



UFRJ

# **NAFLD/NASH: MULTIDISCIPLINARY MANAGEMENT OF A SYSTEMIC DISEASE**

## **The hepatologist**

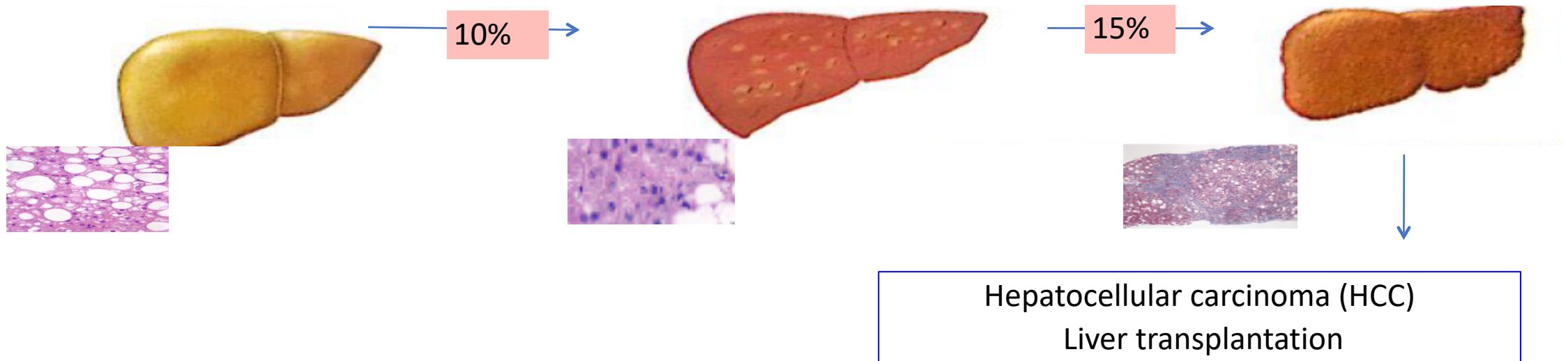
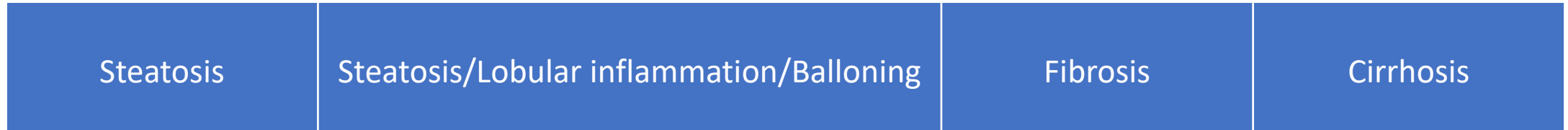
**Ana Carolina Cardoso**

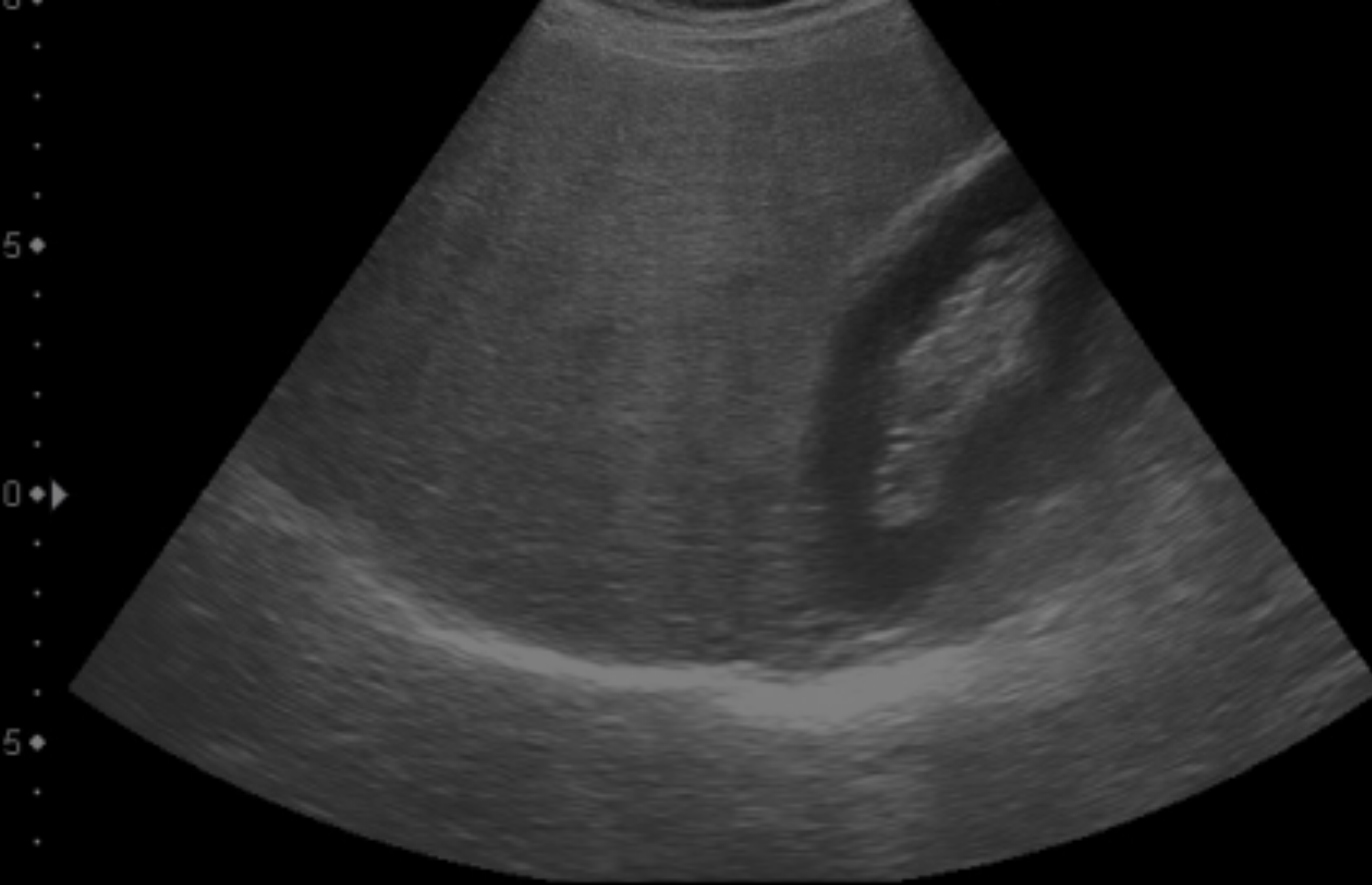
Universidade Federal do Rio de Janeiro - Brazil

# Disclosure

Partner of HEPATOSCAN Medical Services® - Commercial interest in transient liver elastography using FibroScan®.

# NAFLD/NASH





MI: (1.5)

2DG

98

DR

65





**STEPS**



# #STEP 1 - Alcohol consumption



Outpatient Unit

Mr. X “ *I drink just a little bit, but I am not an alcohol abuser*”

Evaluation of alcohol consumption is challenging in daily clinical practice.

# #STEP 1 - Alcohol consumption

*Dunn et al.*

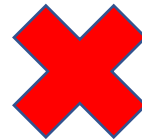
N = 331

< 20g/d vs. lifelong non-drinkers

NASH was evaluated in both groups

Modest drinkers had a lower risk of having NASH and a lower risk of liver fibrosis

*Dunn et al. J Hepatol 2012*



*Ekstedt et al.*

N = 71

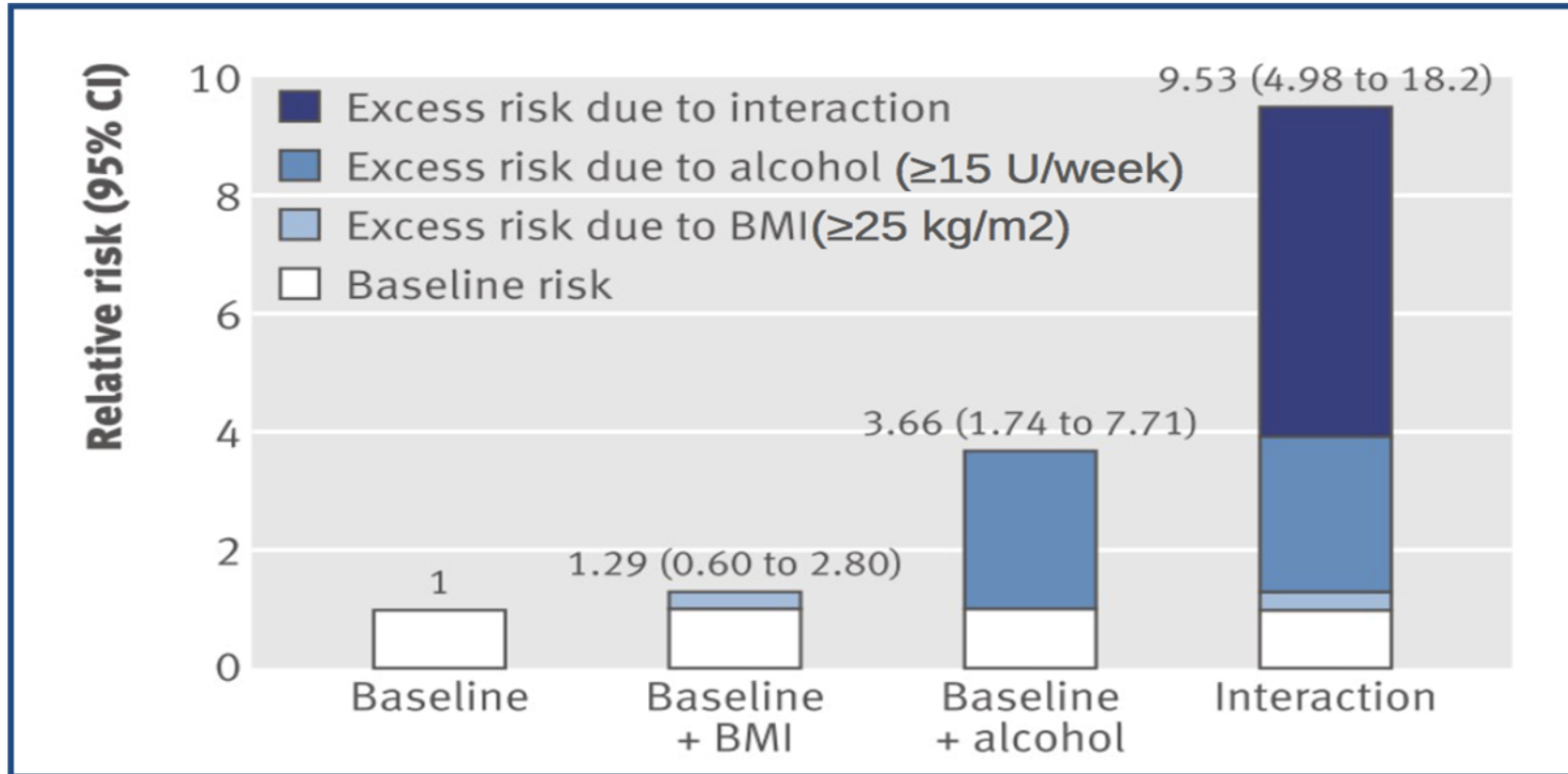
NAFLD patients - low alcohol

At follow-up, 17 (24%) patients had significant fibrosis progression criteria

The proportion of patients reporting heavy episodic drinking at least once a month was higher among those with significant fibrosis progression

*Ekstedt et al. Scand J Gastroenterol 2009*

# #STEP 1 - Alcohol consumption

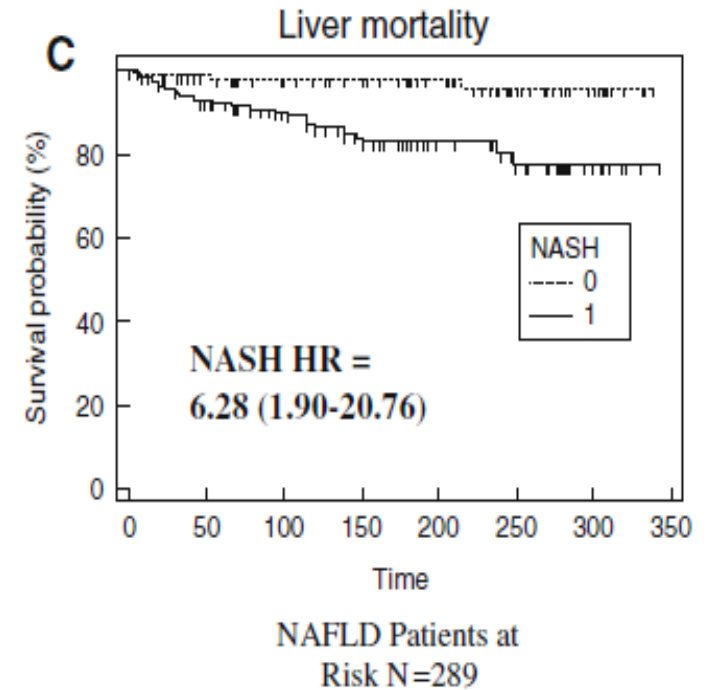
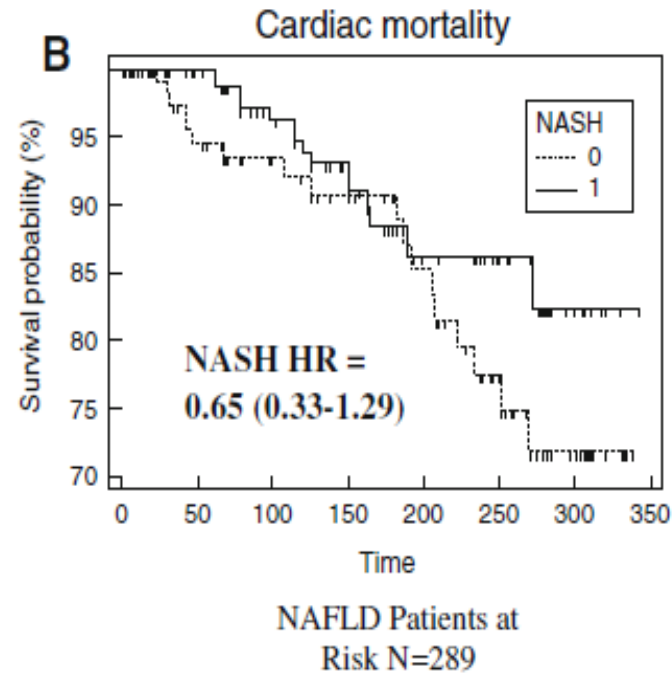
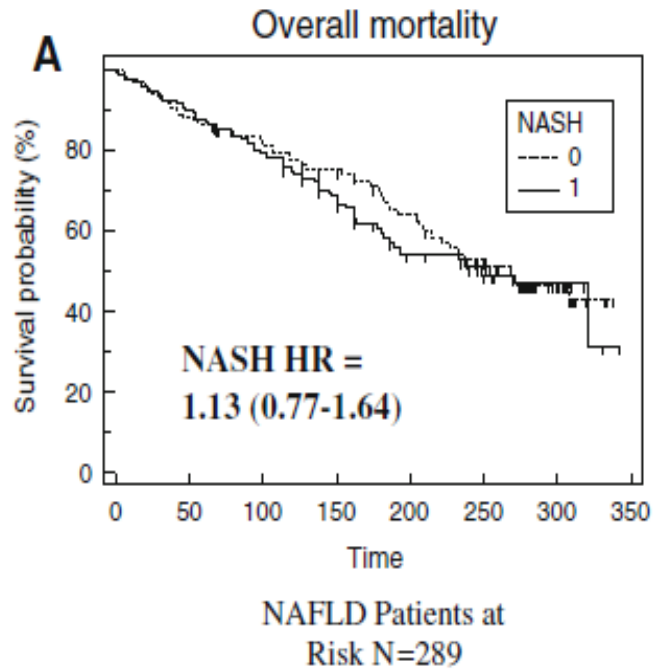


# #STEP 2 - investigation of comorbidities

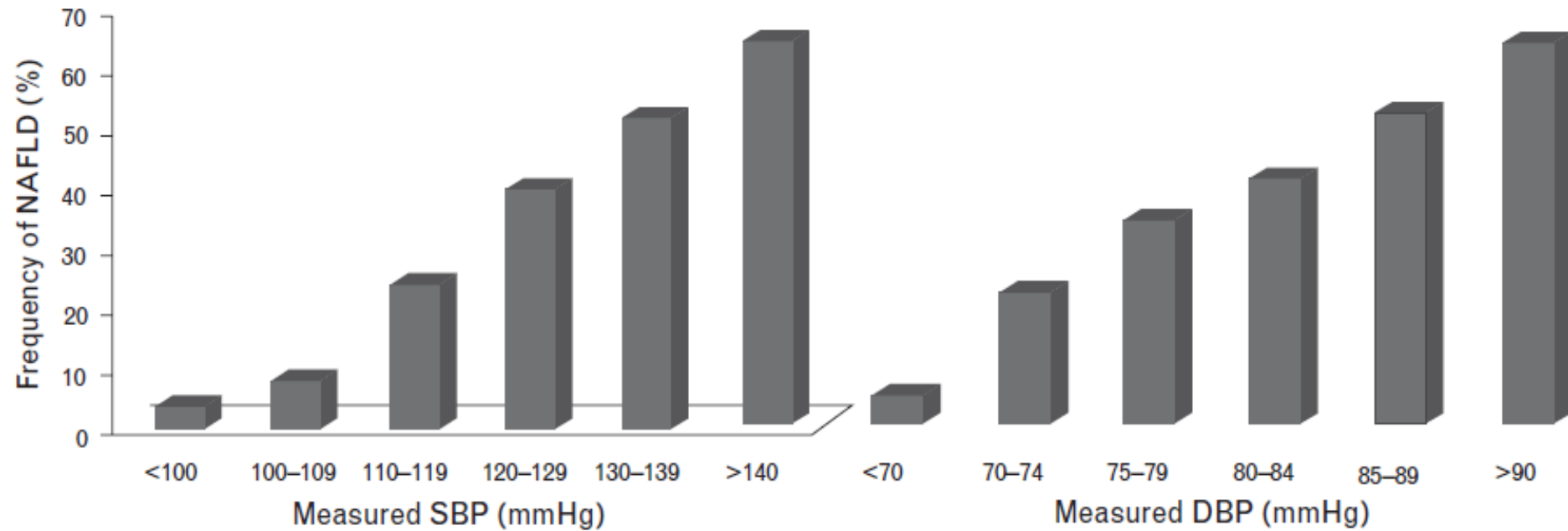


- Viral Hepatitis (HCV, HBV)
- Use of hepatotoxic medications
- Autoimmune diseases (ANA antibody, Anti-smooth muscle antibody, IgG, AMA ....)
- Metabolic diseases (Ferritin, Transferrin Saturation, Ceruloplasmin, alpha-1-antitrypsin)

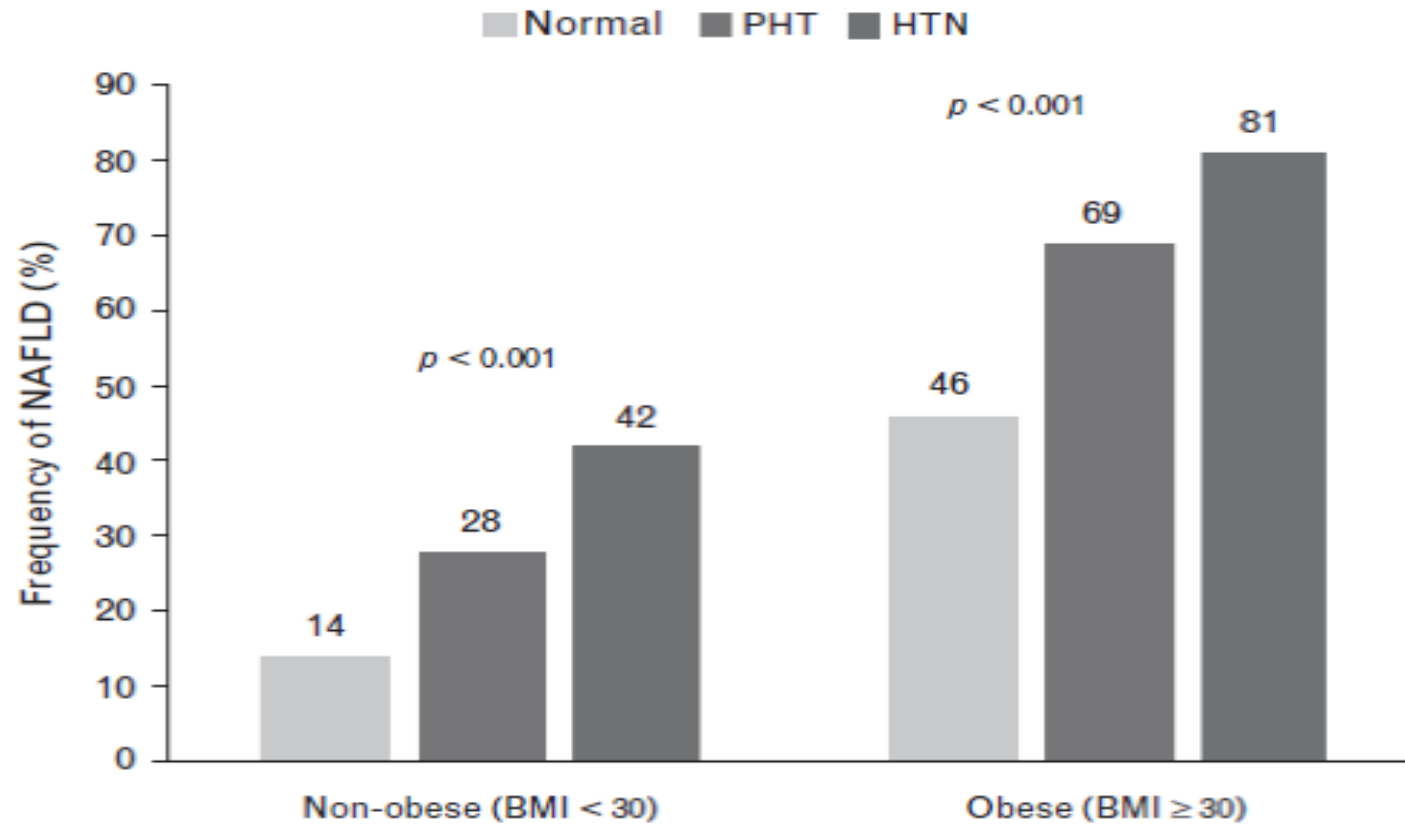
# #STEP 3 - Cardiovascular disease



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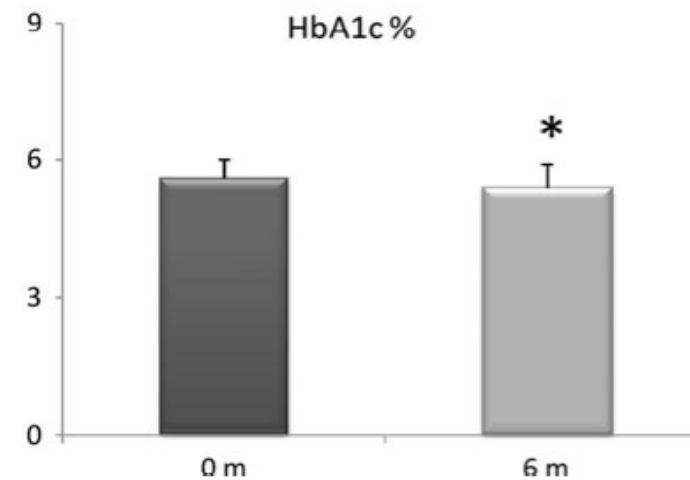
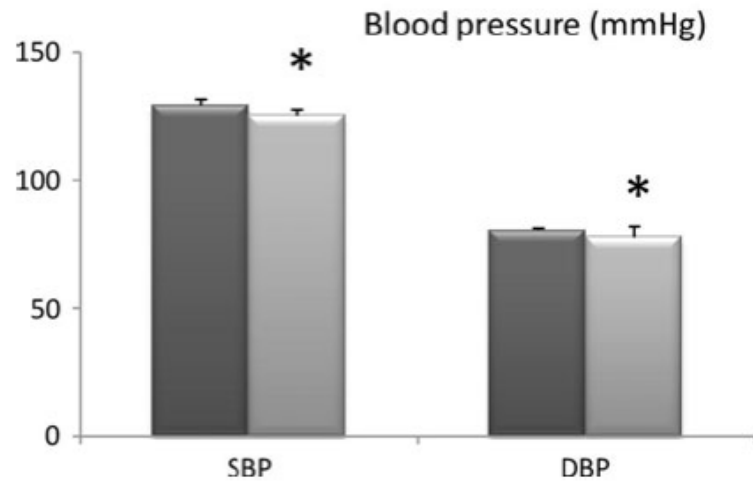
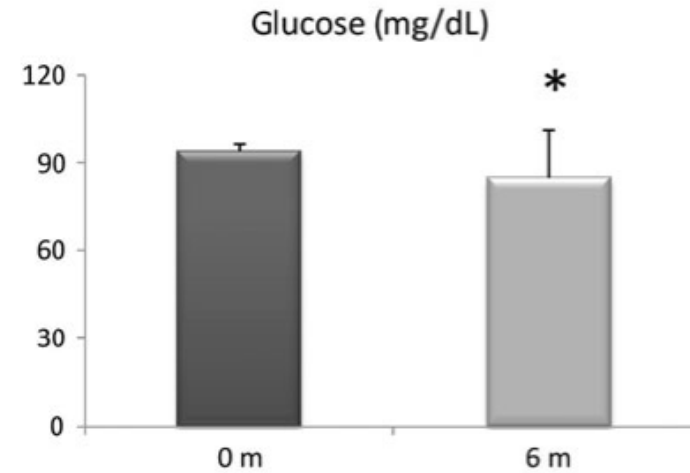
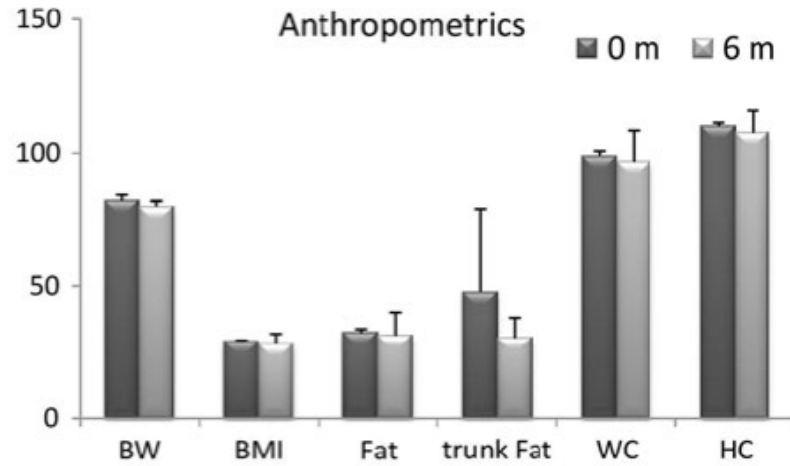


# #STEP 3 - Cardiovascular disease



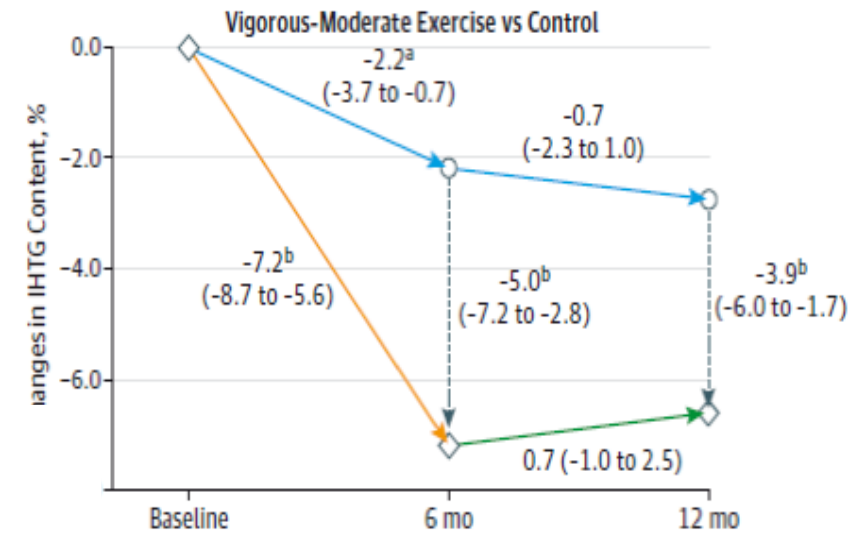
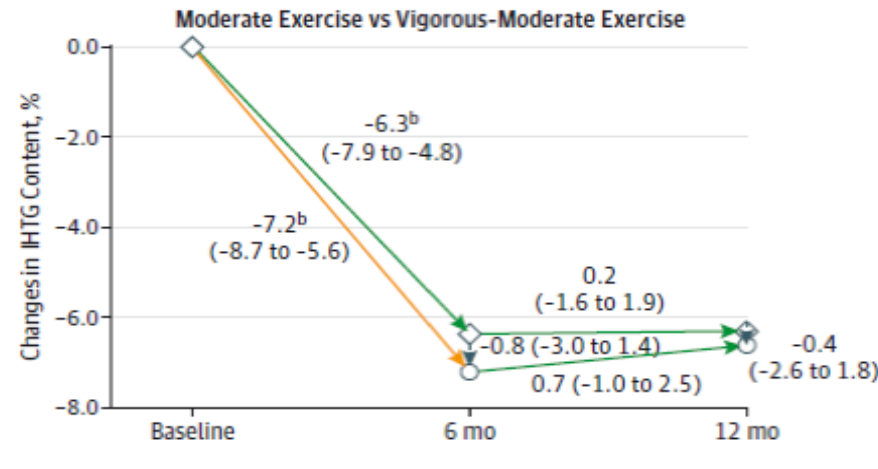
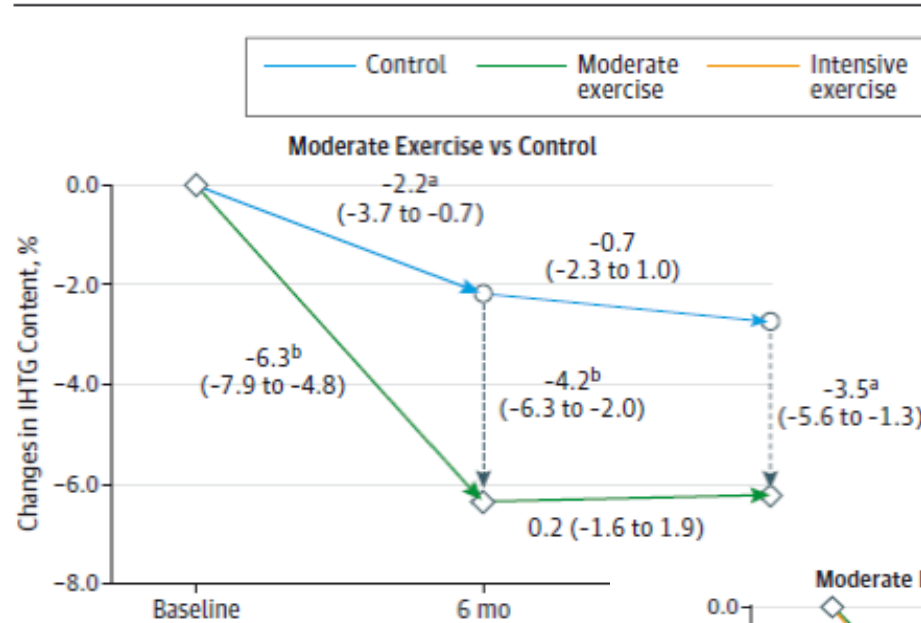


# #STEP 4 - Lifestyle changes



N = 44 NAFLD

# #STEP 4 - Lifestyle changes

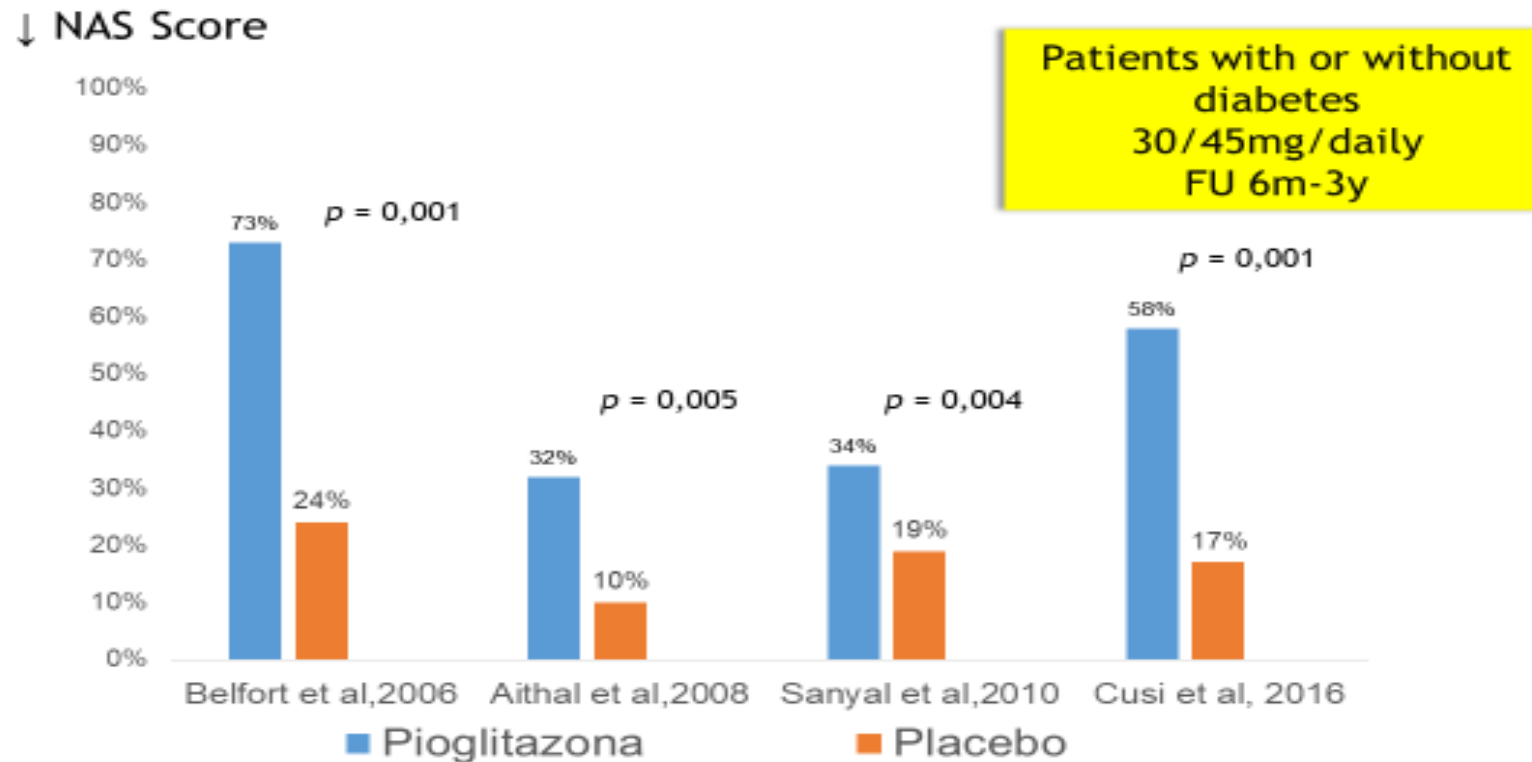


n = 220 NAFLD  
 control (n = 74)  
 moderate exercise (n = 73)  
 vigorous-moderate exercise (n = 73)

# #STEP 5 - Medications



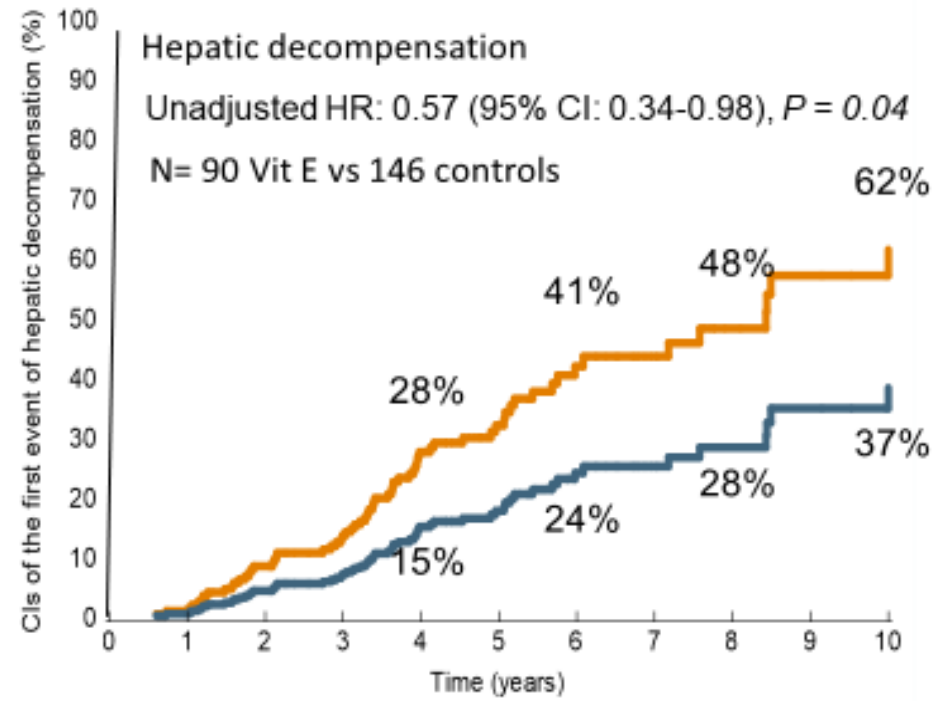
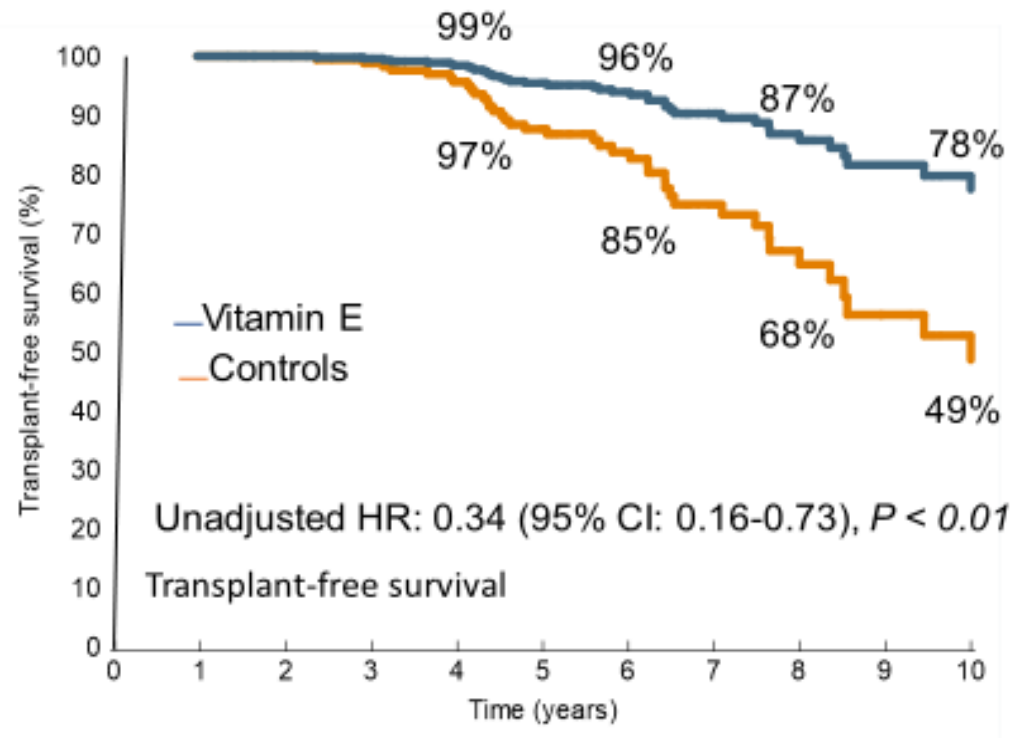
## Randomized Studies with Pioglitazone



# #STEP 5 - Medications



Vitamin E improves transplant free survival and decompensation rates in NASH with stage 3 or 4 fibrosis







*Keep Walking*