

## Artificial Intelligence in Cardiology and new studies..

Biondi-Zoccai et al from Italy and some other countries reviewed "Artificial intelligence in cardiology: general perspectives and focus on interventional cardiology". This is a comprehensive review on this current topic.

Primary percutaneous coronary intervention (PPCI) is the preferred reperfusion option for patients with ST-segment elevation myocardial infarction (STEMI). Jiang et al from China conducted a study on the pharmaco-invasive strategy with halfdose recombinant human prourokinase (PHDP) trial to evaluate whether the PHDP encompassing early fibrinolysis coupled with timely catheterization, provides efficacy and safety similar to that of PPCI in STEMI patient. Clinically useful?

Oxidative stress enhances the cardiac fibrotic signaling pathway, with reactive oxygen species inducing cardiac fibrosis through increased expression of the pro-fibrotic factor TGF- $\beta$ 1 expression. Furthermore, Wnt/ $\beta$ -catenin signaling pathway is implicated in interstitial fibrosis, which is associated with TGF- $\beta$ . SIRT2 (Sirtuin) is expressed in heart tissue, with protective effects in pathological cardiac hypertrophy. Akbulut et al from Türkiye aimed to investigate the mechanisms of cardiac fibrosis in D-Gal-induced accelerated aging, focusing on TGF- $\beta$ 1,  $\beta$ -catenin, and SIRT2.

Growth arrest specific 5 (GAS5) is a long noncoding RNA (lncRNA) that regulates the function of cardiovascular cells in various cardiovascular diseases. The current study by Zhong et al from China delved into the regulation of GAS5 on the function of endothelial progenitor cells and its potential regulatory mechanism in coronary heart disease.

With increasing incidence of cancer among the adult population, radiotherapy (RT) is frequently used as a critical component in the treatment of various cancer types. Due to the nature of ionizing radiation, damage usually occurs within the tissues in anatomical neighborhood with the primary tumor localisation. Dapagliflozin (DAPA), originally developed as an oral anti-diabetic medication, has shown to have potent cardioprotective effects in the DAPA-HF trial. Uzun et al from Türkiye studied the cardioprotective effects of Dapagliflozin against RT induced cardiac cellular damage. What do you expect?

And new case report, letter, e-page originals.

I hope this new issue of our Journal will be interest of our readers.

### EDITORIAL

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