



Sheba Medical Center Tel HaShomer
Leviev Cardiothoracic and Vascular Center
Tel Aviv University
ISRAEL

Prevalence and Clinical Predictors of Aspirin Resistance in Heart Transplant Recipients

**Yael Peled, Roy Beigel, Robert Klempfner, Jacob Lavee,
Shlomi Matetzky**

Heart Transplantation Unit, Sheba Medical Center and Tel-Aviv University
ISRAEL



Relevant Financial Relationship Disclosure Statement

**Prevalence and Clinical Predictors of Aspirin Resistance
in Heart Transplant Recipients**

Yael Peled

No relationships to disclose

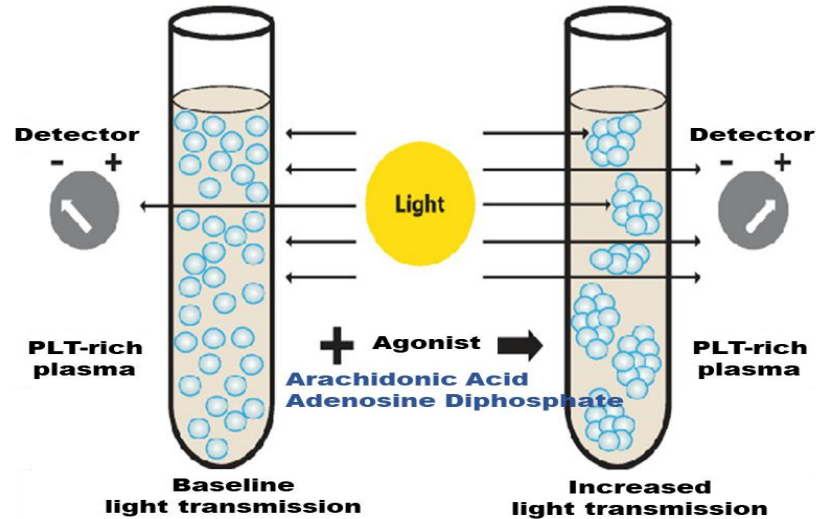
Background & Aim

- ❖ Enhanced PLT activation strongly associated with transplant vasculopathy.
- ❖ ASA is thought to be associated with improved graft survival and reduced CAV in HT recipients.^{1,2}
- ❖ The assessment of ASA resistance is potentially of great therapeutic importance, as it would enable identification of patients at risk for clinical events and allow intervention to prevent subsequent morbidity or mortality.
- ❖ **We aimed to determine the prevalence and clinical predictors of ASA resistance following HT.**

Methods



67 stable HT recipients receiving anti-PLT monotherapy with ASA (100 mg/day \geq 1 month)

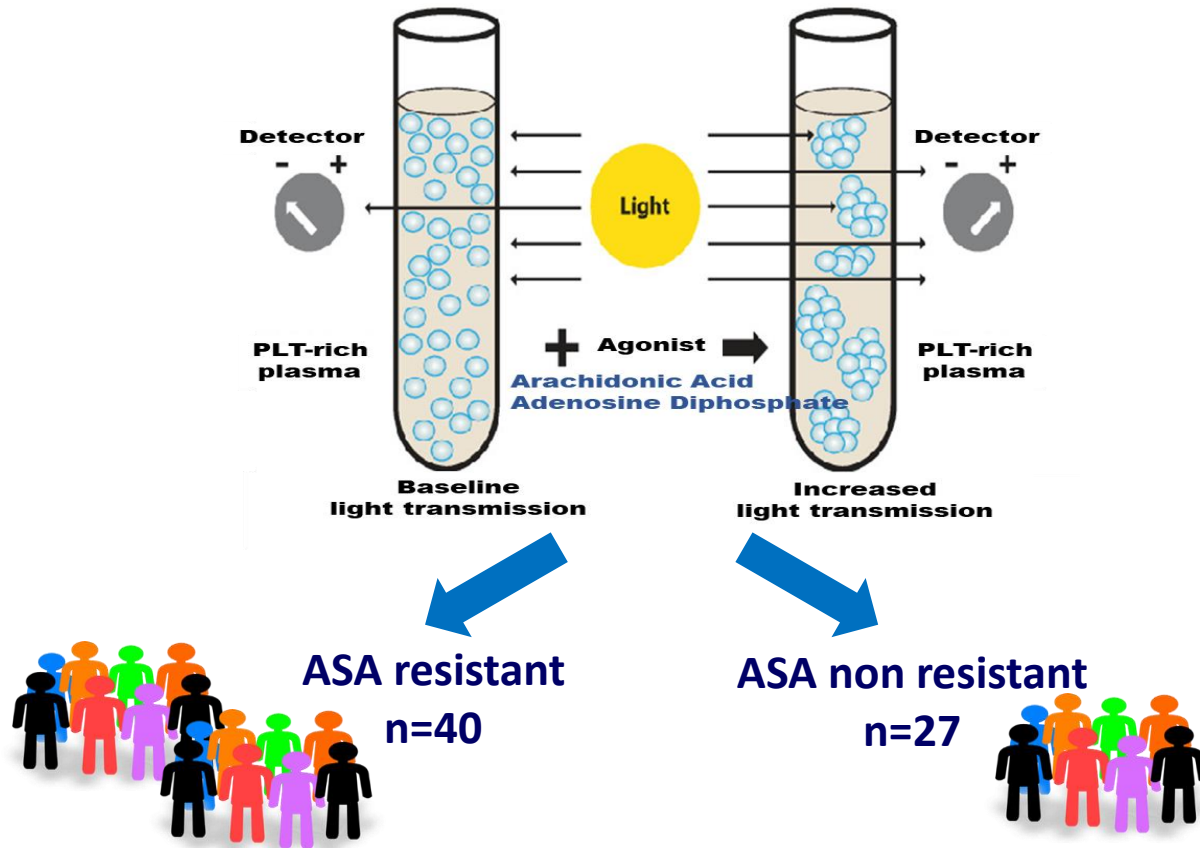


PLT stimulated with ADP & AA
Aggregation assessed using light-transmitted aggregometry.



ASA resistance:
AA-induced PLT aggregation \geq 20%

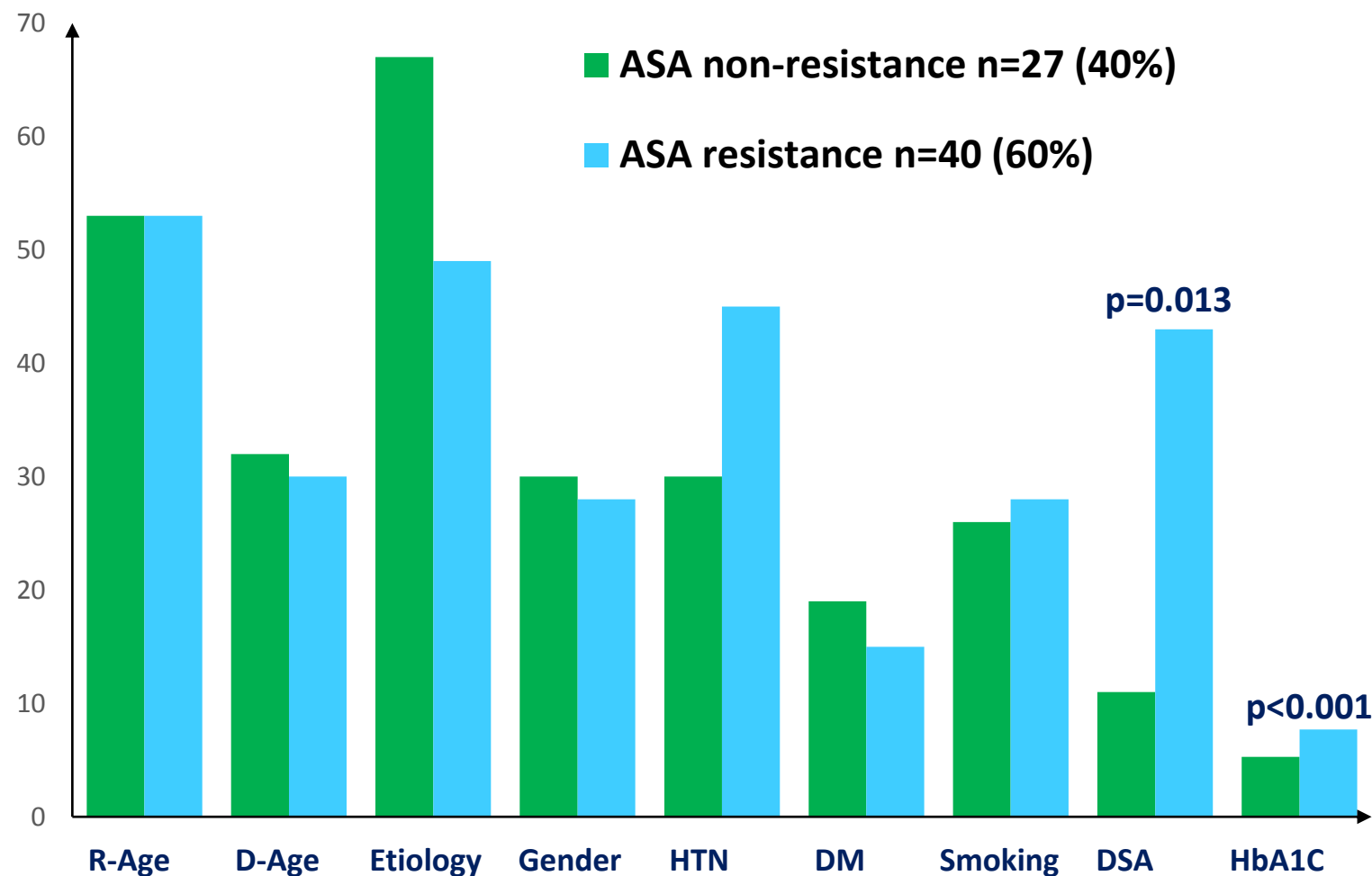
Results



Mean AA-induced aggregation was $29.6 \pm 24.8\%$.

Of the total cohort, 40 pts (60%) were ASA resistant & 27 (40%) were not.

Characteristics by aspirin resistance

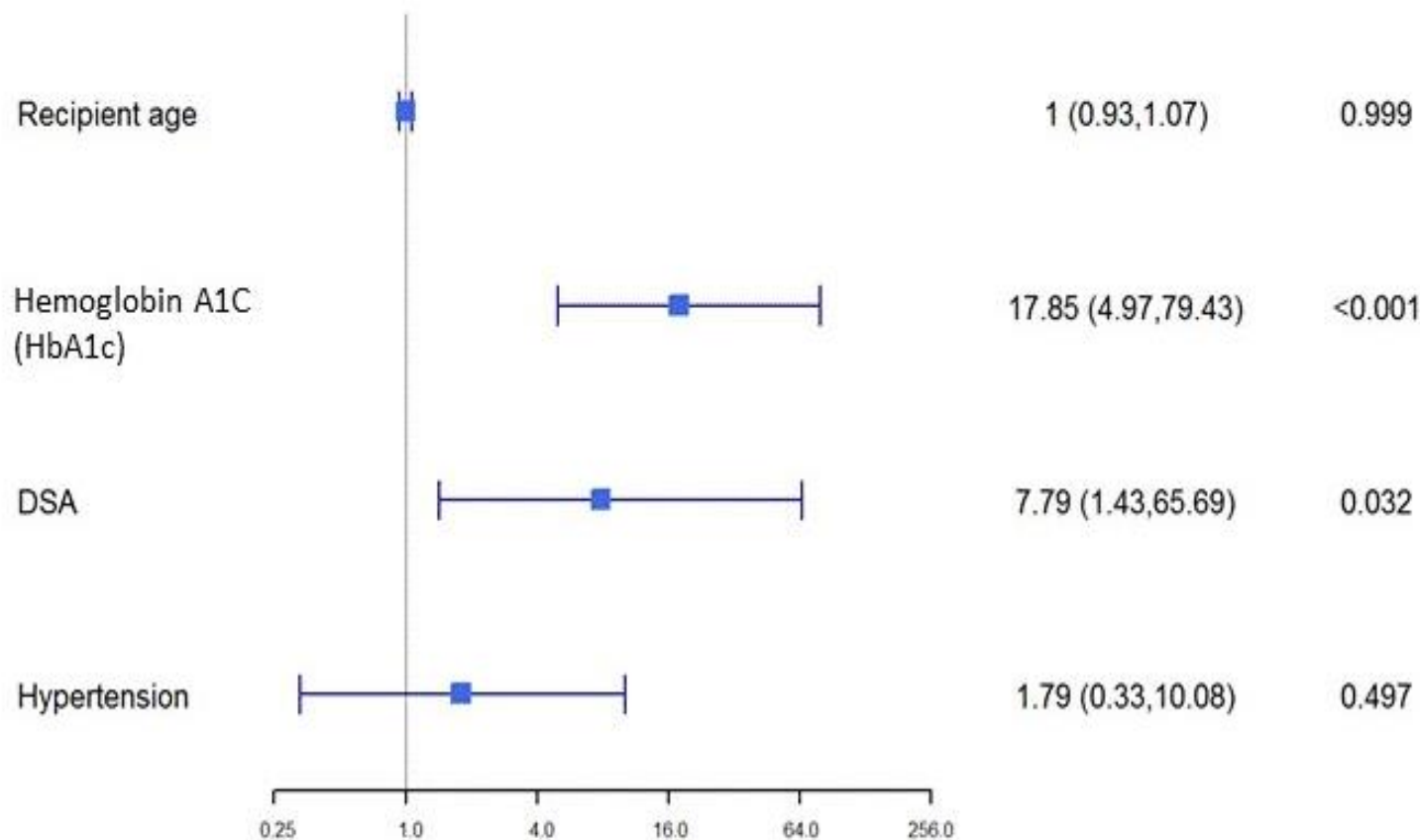


ASA-resistant pts had higher HbA1c values and higher prevalence of DSA.

No differences in ASA resistance by baseline D&R characteristics

Multivariable model for aspirin resistance

OR (95% CI) P.value



In a multivariable analysis HbA1c and DSA were independently associated with a significantly higher risk of aspirin resistance

Conclusions

- ❖ Our study suggests a high rate of ASA resistance in HT patients, which was associated with higher DSA & HbA1c levels, both known risk factors for transplant vasculopathy and survival.
- ❖ Further studies are needed to correlate ASA resistance with clinical outcomes and hence to tailor therapeutic interventions.

Thank You !
! תודה רבה

