



Food and Drug Administration  
10903 New Hampshire Avenue  
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December 5, 2014

STRECK INC  
C/O MS. DEBORAH KIPP  
REGULATORY AFFAIRS MANGER  
7002 SOUTH 109<sup>TH</sup> STREET  
OMAHA, NE 68128

Re: K141962  
Trade/Device Name: XN CAL™  
Regulation Number: 21 CFR 864.8150  
Regulation Name: Calibrator for cell indices  
Regulatory Class: Class II  
Product Code: KRX  
Dated: October 27, 2014  
Received: October 28, 2014

Dear Ms. Kipp:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA).

You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

**Maria M. Chan -S**

Maria M. Chan, Ph.D.

Director

Division of Immunology and Hematology Devices  
Office of *In Vitro* Diagnostics and Radiological  
Health

Center for Devices and Radiological Health

Enclosure

**Indications for Use**

510(k) Number (if known)

k141962

Device Name

XN CAL

Indications for Use (Describe)

XN CAL is used for the calibration and calibration verification of Sysmex XN series (XN-10, XN-11, XN-20, XN-21) analyzers. Assayed parameters include:

WBC ( $10^3/\mu\text{L}$ ), RBC ( $10^6/\mu\text{L}$ ), HGB (g/dL), HCT (%), PLT ( $10^3/\mu\text{L}$ ), and RET (%)

Type of Use (Select one or both, as applicable)

Prescription Use (Part 21 CFR 801 Subpart D)

Over-The-Counter Use (21 CFR 801 Subpart C)

**PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON A SEPARATE PAGE IF NEEDED.**

**FOR FDA USE ONLY**

Concurrence of Center for Devices and Radiological Health (CDRH) (Signature)

This section applies only to requirements of the Paperwork Reduction Act of 1995.

**\*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\***

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## 510(k) Summary

**510(k) Submitter:** Streck  
7002 South 109<sup>th</sup> Street  
La Vista, NE 68128

**Official Correspondent:** Deborah Kipp, Regulatory Affairs Manager  
**Address:** 7002 South 109<sup>th</sup> Street; La Vista, NE 68128  
**Phone:** 402-537-5215  
**Fax:** 402-537-5317  
**Date Prepared:** April 18, 2014

### Names

**Trade Name:** XN CAL™  
**Common Name:** Assayed Hematology Calibrator  
**Classification Name:** Calibrator for Cell Indices (864.8150)  
**Product Code:** KRX  
**Panel:** Hematology

### Predicate Device:

XN CAL™ (K120745)

### Intended Use:

XN CAL is used for the calibration and calibration verification of Sysmex XN series (XN-10, XN-11, XN-20, XN-21) analyzers. Assayed parameters include:

WBC ( $10^3/\mu\text{L}$ ), RBC ( $10^6/\mu\text{L}$ ), HGB (g/dL), HCT (%), PLT ( $10^3/\mu\text{L}$ ), and RET (%)

**Description:**

Per the FDA guidance document, The 510(k) Program: Evaluating Substantial Equivalence in Premarket Notifications [510(k)], a predicate device was selected in order to demonstrate substantial equivalence for XN CAL. The comparison to the predicate device is shown in the “Comparison to Predicate Device” section.

**Comparison to Predicate Device**

	<b>XN CAL™ (K120745)-Predicate Device</b>	<b>XN CAL™ -Candidate Device</b>	<b>Same or Differences</b>
<b>Intended Use Statement</b>	XN CAL is used for the calibration and calibration verification of Sysmex XN series (XN-10, XN-20) analyzers. Assayed parameters include:  WBC ( $10^3/\mu\text{L}$ ), RBC ( $10^6/\mu\text{L}$ ), HGB (g/dL), HCT (%), PLT ( $10^3/\mu\text{L}$ ), and RET (%)	XN CAL is used for the calibration and calibration verification of Sysmex XN series (XN-10, XN-11, XN-20, XN-21) analyzers. Assayed parameters include:  WBC ( $10^3/\mu\text{L}$ ), RBC ( $10^6/\mu\text{L}$ ), HGB (g/dL), HCT (%), PLT ( $10^3/\mu\text{L}$ ), and RET (%)	Addition of the XN-11 and XN-21 analyzers.
<b>Open Vial Stability</b>	4 hours	4 hours	Same
<b>Closed Vial Stability</b>	35 days	49 days	Extension of Closed Vial Stability Dating to 49 days
<b>Reagents</b>	XN CAL contains the following: stabilized red blood cell component(s), stabilized white blood cell component(s), stabilized platelet component(s), and stabilized nucleated red blood cell component(s) in a preservative medium.	XN CAL contains the following: stabilized red blood cell component(s), stabilized white blood cell component(s), stabilized platelet component(s), and stabilized nucleated red blood cell component(s) in a preservative medium.	Same
<b>Storage Conditions</b>	2 - 8°C	2 - 8°C	Same

**Discussion of Tests and Test Results:**

To substantiate the product performance claims for XN CAL, Streck collected product performance data for the following studies Open-Vial Stability, Closed-Vial Stability, and Precision Performance. The resultant data set established that XN CAL is safe and effective for its intended use and that the product is stable for the entire product dating. The product fulfills its intended use as instructed in the Instructions for Use.

**Conclusions Drawn From Tests:**

Study results show XN CAL to be consistently reproducible, substantially equivalent to the predicate products, and stable for the entire product dating. XN CAL is a safe and effective product, which fulfills its intended use when used as instructed in the Instructions for Use.