

#### Fresenius Kabi

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### 510(k) SUMMARY

# **Date Prepared**

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**Owner/Operator** 

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#### **Device Trade Name**

Aurora Xi Plasmapheresis System Aurora Xi system Aurora Xi

### **Common Name/Usual Name:**

Automated Blood Cell Separator (Filtration Separation Principle)

### **Classification Name**

# 21 CFR 864.9245 Automated Blood Cell Separator

Automated blood cell separator devices operating by centrifugal or filtration separation principle have been classified by the Center for Biologics Evaluation and Research as Class II devices with Special Controls (Docket 2005N-0017, Final Rule, 30-Nov-07).



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#### **Product Code and Classification Panel**

81 GKT (Hematology panel)-Separator, Automated, Apheresis

### Legally Marketed Device Under Which Substantial Equivalence is Being Claimed

Fresenius Kabi is claiming substantial equivalence to the Aurora Xi Plasmapheresis System cleared under 510(k) BK200478 on May 7, 2020.

#### **Device Description**

The Aurora Xi Plasmapheresis System, comprising the Aurora Xi instrument (hardware and software) and a PLASMACELL Xi disposable set, is an automated plasmapheresis system intended for routine collection of plasma to be processed as Source Plasma. The Aurora Xi system uses a rapidly rotating separator (membrane filter) to separate whole blood into plasma for collection and concentrated cells for reinfusion to the donor.

The collection of plasma by the Aurora Xi system is a fully automated procedure with the donor connected to the PLASMACELL Xi disposable set throughout the collection process requiring a single venipuncture, which means that one access site is used to draw whole blood and return concentrated cellular components. Because of this, the procedure involves sequential cycles of alternating phases, one in which blood is drawn and plasma is separated and collected, and the other in which residual cellular components are returned.

The Aurora Xi Plasmapheresis System continues to provide bi-directional communication and data management capabilities.

#### **Statement of Intended Use**

The Aurora Xi Plasmapheresis System is intended for the automated collection of plasma by membrane filtration to be processed as Source Plasma. The Aurora Xi system is to be used with a single-use PLASMACELL Xi disposable set and 4% sodium citrate anticoagulant and allows for Saline and No Saline Protocol options.

# **Technological Comparison as Compared to the Predicate Device**

The technological characteristics of the Aurora Xi Plasmapheresis System remain the same as the predicate device. It is a microprocessor-controlled electromechanical device comprising pumps, clamps, monitors and sensors that move and direct donor blood through the PLASMACELL Xi disposable set. The plasma is collected, and the other components are returned to the donor.

The instrument modification and labeling changes, subject of this 510(k), do not change the operating principle of the Aurora Xi Plasmapheresis System.



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# **Modification to the Existing Device**

Software Version 1.3 has been developed to provide improvements to the plasmapheresis procedure. Software Version 1.3 also includes minor enhancements and anomaly fixes.

New revisions of the Aurora Xi Plasmapheresis System Operator's Manual and Administrator's Guide have been created to include information relevant to Software Version 1.3. These have been updated to reflect the improved functionality and minor enhancements added as a result of the new software version.

#### Performance Data

System verification and validation activities have been performed on the Aurora Xi Plasmapheresis system with Software Version 1.3, which verified that the modified Aurora Xi Plasmapheresis System performs as intended in a safe and effective manner that is substantially equivalent to the predicate device.

#### Conclusion

Based on the verification and validation activities performed, the Aurora Xi Plasmapheresis System with Software Version 1.3 provides a device that is substantially equivalent to the predicate device.