

## Heart Failure Heart Team — time to act... now

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### TO THE EDITOR

The world has changed. Not only due to the COVID-19 pandemic and enormous challenges it brought along but also due to clear evidence that postponement means... failure. Heart failure.

This year, the European Society of Cardiology (ESC) in cooperation with the Heart Failure Association (HFA) of the ESC released updated guidelines for the diagnosis and treatment of acute and chronic heart failure. While previously published documents deepened our knowledge in modern pharmacology, the 2021 update focuses more on timely action. Experts move away from lengthy and (over-) complicated algorithms and point our attention and therapeutic decisions towards a more simplified, patient-focused approach. The goal is simple: to diagnose and treat myocardial dysfunction as soon as possible to prevent patients from developing end-stage heart failure, which remains not only difficult to target therapeutically but also has an enormous impact on healthcare, so severely struck by the ongoing pandemic.

Heart failure affects nowadays almost 65 million people worldwide and this number is expected to increase with sustained poor prognosis of advanced heart failure despite continuous advances in medical management [1]. Heart transplantation (HTx) holds its strong position as the cornerstone of advanced therapy for heart failure. It is the ultimate replacement of the failing organ, offering one-year survival of 90% and median survival of 12.5 years with an exceptionally good quality of life. Yet, long organ waiting time, extremely distressing for individuals placed on the elective list, has dreadful effects as a substantial percentage of them expire while waiting. Poland is fortunate in this regard, as the number of heart transplantations has visibly increased over

the past 4 years from an average of 90–80 to 140–150 cases per annum. Much more is to be improved in terms of early morbidity and mortality, which is undoubtedly related to the preoperative state of the recipient — often referred to HTx late, in poor clinical condition. The same principles apply to mechanical circulatory support (MCS). Recently published outcomes of large-volume, multicenter clinical trials revealed a phenomenal safety profile in contemporary, long-term left ventricular assist devices (LVADs), which are now recommended for the broader patient population at early stages of the disease. Technological breakthroughs will continue, with wireless charging and connectivity not far on the horizon. Yet... the perception of the unattainability of these therapeutic solutions so often dominates our talks and discussions. Assist devices are on-the-shelf or in storage, ready-to-use products frequently covered with dust. The devices are mobilized when a barely alive patient is finally rushed to the Transplant Center after weeks of ineffective peripheral mechanical support and maximally up-titrated vasoactive and inotropic medications. The ESC screams out loud in just-published guidelines — Do not wait! Time is of the essence! Team up with centers of excellence, create, run and maintain heart failure meetings where true experts in heart failure review and decide on how to proceed with a patient diagnosed with heart failure. It is now up to the heart team's decision when and how to treat mitral insufficiency (clip vs. surgery), revascularize the myocardium (percutaneous coronary intervention vs. coronary artery bypass grafting), implant intravascular or subcutaneous implantable cardioverter defibrillator (ICD), propose durable or temporary mechanical circulatory support or enlist the patient for heart transplantation. Countless patients frequently fly back to cardiology de-

partments due to exacerbation of cardiac disease and are not offered treatment that is within reach. Or the opposite — are offered half-way solutions which are thrown away as the heart is excised during transplantation a couple of weeks later. We need to come together as one true heart team involving surgeons, cardiologists, anesthesiologists, and intensivists supported by social workers, nurses, and physiotherapists as the disease is extremely complex and requires a collaborative and convergent approach.

Novel guidelines provide a patient-centered approach with a simplified triage algorithm, in which patients suffering from HF are directed to centers of excellence in advanced heart failure (AHFC), managed in local cardiology service with a clinical re-evaluation every 3–6 months, or offered a palliative care option. The end-stage heart failure management model seen before often revealed a delayed referral where multiorgan failure has already been or finished developing. Again, our national efforts to create a network of primary and specialized ambulatory care and out-patient clinics collaborating with centers of excellence seem to precede the ESC guidelines. The concept of “Krajowa Sieć Kardiologiczna” (or the National Cardiology and Cardiac Surgery Network) reflects what European Experts advocate for — a broad-range, an accessible network of centers focused on the in-depth diagnosis and treatment of the disease at its early and advanced stages. Yet, the concentration of expertise and experience justifies higher spending only if outcomes and quality are routinely measured and evaluated (structure, process, and outcomes measure) by independent agencies or committees.

This year's ESC/EACTS heart failure and valvular disease guidelines are one of the best published documents of this type. Not because they collect the most valuable and accurate clinical and experimental data, review and assess the quality of registries and randomized trials, emphasize the concept of a true heart team, but because they concentrate on the patient.

## Article information

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## REFERENCES

- Groenewegen A, Rutten FH, Mosterd A, et al. Epidemiology of heart failure. *Eur J Heart Fail.* 2020; 22(8): 1342–1356, doi: 10.1002/ejhf.1858, indexed in Pubmed: 32483830.
- Goldstein DJ, Meyns B, Xie R, et al. Third Annual Report From the ISHLT Mechanically Assisted Circulatory Support Registry: A comparison of centrifugal and axial continuous-flow left ventricular assist devices. *J Heart Lung Transplant.* 2019; 38(4): 352–363, doi: 10.1016/j.healun.2019.02.004, indexed in Pubmed: 30945637.
- Molina EJ, Shah P, Kiernan MS, et al. The Society of Thoracic Surgeons Intermacs 2020 Annual Report. *Ann Thorac Surg.* 2021; 111(3): 778–792, doi: 10.1016/j.athoracsur.2020.12.038, indexed in Pubmed: 33465365.
- McDonagh TA, Metra M, Adamo M, et al. 2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. *Eur Heart J.* 2021; 42(36): 3599–3726, doi: 10.1093/eurheartj/ehab368, indexed in Pubmed: 34447992.
- Potapov EV, Antonides C, Crespo-Leiro MG, et al. 2019 EACTS Expert Consensus on long-term mechanical circulatory support. *Eur J Cardiothorac Surg.* 2019; 56(2): 230–270, doi: 10.1093/ejcts/ezz098, indexed in Pubmed: 31100109.
- Bielka A, Kalinowski M, Pacholewicz J, et al. Short- and long-term outcomes of continuous-flow left ventricular assist device therapy in 79 patients with end-stage heart failure. *Pol Arch Intern Med.* 2020; 130(7-8): 589–597, doi: 10.20452/pamw.15362, indexed in Pubmed: 32420709.
- Ponikowski P, Voors AA, Anker SD, et al. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure: The Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC) Developed with the special contribution of the Heart Failure Association (HFA) of the ESC. *Eur Heart J.* 2016; 37(27): 2129–2200, doi: 10.1093/eurheartj/ehw128, indexed in Pubmed: 27206819.
- Stevenson LW, Pagani FD, Young JB, et al. INTERMACS profiles of advanced heart failure: the current picture. *J Heart Lung Transplant.* 2009; 28(6): 535–541, doi: 10.1016/j.healun.2009.02.015, indexed in Pubmed: 19481012.