

# Study examines outcomes of patients who refuse transfusion following cardiac surgery

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Jehovah's Witness patients who undergo cardiac surgery do not appear to be at increased risk for surgical complications or death when compared to patients who undergo cardiac surgery and receive blood transfusions, according to a report published Online First by *Archives of Internal Medicine*, a JAMA Network publication.

Jehovah's Witness patients (Witnesses) hold beliefs that disallow blood product transfusion and encourage the use of a number of blood [conservation practices](#), according to background information in the article.

Gregory Pattakos, M.D., M.S., of the Cleveland Clinic, Ohio, and colleagues sought to compare morbidity and long-term [survival rates](#) of Witnesses undergoing [cardiac surgery](#) with a similarly matched group of patients who received blood transfusions.

The authors found that after propensity matching, Witnesses (322 patients) and non-Witnesses (322 patients) had similar risks for hospital mortality, but Witnesses had significantly lower occurrence of additional operation for bleeding, [renal failure](#) and sepsis compared with non-Witnesses who received transfusions.

Witnesses had fewer acute complications, including [myocardial infarction](#) (heart attack), additional operations for bleeding and prolonged ventilation. Witnesses also had shorter hospital lengths of stay compared with matched patients who received transfusions, as well as shorter [intensive care unit](#) lengths of stay.

Additionally, Witnesses had higher survival rates compared with non-Witnesses at one-year (95 percent vs. 89 percent) but both groups had similar 20-year survival rates (34 percent vs. 32 percent).

The authors conclude that the Jehovah's Witness patients undergoing cardiac surgery at the

Cleveland Clinic experienced similar or better short- and long-term survival than non-Witnesses.

"Although we found differences in complications among Witnesses and control groups that received transfusions, current extreme blood management strategies do not appear to place patients at heightened risk for reduced long-term survival," they conclude.

In an invited commentary, Victor A. Ferraris, M.D., Ph.D., of the University of Kentucky Chandler Medical Center, Lexington, notes that Jehovah's Witnesses, "believe that the Bible prohibits ingesting blood and that Christians should therefore not accept blood transfusions or donate or store their own blood for transfusion."

Ferraris continues saying, "the finding that the Witnesses, who did not receive transfusions did at least as well as, if not better than, those who received a transfusion raises questions about whether more patients might benefit from surgical strategies that minimize transfusion of blood products."

"The findings of this analysis by Pattakos and colleagues add to the increasing data that suggest that more conservative use of blood transfusions would be in our patients' interest, in both Witnesses and non-Witnesses," he concludes.

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