

***Non-coding RNAs as disease biomarkers
and therapeutic targets. From left to right
ventricular failure.***



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SHORT SUMMARY:

The potential of RNAs to be used as biomarkers and therapeutic targets is currently an active area of research. Heart failure is a public health issue for which current biomarkers and treatments are lacking accuracy. The value of RNAs as biomarkers and therapeutic targets of heart failure will be discussed, using past and ongoing collaborative research projects between Poland and Luxembourg. The audience will be conveyed between the left and the right ventricle of the heart, both of which can be affected by heart failure.

SHORT BIO:

With a PhD obtained in 2001 and a background training in Health and Biological Sciences, Dr Yvan Devaux has more than 20 years of research in molecular diagnostics and is the leader of the Cardiovascular Research Unit of the Luxembourg Institute of Health. His main research interest and expertise is the discovery and validation of novel RNA biomarkers and therapeutic targets of brain and heart diseases, including heart failure, diabetes, acute coronary syndrome, cardiac arrest, stroke, and Parkinson's disease. As his research focus is translational and he believes that collaboration is key, one of his professional goals is to bring together complementary expertise from clinicians, basic researchers, bioinformaticians, artificial intelligence experts, computational biologists, health economics and social sciences and humanities experts, as well as industrial partners towards the satisfaction of unmet medical needs. His team has developed and extensively validated biomarker discovery pipelines based on sequencing, bioinformatics approaches, complex statistics, artificial intelligence and machine learning. I am active in several editorial, scientific and industrial boards and policy networks. Dr Devaux is a member of the Luxembourg Plan for Cardiovascular and Neurological Diseases, a Fellow Member of the Sciences Section of the Grand Ducal Institute of Luxembourg, a Fellow of the American Heart Association and a Fellow of the European Society of Cardiology. He has published more than 200 peer-reviewed scientific articles and has a Scopus H-index of 41.

RELEVANT PUBLICATIONS:

[Non-coding RNAs as therapeutic targets and biomarkers in ischaemic heart disease.](#)

Caporali A, Anwar M, Devaux Y, Katare R, Martelli F, Srivastava PK, Pedrazzini T, Emanuelli C. **Nat Rev Cardiol.** 2024 Aug;21(8):556-573. doi: 10.1038/s41569-024-01001-5. Epub 2024 Mar 18.

[Transcriptomics Research to Improve Cardiovascular Healthcare.](#)

Badimon L, Devaux Y. **Eur Heart J.** 2020 Sep 14;41(35):3296-3298. doi: 10.1093/eurheartj/ehaa237.

[Myocardial Infarction-Associated Circular RNA Predicting Left Ventricular Dysfunction.](#)

Vausort M, Salgado-Somoza A, Zhang L, Leszek P, Scholz M, Teren A, Burkhardt R, Thiery J, Wagner DR, Devaux Y. **J Am Coll Cardiol.** 2016 Sep 13;68(11):1247-1248. doi: 10.1016/j.jacc.2016.06.040.

[Long noncoding RNAs in cardiac development and ageing.](#)

Devaux Y, Zangrando J, Schroen B, Creemers EE, Pedrazzini T, Chang CP, Dorn GW 2nd, Thum T, Heymans S; Cardioline network. **Nat Rev Cardiol.** 2015 Jul;12(7):415-25. doi: 10.1038/nrcardio.2015.55. Epub 2015 Apr 7.

[Long noncoding RNAs in patients with acute myocardial infarction.](#)

Vausort M, Wagner DR, Devaux Y. **Circ Res.** 2014 Sep 12;115(7):668-77. doi: 10.1161/CIRCRESAHA.115.303836. Epub 2014 Jul 17.

[MicroRNA-150: a novel marker of left ventricular remodeling after acute myocardial infarction.](#)

Devaux Y, Vausort M, McCann GP, Zangrando J, Kelly D, Razvi N, Zhang L, Ng LL, Wagner DR, Squire IB. **Circ Cardiovasc Genet.** 2013 Jun;6(3):290-8. doi: 10.1161/CIRCGENETICS.113.000077. Epub 2013 Apr 1.