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EDITORIAL

Cardiology 2.0: the (r)age of the machines?

Chiara BERNELLI ¹, Michela CASELLA ², Giuseppe BIONDI-ZOCCAI ^{3, 4} *, Elena CAVARRETTA ³

¹Santa Corona Hospital, Pietra Ligure, Savona, Italy; ²Ospedali Riuniti University Hospital, Ancona, Italy; ³Department of Medical-Surgical Sciences and Biotechnologies, Sapienza University, Latina, Italy; ⁴Unit of Cardiology, Santa Maria Goretti Hospital, Latina, Italy

*Corresponding author: Giuseppe Biondi-Zoccai, Department of Medical-Surgical Sciences and Biotechnologies, Sapienza University, Latina, Italy. E-mail: giuseppe.biondizoccai@uniroma1.it

If you would be a real seeker after truth, it is necessary that at least once in your life you doubt, as far as possible, all things René Descartes

This issue of Minerva Cardiology and Angiolo-**■** gy resembles Two-Face, Batman's archenemy, in the sense that it provides many rosy opportunities for improvements in cardiovascular prevention and therapeutics, but also many causes of concern (Figure 1).1 Indeed, several topics, while intriguing, may represent a standard list of worthy areas of research and dissemination ranging from the interplay between inflammatory or thrombotic mechanisms and cardiovascular disease, 2-4 to preventive or predictive studies and clinical interventions for common cardiac conditions.⁵⁻¹⁰ Yet, other subjects appear more provocatively groundbreaking, as several articles of this issue present important technological and analytical advances in cardiovascular health, including one brief albeit poignant report on the emerging leader in every day artificial intelligence (AI), the large language model developed by OpenAI (San Francisco, CA, USA), ChatGPT.¹¹⁻¹³ In particular, the crucial role of inflammation, prothrombotic milieu, and plasma lipid homeostasis is well covered by three leading state of the art reviews, 2-4 which offer numerous suggestions for further basic, translational, and clinical research, including investigations on the ever increasing important role of autophagy in cardiovascular disease. 14-16 Furthermore, transcatheter structural heart interventions are discussed in two original articles, with a detailed comparative analysis of the inflammatory reaction following transcatheter aortic valve implantation, ¹⁰ as well as a study on the predictive role of ECG data in the same clinical setting. ⁵ Invasive cardiology keeps the stage in an intriguing review article showcasing the long-term benefits of drug-coated balloon for percutaneous coronary intervention. ⁹ Heart failure, pulmonary hypertension, and COVID-19,

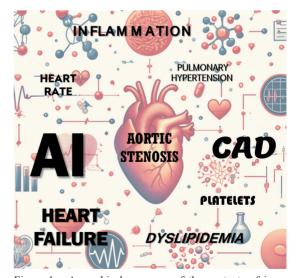


Figure 1.—A graphical summary of the contents of issue 5 of *Minerva Cardiology and Angiology*, with size of keywords loosely proportional to their present and future importance in cardiovascular research and practice. Courtesy of: ChatGPT (OpenAI, San Francisco, CA, USA). AI: artificial intelligence.

BERNELLI CARDIOLOGY 2.0

which are by no means irrelevant clinical conditions, are also targeted by several impactful reports.^{4,7,8} In particular, Mace *et al.* cover in much needed detail the importance to predict, prevent and aggressively treat readmissions for decompensated heart failure, a condition which is becoming more and more common and often represents a veritable clinical challenge.8 Despite its many merits, this issue does not explore many other important topics, such as the latest pharmacological treatments for chronic heart conditions, surgical or hybrid interventions, advancements in bioresorbable technology, or antiarrhythmic interventions, among many others.¹⁵⁻¹⁷ More basically, no coverage of aggregate-level risk factors is present, and the same applies to arterial hypertension or smoking. 17-19 In conclusion, we hope the present issue of Minerva Cardiology and Angiology will prove as informative to readers as it was stimulating to peerreviewers and editors. Of course, feel free to comment on our articles on social media as well as by formally corresponding with the Editorial Office.

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Conflicts of interest

Giuseppe Biondi-Zoccai has served as consultant for Aleph, Amarin, Balmed, Cardionovum, Crannmedical, Endocore Lab, Eukon, Guidotti, Innovheart, Meditrial, Menarini, Microport, Opsens Medical, Terumo, and Translumina, outside the present work.

Authors' contributions

All authors read and approved the final version of the manuscript.

History

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