



# Gestión de la Lista de Espera. MELD

Miguel Angel Gómez Bravo  
Hosp. Univ. Virgen del Rocío  
Sevilla



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SETH



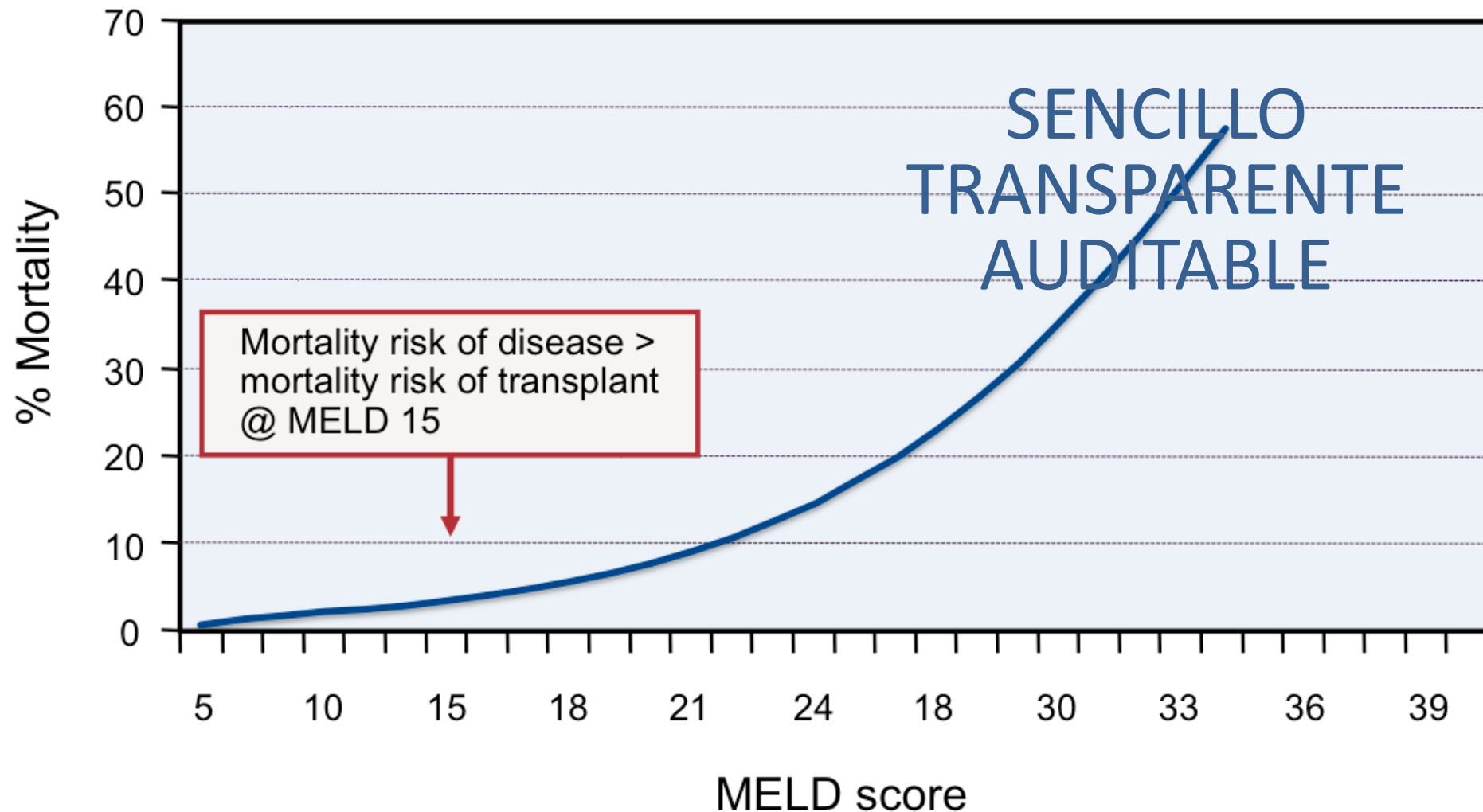
*Málaga 2015*

Sociedad Española  
de Trasplante Hepático

1. ¿Porque el Meld ?
2. Impacto del Meld
3. Limitaciones del Meld
4. Futuro del Meld



# ¿Por qué el MELD ?



Freeman RB, Edwards EB.

*Liver transplant waiting time does not correlate with waiting list mortality: implications for liver allocation policy. Liver Transpl. 2000;6:543-52.*

Treat sickest first, or give livers to the less ill?



Justicia



Utilidad

# Impacto del MELD en la LE

: Lista de Espera

| D      | NOMBRES |
|--------|---------|
| 4036-0 | AGUIRRE |
| 3285-3 | LECAROS |
| 3552-K | GUZMAN  |

# Impacto del sistema Meld

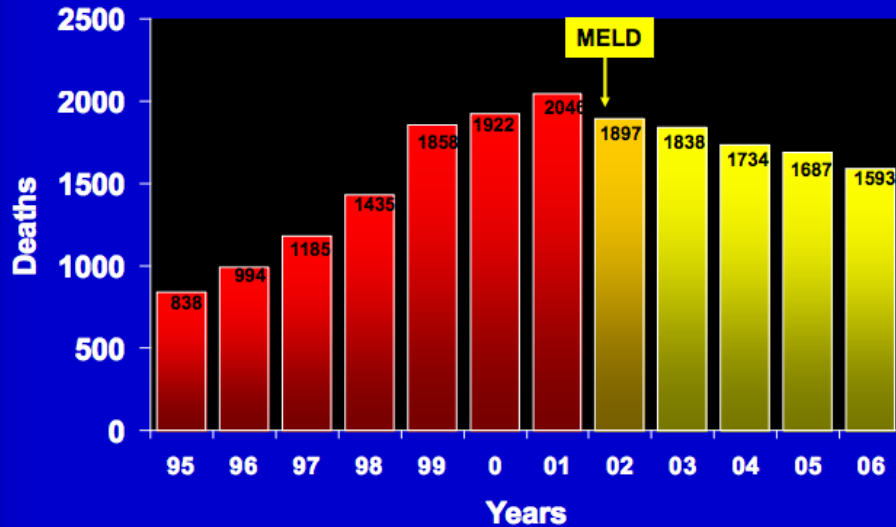
## Valor predictivo del Meld en LE

| Referencia        | Número de pacientes | c-estadística   |                | P valor |
|-------------------|---------------------|-----------------|----------------|---------|
|                   |                     | Puntuación MELD | Puntuación CTP |         |
| Wiesner et al. 13 | 3437 *              | 0.83            | 0.76           | <0,001  |
| Kim et al. 14     | 706                 | 0.85            | 0.72           | <0,01   |
| Huo et al. 15 †   | 58                  | 0,718           | 0,528          | <0,001  |
| Heuman y Mihai 16 | 6958 ‡              | 0,759           | 0,766          | NS      |
| Foxton et al. 17  | 376                 | 0.79            | 0.81           | NS      |



# Impacto del sistema Meld

## Deaths on UNOS Liver Waiting List



## Mortalidad en LE

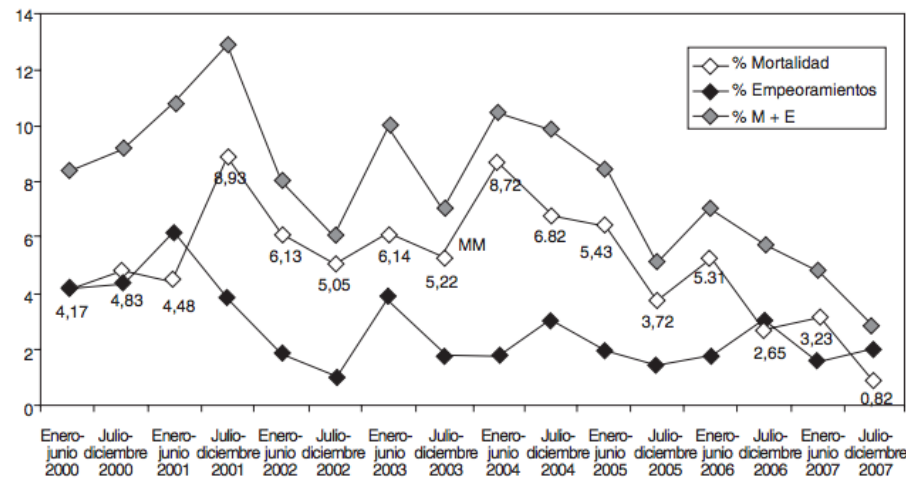
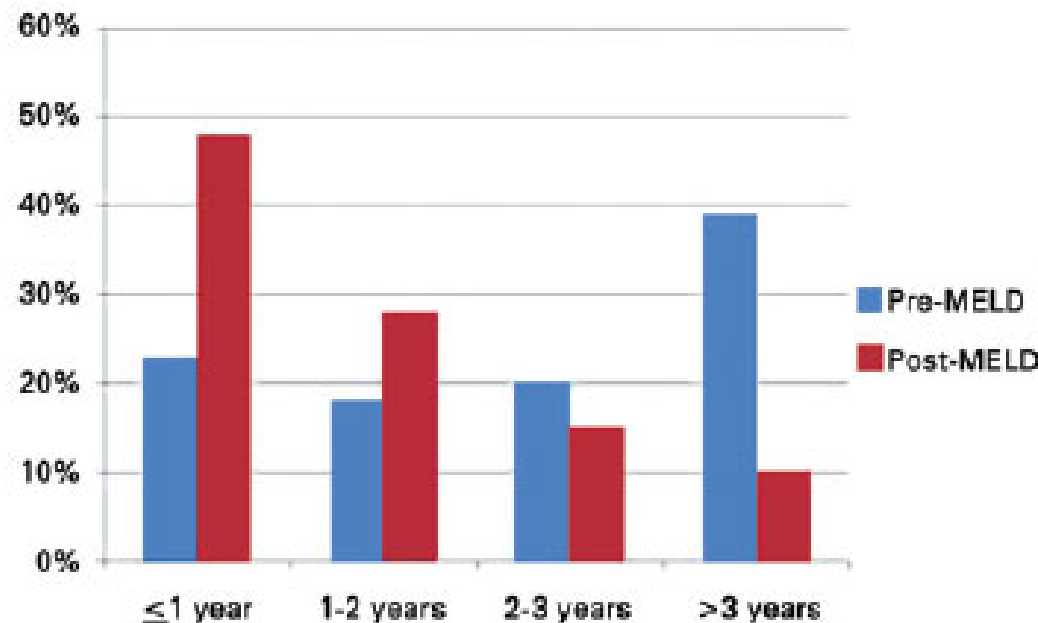
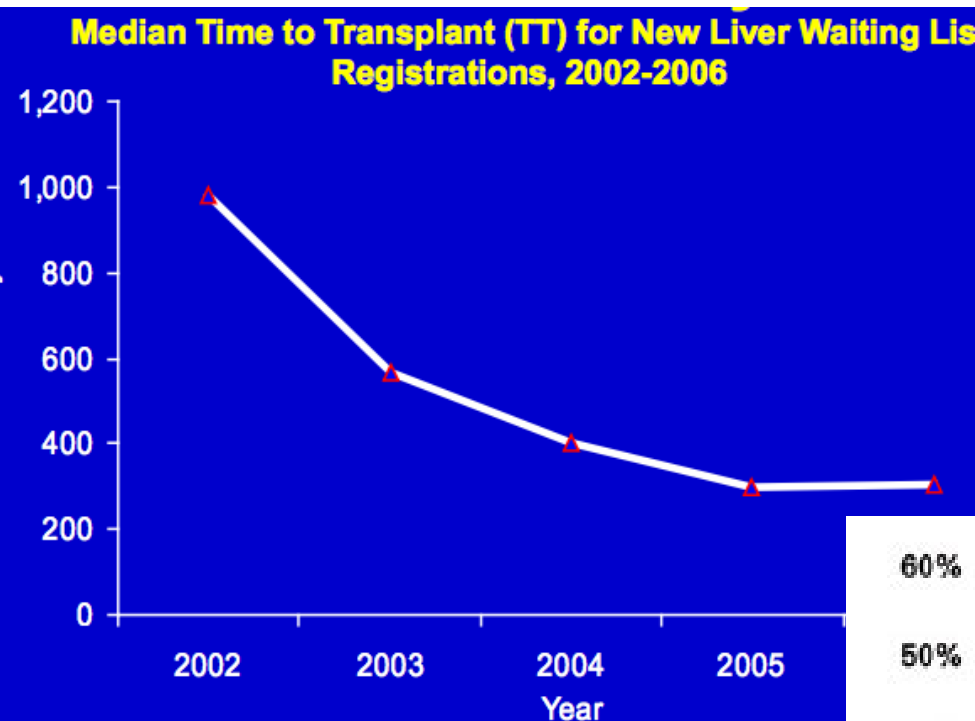


Figura 2. Evolución del porcentaje de mortalidad, de empeoramientos (exclusiones definitivas) y de muertos y empeoramientos en lista de espera para el trasplante hepático en Cataluña (semestres 2000-2007). M+E: mortalidad y empeoramiento.

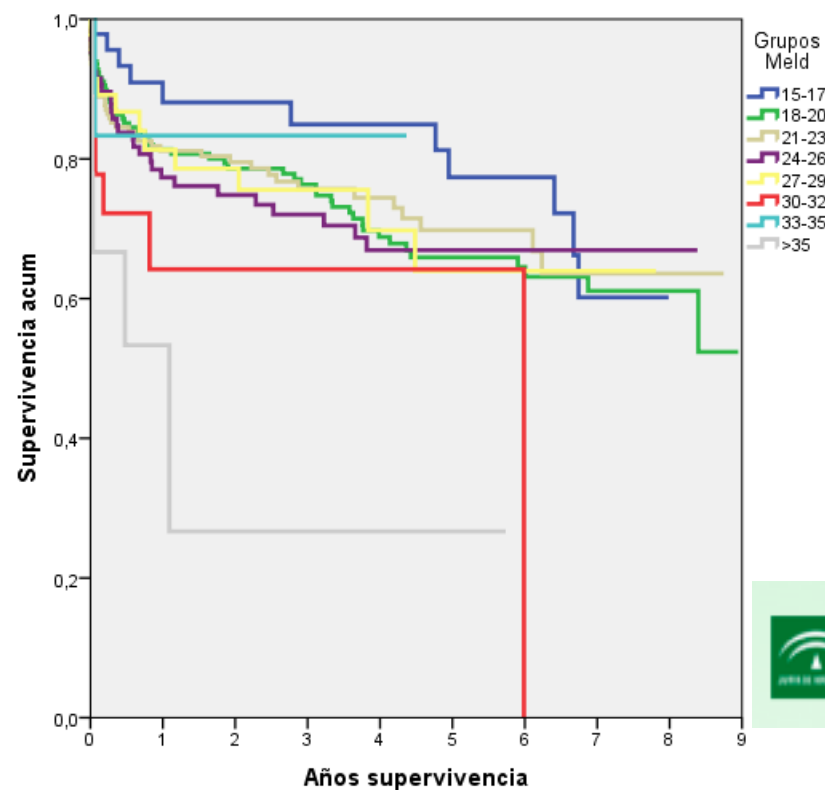
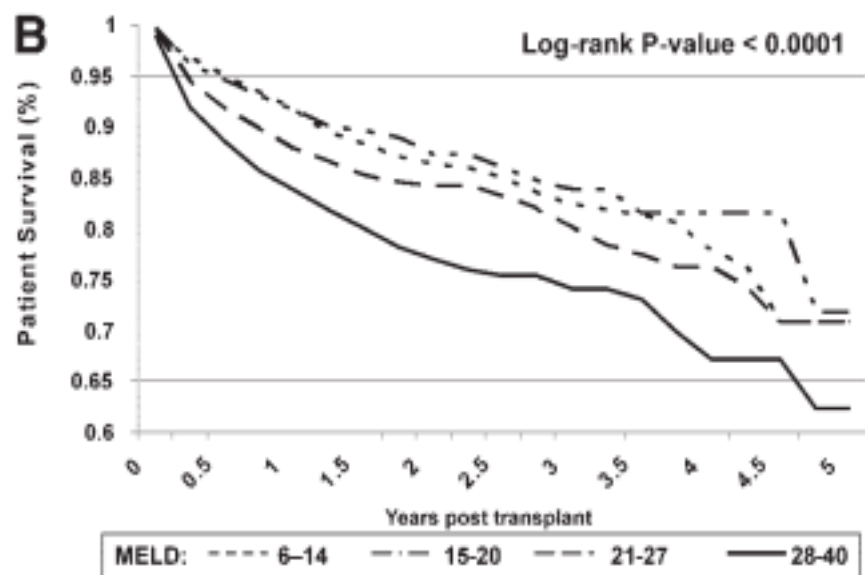
# Impacto del sistema Meld

## Tiempo en LE



# Impacto del sistema Meld

## Supervivencia tras el TH

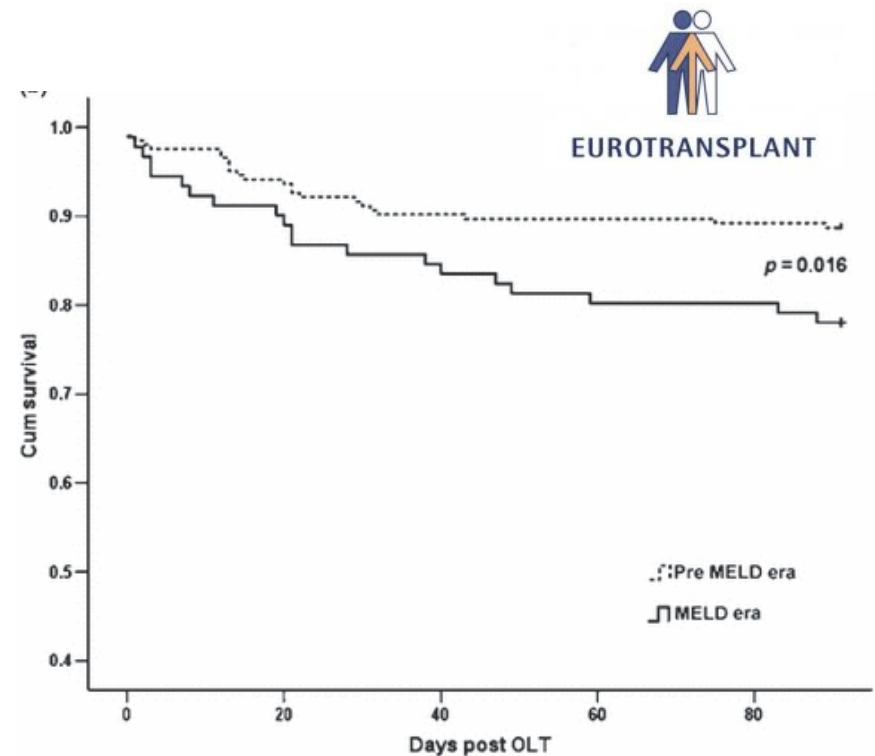
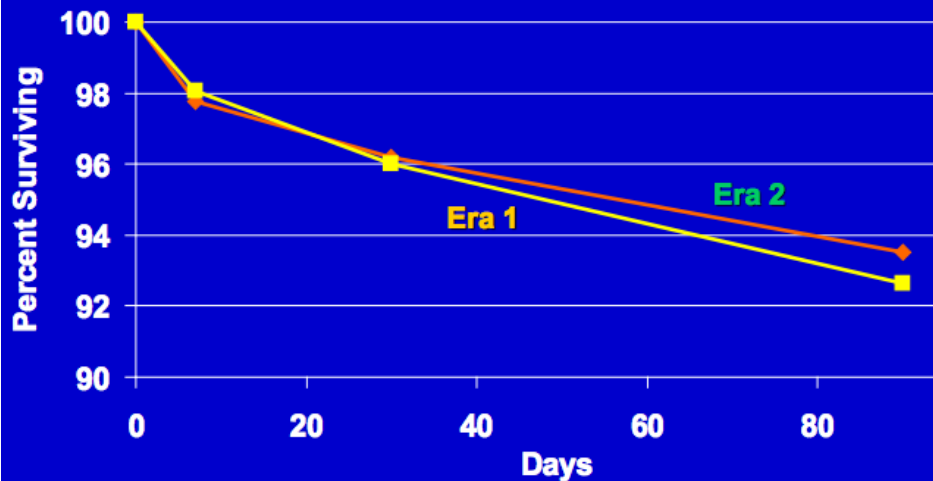


**Figure 1. (A) Graft and (B) patient survival according to the Model for End-Stage Liver Disease (MELD) group (n = 990).**

# Impacto del sistema Meld

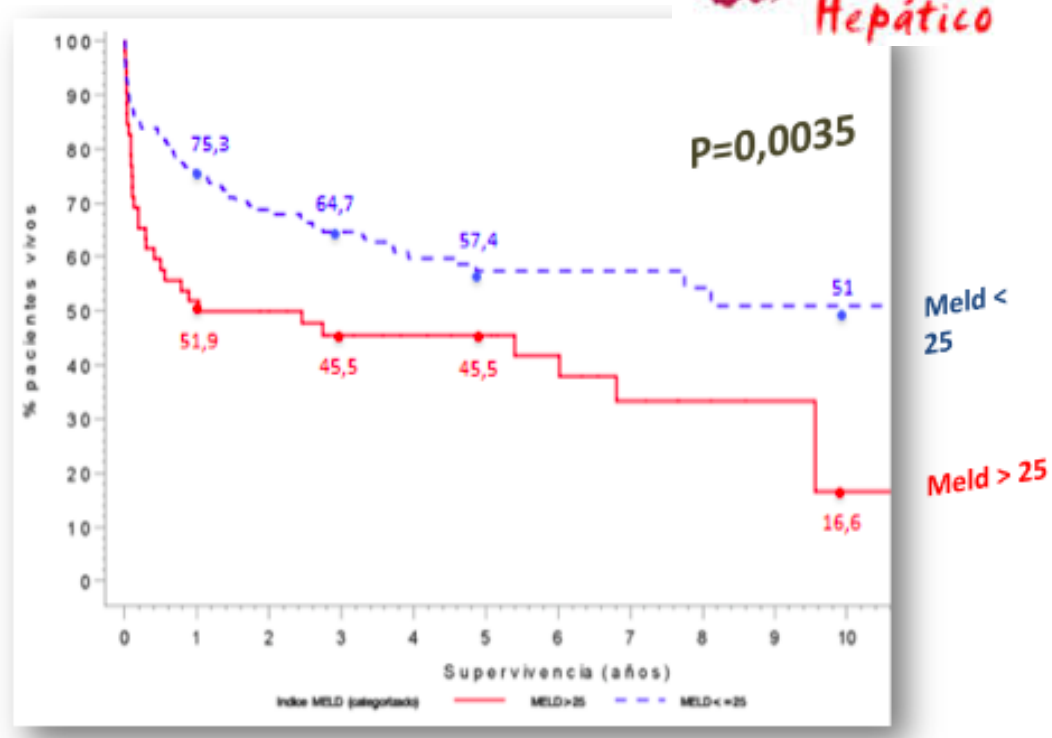
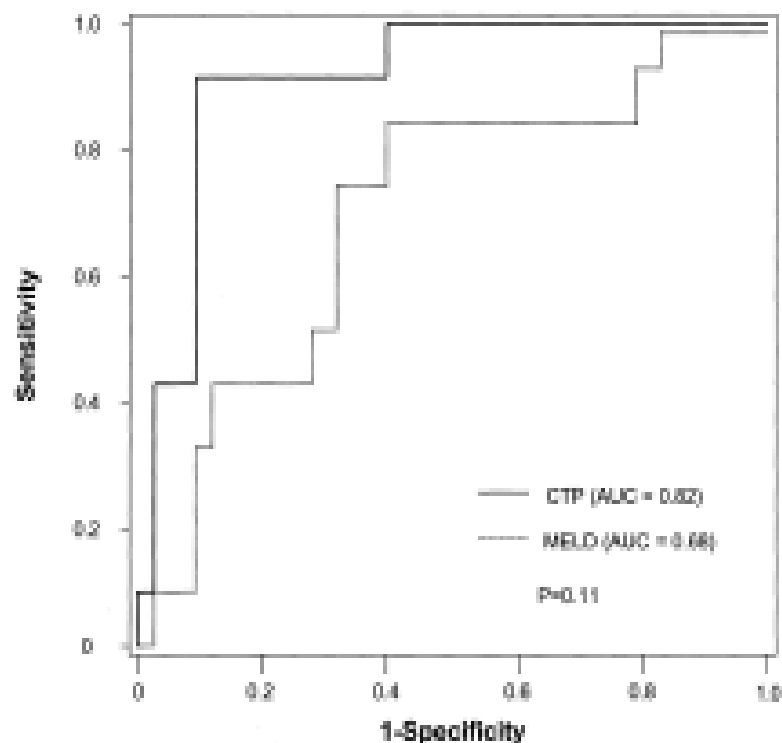
## Supervivencia tras el TH

### Post-Transplant Patient Survival



# Impacto del sistema Meld

## Meld y Retrasplante

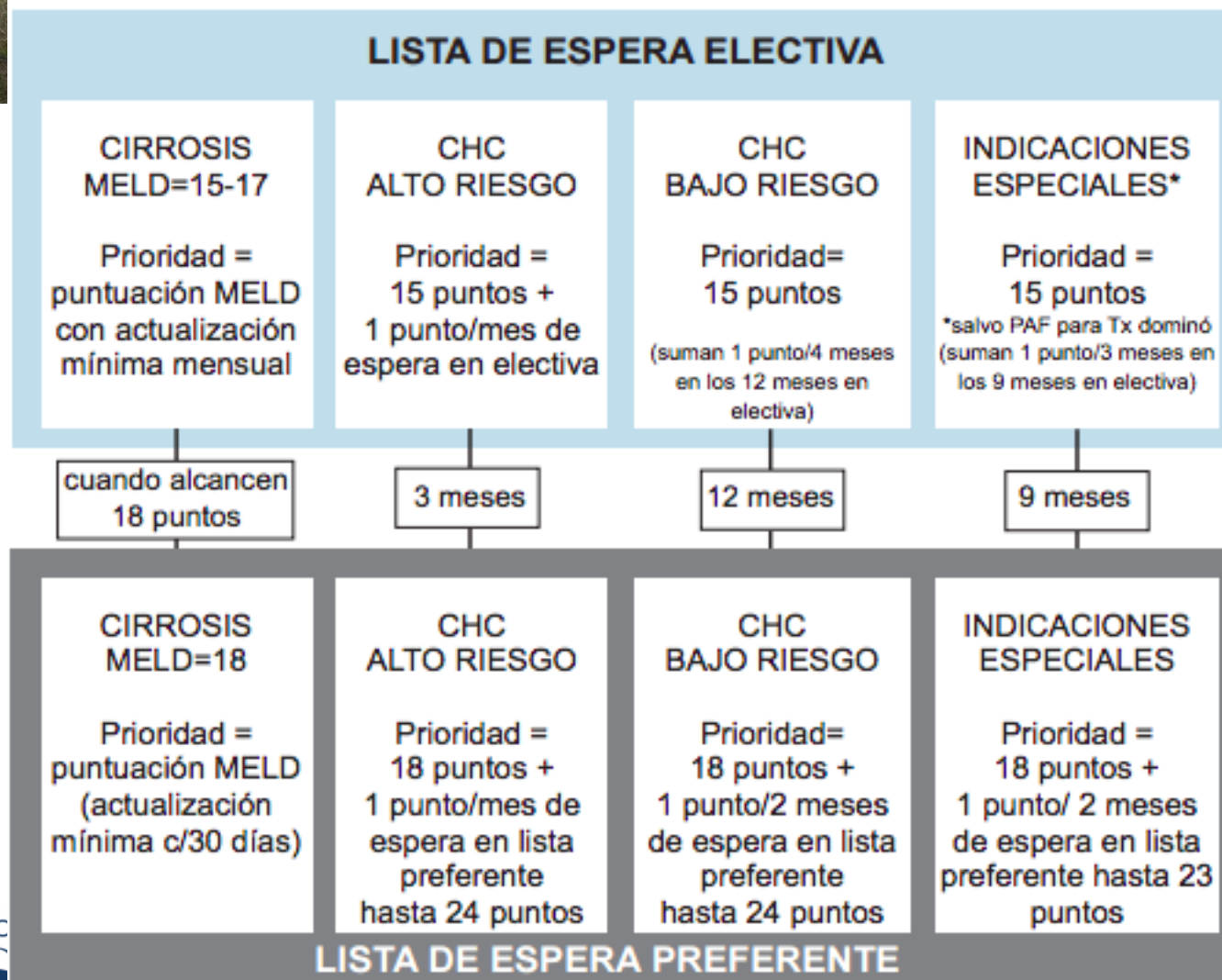


# Limitaciones del sistema Meld





# Limitaciones del sistema Meld



# Impacto del Meld en el HCC

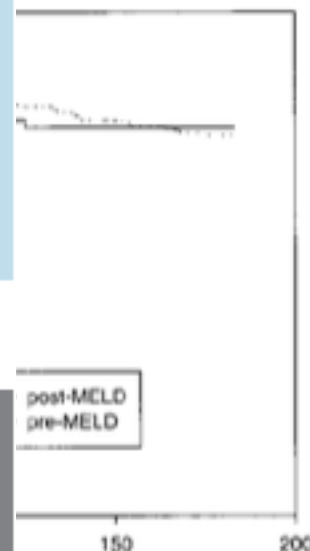
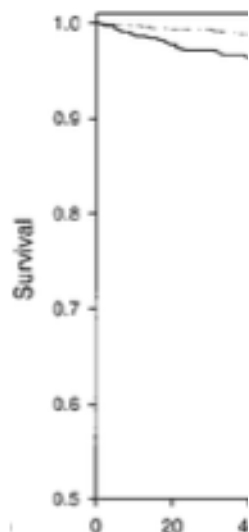
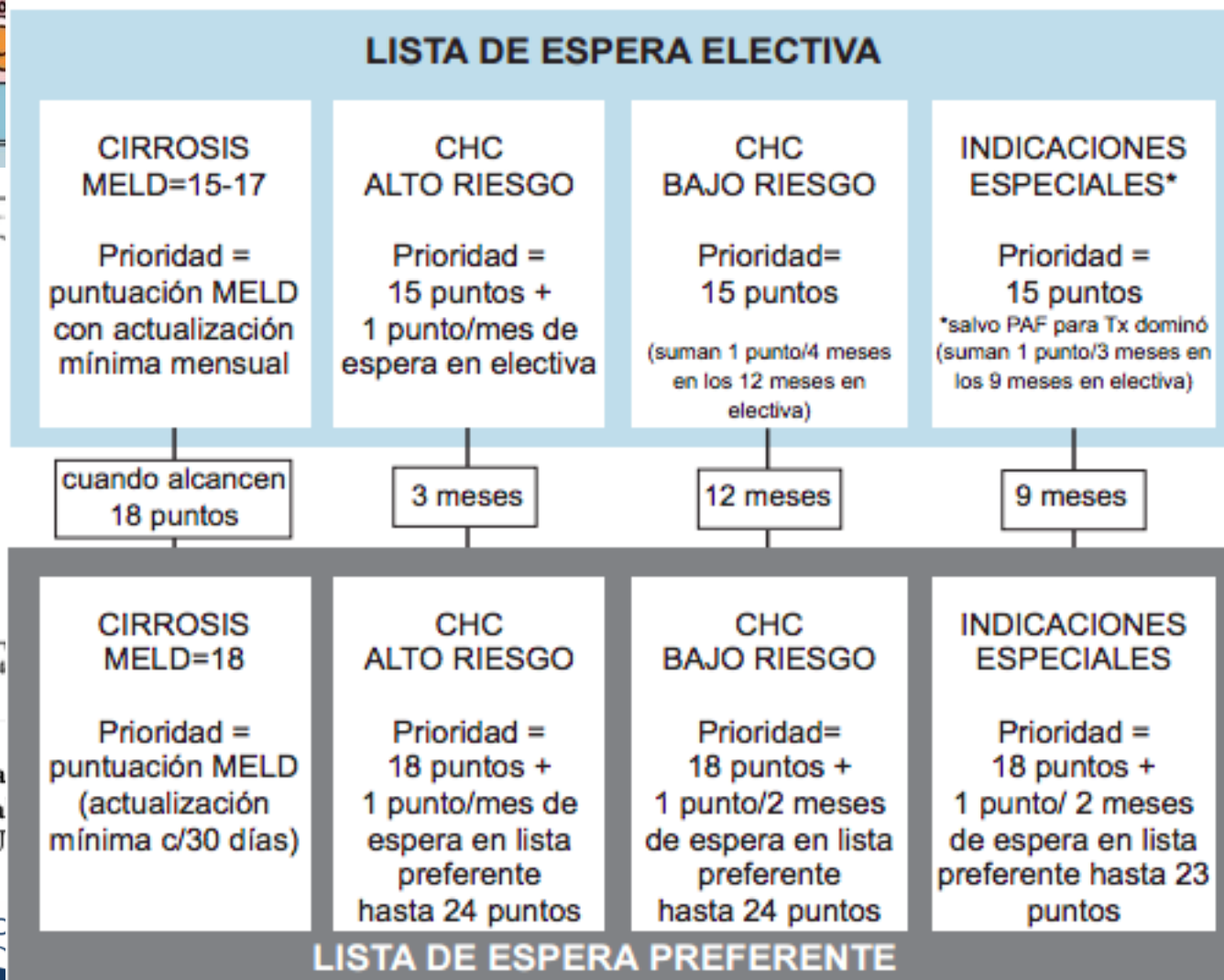
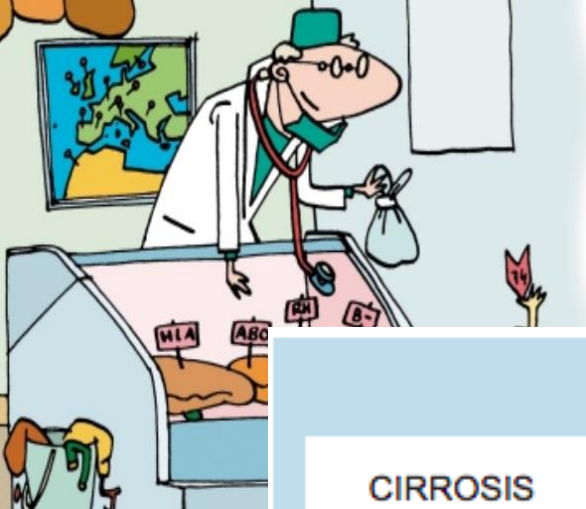


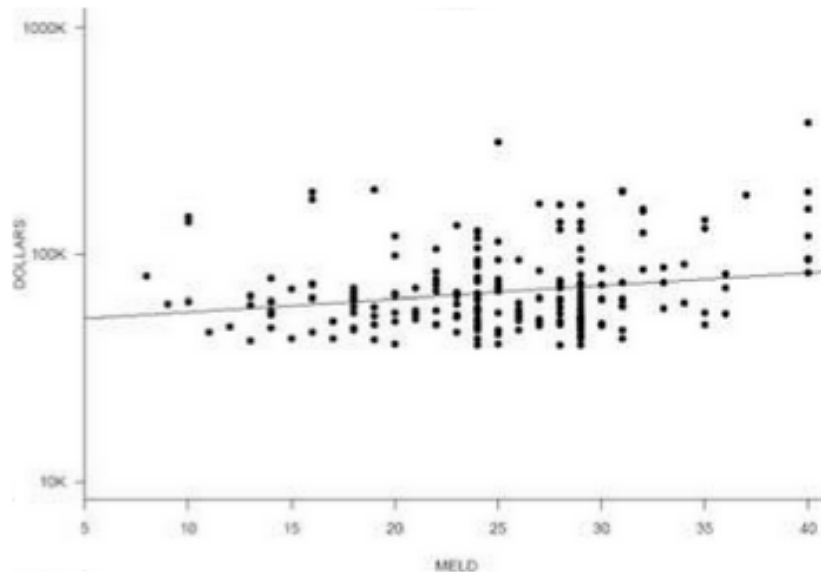
Figure 2. Kaplan-Meier 5-month survival probability on the U.S. waiting list for liver transplantation.

ing 5-month patient survival probability on the U.S. waiting list for liver transplantation. At 5 years, the survival probability was 0.50 for the pre-MELD group and 0.55 for the post-MELD group.

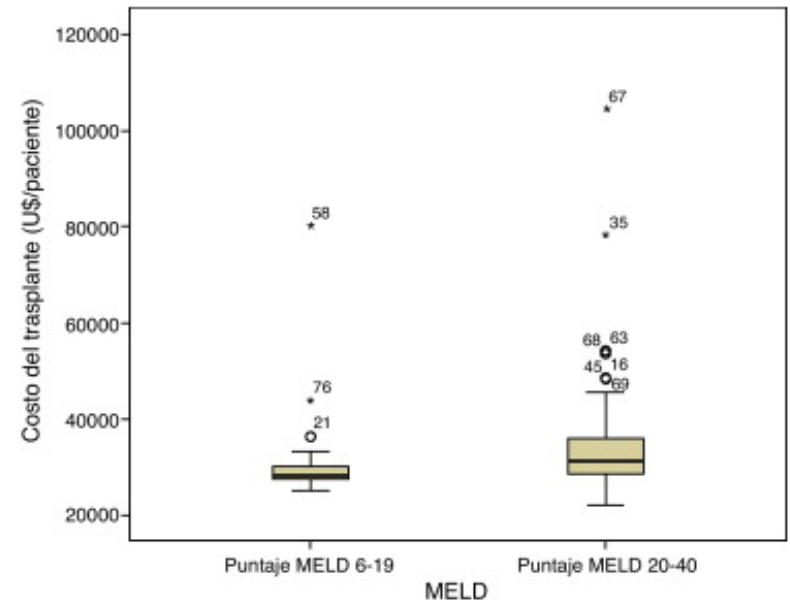


# Evaluación del sistema Meld

## Impacto económico de la aplicación del Meld



**Figure 1: Scatter plot showing the relationship between recipient MELD score at time of transplant and log of total costs incurred from surgery until discharge ( $r = 0.20$ ;  $p = 0.002$ ).**





# Futuro del sistema Meld

Clinical Liver Disease, Vol 5, No 4, April 2015

## MELD-Derived Models [Reference]

## Modification

MELD-Na [Biggins et al, 2006]

Serum sodium incorporated into standard MELD

Updated ("reweighted") MELD  
[Sharma et al, 2008]

Assigning lower weight to serum creatinine and INR with higher weight to bilirubin

MESO [Huo et al, 2007]

MELD to serum sodium ratio

MELD-AS [Heuman et al, 2004]

Presence of ascites incorporated in standard MELD

Integrated MELD (iMELD)  
[Luca et al, 2007]

Serum sodium and age incorporated into standard MELD

UK end-stage liver disease (UKELD)  
[Barber et al, 2007]

Similar to MELD-Na

MELD-XI [Heuman et al, 2007]

MELD without INR

Delta ( $\Delta$ ) MELD [Hou et al, 2005]

Changes in MELD over time

MELD-gender

Gender incorporated into

[Cholangitis et al, 2007]

standard MELD



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