EDITORIAL

# Special issue “Heart Connections: Integrating Organ, Environmental, and Mental Health Impacts” Systematic reviews and meta-analyses

## Edition spéciale “Heart Connections: Integrating Organ, Environmental, and Mental Health Impacts” Revues systématiques et meta-analyses

Saoussen Miladi[1], Lilia Zakhama[2]

1. Rheumatology Department, Mongi Slim Hospital, La Marsa, Faculty of Medicine of Tunis, University of Tunis El Manar, Tunisia.
2. Cardiology Department, Security Forces Hospital, La Marsa, Faculty of Medicine of Tunis, University of Tunis El Manar, Tunisia.

Systematic reviews and meta-analyses have become essential tools for evidence-based medicine in today's scientific landscape. By meticulously gathering data from multiple studies, they provide a robust foundation for clinical decision-making and healthcare policy. Systematic reviews synthesise current literature, identify gaps and plan the design of future studies, which is crucial given the dramatic growth in medical information. Therefore, researchers seeking to produce rigorous and high-quality evidence must master the conduct and reporting of systematic reviews and meta-analyses.

To this end, our editorial team has launched a structured training programme to support our researchers in developing the necessary skills to conduct and write up systematic reviews and meta-analyses. A total of 35 researchers from various specialties were recruited. Over the past year, four intensive two-day workshops were held. These sessions covered all the key steps, from formulating the research questions to data synthesis and critical appraisal. To align with the focus of our special issue, the chosen topic was “Heart Connections: Integrating Organ, Environmental, and Mental Health Impacts”.

Following this educational initiative, eleven manuscripts were prepared, including four meta-analyses and seven systematic reviews.

1. Continuing versus withholding renin-angiotensin-aldosterone system antagonists before non-cardiac surgery: A systematic review and meta-analysis (1). This review synthesises evidence on the optimal perioperative management of RAAS antagonists to balance cardiovascular stability and renal outcomes.
2. The effect of ambient heat exposure early in pregnancy on the frequency of congenital heart defects: Meta-analysis (2). This analysis examines how maternal exposure to heat during critical developmental periods influences the risk of foetal cardiac malformations.
3. The effect of inotropes in patients with advanced heart failure: A meta-analysis of randomised trials (3). This meta-analysis evaluates the efficacy and safety of inotropes in patients with advanced heart failure.
4. The effect of paracetamol on blood pressure: A systematic review (4) investigating the potential hypertensive effects of regular paracetamol use across patient populations.
5. Effects of heated tobacco products compared to conventional cigarettes on the cardiovascular system: A systematic review (5) comparing the cardiovascular risk profiles of novel heated tobacco devices and traditional cigarette smoking.
6. Efficacy and safety of Sodium-Glucose Cotransporter 2 Inhibitors (SGLT2i) in cardiac amyloidosis: A systematic review (6). This study assessed the therapeutic potential of SGLT2 inhibitors in improving outcomes for cardiac amyloidosis patients.
7. Cardiovascular risk and JAK Inhibitors for the treatment of spondyloarthritis: A systematic review (7) analysing the cardiovascular safety signal of JAK inhibitors in spondyloarthritis treatment regimens.

**Corresponding Author**:
Saoussen Miladi
Rheumatology Department, Mongi Slim Hospital, La Marsa, Faculty of Medicine of Tunis, University of Tunis El Manar, Tunisia.
E-mail: saoussen.miladi@stsm.latunisiemedicale.com

LA TUNISIE MEDICALE-2025; Vol 103 (09): 1143-1144 DOI: 10.62438/tunismed.v103i9.6566

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (CC BY-NC-ND 4.0) which permits non-commercial use production, reproduction and distribution of the work without further permission, provided the original author and source are credited.

8. Long working hours and the risk of ischaemic cardiac death: A systematic review and meta-analysis (8). This research quantified the association between prolonged occupational exposure and fatal ischaemic heart events.
9. Cardiovascular and pulmonary response in internet gaming disorder: A systematic review (9) exploring the physiological impact of digital addiction on cardiopulmonary stress responses.
10. Cardiac phenotypes and endophenotypes in schizophrenia: A systematic review (10). This study systematically characterises the distinct cardiac manifestations associated with schizophrenia spectrum disorders.
11. The effects of TNF-alpha inhibitors on subclinical atherosclerosis and endothelial function in patients with psoriatic arthritis: A systematic review (11). It evaluates how biologic therapy modulates early vascular pathology in psoriatic arthritis.

Beyond their academic value, these contributions also aim to enhance the visibility and impact of “La Tunisie Médicale”. By prioritising high-quality publications that adhere to international methodological standards, our journal aims to enhance its CiteScore and strengthen its global reach.

We would like to express our sincere gratitude to all the participants, trainers and authors who contributed to this educational and scientific project. We hope that this special issue will inspire similar initiatives and help to foster a sustained culture of evidence-based research in our region and beyond.

## References


1. Daghmouri MA, Haddad F, Kammoun E, Jebali F, Jeddou H, Chaouch MA. Continuing versus Withholding Renin–Angiotensin–Aldosterone System Antagonists Before Noncardiac Surgery: A Systematic Review and Meta-Analysis. Tunis Med. 2025;103(9):1146-1156.
2. Benali M, Ayadi A, Hannachi MW, Jaouhari S, BouslamaM, Dziri C, Ben Hamida E. The effect of Ambient heat exposure early in pregnancy on the frequency of congenital heart defects: A systematic review and meta-analysis. Tunis Med. 2025;103(9):1157-1164.
3. (3) GhabaraR, Ben kaab B, Antit S, Boussabeh I, Bousnina S, Dziri C, Zakhama L. Effect of Inotropes in Patients with Advanced Heart Failure: A Meta-Analysis of Randomized Trials. Tunis Med. 2025;103(9):1165-1174.
4. Miladi S, Rouached L, Bouden S, Boussaa H, Makhlouf Y, Ben Tekaya A et al. Effect of Paracetamol on Blood Pressure: A Systematic Review. Tunis Med. 2025;103(9):1175-1182.
5. Ben Saad S, Hrizi C, Balloumi N, Ben Mansour A. Effects of Heated Tobacco Products compared to Conventional Cigarettes on Cardiovascular System: A Systematic Review. Tunis Med. 2025;103(9):1183-1194.
6. Bourguiba R, Antit S, Ben Rejab S, Bellakhal S, Zakhama L. Efficacy and Safety of Sodium-Glucose Cotransporter 2 Inhibitors (SGLT2i) in Cardiac Amyloidosis: A Systematic Review. Tunis Med. 2025;103(9):1195-1201.
7. Dhahri R, Ben Ammar L, Boussaid S, Bellakhal S, Gharsallah I, Sahli H, et al. Cardiovascular risk and JAK inhibitor for the treatment of spondyloarthritis: A systematic review. Tunis Med. 2025;103(9):1202-1209.
8. Boussaid M, Chaouch MA, Limem H, Mlouki I, Mesrati MA, Mhamdi S, et al. Long working hours and the risk of ischemic cardiac death: A systematic review and a meta-analysis. Tunis Med. 2025;103(9):1210-1217.
9. Cherif H, Debiche S, Louhaichi S, Mokaddem S.Cardiovascular and pulmonary response in Internet gaming disorder: A systematic review. Tunis Med. 2025;103(9):1218-1226.
10. Larnaout A, Jebberi Z, Hamdi MS, Lansari R, Mourali MS, Melki W. Cardiac Phenotypes and Endophenotypes in Schizophrenia : A systematic Review. Tunis Med. 2025;103(9):1227-1237.
11. Makhlouf Y, Boussaa H, Bettaieb H, Fazaa A, Dergaa I, Boudokhane M, et al. Effects of TNF-α Inhibitors on Subclinical Atherosclerosis and Endothelial Function in Patients with Psoriatic Arthritis: A Systematic Review. Tunis Med. 2025;103(9):1238-1251.