



Pulse Day resources



From ESC 365, the cardiology knowledge hub

EHRA/other Congress Resources

- Session: Meet the experts from the EHRA Practical Guide on Digital Devices <https://esc365.escardio.org/session/34871>
- Session: Atrial fibrillation (AF) management - how does novel technology help to address this comprehensive task? <https://esc365.escardio.org/session/36826>
- Presentation: Longer and better lives for patients with atrial fibrillation: The 9th AFNET/EHRA Consensus Conference <https://esc365.escardio.org/presentation/279586>
- Presentation: Remote app-based monitoring of AF <https://esc365.escardio.org/presentation/242137>
- Presentation: Remote app-based management of atrial fibrillation during the COVID-19: The centre characteristics and experiences of the European TeleCheck-AF project <https://esc365.escardio.org/presentation/230258>
- Opportunities to manage the AF screening process <https://esc365.escardio.org/presentation/248084>

Webinars

- Atrial fibrillation screening in the digital era <https://esc365.escardio.org/presentation/273039>
- Atrial fibrillation screening implementation - state of the art and future directions. A Horizon 2020 AFFECT-EU webinar <https://esc365.escardio.org/event/324>



- Innovation in the cloud: see what artificial intelligence can do for ICMs <https://esc365.escardio.org/event/473>
- Rhythm monitoring: new technologies, new strategies - a Horizon 2020 AFFECT-EU webinar <https://esc365.escardio.org/event/902>

Websites & Patient resources

From the ESC

- www.afibmatters.org
- Find my EP specialist: <https://www.escardio.org/find-my-ep>
- <https://www.healthy-heart.org/>

From the Heart Rhythm Alliance

- [Know Your Pulse - Arrhythmia Alliance - UK](#)

From the Heart Rhythm Society (HRS)

- Upbeat.org: <https://upbeat.org/>
- AFib Question Builder: <https://upbeat.org/question-builder>
- Find a Specialist: <https://upbeat.org/find-a-specialist>
- Patient Resources: <https://upbeat.org/patient-resources>
You can find the following new releases:
 - ✓ Your AFib Medication Guide – A Simple Guide to Staying on Track
 - ✓ What is Shared Decision-Making?
 - ✓ Taking Control of Your AFib Risk
 - ✓ How Does AFib Affect My Stroke Risk?

Other visual resources and information

From the Heart Rhythm Alliance

[Know Your Pulse - Arrhythmia Alliance - UK](#)

From the World Heart Federation (WHF)

- General infographic on arrhythmias:
<https://world-heart-federation.org/resource/arrhythmias-infographic/>
- Infographic on myths and facts of arrhythmias:

<https://world-heart-federation.org/resource/arrhythmias-infographic-myths-and-facts/>

- Arrhythmias – what you need to know:
https://www.youtube.com/watch?v=mdwJaaJdXiM&embeds_referring_euri=https%3A%2F%2Fworld-heart-federation.org%2F&source_ve_path=Mjg2NjY

HRS TV

- Digital Health & Innovations: PPG Today - Where Do We Stand? <https://www.youtube.com/watch?v=cWBMWbPHUmc>

Scientific publications

guideline	ESC	Van Gelder IC, Rienstra M, Bunting K V, Casado-Arroyo R, Caso V, Crijns HJGM, et al. 2024 ESC Guidelines for the management of atrial fibrillation developed in collaboration with the European Association for Cardio-Thoracic Surgery (EACTS). Eur Heart J. 2024 Aug;29;45(36):3314–414.
guideline	ESC	Zeppenfeld K, Tfelt-Hansen J, de Riva M, Winkel BG, Behr ER, Blom NA, et al. 2022 ESC Guidelines for the management of patients with ventricular arrhythmias and the prevention of sudden cardiac death. Eur Heart J. 2022 Oct;43(40):3997–4126.
other scientific publication	ESC	Svennberg E, Tjong F, Goette A, Akoum N, Di Biase L, Bordachar P, et al. How to use digital devices to detect and manage arrhythmias: an EHRA practical guide. Europace. 2022 Jul;24(6):979–1005.
other scientific publication	ESC	Duncker D, Svennberg E, Deharo J-C, Costa FM, Kommata V. The “afibmatters.org” educational website for patients with atrial fibrillation from the European Heart Rhythm Association. Europace [Internet]. 2021 Nov 1;23(11):1693–7. Available from: https://doi.org/10.1093/europace/euab098
other scientific publication	Other	Wissenberg M, Lippert FK, Folke F, Weeke P, Hansen CM, Christensen EF, et al. Association of national initiatives to improve cardiac arrest management with rates of bystander intervention and patient survival after out-of-hospital cardiac arrest. JAMA. 2013 Oct;310(13):1377–84
other scientific publication	Other	da Costa FA, Mala-Ladova K, Lee V, Tous S, Papastergiou J, Griffiths D, et al. Awareness campaigns of atrial fibrillation as an opportunity for early detection by pharmacists: an international cross-sectional study. J Thromb Thrombolysis. 2020 May;49(4):606–17

other scientific publication	Other	alhotra K, Lal V, Majmundar M, Kumar A, Wander GS, Kalra A. Similar Events but Contrasting Impact: Appraising the Global Digital Reach of World Heart Day and Atrial Fibrillation Awareness Month. <i>Glob Heart</i> . 2023;18(1):30
other scientific publication	EHRA	Hermans ANL, Betz K, Verhaert DVM, den Uijl DW, Clerx K, Debie L, et al. 360° Virtual reality to improve patient education and reduce anxiety towards atrial fibrillation ablation. <i>Europace</i> . 2023 Mar;25(3):855–62
other scientific publication	EHRA	Hillmann HAK, Angelini E, Karfoul N, Feickert S, Mueller-Leisse J, Duncker D. Accuracy and comprehensibility of chat-based artificial intelligence for patient information on atrial fibrillation and cardiac implantable electronic devices. <i>Europace</i> . 2023 Dec;26:1–10
other scientific publication	EHRA	Manninger M, Zweiker D, Svennberg E, Chatzikyriakou S, Pavlovic N, Zaman JAB, et al. Current perspectives on wearable rhythm recordings for clinical decision-making: the wEHRables 2 survey. <i>Europace</i> . 2021 Jul;23(7):1106–13.
other scientific publication	EHRA	Kalarus Z, Mairesse GH, Sokal A, Boriani G, Beata Ś, Arroyo RC, et al. Searching for atrial fi brillation : looking harder , looking longer , and in increasingly sophisticated ways . An EHRA position paper ’. 2022;1–14
other scientific publication	EHRA	Linz D, Andrade JG, Arbelo E, Boriani G, Breithardt G, Camm AJ, et al. Longer and better lives for patients with atrial fibrillation: the 9th AFNET/EHRA consensus conference. <i>Europace</i> . 2024 Mar;26(4)
other scientific publication	Other	Venn RA, Khurshid S, Grayson M, Ashburner JM, Al-Alusi MA, Chang Y, et al. Characteristics and Attitudes of Wearable Device Users and Nonusers in a Large Health Care System. <i>J Am Heart Assoc</i> . 2024 Jan;13(1):e032126
other scientific publication	EHRA	Tzeis S, Gerstenfeld EP, Kalman J, Saad EB, Sepehri Shamloo A, Andrade JG, et al. 2024 European Heart Rhythm Association/Heart Rhythm Society/Asia Pacific Heart Rhythm Society/Latin American Heart Rhythm Society expert consensus statement on catheter and surgical ablation of atrial fibrillation. <i>Europace</i> [Internet]. 2024 Apr 1;26(4):euae043. Available from: https://doi.org/10.1093/europace/euae043
other scientific publication	EHRA	Pluymaekers NAHA, Hermans ANL, van der Velden RMJ, Gawałko M, den Uijl DW, Buskes S, et al. Implementation of an on-demand app-based heart rate and rhythm monitoring infrastructure for the management of atrial fibrillation through teleconsultation: TeleCheck-AF. <i>Europace</i> . 2021 Mar;23(3):345–52
other scientific publication	ESC (association, council, working group)	familyvan Mourik MJW, Keijsers L, van der Velden RMJ, Vorstermans B, Crijns HJGM, Muris JWM, et al. Patients perspectives on integrating eHealth in regular care pathways for atrial fibrillation: evaluating photoplethysmography for remote self-assessment. <i>Eur J Cardiovasc Nurs</i> . 2025 Jan;zvae156
other scientific publication	EHRA	Svennberg E, Caiani EG, Bruining N, Desteghe L, Han JK, Narayan SM, et al. The digital journey: 25 years of digital development in electrophysiology from an Europace perspective. <i>Europace</i> . 2023 Aug;25:1–10.



other
scientific
publication

Other

Mannhart D, Lischer M, Knecht S, du Fay de Lavallaz J, Strebel I, Serban T, et al. Clinical Validation of 5 Direct-to-Consumer Wearable Smart Devices to Detect Atrial Fibrillation: BASEL Wearable Study. JACC Clin Electrophysiol. 2023 Feb;9(2):232–42

Perino AC, Gummidipundi SE, Lee J, Hedlin H, Garcia A, Ferris T, et al. Arrhythmias Other Than Atrial Fibrillation in Those With an Irregular Pulse Detected With a Smartwatch: Findings From the Apple Heart Study. Circ Arrhythm Electrophysiol. 2021 Oct;14(10):e010063

other
scientific
publication

Other

van der Velden RMJ, Verhaert DVM, Hermans ANL, Duncker D, Manninger M, Betz K, Gawalko M, Desteghe L, Pistors R, Hemels M, Pison L, Sohaib A, Sultan A, Steven D, Wijtvliet P, Gupta D, Svennberg E, Luermans JCLM, Chaldoupi M, Vernooij K, den Uijl D, Lodzinski P, Jansen WPJ, Eckstein J, Bollmann A, Vandervoort P, Crijns HJGM, Tieleman R, Heidbuchel H, Pluymaekers NAHA, Hendriks JM, Linz D; TeleCheck-AF Investigators. The photoplethysmography dictionary: practical guidance on signal interpretation and clinical scenarios from TeleCheck-AF. Eur Heart J Digit Health. 2021 Jun 4;2(3):363-373.

Publications from the HRS:

- [2024 HRS Expert Consensus Statement on Arrhythmias in the Athlete: Evaluation, Treatment, and Return to Play](#)
- [2023 HRS/EHRA/APHRS/LAHRS Expert Consensus Statement on Practical Management of the Remote Device Clinic](#)

Publications from the World Heart Federation

- Roadmap on Atrial Fibrillation: <https://world-heart-federation.org/cvd-roadmaps/whf-global-roadmaps/atrial-fibrillation/>
- [2023 HRS Expert Consensus Statement on the Management of Arrhythmias During Pregnancy](#)
- [2023 HRS/APHRS/LAHRS Guideline on Cardiac Physiologic Pacing for the Avoidance and Mitigation of Heart Failure](#)
- [2022 HRS Expert Consensus Statement on Evaluation and Management of Arrhythmic Risk in Neuromuscular Disorders](#)

