Ortho Clinical Diagnostics

PART OF THE Johnson & Johnson FAMILY OF COMPANIES

June xx, 2012

URGENT FIELD SAFETY NOTICE

Revised Recommended Specimens for VITROS® Chemistry Products DGXN Slides (Product Code 8343386)

Dear Customer,

As part of a Field Safety Corrective Action, the purpose of this notification is to inform you that Ortho-Clinical Diagnostics, Inc. (OCD) recently received complaints of elevated results using heparin plasma samples for VITROS® Chemistry Products DGXN Slides. As a result of our investigation into these complaints, heparin plasma is being removed as a recommended specimen type for VITROS® DGXN Slides.

Investigation Summary

Our internal testing confirmed reports of falsely elevated patient results using VITROS® DGXN Slides for heparin plasma samples *only*. Serum samples obtained from the same patients did not exhibit elevated results.

The current Instructions for Use (Version 7.0) states that:

> *VITROS Chemistry Products DGXN Slides quantitatively measure digoxin (DGXN) concentration in serum and plasma using VITROS® 250/350/950/5,1 FS and 4600 Chemistry Systems and the VITROS® 5600 Integrated System.*

NOTE: The Intended Use statement on VITROS® DGXN Slides shipped *prior to* June 11, 2012 indicates the use of serum and plasma.

Results for patients on digoxin therapy could potentially be above the therapeutic range, as the maximum positive bias observed in our investigation was 1.3 ng/mL (1.7 nmol/L). Our testing confirmed that digoxin results using heparin plasma samples from patients who are known not to be on digoxin therapy may potentially predict into the therapeutic range (0.8–2.0 ng/mL or 1.0 – 2.6 nmol/L). Although the bias was variable, the maximum positive bias observed was 2.4 ng/mL (3.1 nmol/L).

Resolution

As a result, OCD has revised the VITROS® Chemistry Products DGXN Slides Instructions for Use (IFU) and removed heparin plasma as a recommended specimen type for VITROS® DGXN Slides. **Serum continues to be an acceptable specimen type.**

Required Actions

- **Immediately discontinue using heparin plasma samples for VITROS® DGXN Slides.**
- Use only serum samples to process VITROS® DGXN Slides.
- Notify your laboratory and medical staff of this change and forward the information if you have distributed this product outside of your facility.
- Replace the pages of your VITROS® Instructions for Use Manual with the enclosed Instructions for Use and Table of Contents. Discontinue using any copies of the VITROS® DGXN Slide IFU (Version 7.0).
- Discuss any concerns you may have regarding previously reported results with your Laboratory Medical Director to determine the appropriate course of action.
- Collaborate with your pharmacy and clinical staff to evaluate the clinical implications for your institution for previously reported digoxin results using heparin plasma samples.

Required Actions (Continued)

- Consult with your Information Technology personnel to remove plasma as a sample type in your Laboratory Information System (LIS) download when processing VITROS® DGXN Slides, if appropriate.
- Complete and return the Confirmation of Receipt form no later than **July xx, 2012** regardless of whether your laboratory currently uses VITROS® DGXN Slides.
- Post this notification by each VITROS® System that utilizes VITROS® DGXN Slides or with your user documentation.

Revised Instructions for Use

The revised IFU for VITROS® DGXN Slides is enclosed; revisions have been made throughout the document to remove heparin plasma as a recommended specimen type. IFU documents are also located on our website at www.orthoclinical.com and are available via the global Fax on Demand system. IFUs are the official source of information for VITROS® Chemistry Products. The enclosed Table of Contents lists the most current version of each IFU. Changes in the IFUs are indicated by a change bar (|) to the left of the edited text and are described in the Revision History section that is included at the end of each document.

We apologize for the inconvenience this may cause your laboratory. We have anticipated some questions you may have in the following Questions and Answers section. If you have any additional questions, please contact Customer Technical Services at *insert appropriate number*.

Sincerely,

insert appropriate name
insert appropriate title

Enclosures:

VITROS® DGXN Slides Instructions for Use (Pub. No. MP2-114, Version 8.0)
VITROS® MicroSlide Instructions for Use Manual Table of Contents (J33004, 2012-06-19)

Questions and Answers

1. Why is OCD removing heparin plasma as a recommended specimen type using VITROS® DGXN Slides?

We confirmed reports of falsely elevated results using heparin plasma samples. To investigate the frequency of the falsely elevated results, we used multiple sources to obtain samples from patients known not to be on digoxin therapy. Serum samples obtained from the same patients did not exhibit any falsely elevated results.

The bias observed internally by OCD is associated with an unknown interaction between plasma samples and VITROS® DGXN Slides. The investigation into this issue is ongoing and OCD will provide any pertinent updates as they become available. To date, we have identified a potential interaction between cellular material that remains above the gel/buffy coat present in plasma samples and the VITROS® DGXN Slide. The magnitude of the positive bias varies by the amount of residual cellular material present in the sample at the time of testing.

Internal testing confirmed that plasma samples that do not contain residual cellular material did not demonstrate falsely elevated results.

2. What was the observed magnitude of the falsely elevated results?

Results for patients on digoxin therapy could potentially be falsely elevated above the therapeutic range. Internal testing confirmed that digoxin results using heparin plasma samples that were known negative may potentially predict into the therapeutic range (0.8–2.0 ng/mL or 1.0 – 2.6 nmol/L).

Based on the results of our internal testing performed using plasma samples:

- *For patients on digoxin therapy*, the positive bias observed was variable with a maximum bias of 1.3 ng/mL (1.7 nmol/L) for a sample with an expected concentration of 0.8 ng/mL (1.0 nmol/L)
- *For patients not on digoxin therapy,* the positive bias observed for the results was variable with a maximum bias of 2.4 ng/mL (3.1 nmol/L)

3. Should I take any action on previously reported patient results using heparin plasma samples on my VITROS® System?

We recommend that you discuss any concerns you may have regarding previously reported results with your Laboratory Medical Director to determine the appropriate course of action.

We also recommend that you collaborate with your pharmacy and your clinical staff in specific instances, to evaluate the clinical implications for your institution for previously reported digoxin results using heparin plasma samples.

4. What assays are affected by this issue?

We confirmed that all other immunorate therapeutic drug monitoring VITROS® MicroSlide assays (e.g., VITROS® CRBM, PHBR & PHYT Slides) are not affected.

This anomaly only affects heparin plasma samples processed using VITROS® DGXN Slides on VITROS® 250/350/950/5,1 FS, 4600 and 5600 Systems.

Questions and Answers (Continued)

5. Are all sample types affected?

This issue only affects samples that are collected in heparin plasma tubes (independent of tube brand manufacturer). **Our testing confirmed that serum continues to be an acceptable type of specimen.** Note that the bias observed with plasma samples would not be detected by monitoring quality control performance.

As a result, immediately discontinue using heparin plasma samples when processing VITROS® DGXN Slides on your VITROS® System or VITROS® Systems configured with an enGen™ Laboratory Automation System.

Our testing has determined there is a relationship between falsely elevated digoxin results and cellular material which is typically present in plasma samples.

6. Is this issue specific to certain lots of VITROS® DGXN Slides?

No, all slide lots within expiration dating are potentially affected and should not be used with plasma samples.

7. Do I need to take any actions regarding my Laboratory Information System (LIS) download?

Your VITROS® System will continue to accept heparin plasma as a sample type when processing VITROS® DGXN Slides. Please consult with your Information Technology personnel to remove plasma as a sample type in your LIS download.

8. Will heparin plasma be reinstated as an acceptable sample type for VITROS® DGXN Slides?

Our investigation into the root cause is ongoing. Upon completion of the investigation, if we are able to re-establish heparin plasma as a recommended specimen type, we will revise our IFU and issue a notification at that time.

9. Can I continue to use my current inventory of VITROS® DGXN Slides?

It is acceptable to use your current VITROS® DGXN Slide inventory provided **you use serum samples only** and discontinue use of plasma samples with VITROS® DGXN Slides in your facility.

New VITROS® DGXN Slide orders may have a brief, unexpected delay while we revise our product packaging to reflect the change in the intended use statement.

Confirmation of Receipt - Important Response Required

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So that we can complete our records, please return this form to us no later than July xx, 2012.

FAX TO: *insert appropriate name*
FAX: *insert appropriate number*

Section I: Confirmation

I received and reviewed the Urgent Field Safety Notice (Ref. CL12-175_EU) regarding falsely elevated results for heparin plasma samples using VITROS® DGXN Slides.

Please choose from the following options:

☐ My laboratory currently uses VITROS® DGXN Slides and I understand that heparin plasma is *no longer* a recommended specimen type for use with VITROS® DGXN Slides.

☐ My laboratory does *not* use VITROS® DGXN Slides.

**Your signature provides confirmation that you have received and understood this notification.*

Your Name: _____ Job Title (optional): _____

Signed*: _____ Date: _____

Fax Number: _____ Telephone Number: _____

J Number: _____ Institution: _____

Your comments are always welcome:

_____

Section II – Verification of your Name and Address

Verify your name and mailing address:

Please complete this section if your name and/or mailing address have changed or are not printed above:

Institution / Contact Name: _____

Address: _____

City: _____ State/Province: _____ Zip/Postal Code: _____

Telephone: _____ FAX: _____