# Sultanate of Oman Ministry of Health Directorate General of Pharmaceutical Affairs and Drug Control Muscat



سلطنة عُمان وزارة الصحة المديرية العامة للصيدلة والرقابة الدوائية مسقط

To:

THE DIRECTOR GENERAL OF HEALTH SERVICES IN ALL GOVERNORATES

Commanding Officer, Armed Forces Hospital (Al Khoudh & Salalah)

Director General of Engineering Affairs, MOH

Director General of Royal Hospital

Director General of Khoula Hospital

Director General of Medical Supplies (MOH)

Director General of Pvt. Health Est. Affairs (to kindly arrange distribution to all Pvt. Hospitals)

Hospital Director (Al Nahda Hospital)

Hospital Director (Al Massara Hospital)

The Head of Medical Services in SQU Hospital

The Head of Medical Services in Royal Oman Police

The Head of Medical Services in Ministry of Defence

The Head of Medical Services in The Diwan

The Head of Medical Services in The Sultan's Special Force

The Head of Medical Services in Internal Security Services

The Head of Medical Services in Petroleum Development of Oman

The Head of Medical Services in LNG Oman

ALL PRIVATE PHARMACIES & DRUG STORES

After Compliments,

Please find attached our Circular No 176 dated 24/8/23 Regarding NCMDR racall of Diacon 3 hematology control ((Low) 6x, (Normal), (High) 6 from (mfr: Diatron MI Plc).

### Copy to:

- · Director, Office of H.E. The Undersecretary for Health Affairs
- Director of Medical Device Control, DGPA&DC
- Director of Pharmacovigilance & Drug Information Dept, DGPA&DC
- Director of Drug Control Department, DGPA&DC
- Director of Pharmaceutical Licensing Department, DGPA&DC
- Director of Central Quality Control Lab., DGPA&DC
- Supdt. of Central Drug Information





### Sultanate of Oman Ministry of Health Directorate General of Pharmaceutical Affairs and Drug Control Muscat



سلطنة عُمان وزارة الصحة المديرية العامة للصيدلة والرقابة الدوائية مسقط

Circular No. 176/2023

08 -02-1445 H

24 -08-2023

### Recall of Diacon 3 hematology control ( (Low) 6x, (Normal), (High) 6 from Diatron MI Plc

Source	NCMDR- National Center for Medical Devices Reporting- SFDA https://ncmdr.sfda.gov.sa/Secure/CA/CaViewRecall.aspx?caid=6&rid=19665
Product	Diacon 3 hematology control ( (Low) 6x, (Normal), (High) 6.
Description	In-vitro diagnostics - haematological, histological and cytological products.
Manufacturer	Diatron MI Plc.
The affected products	Model/catalogue: 10031722, 10031724, 10031784 UDI-DI: 5999883586778, 5999883586785, 5999883586792 LOT: B1122N (Normal control).
Reason	The above lot of normal level control may have hemolysis or deterioration due to a microbial contamination. The values measured with this normal level control are about 20% higher than specified.
Action	<ol> <li>Please identify the affected lot in your stock and discard the vials.</li> <li>Please refer to the part of "Action To Be Taken by the User" in the attachment for more instructions should be taken.</li> <li>Contact the local agent for remedial action.</li> </ol>
comments	Healthcare professionals are encouraged to report any adverse events Suspected to be associated with the above device or any other medical device to Department of Medical Device Control through the E-mail: <a href="Med-device@moh.gov.om">Med-device@moh.gov.om</a>

Dr. Mohammed Hamdan Al Rubaie

**Director General** 









Date: 2022. December 02.

### Urgent Field Safety Notice Device Commercial Name

For Attention of\*:

Guder Medizintechnik GmbH & Co. KG Quality Assurance and Regulatory Responsible

Contact details of local representative (name, e-mail, telephone, address etc.)\*

Mr. Heyko Dettke dettke@guder-medizin.de; info@guder-medizin.de; +49 5731 8697080

Zum Bache 2, 32549 Bad Oeynhausen

### Important Note to updated Field Safety Notice:

This Field Safety Notice (FSN) is an update of the original FSN document (document number: FSNHE20221110-09, dated: November 14, 2022). The reason for the change was a more detailed explanation of the information described in the original FSN mainly regarding a more specified risk assessment. The changes compared to the previous FSN are marked in the corresponding sections of this document.

Please notify the affected end users of this updated FSN documentation and request a confirmation of its receipt in the context of a customer reply form.



### Urgent Field Safety Notice (FSN) Device Commercial Name Risk addressed by FSN

	1. Information on Affected Devices*
1	1. Device Type(s)*
٠	Hematology control
1	2. Commercial name(s)
	Diacon 3 hematology control (Low) 6x
	Diacon 3 hematology control (Normal)
	Diacon 3 hematology control (High) 6
1	Unique Device Identifier(s) (UDI-DI)
	5999883586778
	5999883586785
	5999883586792
1	4. Primary clinical purpose of device(s)*
	The control is a process control used to monitor instrument performance
1	Device Model/Catalogue/part number(s)*
	10031722
	10031724
	10031784
1	Software version
	Not relevant
1	7. Affected serial or lot number range
	LOT: B1122N (Normal control)
1	Associated devices
	This product is a hematology control used on 3-part hematology analyzers manufactured
	by Diatron as product families of Abacus 3, Abacus Junior 30, Abacus 380, Aquila
	Abacus 3 CT, and all their equivalent variants sold under different brand names.

# 2 Reason for Field Safety Corrective Action (FSCA)\* 1. Description of the product problem\* Updated in FSN rev 2: Normal level control - LOT B1122N may have hemolysis or deterioration due to a microbial contamination. MCV results measured with control LOT B1122N are discrepant from the values specified in the assay sheet. The values measured with the normal level control are about 20% higher than specified. This alteration affects the calculated Hematocrit and MCHC parameters derived from the MCV values, too. The low (LOT B1122L) and high (LOT B1122H) level controls show no signs of contamination and can therefore be safely used for daily quality control of the analyzers.



diatron

FSCA Ref: FSCAHE20221110

2. Hazard giving rise to the FSCA\*

The control is a process control used to monitor instrument performance and have no impact on patient results.

#### Addition in FSN rev 2:

The instrument performs a cleaning procedure between each measurement with a cleaning solution, including the sampling probe and the internal fluidic system as well. The aim of this cleaning is to remove all residual material from the previous test, in order to prevent any carry-over of the measured parameters. Even in the theoretical case of a residual microbiological contamination of the instrument, it would need several hours or days to manifest (microbial growth) in the patient sample. Since each measurement takes only maximum 2 minutes before the next cleaning step an impact on patient results is more than unlikely.

Probability of problem arising

. Updated in FSN rev 2:

The probability is difficult to estimate, potentially any vial of LOT: B1122N can be affected.

4. Predicted risk to patient/users

. Updated in FSN rev 2:

Follow-up or review patients' previous results is not required.

Justification: The control is supplied with established assay values for Diatron hematology instruments and is read via Barcode Reader. In case of measured out of range values of the provided ranges, the instrument shows a warning flag to the user. In such a case, according to the standards of Good Laboratory practice, no patient results can be reported until the cause is definitively investigated.

2 5. Further information to help characterise the problem

. Updated in FSN rev 2:

Diatron recommends to inspect each control vial for deterioration before use. This can be detected as followed:

Signs of hemolysis or deterioration of controls by professional user at the end-customer site include the observation of an unclear separation between the blood cells and the supernatant, a very dark red supernatant on visual inspection. In case of any suspicion of hemolysis or deterioration, the vial must be discarded immediately and excluded further use. This also applies in case of a warning flag of the instrument due to a measured value outside the measuring range specified in the assay sheet.

Background on Issue

R&D Systems, Bio-Techne Co. (OEM manufacturer of the control) informed Diatron MI in an Important Product Notification document that LOT B1122N, Normal Level may exhibit hemolysis or deterioration due to a microbial contamination. R&D Systems has initiated a recall of R&D CBC-3D LOT B1122N which is the same product and LOT as Diatron MI product.

Other information relevant to FSCA

Updated in FSN rev 2: (this section was moved to 3.1)

N/A





	3. Type of Action to mitigate the risk*
3.	Action To Be Taken by the User*
	☐ Identify Device ☐ Quarantine Device ☐ Return Device ☐ Destroy Device
	☐ On-site device modification/inspection
	☐ Follow patient management recommendations
	☐ Take note of amendment/reinforcement of Instructions For Use (IFU)
	☑ Other ☐ None
	Addition in FSN rev 2:
	<ol> <li>Identify normal control LOT: B1122N in your stock and discard the vials</li> <li>LOW level and HIGH level controls do not show signs of contamination and can be safely used for the daily QC of the analyzers.</li> </ol>
	3) If vials from LOT: B1122N normal control was used in any device, the device fluidics system shall be decontaminated as per the User Manual. If any LOW or HIGH level control was also tested in the same time, these control vials must also
	<ul> <li>be discarded as a purely precautionary measure.</li> <li>4) LOW, NORMAL and HIGH controls can be inspected for signs of hemolysis or deterioration:</li> </ul>
	<ul> <li>a. Signs of hemolysis or deterioration include observing an unclear separation between the blood cells and the supernatant, a very dark red supernatant or obtaining unacceptable results when the control is run on the hematology analyzer.</li> <li>5) If signs of hemolysis or deterioration are noted, discard the tube per the Instructions for Use. Do not use the product if hemolysis or deterioration is suspected.</li> </ul>
3.	By when should the action be completed?  modified to 2022.12.16
3.	Particular considerations for:
	Is follow-up of patients or review of patients' previous results recommended?
	Control measurements does not affect the patient reportable results.
	Addition in FSN rev 2: When the results measured with the control material that is used in a test run is out of the acceptable range, the run is considered to be "out of control". In this case the testing process should be stopped and the technologist must immediately identify and correct problems. Once possible sources of error have been identified and corrections have been made, the control material should be rechecked. If they read correctly, then patient samples, along with another control measurement, should be repeated. Patient results





	m pe	<b>eust not be reported</b> until the problem is erformance.	s resolved and the co	ontrols indicate proper
3.		Is customer Reply Required? * yes, form attached specifying deadline	for return)	Yes
3.	5.	Action Being Taken by the Manu  ☐ Product Removal ☐ Software upgrade ☐ Other ☐ None	vice modification/inspe	ection
3	6.	By when should the modificaction be completed?	ed to 2022.12.16	
3.	7.	Is the FSN required to be communicated /lay user?	ed to the patient	No
3	8.	If yes, has manufacturer provided additional user in a patient/lay or non-professional N/A	itional information su al user information le	itable for the patient/lay tter/sheet?

	4.	General Information*
4.	1. FSN Type*	Update
4.	For updated FSN, reference number and date of previous FSN	Number: FSNHE20221110-09 Date: 14 <sup>th</sup> November, 2022
4.	3. For Updated FSN, key new information	ation as follows:
	was a more detailed explanation of the regarding a more specified risk assess relevant and below listed sections:  - Section 2.1: Description of the Section 2.2: Hazard giving rise - Section 2.4: Predicted risk to pa	to the FSCA (addition) atient/users (update) to help characterise the problem (update) elevant to FSCA (update) by the User (addition)
4.	Further advice or information already expected in follow-up FSN? *	No
4	If follow-up FSN expected, what is t     N/A	he further advice expected to relate to:





FSCA Ref: FSCAHE20221110

4	<ol><li>Anticipated timescale for follow- up FSN</li></ol>	N/A
4.	7. Manufacturer information (For contact details of local representative	e refer to page 1 of this FSN)
	a. Company Name	Diatron MI Plc
	b. Address	Táblás u. 39, 1097 Budapest, Hungary
	<ul> <li>c. Website address</li> </ul>	www.diatron.com
4.	communication to customers: Yes	
4.	List of attachments/appendices:	Field Safety Notice Distributor Reply Form ver2; Field Safety Notice Customer Reply Form ver2
4.	10. Name/Signature	Insert Name and Title here and signature below

Transmission of this Field Safety Notice
This notice needs to be passed on all those who need to be aware within your organisation or to any organisation where the potentially affected devices have been transferred. (As appropriate)
Please transfer this notice to other organisations on which this action has an impact. (As appropriate)
Please maintain awareness on this notice and resulting action for an appropriate period to ensure effectiveness of the corrective action.
Please report all device-related incidents to the manufacturer, distributor or local representative, and the national Competent Authority if appropriate, as this provides important feedback*

Note: Fields indicated by  $^{\star}$  are considered necessary for all FSNs. Others are optional. Date: 2022. December 02.

Rev 1: September 2018 FSN Ref: FSNHE20221110-19 ver2



FSCA Ref: FSCAHE20221110

Date: 2022, December 02.

### Urgent Field Safety Notice Device Commercial Name

For Attention of\*:

LumiraDx B.V.

Quality Assurance and Regulatory Responsible

Contact details of local representative (name, e-mail, telephone, address etc.)\*

Uwe Klimpe

Uwe.Klimpe@LumiraDx.com;

1728123263

Bijsterhuizen 30-41 6604 LV Wijchen

### Important Note to updated Field Safety Notice:

This Field Safety Notice (FSN) is an update of the original FSN document (document number: FSNHE20221110-19, dated: November 14, 2022). The reason for the change was a more detailed explanation of the information described in the original FSN mainly regarding a more specified risk assessment. The changes compared to the previous FSN are marked in the corresponding sections of this document.

Please notify the affected end users of this updated FSN documentation and request a confirmation of its receipt in the context of a customer reply form.



## Urgent Field Safety Notice (FSN) Device Commercial Name Risk addressed by FSN

	1. Information on Affected Devices*
1	1. Device Type(s)*
15	Hematology control
1	Commercial name(s)
٠	LUMIRATEK H3 CONTROL KIT 3x2x3.0 mL
1	Unique Device Identifier(s) (UDI-DI)
1	Primary clinical purpose of device(s)*
	The control is a process control used to monitor instrument performance
1	Device Model/Catalogue/part number(s)*
	10031738
1	6. Software version
	Not relevant
1	Affected serial or lot number range
	LOT: B1122N (Normal control)
1	Associated devices
*	This product is a hematology control used on 3-part hematology analyzers manufactured by Diatron as product families of Abacus 3, Abacus Junior 30, Abacus 380, Aquila, Abacus 3 CT, and all their equivalent variants sold under different brand names.

	2 Reason for Field Safety Corrective Action (FSCA)*
2	Description of the product problem*
	Updated in FSN rev 2:
	Normal level control - LOT B1122N may have hemolysis or deterioration due to a microbial contamination.
	MCV results measured with control LOT B1122N are discrepant from the values specified in the assay sheet. The values measured with the normal level control are about 20% higher than specified. This alteration affects the calculated Hematocrit and MCHC parameters derived from the MCV values, too.
	The low (LOT B1122L) and high (LOT B1122H) level controls show no signs of contamination and can therefore be safely used for daily quality control of the analyzers.
2	Hazard giving rise to the FSCA*
	The control is a process control used to monitor instrument performance and have no impact on patient results.
	Addition in FSN rev 2:





FSCA Ref: FSCAHE20221110

The instrument performs a cleaning procedure between each measurement with a cleaning solution, including the sampling probe and the internal fluidic system as well. The aim of this cleaning is to remove all residual material from the previous test, in order to prevent any carry-over of the measured parameters. Even in the theoretical case of a residual microbiological contamination of the instrument, it would need several hours or days to manifest (microbial growth) in the patient sample. Since each measurement takes only maximum 2 minutes before the next cleaning step an impact on patient results is more than unlikely. 3. Probability of problem arising Updated in FSN rev 2:

The probability is difficult to estimate, potentially any vial of LOT: B1122N can be affected.

Predicted risk to patient/users

Updated in FSN rev 2:

Follow-up or review patients' previous results is not required.

Justification: The control is supplied with established assay values for Diatron hematology instruments and is read via Barcode Reader. In case of measured out of range values of the provided ranges, the instrument shows a warning flag to the user. In such a case, according to the standards of Good Laboratory practice, no patient results can be reported until the cause is definitively investigated.

2 Further information to help characterise the problem Updated in FSN rev 2:

Diatron recommends to inspect each control vial for deterioration before use. This can be detected as followed:

Signs of hemolysis or deterioration of controls by professional user at the end-customer site include the observation of an unclear separation between the blood cells and the supernatant, a very dark red supernatant on visual inspection. In case of any suspicion of hemolysis or deterioration, the vial must be discarded immediately and excluded further use. This also applies in case of a warning flag of the instrument due to a measured value outside the measuring range specified in the assay sheet.

2 6. Background on Issue

- R&D Systems, Bio-Techne Co. (OEM manufacturer of the control) informed Diatron MI in an Important Product Notification document that LOT B1122N, Normal Level may exhibit hemolysis or deterioration due to a microbial contamination. R&D Systems has initiated a recall of R&D CBC-3D LOT B1122N which is the same product and LOT as Diatron MI product.
- 2 Other information relevant to FSCA
- Updated in FSN rev 2: (this section was moved to 3.1)

N/A

### 3. Type of Action to mitigate the risk\*





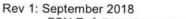
3.	1.	Action To Be T	aken b	y the User*		
		□ Identify Device	⊠ Qua	rantine Device	☐ Return Device	ce 🛮 Destroy Device
		☐ On-site device m	odificatio	n/inspection		
		☐ Follow patient ma	anageme	nt recommendati	ons	
		☐ Take note of ame	endment/	reinforcement of	nstructions For Use (	IFU)
		⊠ Other	□ Non	е		
	Add	dition in FSN rev 2:				
		be safely used	for the	evel controls do daily QC of the	analyzers	contamination and can
		HIGH level con be discarded a	shall be trol was s a pure	e decontaminate also tested in t ly precautionary	ed as per the User ne same time, these measure.	any device, the device Manual. If any LOW or control vials must also
		a. Signs separat	of hem	olysis or dete	rioration include o	r signs of hemolysis or observing an unclear natant, a very dark red
		5) If signs of he Instructions for suspected.	natology molysis Use. [	analyzer. or deterioration	n are noted, disc.	en the control is run on ard the tube per the sis or deterioration is
3.		By when should the action be complete		modified to 20	22.12.16	1
3.	3.	Particular considera	ations fo	r:		
		ls follow-up of patie No	nts or re	eview of patients	s' previous results re	ecommended?
	(	Control measureme	ents doe	s not affect the	patient reportable re	esults.
	Whe	ition in FSN rev 2: en the results meas	ured wit	h the control ma	aterial that is used in	n a test run is out of n this case the testing
	prob	ess should be stop lems. Once possible made, the control	ped and le source materia	the technologises of error have s of should be rech	it must immediately been identified and lecked. If they read	identify and correct I correctly, then patient
	mus	t not be reported	otner co	ntrol measurem	ent, should be repeal lived and the contro	ated Patient recults
3.	4. I	ormance. s customer Reply R es, form attached sp	Required	? *		Yes
			J J 19		GIII)	





3.	5.	Action Being Taken	by the Manufacturer		
		<ul><li>☑ Product Removal</li><li>☐ Software upgrade</li><li>☐ Other</li></ul>	<ul> <li>□ On-site device modification/insper</li> <li>□ IFU or labelling change</li> <li>□ None</li> </ul>	ection	
3	6.	By when should the action be completed?	modified to 2022.12.16		
3.	7.	Is the FSN required to be /lay user?	pe communicated to the patient	No	
3	8.	If yes, has manufacture user in a patient/lay or r N/A	r provided additional information su non-professional user information le	uitable for the etter/sheet?	ne patient/lay

	4.	General Information*
4.	1. FSN Type*	Update
4.	For updated FSN, reference number and date of previous FSN	Number: FSNHE20221110-19 Date: 14 <sup>th</sup> November, 2022
4.	<ol><li>For Updated FSN, key new inform</li></ol>	nation as follows:
	was a more detailed explanation of the regarding a more specified risk assess relevant and below listed sections:  - Section 2.1: Description of the - Section 2.2: Hazard giving risk - Section 2.4: Predicted risk to p	e to the FSCA (addition) patient/users (update)
	<ul> <li>Section 2.7: Other information</li> <li>Section 3.1: Action To Be Take</li> <li>Section 3.3: Particular consider</li> </ul>	en by the User (addition)
4.	<ul> <li>Section 2.7: Other information</li> <li>Section 3.1: Action To Be Take</li> </ul>	relevant to FSCA (update) en by the User (addition)
	<ul> <li>Section 2.7: Other information</li> <li>Section 3.1: Action To Be Take</li> <li>Section 3.3: Particular consider</li> <li>Further advice or information already expected in follow-up FSN? *</li> </ul>	relevant to FSCA (update) en by the User (addition) erations (addition)  No
4.	<ul> <li>Section 2.7: Other information</li> <li>Section 3.1: Action To Be Take</li> <li>Section 3.3: Particular consider</li> <li>Further advice or information already expected in follow-up FSN? *</li> </ul>	relevant to FSCA (update) en by the User (addition) erations (addition)
	<ul> <li>Section 2.7: Other information</li> <li>Section 3.1: Action To Be Take</li> <li>Section 3.3: Particular consider</li> <li>4. Further advice or information already expected in follow-up FSN? *</li> <li>5. If follow-up FSN expected, what is</li> </ul>	relevant to FSCA (update) en by the User (addition) erations (addition)  No
4	<ul> <li>Section 2.7: Other information</li> <li>Section 3.1: Action To Be Take</li> <li>Section 3.3: Particular consider</li> <li>Further advice or information already expected in follow-up FSN? *</li> <li>If follow-up FSN expected, what is N/A</li> <li>Anticipated timescale for follow-up FSN</li> <li>Manufacturer information</li> </ul>	relevant to FSCA (update) en by the User (addition) erations (addition)  No  the further advice expected to relate to:  N/A
4	<ul> <li>Section 2.7: Other information</li> <li>Section 3.1: Action To Be Take</li> <li>Section 3.3: Particular consider</li> <li>4. Further advice or information already expected in follow-up FSN? *</li> <li>5. If follow-up FSN expected, what is N/A</li> <li>6. Anticipated timescale for follow-up FSN</li> <li>7. Manufacturer information (For contact details of local representative)</li> </ul>	relevant to FSCA (update) en by the User (addition) erations (addition)  No  the further advice expected to relate to:  N/A  refer to page 1 of this FSN)
4	<ul> <li>Section 2.7: Other information</li> <li>Section 3.1: Action To Be Take</li> <li>Section 3.3: Particular consider</li> <li>Further advice or information already expected in follow-up FSN? *</li> <li>If follow-up FSN expected, what is N/A</li> <li>Anticipated timescale for follow-up FSN</li> <li>Manufacturer information</li> </ul>	relevant to FSCA (update) en by the User (addition) erations (addition)  No  the further advice expected to relate to:  N/A





FSCA Ref: FSCAHE20221110

4.	<ol><li>The Competent (Regulatory) Authority of your country has been informed about the communication to customers: Yes</li></ol>	
4.	9. List of attachments/appendices:	Field Safety Notice Distributor Reply Form ver2; Field Safety Notice Customer Reply Form ver2
4.	10. Name/Signature	Insert Name and Title here and signature below
		3

Transmission of this Field Safety Notice
This notice needs to be passed on all those who need to be aware within your organisation or to any organisation where the potentially affected devices have been transferred. (As appropriate)
Please transfer this notice to other organisations on which this action has an impact. (As appropriate)
Please maintain awareness on this notice and resulting action for an appropriate period to ensure effectiveness of the corrective action.
Please report all device-related incidents to the manufacturer, distributor or local representative, and the national Competent Authority if appropriate, as this provides important feedback*

Note: Fields indicated by  $^*$  are considered necessary for all FSNs. Others are optional. Date: 2022. December 02.