



April 15, 2024

Beckman Coulter, Inc.
Kate Oelberg
Senior Staff Quality and Regulatory Affairs
1000 Lake Hazeltine Drive
Chaska, Minnesota 55318

Re: K232904

Trade/Device Name: Access Ostase
Regulation Number: 21 CFR 862.1050
Regulation Name: Alkaline Phosphatase or Isoenzymes Test System
Regulatory Class: Class II
Product Code: CIN
Dated: March 1, 2024
Received: March 1, 2024

Dear Kate Oelberg:

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 (the 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. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database available at <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm> identifies combination product submissions. 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.

Additional information about changes that may require a new premarket notification are provided in the FDA guidance documents entitled "Deciding When to Submit a 510(k) for a Change to an Existing Device" (<https://www.fda.gov/media/99812/download>) and "Deciding When to Submit a 510(k) for a Software Change to an Existing Device" (<https://www.fda.gov/media/99785/download>).

Your device is also subject to, among other requirements, the Quality System (QS) regulation (21 CFR Part 820), which includes, but is not limited to, 21 CFR 820.30, Design controls; 21 CFR 820.90, Nonconforming product; and 21 CFR 820.100, Corrective and preventive action. Please note that regardless of whether a change requires premarket review, the QS regulation requires device manufacturers to review and approve changes to device design and production (21 CFR 820.30 and 21 CFR 820.70) and document changes and approvals in the device master record (21 CFR 820.181).

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 and Part 809); medical device reporting (reporting of medical device-related adverse events) (21 CFR Part 803) for devices or postmarketing safety reporting (21 CFR Part 4, Subpart B) for combination products (see <https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products>); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR Part 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR Parts 1000-1050.

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance>) and CDRH Learn (<https://www.fda.gov/training-and-continuing-education/cdrh-learn>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice>) for more information or contact DICE by email (DICE@fda.hhs.gov) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

**Thomas C.
Miller -S**

Digitally signed by
Thomas C. Miller -S
Date: 2024.04.15
15:56:59 -04'00'

for Paula Caposino, Ph.D.

Acting Deputy Director

Division of Chemistry
and Toxicology Devices

OHT7: Office of In Vitro Diagnostics

Office of Product Evaluation and Quality

Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known)

K232904

Device Name

Access Ostase

Indications for Use (Describe)

The Access Ostase assay is a paramagnetic particle, chemiluminescent immunoassay for use with the Access Immunoassay Systems for the quantitative measurement of bone alkaline phosphatase (BAP), an indicator of osteoblastic activity, in human serum and plasma. This device is intended to be used as an aid in the management of postmenopausal osteoporosis and Paget's disease.

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)

CONTINUE ON A SEPARATE PAGE IF NEEDED.

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510 (k) Summary

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

510(k) Number k232904

Submitted By:

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Primary Contact:

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Device Name

Common Name: Access Ostase

Trade Name: Access Ostase

Classification Name: Alkaline phosphatase or isoenzymes test system.

Classification Regulation: [21 CFR 862.1050]

Product Code: CIN

Predicate Device

Device Name: Access Ostase

510(k) Numbers: k994278

Device Description

The Access Ostase assay is a one-step sandwich immunoenzymatic assay. The Access Ostase assay consists of the reagent pack, calibrators and QCs. Other items needed to run the assay include substrate and wash buffer. The Access Ostase assay reagent pack, Access Ostase assay calibrators, Access Ostase QCs, along with the UniCel DxI Wash Buffer II are designed for use with the DxI 9000 Access Immunoassay Analyzer in a clinical laboratory setting.

Intended Use

The Access Ostase assay is a paramagnetic particle, chemiluminescent immunoassay for use with the Access Immunoassay Systems for the quantitative measurement of bone alkaline phosphatase (BAP), an indicator of osteoblastic activity, in human serum and plasma. This device is intended to be used as an aid in the management of postmenopausal osteoporosis and Paget's disease.

Comparison of Technological Characteristics to the Predicate

Parameter	Access Ostase on Access 2 Immunoassay System (Predicate)	Access Ostase on Dxl 9000 Access Immunoassay System
Intended use	The Access Ostase assay is a paramagnetic particle, chemiluminescent immunoassay for use with the Access Immunoassay Systems for the quantitative measurement of bone alkaline phosphatase (BAP), an indicator of osteoblastic activity, in human serum and plasma. This device is intended to be used as an aid in the management of postmenopausal osteoporosis and Paget's disease.	Same
Analyte Measured	Bone alkaline phosphatase (BAP), an indicator of osteoblastic activity, in human serum and plasma	Same
Technology	One-step immunoenzymatic assay	Same
Format	Chemiluminescent	Same
Method	Automated	Same
Calibration	Utilizes a stored calibration curve	Same
Sample Type	Serum or plasma	Same
Measuring Range	Approximately 0.1 – 120 µg/L	Approximately 0.3 – 120 µg/L
Instrument	Access Immunoassay system	Dxl 9000 Access Immunoassay Analyzer
Substrate	Access Substrate	Lumi-Phos Pro Substrate

Standard/Guidance Document Referenced (if applicable):

CLSI EP05-A3: Evaluation of Precision Performance of Quantitative Measurement Methods; Approved Guideline – Third Edition

CLSI EP06-2nd Edition-: Evaluation of the Linearity of Quantitative Measurement Procedures: A Statistical Approach; Approved Guideline

CLSI EP17-A2: Evaluation of Detection Capability for Clinical Laboratory Measurement Procedures; Approved Guideline – Second Edition

Summary of Studies

Method Comparison: A study based on CLSI EP09c, 3rd Edition using Passing Bablok regression and Pearson’s correlation compared the Access 2 Immunoassay System and the Dxl 9000 Access Immunoassay Analyzer.

N	Concentration Range* (µg/L)	Slope	Slope 95% CI	Intercept	Intercept 95% CI	Correlation Coefficient R
163	0.34 - 108	0.95	0.93 - 0.98	0.53	0.32 - 0.75	1.00

*Range is Access 2 values

Imprecision: The assay was designed to have within-laboratory imprecision as listed below:

- ≤ 0.2 µg/L SD at concentrations ≤ 3 µg/L
- ≤ 7.0% CV at concentrations > 3 µg/L

A study based on CLSI EP05-A3 performed on the Dxl 9000 Access Immunoassay Analyzer tested multiple samples in duplicate in 2 runs per day for a minimum of 20 days.

Concentration (µg/L)			Repeatability (Within-Run)		Between-Run		Between-Day		Within-Laboratory	
Sample	N	Mean	SD	%CV	SD	%CV	SD	%CV	SD	%CV
Sample 1	80	1.8	0.1	4.6	0.01	0.8	0.0001	0.0	0.1	4.7
Sample 2	80	9.1	0.3	3.3	0.2	2.0	0.2	1.7	0.4	4.1
Sample 3	80	25	0.8	3.3	0.6	2.3	0.5	1.8	1.1	4.4
Sample 4	80	38	1.4	3.6	0.8	2.1	0.4	1.0	1.6	4.3
Sample 5	80	98	3.2	3.3	2.3	2.4	0.9	0.9	4.1	4.2

Linearity: A study based on CLSI EP06-Ed2 performed on the Dxl 9000 Access Immunoassay Analyzer determined the assay demonstrated linearity across the measuring interval.

Limit of Blank (LoB): The claimed LoB for Access Ostase assay is 0.1 µg/L on Dxl 9000 Access Immunoassay Analyzer.

Limit of Detection (LoD): The claimed LoD for Access Ostase assay is 0.1 µg/L on Dxl 9000 Access Immunoassay Analyzer.

Limit of Quantitation (LoQ): The claimed LoQ for Access Ostase assay is 0.3 µg/L on Dxl 9000 Access Immunoassay Analyzer.

Substantial Equivalence Comparison Conclusion

Beckman Coulter's Access Ostase on the Dxl 9000 Access Immunoassay Analyzer is substantially equivalent to the Access Ostase on the Access 2 Immunoassay System as demonstrated through the information and data provided in this submission. The performance testing presented in this submission provides evidence that the device is safe and effective in its intended use.