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**The Universal Definition and Classification of Heart Failure**

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**Background:** Historically available definitions of heart failure (HF) are ambiguous and lack standardization. Some definitions have focused on the diagnostic features of the clinical syndrome, whereas other definitions approach the definition as a characterization of the hemodynamic and physiological aspects. There is significant variation in different platforms, and a growing need for standardization of the definition of HF.

**Methods:** On August 20, 2020, in response to the necessity for consensus for definition of HF, the Heart Failure Society of America (HFSA), Heart Failure Association of the European Society of Cardiology (HFA) and the Japanese Heart Failure Society convened a virtual consensus conference to develop a universal definition of heart failure with participation from fourteen different countries and six continents. The proceedings of the workgroups were then assembled, resulting in the universal definition chaired by Dr. Bozkurt. The 2020 Universal Definition of HF was reviewed by official reviewers nominated by the HFSA, HFA and JHFS and published jointly in *Journal of Cardiac Failure* and *European Journal of Heart Failure* in March 2021.

**Results:** The Universal Definition of HF is summarized as “ HF is a clinical syndrome with current or prior symptoms and or signs caused by a structural and/or functional cardiac abnormality and corroborated by at least one of the following: Elevated natriuretic peptide levels, objective evidence of cardiogenic pulmonary or systemic congestion by diagnostic modalities such as imaging or hemodynamic measurement at rest or with provocation will be reviewed. Revised stages of HF are: At-risk for HF (Stage A), Pre-heart failure (Stage B), Symptomatic HF (Stage C) and Advanced HF (Stage D). Finally, a new and revised classification of HF according to left ventricular ejection fraction (LVEF) include HF with reduced ejection fraction (HFrEF): symptomatic HF with LVEF  $\leq 40\%$ ; HF with mildly reduced ejection fraction (HFmrEF): symptomatic HF with LVEF 41–49%; HF with preserved ejection fraction (HFpEF): symptomatic HF with LVEF  $\geq 50\%$ ; and HF with improved ejection fraction (HFimpEF): symptomatic HF with a baseline LVEF  $\leq 40\%$ , a  $\geq 10$  point increase from baseline LVEF, and a second measurement of LVEF  $> 40\%$ . Additionally, revised definitions according to trajectories of HF are provided.

**Conclusion:** The Universal Definition of HF that is clinically relevant, simple but conceptually comprehensive, with the ability to sub-classify and to encompass stages within, with universal applicability globally, and with prognostic and therapeutic validity and acceptable sensitivity and specificity. We envision the proposed universal definition and classifications to be used in a standardized fashion across scientific societies and guidelines, employed by clinicians and used in research studies.



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