



SEX-SPECIFIC CONSIDERATIONS ABOUT RESPONSE TO COMMON HF



### SEX-SPECIFIC CONSIDERATIONS ABOUT RESPONSE TO COMMON HF THERAPIES

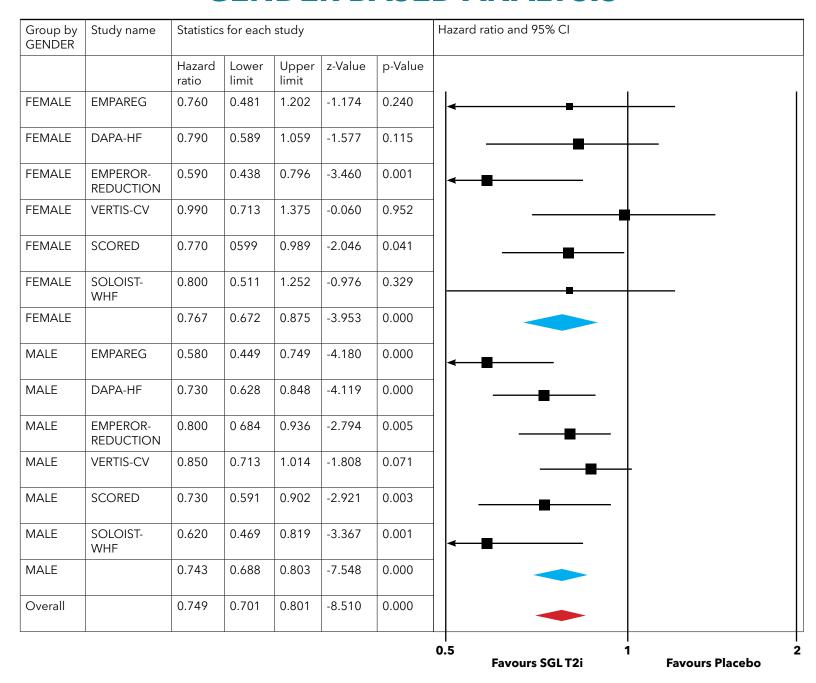
DRUG	METABOLISM	SEX-SPECIFIC CONSIDERATIONS	SEX DIFFERENCES IN SIDE EFFECTS
DIURETICS	↑Plasma concentrations in ♀	n/a	> electrolyte imbalance with diuretic use in \$\oint{\pi}\$, \farrhythmic risk
BETA BLOCKERS	↑Plasma concentrations in ♀	n/a	more ↓ HR & BP in ♀ at same doses
ACEI/ARB	↑Plasma concentrations in ♀	<b>HFrEF</b> ♀ benefit from low& high doses; ♂ benefit from high doses	Angioedema cough 2x ↓ vs ♂, Teratogenic
HYDRALAZINE / ISOSORBIDE DINITRATE	No established sex differences in pharmacokinetics	n/a	No reported sex differences
ARNI	No established sex differences in pharmacokinetics	<b>HFrEF</b> Same↓ in HFH but < ↓ in CV death <b>HFpEF</b> > benefit ♀ vs ♂ with ↓ CV death/ HFH by 27% vs no effect in ♂	No reported sex differences
SGLT2I	No established sex differences in pharmacokinetics	n/a	No established sex- differences in safety
MRA	No established sex difference in pharmacokinetics	♀ benefit across EF spectrum; ♂ benefit at lower LVEF Possible >↓ in CV Mortality in ♀ vs ♂	†Gynecomastia in ♂
DIGOXIN	Dose based on weight	<b>HFrEF</b> $^{\wedge}$ concentrations in 9 Benefit in $\downarrow$ HFH in $^{\wedge}$ vs $^{\wedge}$ †mortality in $^{\wedge}$ vs $^{\wedge}$	Associated with↑ mortality in ♀ in post-hoc analysis





## **SGLT2 INHIBITORS**NO DIFFERENCE BY SEX

#### **GENDER BASED ANALYSIS**





# WHAT GAPS REMAIN?

## **Sex Differences in Risk Factors for Heart Failure GAPS IN KNOWLEDGE**

To what extent do social determinants of health influence HF risk in men vs women?

How can women at risk for heart failure during and after pregnancy be identified early?

What is the actual rate of "recovery" versus persistent myocardial dysfunction in peripartum cardiomyopathy (PPCM) & what is the risk of subsequent relapse with subsequent pregnancies?

Are there sex differences in the risk of chemotherapy-related cardiomyopathy?

What are the specific effects of autoimmune disease (and its treatment) on the development of heart failure in women?

Can women who are at risk for stress (Takotsubo) cardiomyopathy be identified and what strategies can mitigate that risk?

