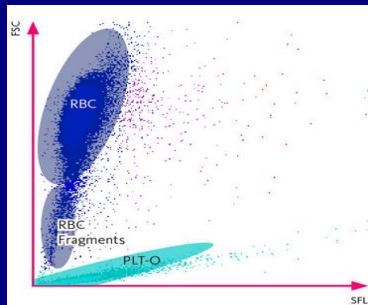


# Effects of supervised exercise on reticulated reactive platelets and erythrocyte fragments in patients with peripheral atherosclerosis

S De Marchi, F Dima<sup>1</sup>, A Rigoni, M Prior, F Rulfo, L Saracino, E Arosio

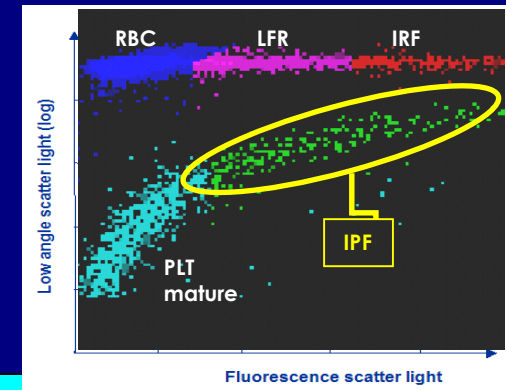
Dept of Medicine, Division of Angiology, .<sup>1</sup>Chemical-Clinical and Hemat Lab, University of Verona, Italy

## ➤ Physical training :



- Large RDW is related with CHD and is due to presence of red cells fragments (FRC <1%),
- FRC increase with inflammation and oxidation - CV risk

- Enhances functional status
- Reduces platelets activation
- Improves reology

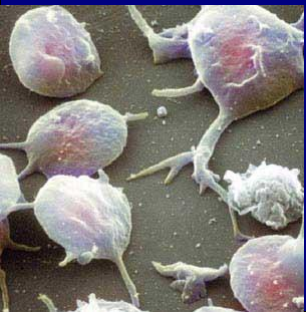


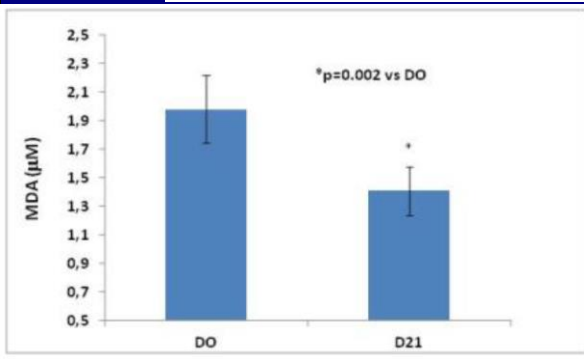
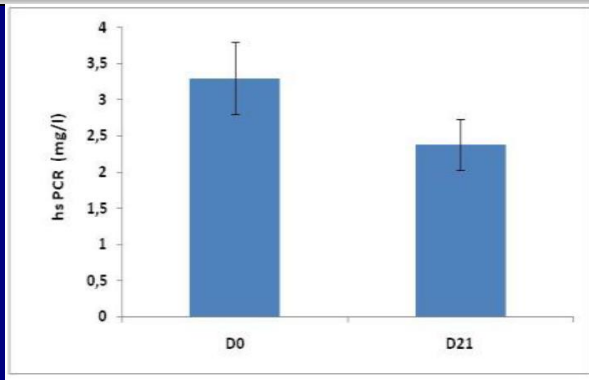
- Young reticulated platelets (IPF) are more retractive
- Increased expression of GP IIb/-IIIa receptors
- Increased ADP-aggregation
- Reduced inhibition with PGI
- Increased content of alfa-granules (nv 2,6)



➤ The aim was to evaluate in PAD patients the effect of controlled training on IPF and FRC at rest and after maximal treadmill test.

- ✓ 12 PAD patients (claudication , stage II class. Fontaine)
- ✓ 15 days of training : 30 minutes of aerobic exercises, 30 min of treadmill walking until pain onset with restart after recover (slope and speed determined with claudication test - namely 3,2 km/h , 10%), 20 minutes of free bike .





*In conclusion: we hypotesize that training, improving oxidation, inflammation and endothelium function, causes reduction of platelets activation (IPF) and FRC count.*

