



# MYCOPHENOLATE MOFETIL VERSUS AZATHIOPRINE AS MAINTENANCE THERAPY FOR KIDNEY TRANSPLANT RECIPIENTS

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# Background

- Incidence and prevalence of kidney disease are high and increasing in Brazil and in the world.
- This fact generates a growing number of patients that could be submitted to renal transplant and therefore high costs for health systems.



# Objective

- To conduct a systematic review with meta-analysis to summarize the data efficacy of mycophenolate mofetil (MMF) versus azathioprine (AZA) in the maintenance therapy of renal transplant.

# Search strategy

- A search was conducted in the MEDLINE, LILACS and the Cochrane Central Register of Controlled Trials and also handsearch to identify relevant randomized controlled trials (RCTs).
- Two reviewers assessed studies for eligibility and quality independently.

# Selection criteria

- RCTs in which AZA was compared with MMF for the maintenance treatment of kidney transplant recipients.

# Exclusion criteria

- Studies considering:
  - Patients aged 16 or younger;
  - Multiple transplants patients;
  - Reviews or pharmacoeconomics studies.

# Data analysis

- In the meta-analysis of 12 months the data were synthesized (random effects model) and results expressed as risk ratio.
- For acute rejection values  $<1$  favors MMF, with 95% confidence intervals.
- The data of others studies were described.

# Findings

- Nine RCTs and 2107 kidney transplants were evaluated.
- The majority of the sample consisted of male patients, white, middle-aged and underwent their first kidney transplant.
- The median length of follow up was 12 months (range 12-60) and the studies were conducted in the period 1995-2002.



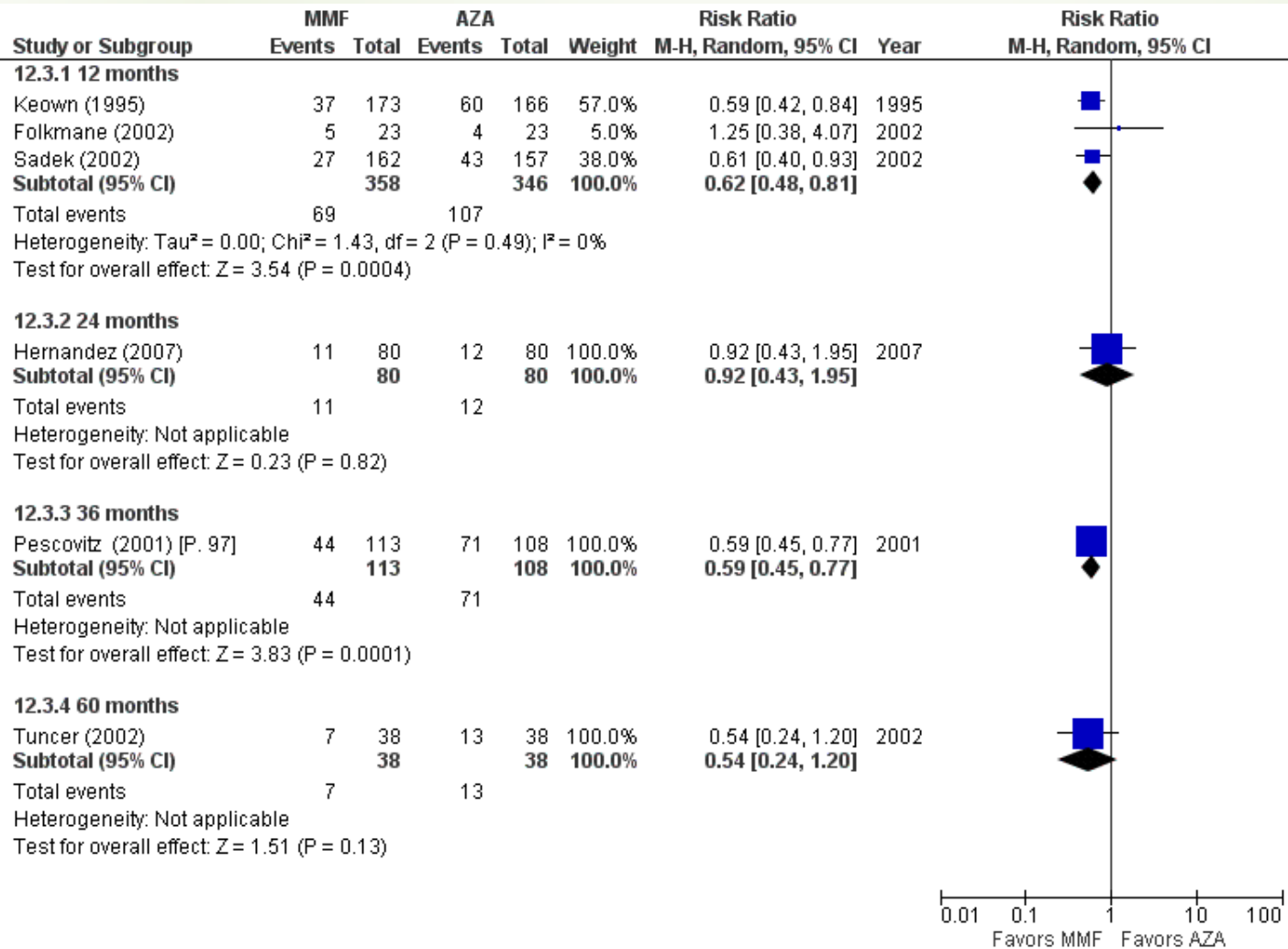
# Findings

- At 12 months AR was significantly reduced in MMF-treated recipients (risk ratio 0.62, 0.48 to 0.81) and there were no differences in graft and patients survival.

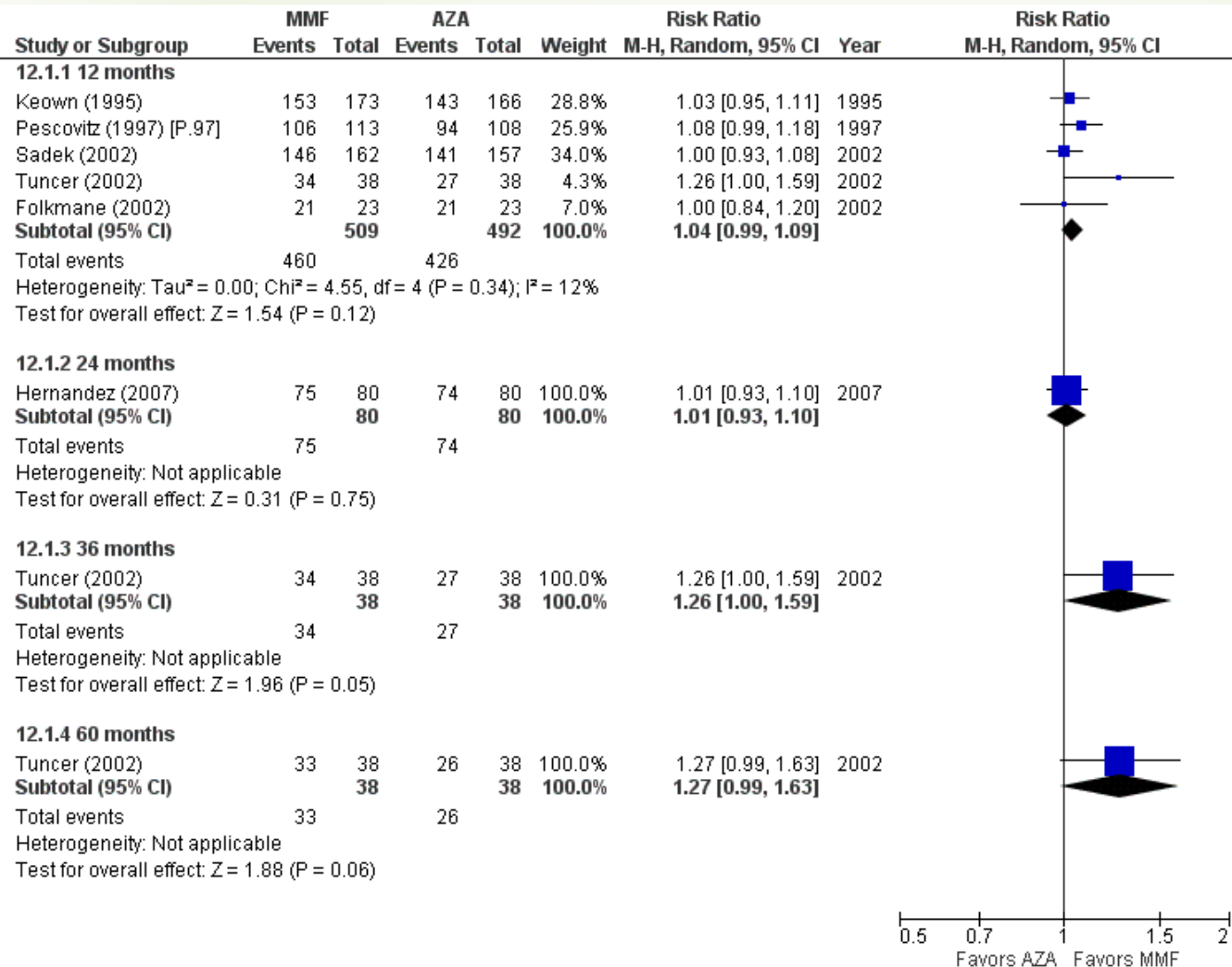
# Findings

- When considering AR and graft survival, the group that used MMF showed positive results ( $p>0.05$ ).
- The results of patient survival in the studies were divergent and the findings were not significant.

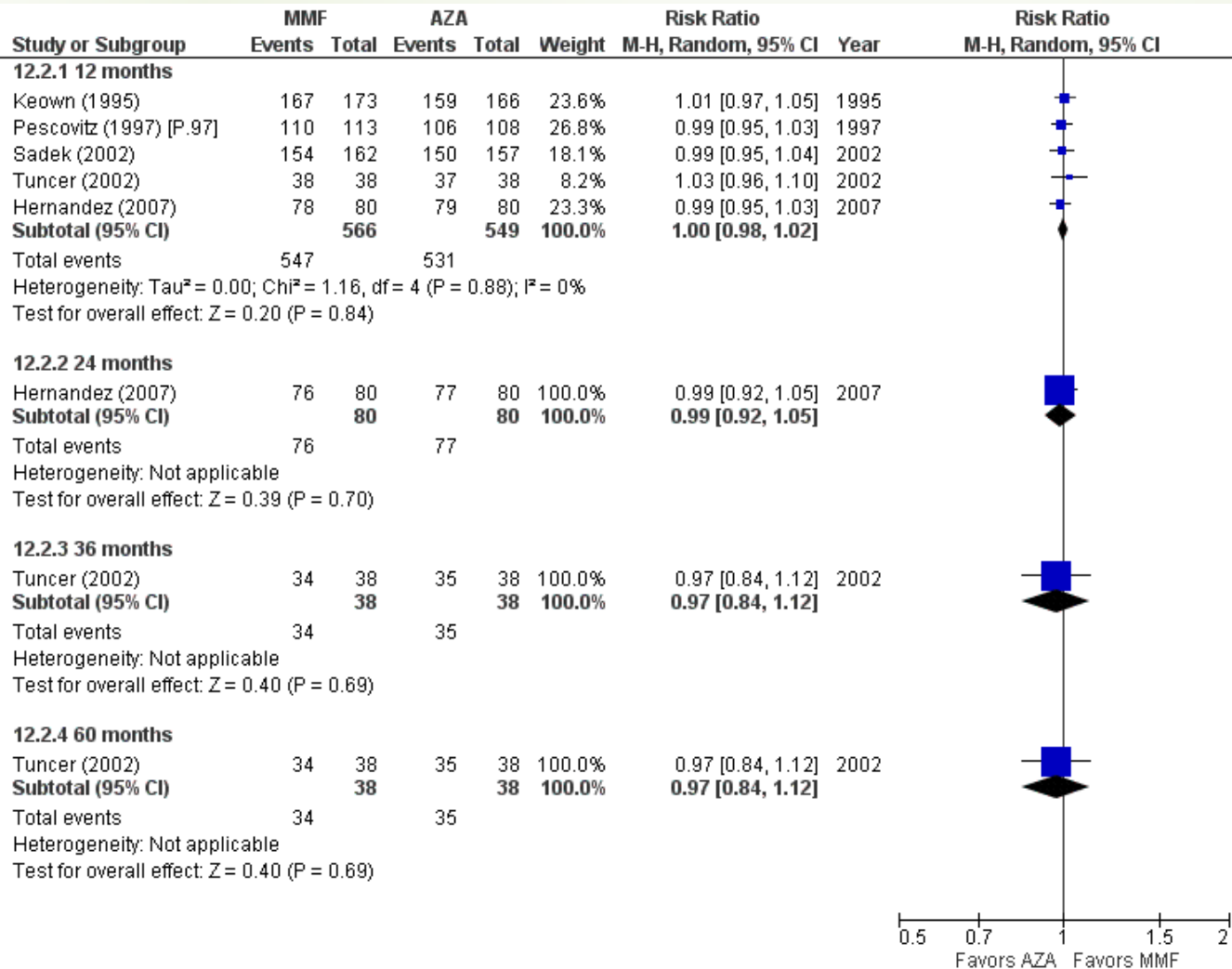
# Acute rejection



# Graft Survival



# Patient Survival



# Conclusions

- The evidence of difference in efficacy between MMF and AZA are questionable. Long-term hard-endpoint data from methodologically robust RCTs are still needed.

# End

- Thanks for the opportunity!

