



# MAYO CLINIC PROCEEDINGS

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The January online issue of *Proceedings* will be available by Thursday, January 2.  
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### 2385 Balancing the Risks and Benefits of Opioid Therapy: The Pill and the Pendulum

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### 2390 Association Between Patient Cost Sharing and Cardiac Rehabilitation Adherence

Michel Farah, Maya Abdallah, Heidi Szalai, Robert Berry, Tara Lagu, Peter K. Lindenauer, and Quinn R. Pack  

Higher cost sharing was associated with lower cardiac rehabilitation attendance. Given that cardiac rehabilitation is cost-effective and underutilized, insurance companies and other payers should reevaluate their cost-sharing policies for cardiac rehabilitation.

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- 2399** **Relation of Total Sugars, Sucrose, Fructose, and Added Sugars With the Risk of Cardiovascular Disease: A Systematic Review and Dose-Response Meta-analysis of Prospective Cohort Studies**  
*Tauseef A. Khan, Mobushra Tayyiba, Amav Agarwal, Sonia Blanco Mejia, Russell J. de Souza, Thomas M.S. Wolever, Lawrence A. Leiter, Cyril W.C. Kendall, David J.A. Jenkins, and John L. Sievenpiper* 🚫➕  
 There appears to be slight reductions in risk with low intakes, followed by sharp increases in risk as the number of calories provided by sugars increases.
- 2415** **High-Intensity Walking Time Is a Key Determinant to Increase Physical Fitness and Improve Health Outcomes After Interval Walking Training in Middle-Aged and Older People**  
*Shizue Masuki, Mayuko Morikawa, and Hiroshi Nose*  
 Estimated peak aerobic capacity plateaued after approximately 50 minutes per week of fast walking.
- 2427** **Long-Term Relationship Between Atrial Fibrillation, Multimorbidity and Oral Anticoagulant Drug Use**  
*Marco Proietti, Irene Marzona, Tommaso Vannini, Mauro Tettamanti, Ida Fortino, Luca Merlino, Stefania Basili, Pier Mannuccio Mannucci, Giuseppe Boriani, Gregory Y.H. Lip, Maria Carla Roncaglioni, and Alessandro Nobili* ➕  
 New models of care are needed for patients with atrial fibrillation that consider the burden of comorbidities and offer holistic approaches.
- 2437** **Prescription Opioid Epidemic and Trends in the Clinical Development of New Pain Medications**  
*Thomas J. Hwang, Michael S. Sinha, Chintan V. Dave, and Aaron S. Kesselheim* 🚫➕  
 Pain drug development activity has largely shifted from new therapeutics to reformulated ones. New policies, such as increased funding for basic pain research, may help address the urgent need for new therapies for pain.
- 2444** **Direct Oral Factor Xa Inhibitors for the Treatment of Acute Cancer-Associated Venous Thromboembolism: A Systematic Review and Network Meta-analysis**  
*Harry E. Fuentes, Robert D. McBane II, Waldemar E. Wysokinski, Alfonso J. Tafur, Charles L. Loprinzi, Mohammad H. Murad, and Irbaz Bin Riaz* ➕  
 Oral factor Xa inhibitors demonstrated a 52% reduction in the odds of recurrent venous thromboembolism.
- 2455** **Effect of Metformin on Microvascular Endothelial Function in Polycystic Ovary Syndrome**  
*Behnam Heidari, Amir Lerman, Antigoni Z. Lalia, Lilach O. Lerman, and Alice Y. Chang*  
 In women with polycystic ovary syndrome and endothelial dysfunction, metformin improves endothelial function independent of changes in glucose metabolism, dyslipidemia, or presence of prediabetes.
- 2467** **Association Between Public Trust and Provider Specialty Among Physicians With Financial Conflicts of Interest**  
*Joshua D. Niforatos, Alexander Chaitoff, Mary Beth Mercer, Pei-Chun Yu, and Susannah L. Rose* ➕➕  
 Survey respondents were more likely to discontinue care with a physician with conflicts of interest, but they will act on this knowledge of conflicts of interest differently depending on the specialty of the physician.
- 2476** **Differential Effect of  $\beta$ -Blockers According to Heart Rate in Acute Myocardial Infarction Without Heart Failure or Left Ventricular Systolic Dysfunction: A Cohort Study**  
*Jin Joo Park, Sun-Hwa Kim, Si-Hyuck Kang, Chang-Hwan Yoon, Jung-Won Suh, Young-Seok Cho, Tae-Jin Youn, In-Ho Chae, and Dong-Ju Choi* 🚫➕  
 Among survivors of acute myocardial infarction without heart failure or left ventricular systolic dysfunction, beta-blocker use was associated with reduced all-cause mortality in patients who have high—but not low—heart rates.
- 2488** **Comorbidities As Risk Factors for Rheumatoid Arthritis and Their Accrual After Diagnosis**  
*Vanessa L. Kronzer, Cynthia S. Crowson, Jeffrey A. Sparks, Elena Myasoedova, and John M. Davis III* 🚫➕  
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*Michael W. Cullen, Jeffrey B. Geske, Nandan S. Anavekar, Julie A. McAdams, Mary Ellen Beliveau, Steve R. Ommen, and Rick A. Nishimura* 

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*Evan L. O'Keefe, William S. Harris, James J. DiNicolantonio, Andrew Elagizi, Richard V. Milani, Carl J. Lavie, and James H. O'Keefe* 
- 2534** **VpALI—Vaping-related Acute Lung Injury: A New Killer Around the Block**  
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