

# **Use of fibrin sealants in cardiovascular surgery: a systematic review.**

## **[Review]**

Authors: Rousou JA

Publication Date: 2013

### **Abstract:**

**BACKGROUND:** Fibrin sealants are used for hemostasis and tissue adherence.

**AIM OF STUDY:** This systematic review summarizes published clinical data for fibrin sealant use in cardiovascular surgery.

**METHODS:** A literature search for the following terms was conducted using PubMed and EMBASE: (TISSEEL or Tissucol or Beriplast P or Evicel or Quixil or Crosseal or Reliseal or Fibringluraas or Bolheal or Tachosil or Vivostat or Vitagel or Artiss or "fibrin glue" or "fibrin sealant" or "fibrin tissue adhesive") and (cardiac or cardiovascular or vascular or heart or coronary or surgery). Case reports and series were excluded; although reports of controlled trials were preferred, uncontrolled trial data were also considered.

**RESULTS:** Clinical trials and chart review analyses of fibrin sealants were identified and summarized. Although clinical trial data were available for other agents, the majority of published studies examined TISSEEL. Overall, TISSEEL and other fibrin sealants showed improvements over standard of care or control groups for a variety of predefined endpoints. Safety findings are also summarized.

**CONCLUSIONS:** Data from these studies showed that fibrin sealants were well tolerated and

provided effective hemostasis in a range of cardiac and aortic surgeries.

Copyright © 2013 Wiley Periodicals, Inc.