

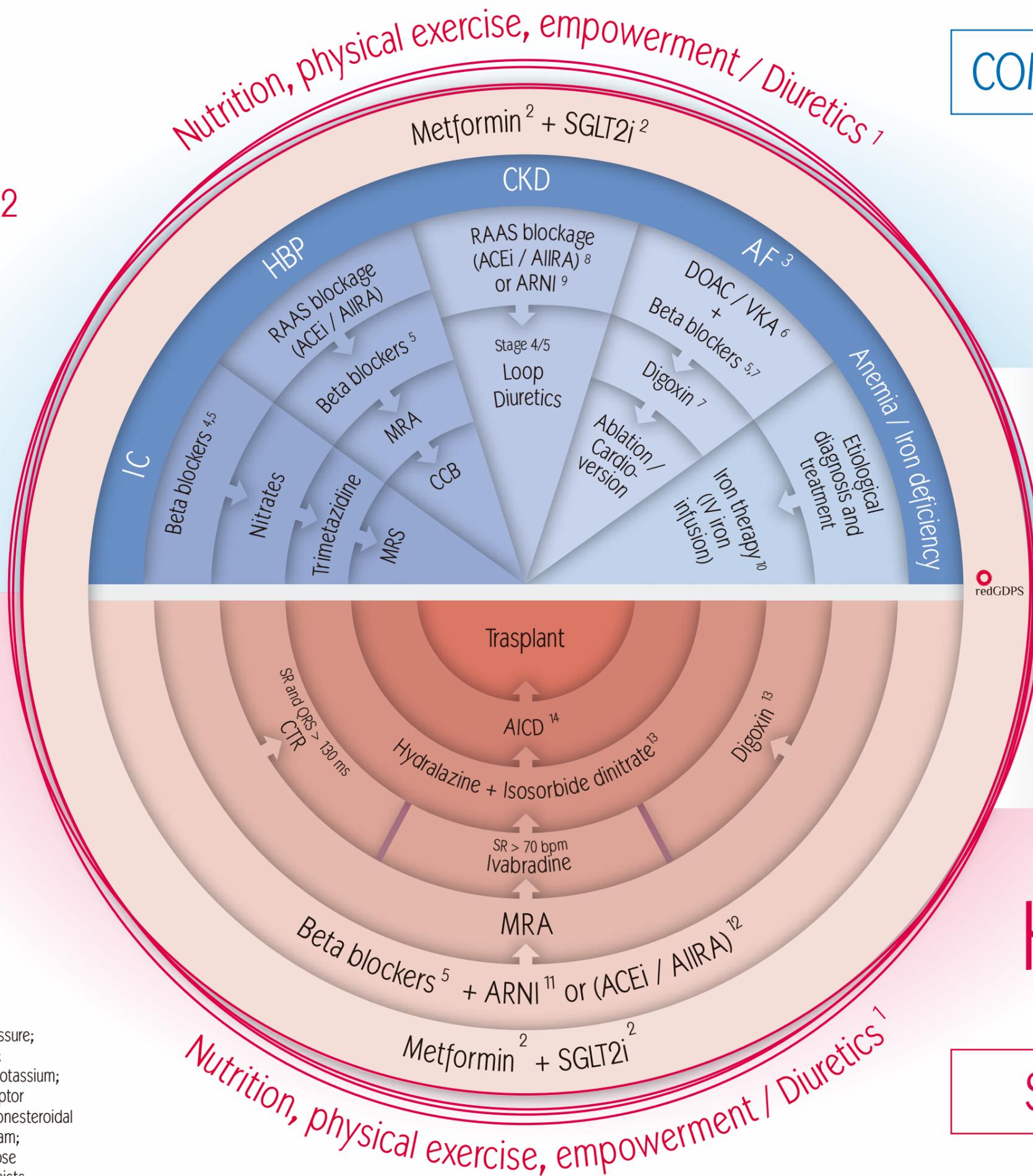
## HEART FAILURE (HF) IN TYPE 2 DIABETES: THERAPEUTIC ALGORITHM. redGDPS

1. Minimum dose needed for congestion control, if necessary.
2. Unless contraindication.
3. In case of hemodynamic instability, consider electric or pharmacological (amiodarone) cardioversion.
4. If beta blockers are not tolerated: amlodipine, nicorantil or ranolazine.
5. Bisoprolol, carvedilol, metoprolol succinate or nebivolol.
6. DOAC are of choice due to their increased safety.
7. If a high heart rate persists. If preserved LVEF, non-dihydropyridine CCB are also useful.
8. With K<sup>+</sup> and GFR monitoring.
9. In HFrEF, with a better renal profile than ACEi/AIIRA, monitoring arterial hypotension.
10. IV iron is of choice.
11. With a better glycemic profile than ACEi and AIIRA in type 2 diabetes.
12. If symptoms persist switch to ARNI.
13. If refractory symptoms persist despite optimal treatment.
14. If NYHA II-III symptoms after optimal medical treatment and life expectancy over 1 year.

Arrows indicate disease progression or ongoing symptoms.

### ACRONYMS:

**ACEi**: angiotensin-converting enzyme inhibitor; **AF**: atrial fibrillation; **AICD**: automatic implantable cardioverter defibrillator; **AIIRA**: angiotensin II receptor antagonists; **ARNI**: angiotensin receptor-neprilysin inhibitor; **CCB**: calcium channel blockers; **CKD**: chronic kidney disease; **COX-2**: cyclooxygenase-2; **CRT**: cardiac resynchronization therapy; **DOAC**: direct-acting oral anticoagulants; **GFR**: glomerular filtration rate; **HBP**: high blood pressure; **HF**: heart failure; **HFrEF**: heart failure with reduced ejection fraction; **HR**: heart rate; **IC**: ischemic cardiomyopathy; **IV**: intravenous; **K<sup>+</sup>**: potassium; **LVEF**: left ventricular ejection fraction; **MRA**: mineralocorticoid receptor antagonists; **MRS**: myocardial revascularization surgery; **NSAIDs**: nonsteroidal anti-inflammatory drugs; **QRS**: QRS complex of the electrocardiogram; **RAAS**: renin angiotensin aldosterone system; **SGLT2i**: sodium-glucose cotransporter 2 inhibitors; **SR**: sinus rhythm; **VKA**: vitamin K antagonists.



COMORBIDITIES

HF

### TO AVOID

- × Non-dihydropyridine CCB (verapamil/ diltiazem) except AF with LVEF ≥ 40.
- × Moxonidine.
- × Alfa-blockers.
- × Combine ACEi with AIIRA or with ARNI or aliskiren.
- × Combine ARNI with ACEi or AIIRA or aliskiren.
- × Glitazones and saxagliptin.
- × Tricyclic antidepressants.
- × NSAIDs or COX-2 inhibitors.
- × Leading to sarcopenia.

HFrEF

SEVERITY