

Review of: "The Intriguing Role of TLR Accessory Molecules in Cardiovascular Health and Disease"

Vijay Kumar¹

¹ Duke University Medical Center

Potential competing interests: The author(s) declared that no potential competing interests exist.

Toll-like receptors (TLRs) are the one of the several pattern recognition receptors (PRRs) whose discovery has changed the field of infection pathogenesis, immunology, and almost every branch of biology (developmental biology, reproductive biology, neurosciences etc.) [\[1\]\[2\]\[3\]\[4\]](#).

In the current article, the authors have discussed the role of TLR accessory molecules (components of TLRs signalling pathways required to recognize different pathogen or microbe-associated molecular patterns (PAMPs or MAMPs) or death or damage-associated molecular patterns (DAMPs)). For example, CD14, lipopolysaccharide (LPS)-binding protein (LPB), myeloid-differentiation factor-2 (MD-2) and different adaptor proteins involved in the TLR signaling pathways are TLR accessory molecules. They discussed every crucial TLR accessory molecule in context to their role in the cardiovascular system and associated diseases, including myocardial infarction, ischemic stroke, and heart failure. Additionally, they have discussed the role of TLRs in the SARS-CoV-2 infection, a current pandemic affecting whole world. I think this article is useful for researchers interested in the understanding the pathogenesis of cardiovascular disease (CVDs) through the lens of TLRs and their different accessory molecules as mentioned in the article. I

References

1. [^]Vijay Kumar, James E. Barrett. (2022). *Toll-Like Receptors (TLRs) in Health and Disease: An Overview*. doi:10.1007/164_2021_568.
2. [^]Kumar Vijay. (2018). *Toll-like receptors in immunity and inflammatory diseases: Past, present, and future*. *International Immunopharmacology*, vol. 59 , 391-412. doi:10.1016/j.intimp.2018.03.002.
3. [^]V. Kumar. (2021). *Toll-Like Receptors in Adaptive Immunity*. doi:10.1007/164_2021_543.
4. [^]V. Kumar. (2020). *Toll-like receptors in sepsis-associated cytokine storm and their endogenous negative regulators as future immunomodulatory targets*. *International Immunopharmacology*, vol. 89 , 107087. doi:10.1016/j.intimp.2020.107087.