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# Comparison of the Effects of Mechanical Heart Valves and Bioprosthetic Heart Valves on Patient Blood Pressure

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## **Comparison of the effects of mechanical heart valves and bioprosthetic heart valves on patient blood pressure.**

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Various diseases and conditions can lead to patient receiving a heart valve replacement (HVR). Bioprosthetic heart valve replacements (BHVR) encompasses several different classifications of HVR, namely xenografts, allografts, and autografts; Mechanical heart valve replacements (MHVR) include any HVR made from non-organic carbon, metal, or plastic; each option has potential costs and benefits in their implementation for doctors and patients alike. We would like to propose further research into the effects of both forms of replacement on the blood pressure (BP) of patients in an effort to establish a significant difference in the BP of patients that have received a MHVR compared to patients that have received a BHVR given that their exact effects are currently unclear. To conduct such research however many obfuscating variables such as the necessity of blood thinners, the effects of any pre-existing and emerging heart conditions, and other factors must be accounted for prior to taking measurements and establishing any meaningful comparisons between BHVRs' and MHVRs' effects on the human body. The analysis of biomedical literature and other research papers has led to no conclusions on the effect of BHVRs on BP and encourage further research into how they may affect patient health in this regard.