BRING-UP 3 Heart Failure Summary of the Study

| Title | BRING-UP 3 Heart Failure |
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| Research description | Heart failure (HF) is a significant public health issue worldwide with high morbidity, mortality, and healthcare resource utilization. As HF is the final common destination of various insults to the heart, its prevalence increases with age. All-cause mortality of patients with chronic HF has been stable with no substantial improvement for over 15 years. In patients with heart failure and reduced ejection fraction (HFrEF), two further pharmacological approaches—inhibition of neprilysin and sodium–glucose co-transporter 2 (SGLT2)—have been shown to improve survival when added to the original 'core' therapies of a renin–angiotensin system blocker, a beta-blocker, and a mineralocorticoid receptor antagonist (MRA). As a consequence, the 2021 ESC guidelines introduce a new treatment paradigm for HFrEF, with a novel four pillar therapeutic approach comprising ARNI/RASI, betablockers, MRA, and SGLT2i. Importantly, there is now also evidence on the efficacy and safety of pharmacological treatments even in patients with an EF>40%. However, guidelines do not provide formal recommendations regarding the sequence of introduction of the recommended treatments in patients with HFrEF and the customization of their sequence currently represents an unmet need. To implement current guidelines in clinical practice, to improve the overall quality of care for HF patients and, and as an expected consequence, their clinical outcomes, a national campaign is needed, adopting an implementation science model based on specific educational programs and consecutive patients' data collection. |
| | The study is observational, prospective, multicenter study conducted in a large, representative sample of Italian cardiology centers. <i>Phases:</i> 1) ECM educational program to discuss the recommendations of guidelines and treatment patterns in specific phenotypes of |
| | guidelines and treatment patterns in specific prenotypes of patients. 2) Data collection for 3 months or up to 30 consecutive patients with chronic HF or acute HF (both de novo and worsening) generating reminders on the most relevant guideline recommendations, and, when guidelines are not followed, asking the reason for non-adherence. |
| | 3) Evaluation of the primary and secondary end-points of the study at 6 months after enrollment. Modifications of treatments will be monitored during the 6 month follow-up. 4) ECM educational program to share the results of the first enrollment period of the study focusing the attention on existing gaps between guidelines recommendations and clinical practice. |

| | 5) New data collection for other 3 months or up to 30 consecutive patients with chronic HF or acute HF (both de novo and worsening). 6) Additional evaluation of the primary and secondary end-points of the study at 6 months after enrollment. Modifications of treatments will be monitored during the 6 months follow-up. 7) 1-year follow-up for all patients included in Phase 2 and 5. |
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| Promoter | Fondazione per il Tuo cuore - Heart Care Foundation-Onlus. ANMCO, Firenze |
| Participants | Inclusion criteria Age ≥18 years old. Males and females at birth. Any ejection fraction level (level of ejection fraction measured in the 6 months preceding enrollment). Ambulatory chronic HF or Hospitalized de-novo or worsening HF. Signed informed consent Diagnosis will be made by the local attending physician following the ESC guidelines recommendations (10). Exclusion criteria Active neoplasia or very severe disease compromising short-medium term life expectancy. Participation in interventional studies. Patients already enrolled into the study from another participating center or in the previous enrolling phase. |
| Duration | 36 months |
| Follow-up | 1 year |
| Study objectives | Primary objective To assess the level of adherence to guideline recommendations regarding the management of patients with HFrEF. Secondary objectives To assess the safety profile of the implementation of recommended treatments. To monitor treatment patterns of patients with acute HF. To monitor treatment patterns of all patients with chronic HF irrespective of the level of EF Exploratory objective To assess patients' outcomes over a follow-up period of 1 year. |
| Estimated number of patients | The participation of approximately 100 cardiology centers will assure the recruitment of at least 5000 patients in the 6 months of data collection(3 months in each phase), allowing an evaluation of the adherence to guidelines also in specific subgroups of patients. |