

NETWORK META-ANALYSIS OF FIRST-LINE ANTIANGIOGENIC DRUGS IN ADVANCED RENAL CELL CARCINOMA

M.D. GIL-SIERRA¹, V. GIMENO-BALLESTER², M.D.P. BRICEÑO-CASADO¹, M. SANCHEZ-HIDALGO³, C. ALARCON DE LA LASTRA-ROMERO³, S. FENIX-CABALLERO¹, E. RIOS-SANCHEZ¹, J. DIAZ-NAVARRO¹, C. MARTINEZ-DIAZ¹, J.M. BORRERO-RUBIO¹, E.J. ALEGRE-DEL REY¹.

¹HOSPITAL UNIVERSITARIO DE PUERTO REAL, PHARMACY, PUERTO REAL, SPAIN.

²HOSPITAL UNIVERSITARIO MIGUEL SERVET, PHARMACY, ZARAGOZA, SPAIN.

³UNIVERSIDAD DE SEVILLA, PHARMACOLOGY DEPARTMENT, SEVILLA, SPAIN..

2SPD-011

L01 - Cytostatics

BACKGROUND

- ✓ Advanced renal cell carcinoma (**RCC**) presents multiple therapeutic alternatives.
- ✓ Recently, **tivozanib** has been authorized in this indication.

PURPOSE

To performed a network meta-analysis (**NMA**) to provide a comprehensive treatment comparison of efficacy of **first-line** antiangiogenic treatment in **RCC**.

MATERIAL AND METHODS

1. Review in Pubmed and EMA

Inclusion criteria

Exclusion criteria

- ✓ Pivotal randomized clinical trials (**CT**)
- ✓ **Antiangiogenic drugs** (sunitinib, pazopanib, sorafenib, tivozanib, interferon and bevacizumab) in treatment-naive RCC patients
- ✓ Most mature data of **PFS**
- ✓ Pivotal CT without a comparator common to the alternatives

2. Subgroups of pre-treated and treatment-naive patients were assessed

3. Evaluated outcome: PFS

4. NMA

- ✓ NMA combined **direct** and **indirect** evidence to calculate pooled hazard ratios (HR) by bayesian methods.
- ✓ **Fixed** and **random** effects.
- ✓ Models compared using deviance information criteria (**DIC**) statistic.
- ✓ **Consistency** of NMA by node-splitting models: agreement of direct and indirect estimations.

RESULTS

7 CT selected

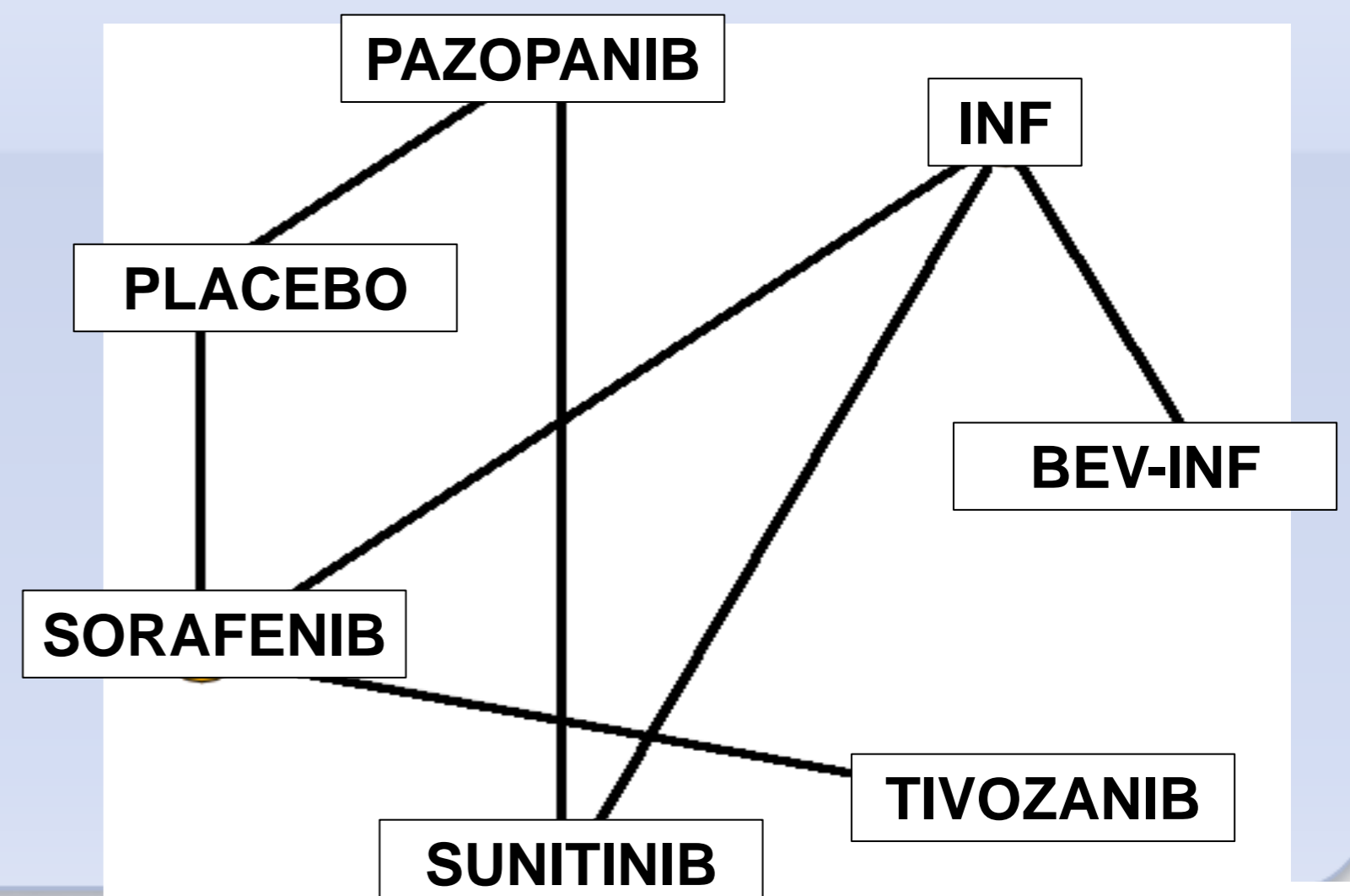
- **Subgroups:** 3 CT included pre-treated and treatment-naive patients.
 - No statistical interaction → Global results used
- **Inclusion criteria:** 0-1 (ECOG) in all CT. Sorafenib studies: patients with life expectancy ≥3 months
- **DIC:** favourable for fixed-effects model
- **Consistency of NMA:** no statistical differences between direct and indirect evidence.

Compared with SUNITINIB Hazard Ratio (95% CrI)

BEVA_INF	0.89 (0.70, 1.1)
INF	0.56 (0.47, 0.66)
PAZOPANIB	0.93 (0.80, 1.1)
PLACEBO	0.39 (0.30, 0.51)
SORAFENIB	0.74 (0.56, 0.97)
TIVOZANIB	0.92 (0.65, 1.3)

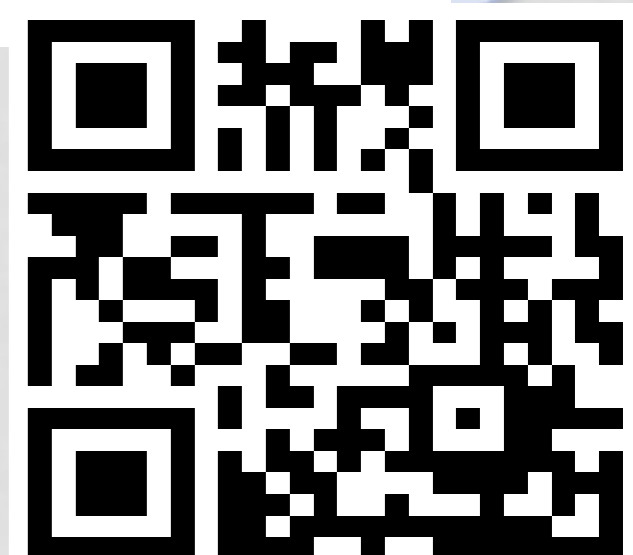
Tivozanib and **sunitinib** showed benefit **over sorafenib**.

Statistically significant **benefit** was found between **all drugs over interferon and placebo**.



CONCLUSION

1. The NMA provided a review of the relative efficacy of current antiangiogenic alternatives for RCC in terms of PFS.
2. Bevacizumab plus interferon, pazopanib, sunitinib and tivozanib showed no differences. Sorafenib was inferior to sunitinib and tivozanib.



<http://www.eahp.eu/24-2SPD-011>