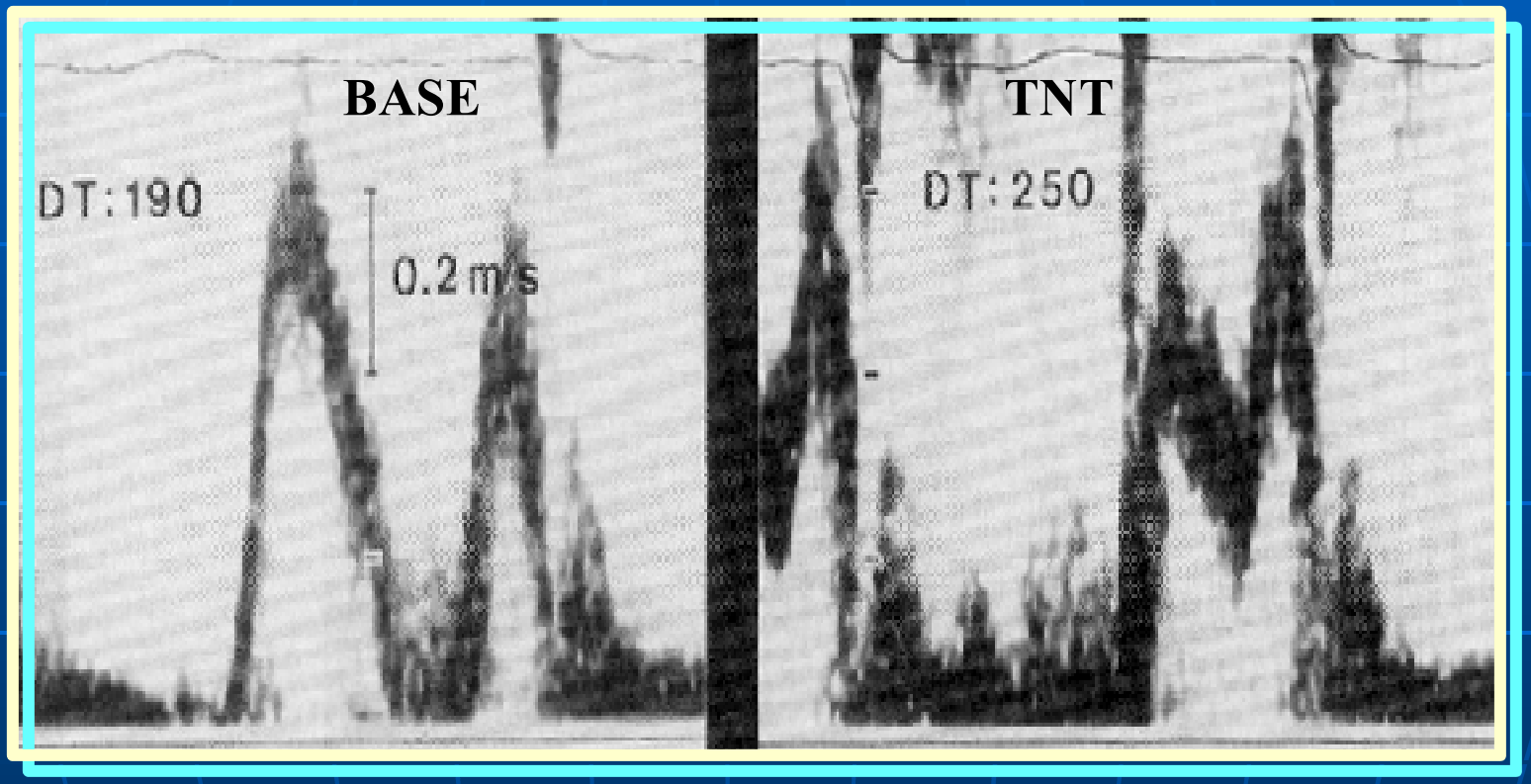
PAPO échocardiographie

Michel Slama
Amiens

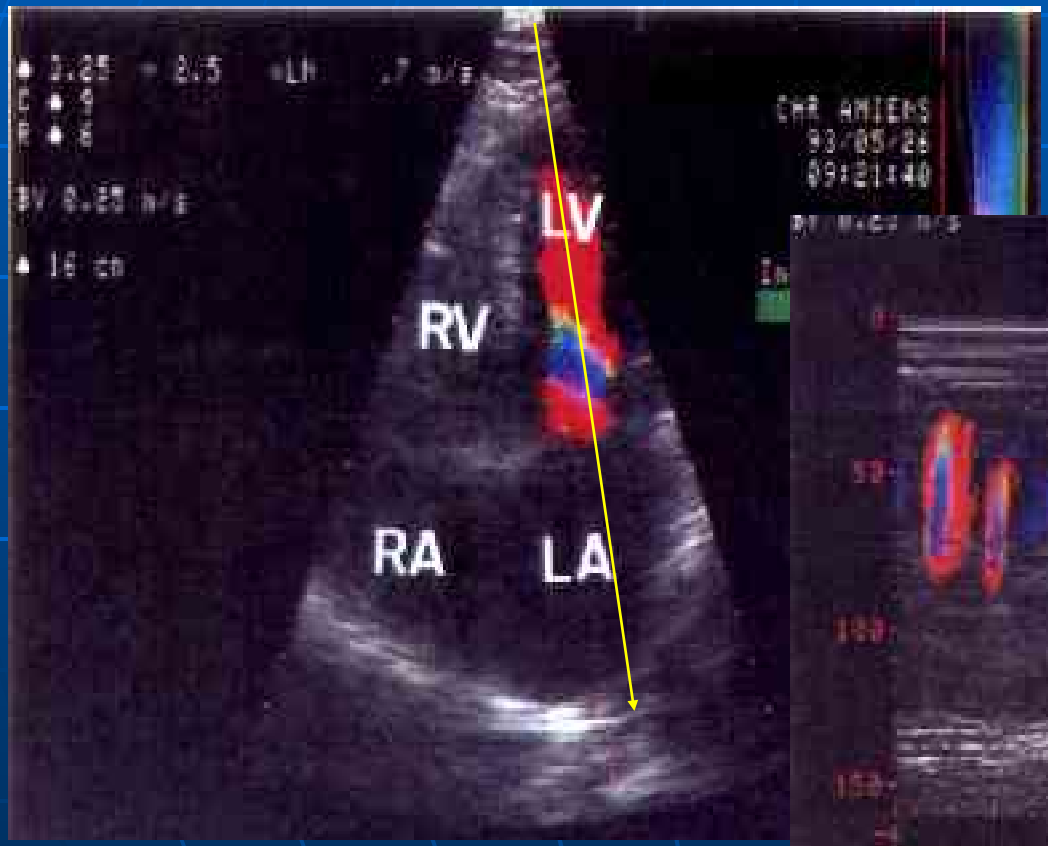
LV Diastolic Function

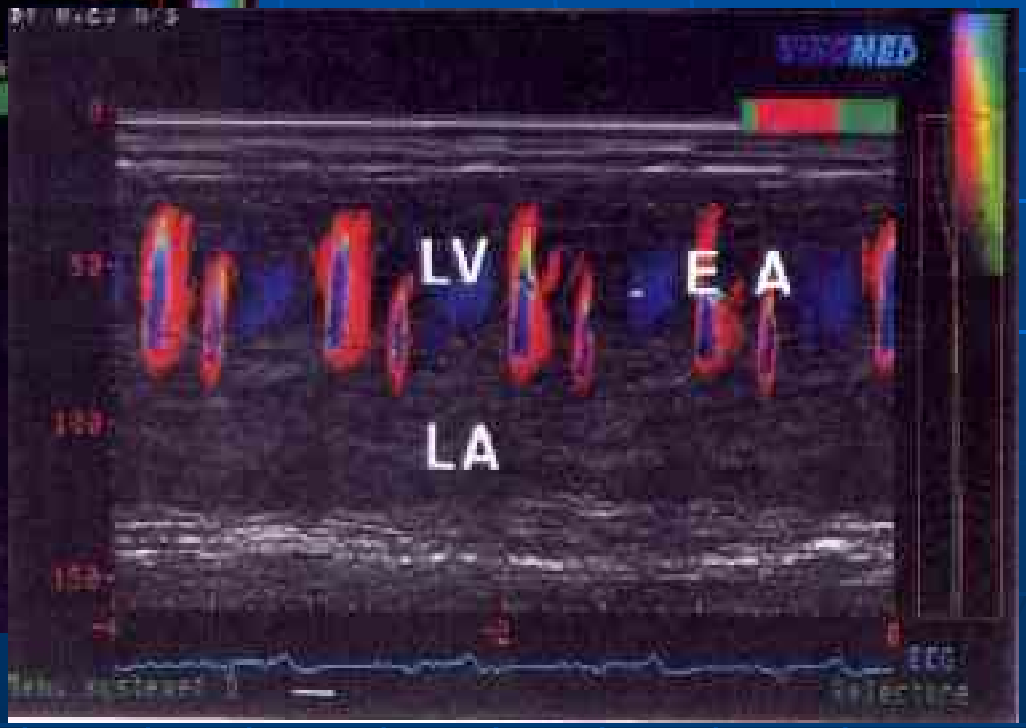
Preload dependance of mitral flow



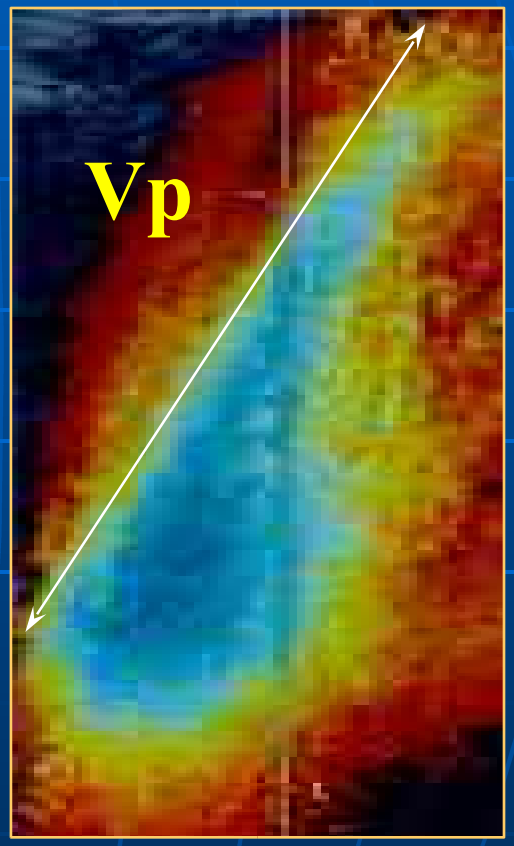
SOHN, JACC 1997

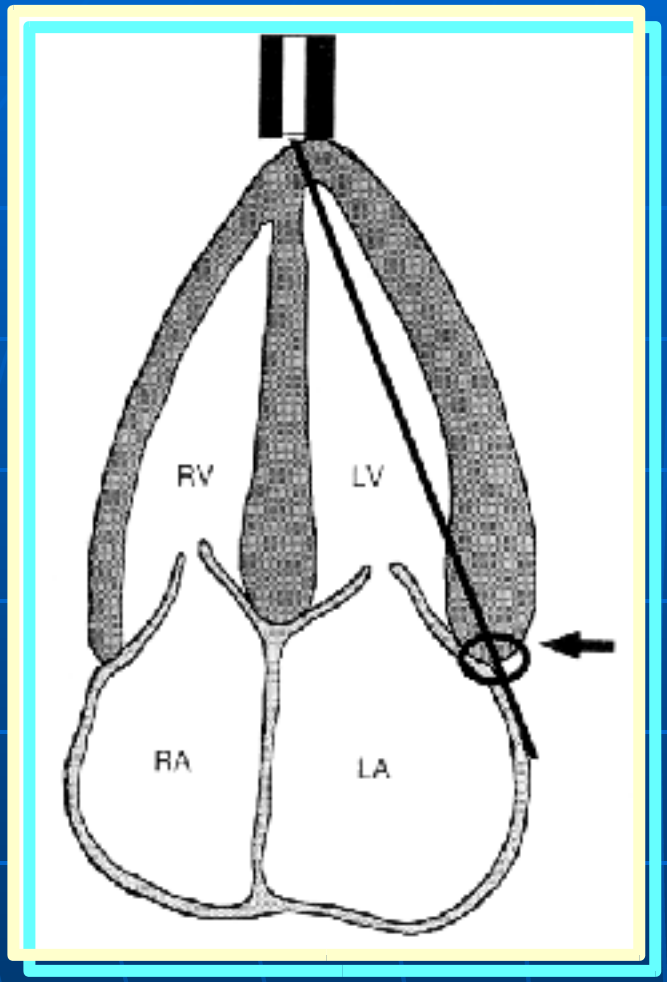
M-Mode Color Doppler Propagation of Mitral Flow (Vp)





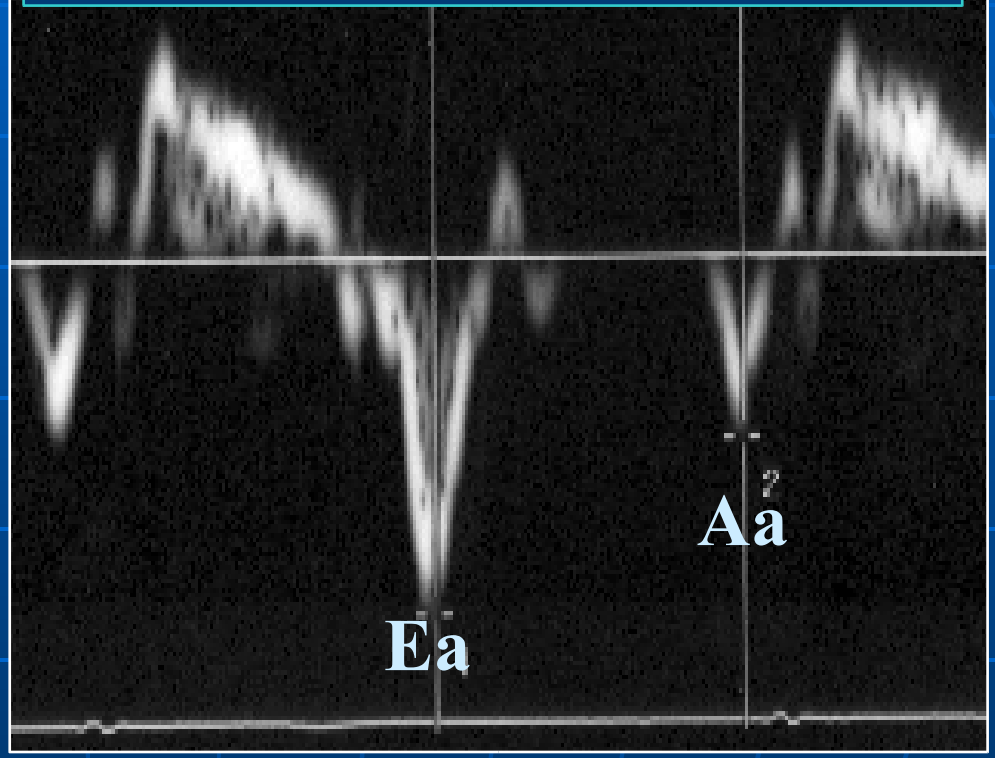
M-Mode Color Doppler Propagation of Mitral Flow (Vp)





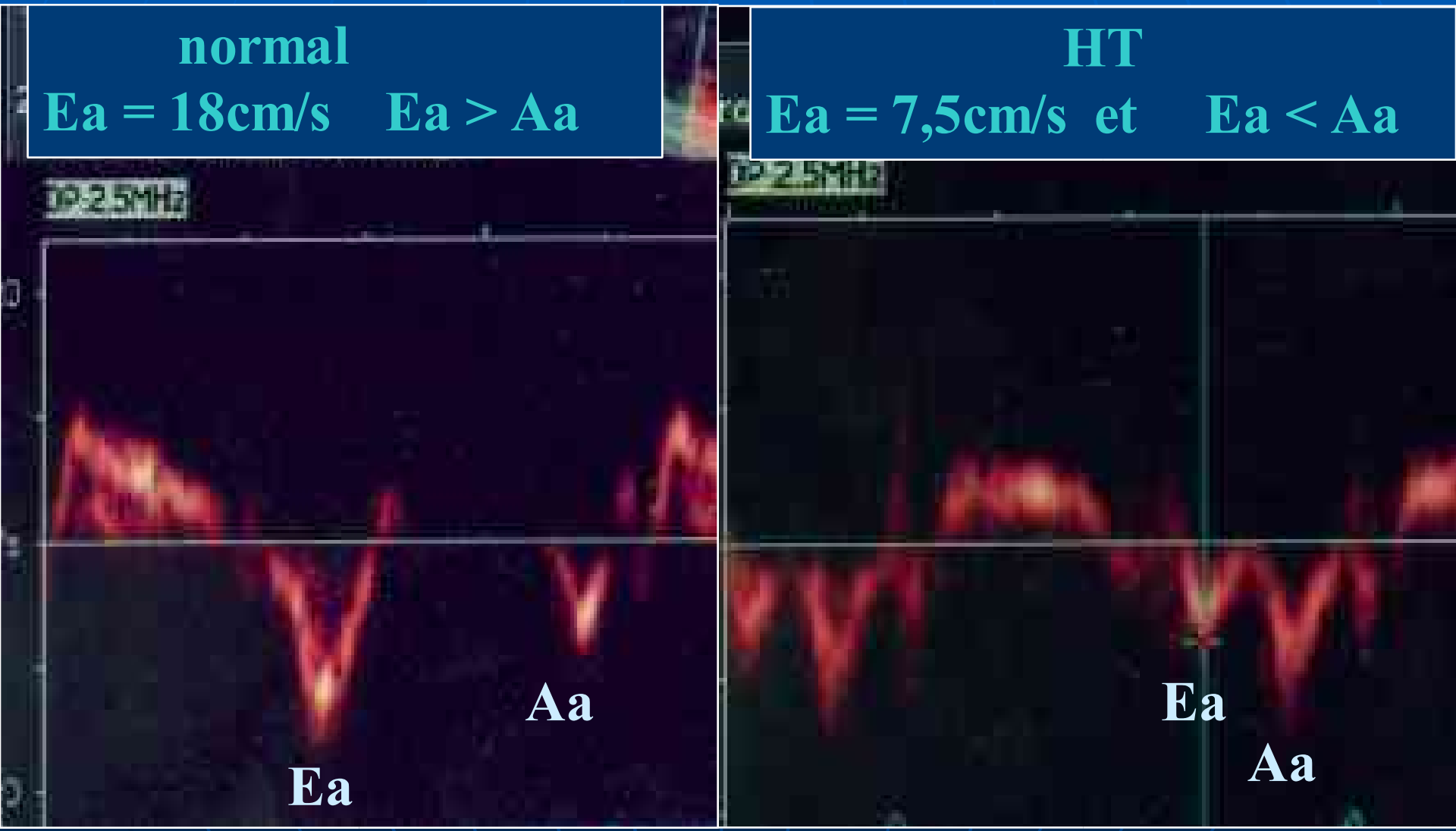
Normal Values

Ea > 8 cm/s et Ea / Aa > 1

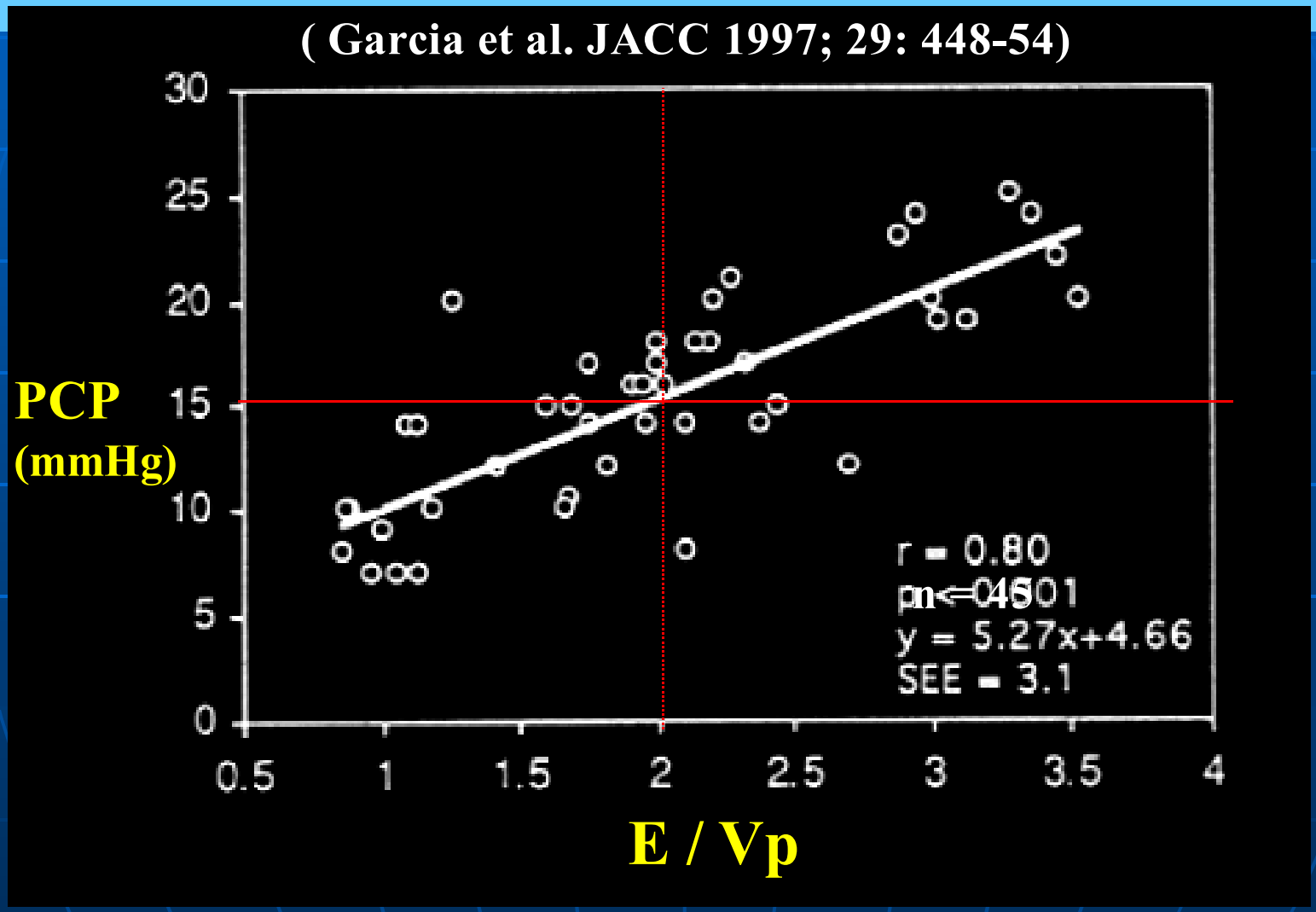


- DTI
- Mitral Annulus

Early diastolic velocity (Ea)
DTI

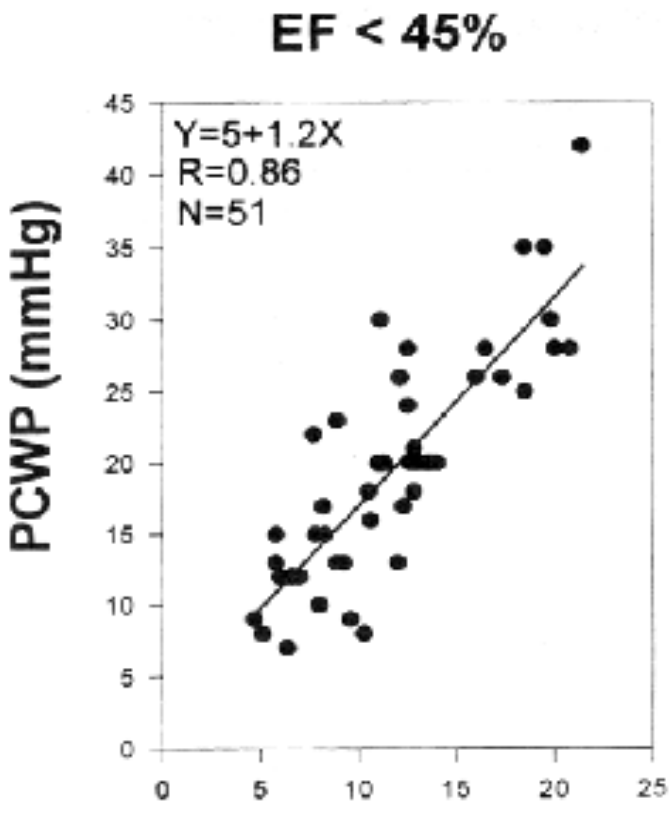


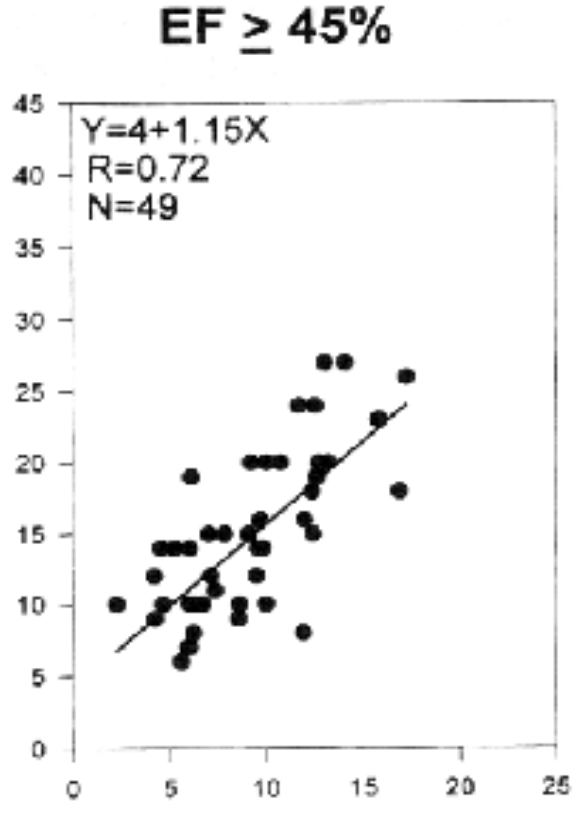
E/Vp



Elevated diastolic pressure : E/Vp > 2.5

E/Ea





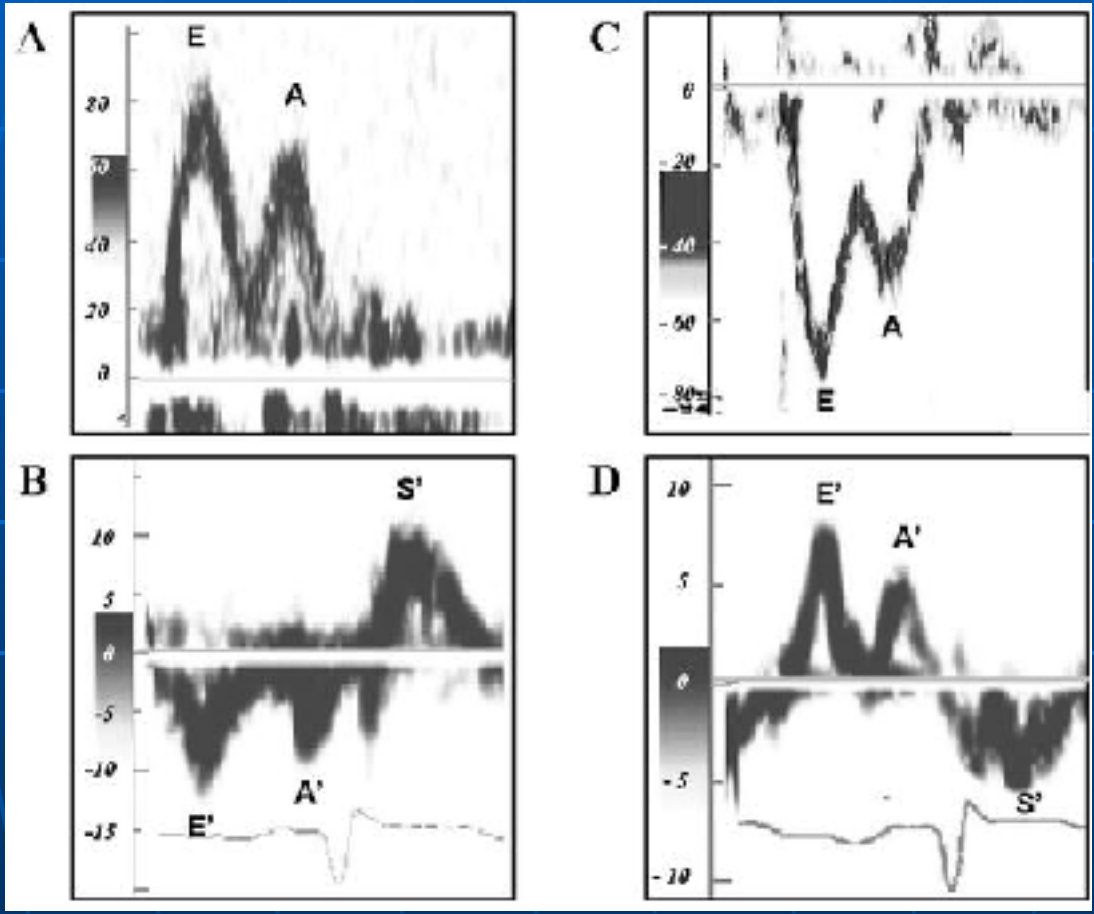
E/Ea

Nagueh; Circulation 1998

Elevated Diastolic Pressure

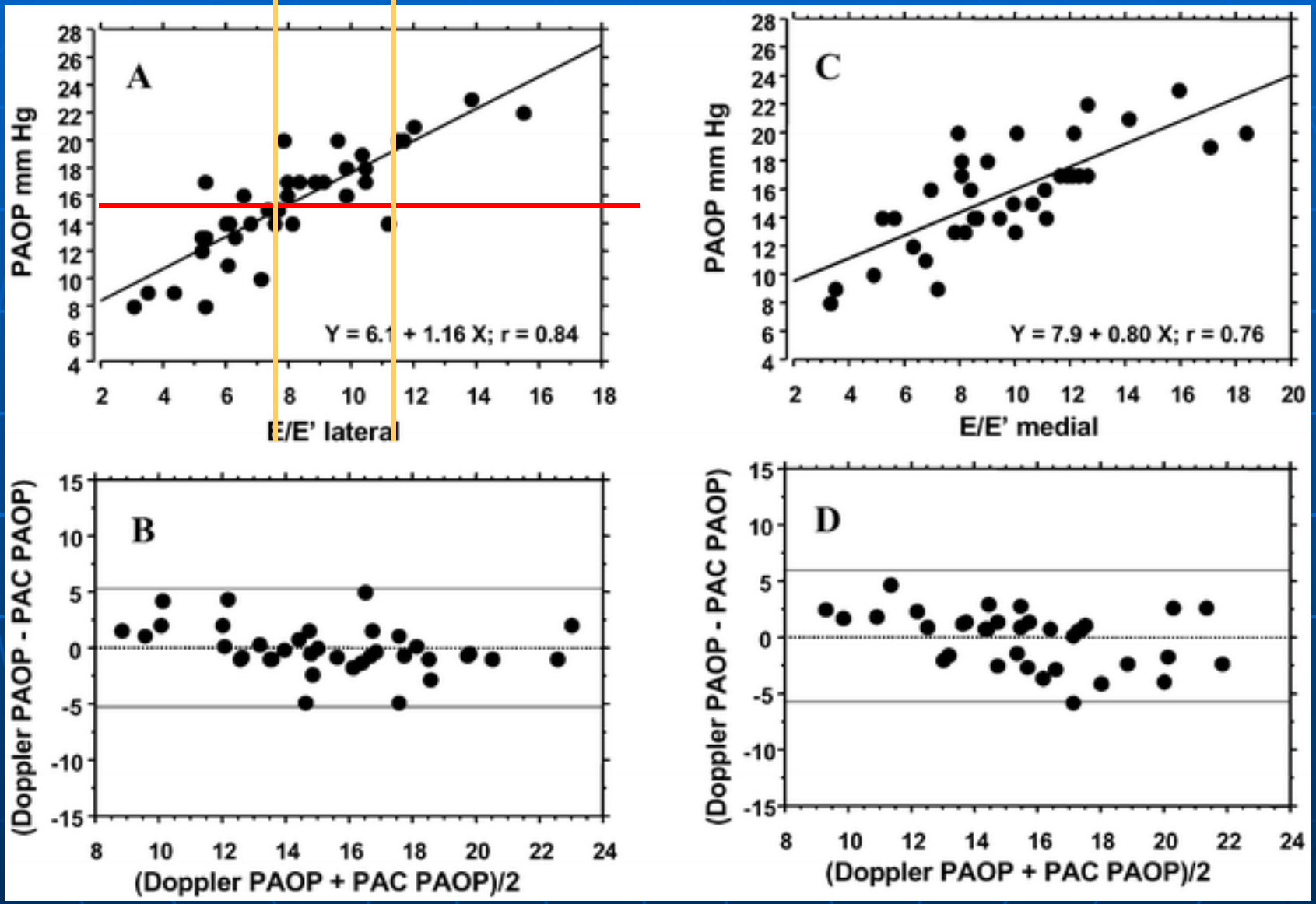
E/Ea > 10 (Nagueh JACC 1997) or E/Ea > 15 (Ommen Circulation 2000)

E/Ea



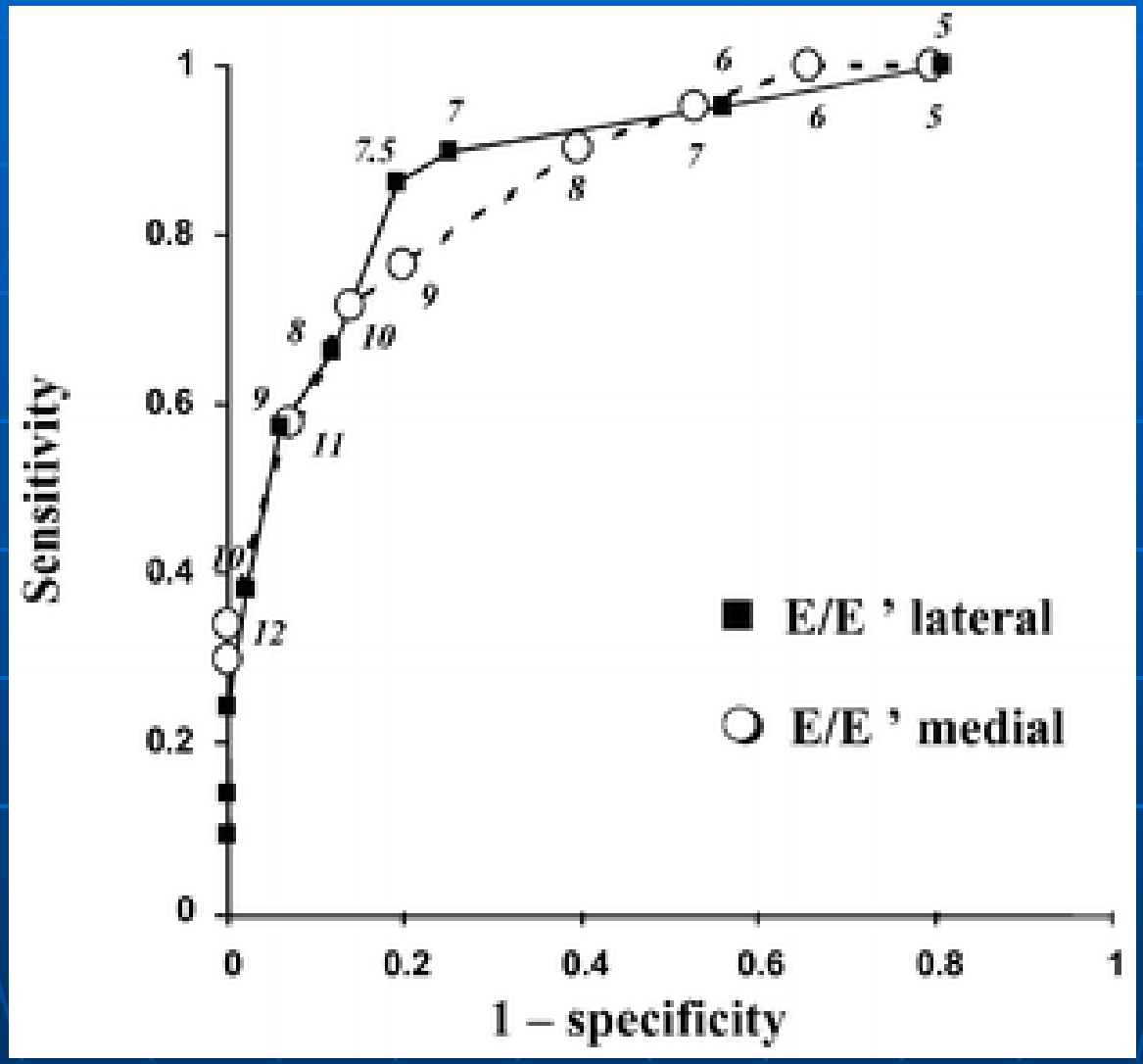
Combes A Int Care Med 2004

E/Ea



Combes A Int Care Med 2004

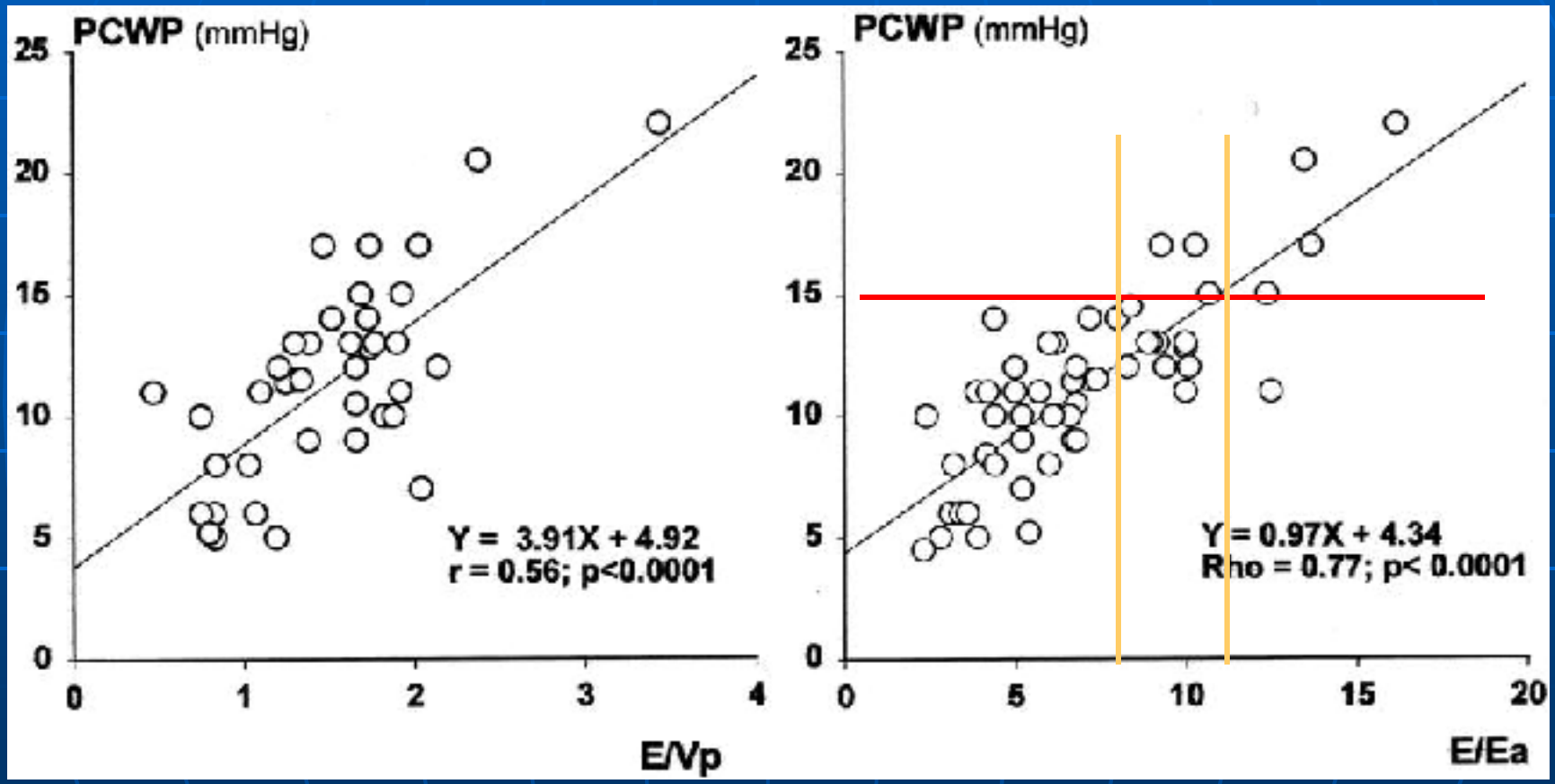
E/Ea



ROC curve for predicting PAOP of 15 mmHg or higher using E/E at both medial and lateral mitral annuli. Area under the curve 0.89 (lateral, *closed squares*) and 0.81 (medial, *open circles*)

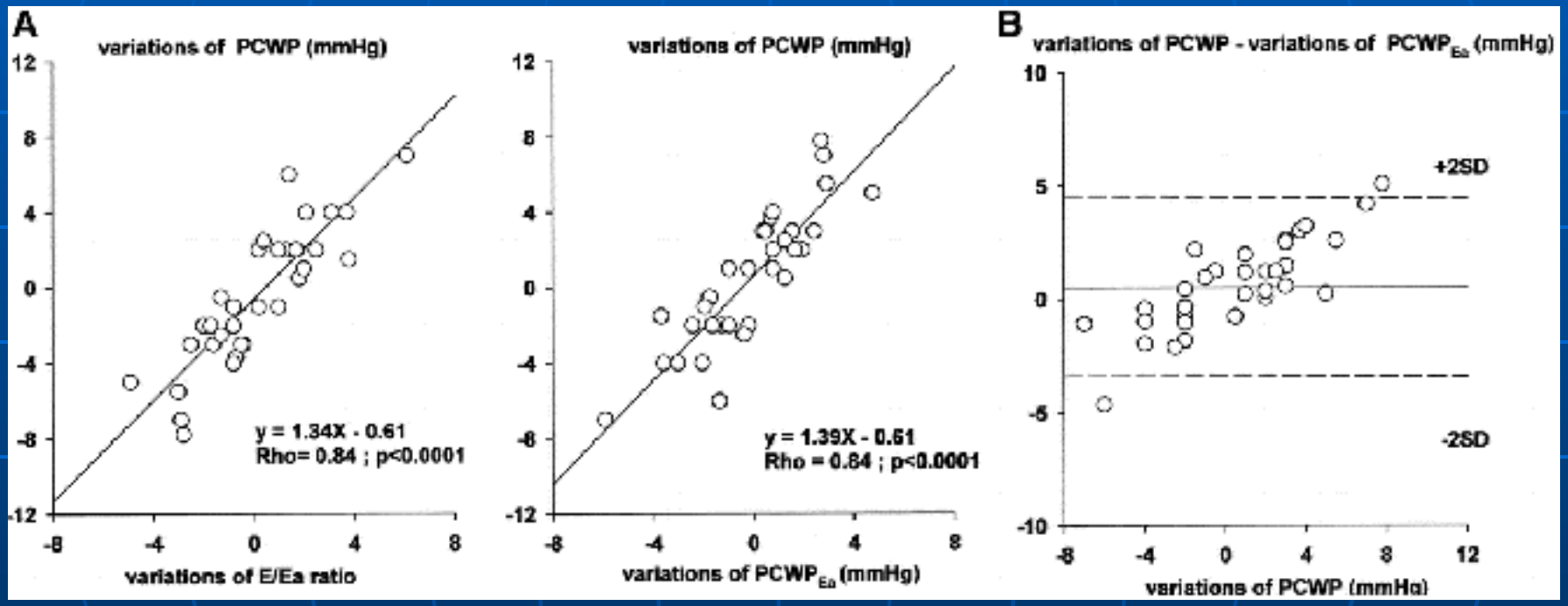
Combes A Int Care Med 2004

E/Vp et E/Ea



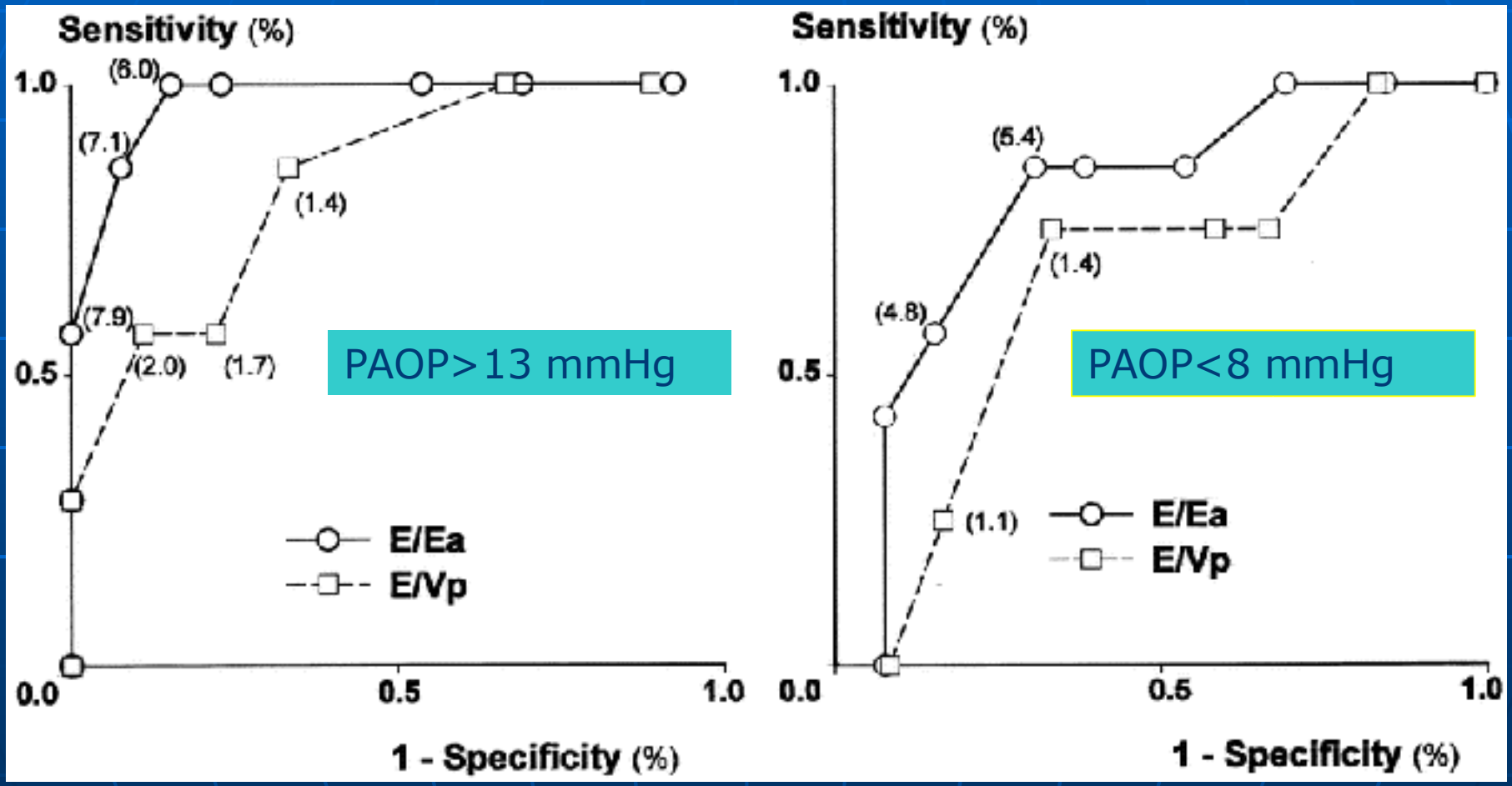
Bouhemad, Bélaïd Anesthesiology: Volume 98(5) May 2003 pp 1091-

E/Vp et E/Ea



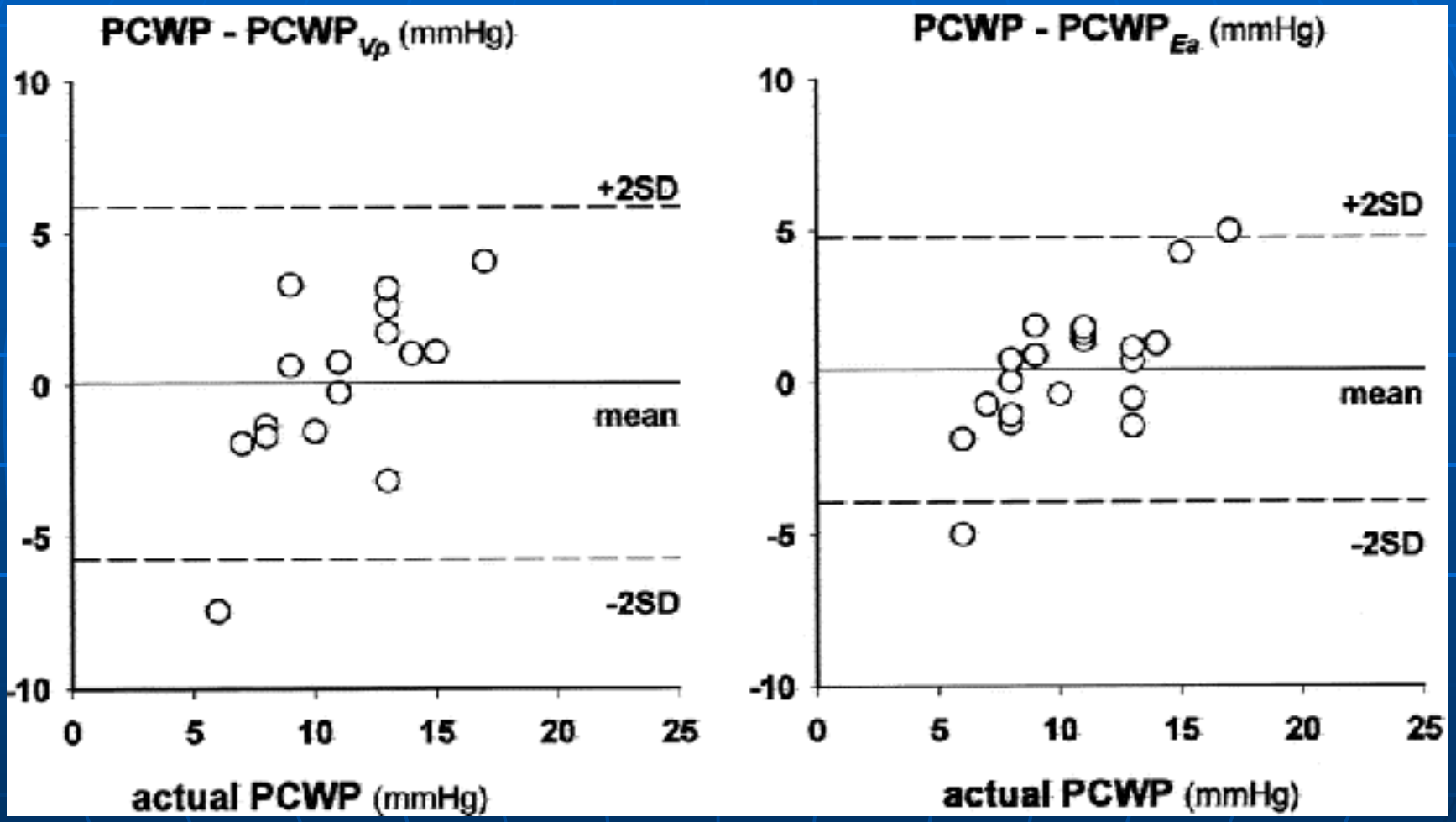
Bouhemad, Bélaïd Anesthesiology: Volume 98(5) May 2003 pp 1091-

E/Vp et E/Ea



Bouhemad, Bélaïd Anesthesiology: Volume 98(5) May 2003 pp 1091-

E/Vp et E/Ea

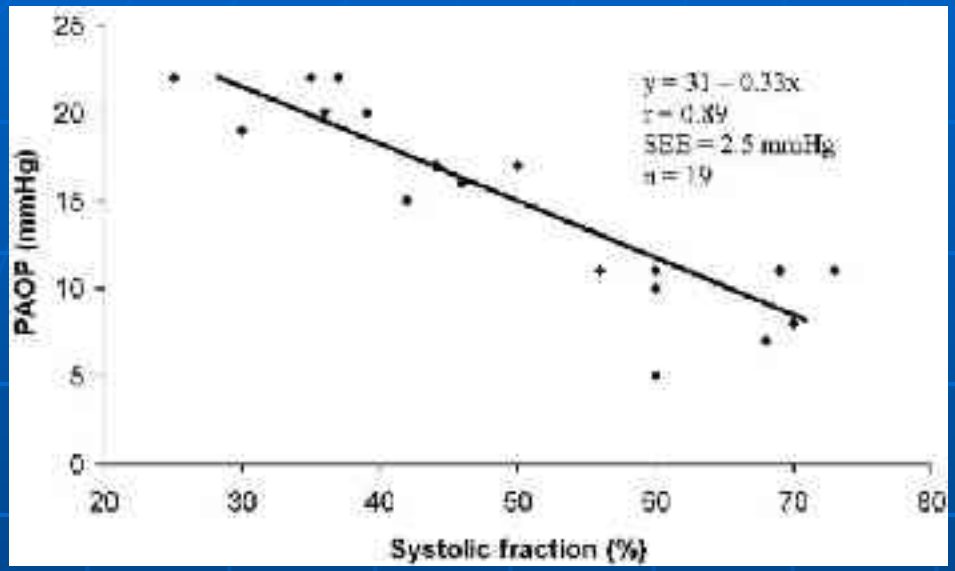


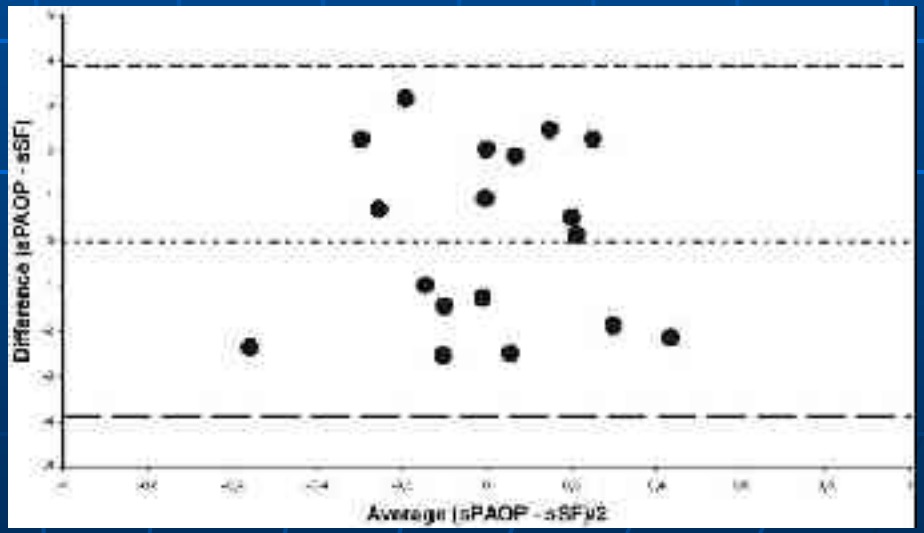
Bouhemad, Bélaïd Anesthesiology: Volume 98(5) May 2003 pp 1091-

CONCLUSION

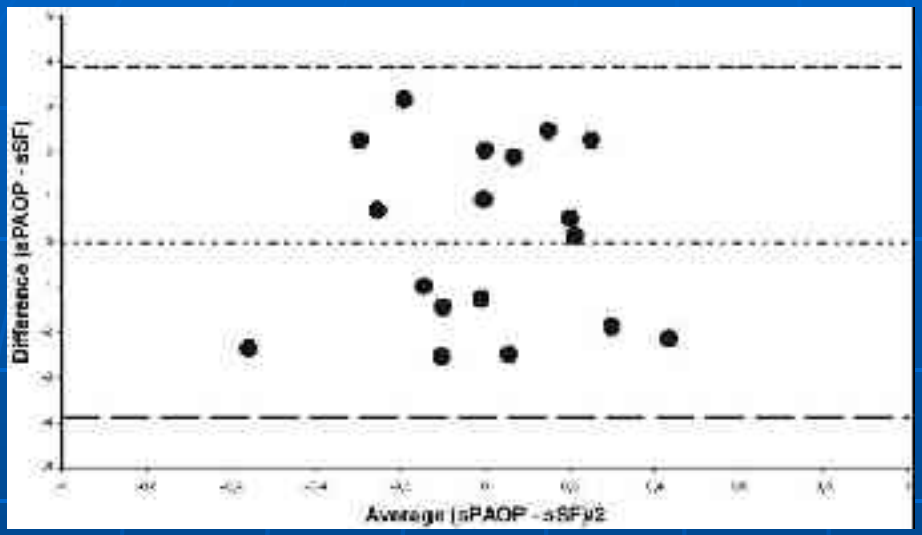
- Flux mitral et le flux pulmonaire sont dépendant des conditions de charge et de la Fc. Non utilisable pour évaluer la PAPO
- E/Ea (et E/Vp) est le meilleur indice afin d'évaluer la PAPO. E/Ea< 8 PAPO inférieure à 15 mmHg et E/Ea >12 PAPO> 15 mmHg

Flux veineux pulmonaire

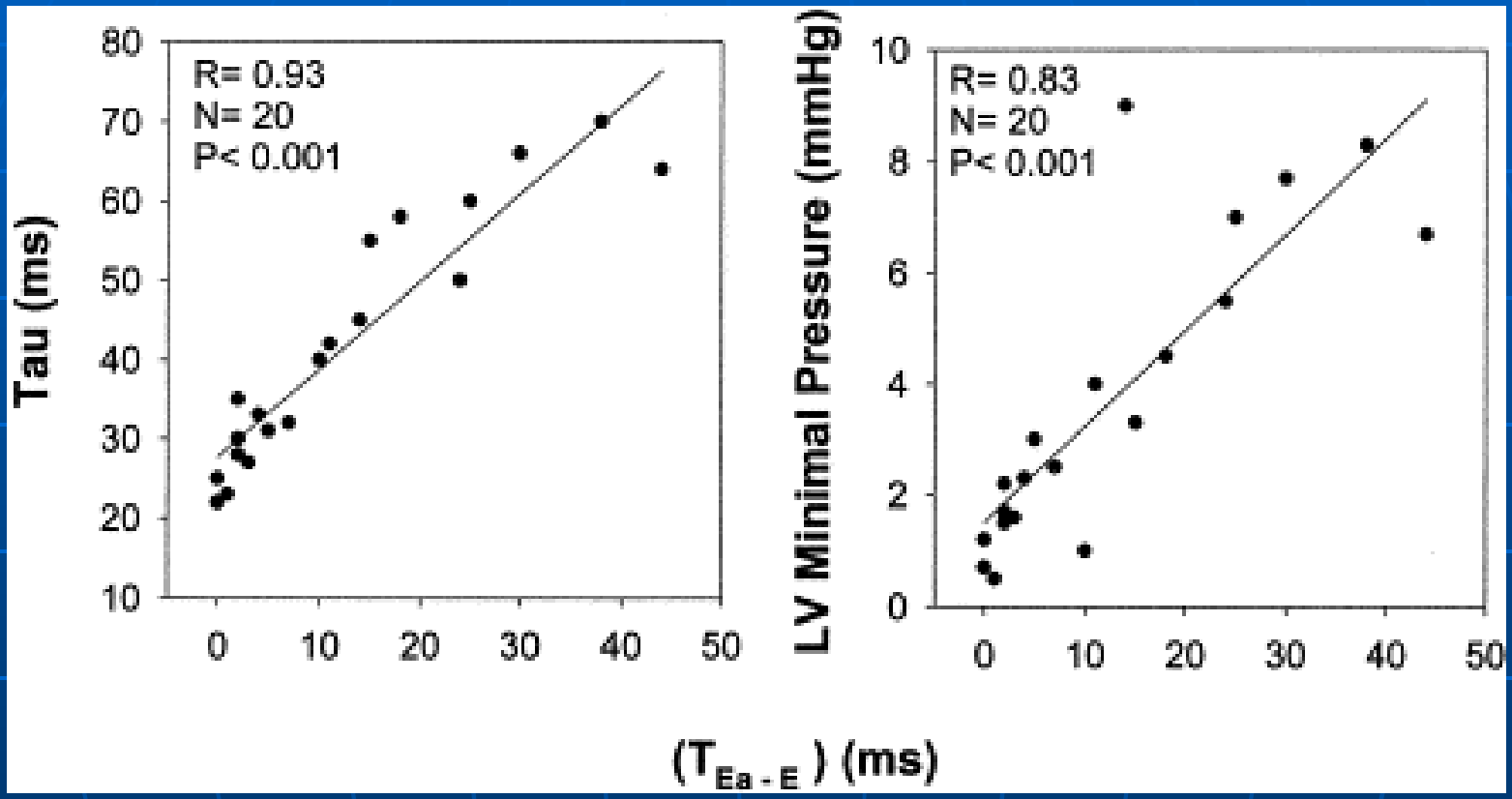


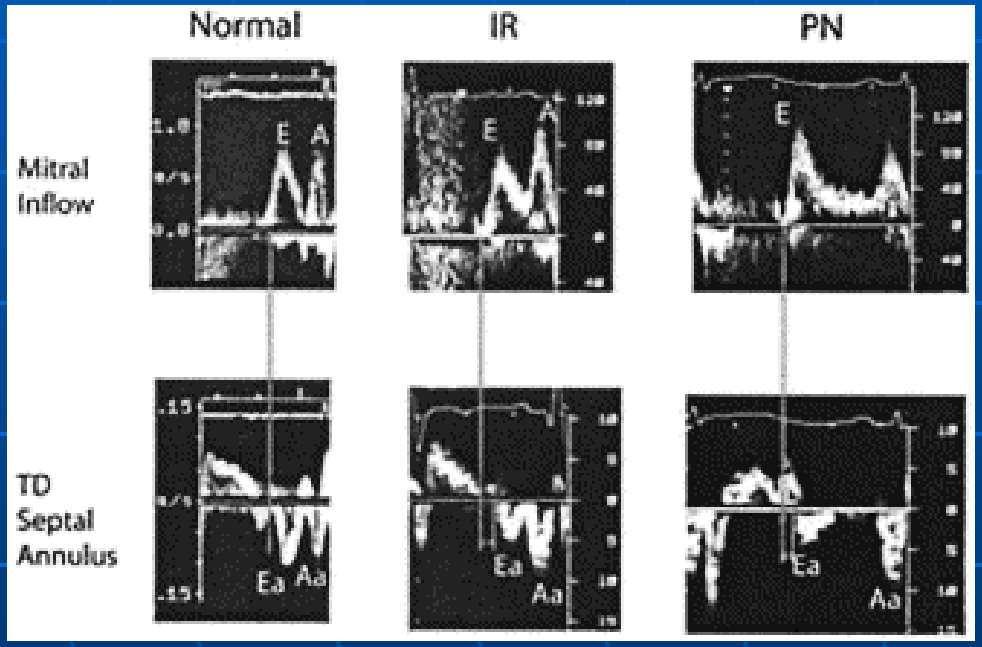


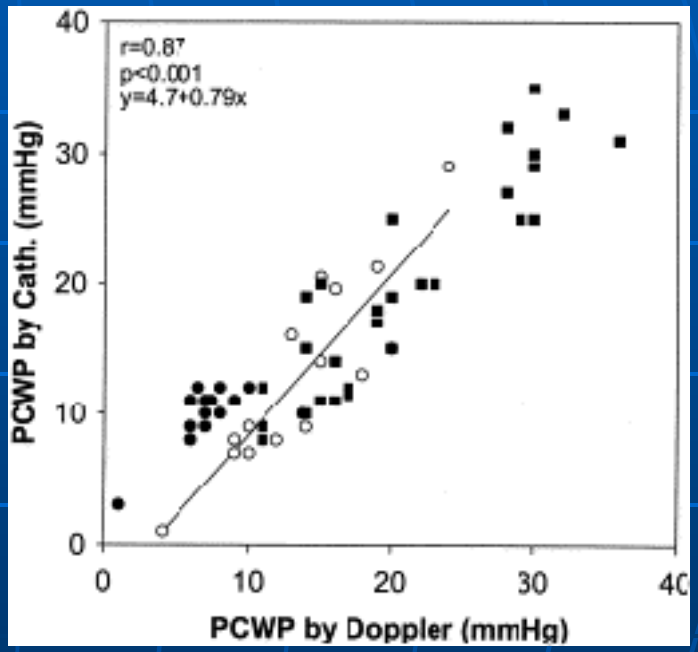
Vargas J Crit Care 2004



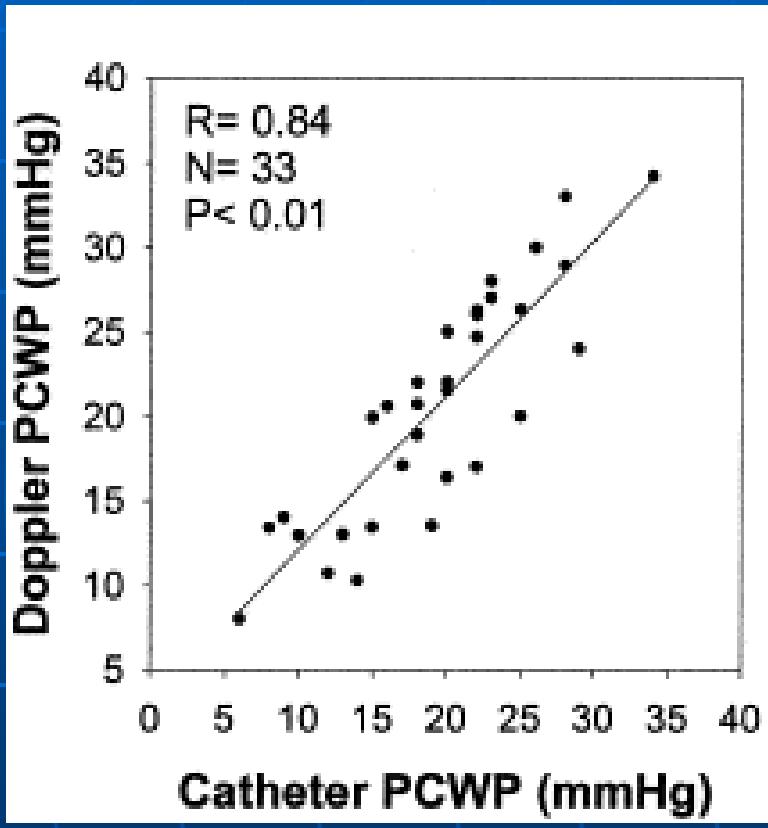
Vargas J Crit Care 2004

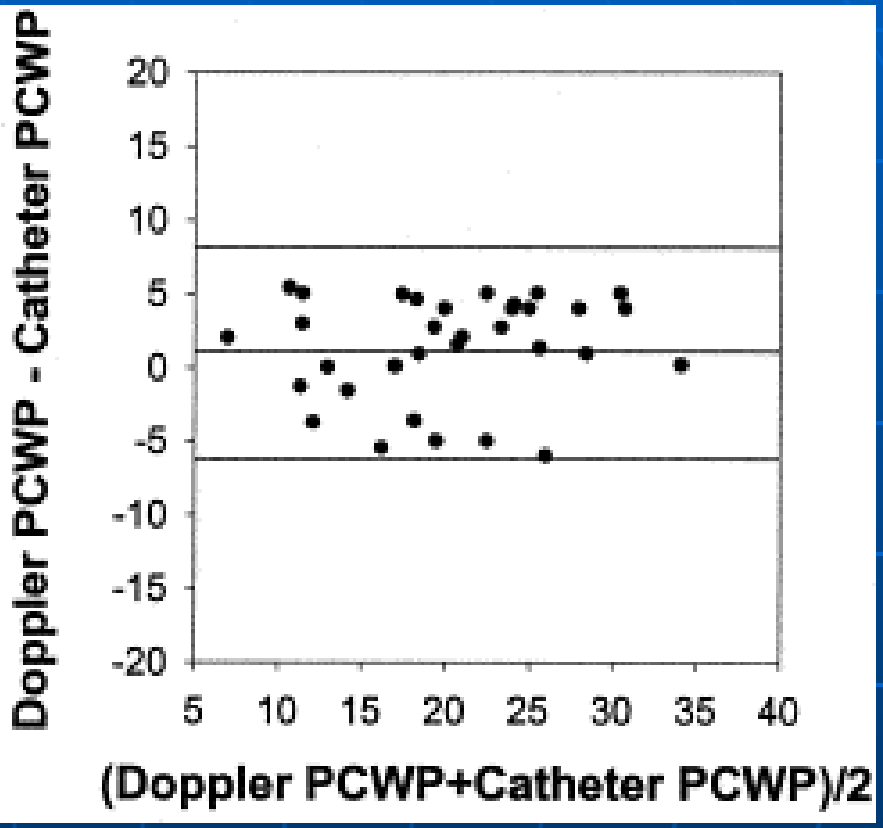

Tau (ms)
R= 0.93
N= 20
P< 0.001
80
70
60
50
40
30
20
10
0
10
20
30
40
50
LV Minimal Pressure (mmHg)
R= 0.83
N= 20
P< 0.001
10
8
6
4
2
0
0
10
20
30
40
50
(T Ea - E) (ms)





Rivas-Gotz C J Am Coll Cardiol. 2003 Oct 15;42(8):1463-70.



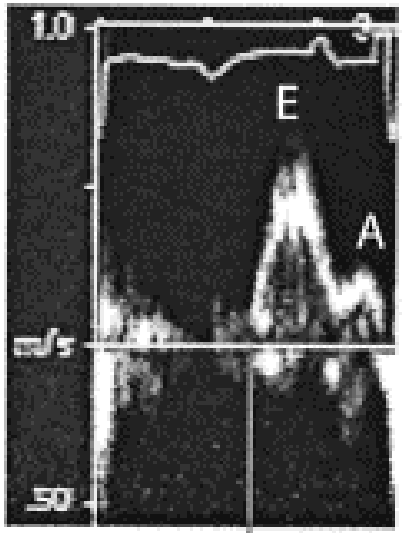


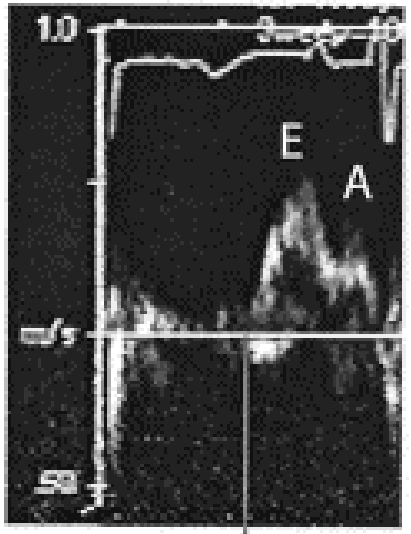
Rivas-Gotz C J Am Coll Cardiol. 2003 Oct 15;42(8):1463-70.

Pre Cx - Constriction

Post Cx - Constriction

Mitral Inflow





TD Septal Annulus