

FSN Ref: 2021-01-29-03

FSCA Ref: 2021-01-29-03

Date: 08/26/2021

Urgent Field Safety Notice

EXACTECH GXL LINERS FOR NOVATION, ACUMATCH, AND MCS SYSTEMS

For Attention of:

Marco Migliori, Country Manager Exactech Italia S.p.A. via Bonfadina 65 25046 Cazzago San Martino (BS) Italy Office: +39 030 7283433 Fax: +39 030 7283434 Email: marco.migliori@exacitalia.com

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Urgent Field Safety Notice

EXACTECH GXL LINERS FOR NOVATION, ACUMATCH, AND MCS SYSTEMS

| | 1. Information on Affected Devices |
|----|---|
| 1. | 1. Device Type(s) |
| | EXACTECH GXL LINERS FOR NOVATION, ACUMATCH, AND MCS SYSTEMS |
| 1. | 2. Commercial name(s) |
| | See Attachment 1 |
| 1. | 3. Unique Device Identifier(s) (UDI-DI) |
| | See Attachment 1 |
| 1. | 4. Primary clinical purpose of device(s) |
| | <u>Novation GXL Liners:</u> All Exactech Hip Systems are indicated for use in skeletally mature individuals undergoing primary surgery for hip replacement due to osteoarthritis, rheumatoid arthritis, osteonecrosis, post-traumatic degenerative problems of the hip, and for treatment of proximal femoral fractures where prosthetic replacement is determined by the surgeon as the preferred treatment. Components of Exactech Hip Systems are also potentially indicated for ankylosing spondylitis, congenital hip dysplasia, revision of failed previous reconstructions where sufficient bone stock is present, and to restore mobility resulting from previous fusion. Cemented femoral stems and cemented acetabular cups are intended for cemented fixation only. Press-fit femoral stems and acetabular cups are intended for press-fit fixation. Femoral heads and endoprostheses are intended for use in cemented and press-fit applications. |
| | Acumatch GXL Liners: All Exactech Hip Systems are indicated for use in skeletally mature individuals undergoing primary surgery for hip replacement due to osteoarthritis, rheumatoid arthritis, osteonecrosis, post-traumatic degenerative problems of the hip, and for treatment of proximal femoral fractures where prosthetic replacement is determined by the surgeon as the preferred treatment. Components of Exactech Hip Systems are also potentially indicated for ankylosing spondylitis, congenital hip dysplasia, revision of failed previous reconstructions where sufficient bone stock is present, and to restore mobility resulting from previous fusion. |

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| | Cemented femoral stems and cemented acetabular cups are intended for cemented fixation only. | | | |
|----|--|--|--|--|
| | • Press-fit femoral stems and acetabular cups are intended for press-fit fixation. | | | |
| | Femoral heads and endoprostheses are intended for use in cemented and press- fit applications. | | | |
| | MCS GXL Liners: | | | |
| | The Exactech Porous Coated Total Hip System is indicated for use in skeletally | | | |
| | mature individuals undergoing primary surgery for total hip replacement due to | | | |
| | osteoarthritis, rheumatoid arthritis, osteonecrosis, ankylosing spondylitis, congenital | | | |
| | hip dysplasia, and post-traumatic degenerative problems of the hip. It is also | | | |
| | potentially indicated for revision of failed previous reconstructions where sufficient | | | |
| | bone stock is present. | | | |
| | | | | |
| 1. | 5. Device Model/Catalogue/part number(s) | | | |
| | See Attachment 1 | | | |
| 1. | 6. Software version | | | |
| | Not Applicable | | | |
| 1. | 7. Affected serial or lot number range | | | |
| | All Serial Numbers | | | |
| 1. | 8. Associated devices | | | |
| | Not Applicable | | | |

| | 2 Reason for Field Safety Corrective Action (FSCA) |
|---|--|
| 2 | 1. Description of the product problem |
| • | Journal articles have been published which identified a number of revision surgeries due to excessive wear for the related GXL Liners for NOVATION, ACUMATCH, and MCS Systems |
| 2 | 2. Hazard giving rise to the FSCA |
| • | A number of variables including user error, implant positioning, patient factors, and implant size selection (fitness for surgery, biomechanics, activity level and local tissue oxidation potential) could have all contributed to the increased trend in complaints. Literature also shows that surgical approach (1) and implant positioning (2) can impact the wear performance of total hip arthroplasty: 1. Watanabe K, Mitsui K, Usuda Y, Nemoto K.; An increase in the risk of excessive femoral anteversion for relatively younger age and types of femoral morphology in total hip arthroplasty with direct anterior approach.; The Journal of Orthopaedic Surgery 2019; 27 (2), 1-6. |



| | 2. Mayeda BF, Haw JG, Battenberg AK, Schmalzried TP.; Femoral-Acetabular Mating: | | |
|---|---|--|--|
| | The Effect of Femoral and Combined | | |
| | | | |
| | | | |
| 2 | 3. Probability of problem arising | | |
| • | Based upon Exactech's health hazard evaluation, the likelihood of occurrence is very low | | |
| | (0.47%) considering the number of variables that could contribute to excessive wear. | | |
| 2 | 4. Predicted risk to patient/users | | |
| • | From the output of the Health Hazard Evaluation indicate the anticipated risk (product of | | |
| | severity x probability) of patient/end user harm (direct or indirect). | | |
| 2 | 5. Further information to help characterise the problem | | |
| • | Reference the Dear Healthcare Professional Letter (DHCP) and the Frequently Asked | | |
| | Questions (FAQ). | | |
| 2 | 6. Background on Issue | | |
| | Over the past 9 months Exactech has become aware of the three journal articles that have | | |
| | been published or submitted for publication which identified a number of revisions due to | | |
| | excessive wear for GXL Liners. The total number of cases that were reported in these | | |
| | articles is 19. | | |
| | • Early Polyethylene Failure in a Modern Total Hip Prosthesis: A Note of Caution; | | |
| | Thomas, Parvataneni, Vlasak, and Gray; The Journal of Arthroplasty, 35, 2020, | | |
| | 1297-11302 | | |
| | • Early Failure of Modern Moderately Cross-Linked Polyethylene Acetabular Liner; | | |
| | Kahlenberg, Menken, Ranawat, and Rodriguez; Arthroplasty Today, 6, 2020, 224- | | |
| | 226 | | |
| | • Unexpected Wear of a Moderately Crosslinked Polyethylene in Total Hip | | |
| | Arthropolasty; Yakkanti, Ocksrider, Patel, Kolevar, Moore, Rimnac, Kraay, | | |
| 1 | Wright, Baral, Robinson; Abstract for AAOS (future publication) | | |
| 1 | | | |
| 2 | 7. Other information relevant to FSCA | | |
| | None | | |
| | | | |



| | 3. Type of Action to mitigate the risk | | | | |
|----|--|--|---|---------------|-----------|
| 3. | 1. | Action To Be Taken by the User | | | |
| | | □ Identify Device □ Qu Device | uarantine Device \Box Re | eturn Device | □ Destroy |
| | | □ On-site device modificat | ion/inspection | | |
| | | ☑ Follow patient managem | ent recommendations | | |
| | | \Box Take note of amendment | t/reinforcement of Instructions | For Use (IFU) | |
| | | \Box Other \Box No | ne | | |
| | | Provide further details of th | e action(s) identified. | | |
| 3. | 2. | By when the action should be completed? | Distributors to immediately relay the Dear Healthcare Professional Letter (DHCP) and the Frequently Asked Questions (FAQ) for the appropriate Surgeon that had performed surgeries involving the affected devices noted within Attachment 1. This Field Safety Notice (FSN) should be signed and returned within 15 business days. | | |
| 3. | 3. | Particular considerations fo | r: Implantable devi | ce | |
| | | Is follow-up of patients or review of patients' previous results recommended? Yes | | | ded? |
| 3. | 4. | Is customer Reply Required | 1? | No | |
| 3. | 5. | Action Being Taken by th | e Manufacturer | | |
| | | Product Removal Software upgrade Other Provide further details of the | □ On-site device modification □ IFU or labelling change ☑ None action(s) identified. | n/inspection | |
| 3 | 6. | By when should the action be completed? | This Field Safety Notice (FS) returned within 15 business of | | ned and |

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| 3. | 7. | Is the FSN required to be communicated to the patient | No |
|----|--|---|--------------|
| | | /lay user? | |
| 3 | 8. If yes, has manufacturer provided additional information suitable for the patient/lay | | |
| | | user in a patient/lay or non-professional user information la | etter/sheet? |
| | | | |

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| | 4. | General Information |
|----|--|--|
| 4. | 1. FSN Type | New |
| 4. | 2. For updated FSN, reference number and date of previous FSN | Not Applicable |
| 4. | 3. For Updated FSN, key new inform | ation as follows: |
| | See proposed actions detailed in the I Frequently Asked Questions (FAQ). | Dear Healthcare Professional Letter (DHCP) and |
| 4. | 4. Further advice or information already expected in follow-up FSN? | No |
| | 5. If follow-up FSN expected, what is | s the further advice expected to relate to: |
| 4 | Not Applicable | |
| 4 | 6. Anticipated timescale for follow- up FSN | Not Applicable |
| 4. | 7. Manufacturer information | |
| | (For contact details of local representa | |
| | a. Company Name | Exactech, Inc. |
| | b. Address | 2320 NW 66th Court, Gainesville, FL 32653 |
| | c. Website address | www.exac.com |
| 4. | 8. The Competent (Regulatory) Authority of your country has been informed about this communication to customers. | |
| 4. | 9. List of attachments/appendices: | See Attachment 1 |
| 4. | 10. Name/Signature | Kate Jacobson |
| | | Director Quality Management Systems & |
| | | Compliance |
| | | Signature |
| | | Kate Jaco Isan (Aug 26, 2021 14:24 EDT) |

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)

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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.

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Distributor/Importer Reply Form

| 1. Field Safety Notice Information | | |
|------------------------------------|---|--|
| Correction Notice Ref. no.: | 2021-01-29-03 | |
| Correction Notice Date: | 26:08:2021 | |
| Product/ Device name | EXACTECH GXL LINERS FOR NOVATION, ACUMATCH, AND MCS SYSTEMS | |
| Product Code(s) | See Attachment 1 | |
| Batch/Serial Number (s) | All Serial Numbers | |

| 2. Distributor/Importer Details | | |
|---------------------------------|--|--|
| Company Name | Exactech Italy S.p.A. | |
| Address | via Bonfadina 65 25046 Cazzago San Martino | |
| | (BS) | |
| | Italy | |
| Contact Name | Marco Migliori | |
| Title or Function | Country Manager | |
| Telephone number | +39 030 7283433 | |
| Email | marco.migliori@exacitalia.com | |

| 1. Return acknowledgement to Sender | | |
|---|--|--|
| Email | recalls@exac.com | |
| Distributor/Importer Helpline | +1 800-392-2832 | |
| Postal Address | 2320 NW 66th Court, Gainesville, FL 32653 USA | |
| Web Portal | www.exac.com | |
| Deadline for returning the Distributor/Importer | Within 15 business days of receipt of Field Safety | |
| reply form* | Notice. | |

| . Distributors/Importers (check all that apply) | | |
|---|---|---|
| | *I confirm the receipt, the reading and | |
| | understanding of the Field Safety | |
| | Notice. | |
| | I have identified customers that | |
| | received or may have received this | |
| | device. | |
| | Distrib | *I confirm the receipt, the reading and understanding of the Field Safety Notice. I have identified customers that received or may have received this |

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| | I have informed the identified customers of this Field Safety Notice and that Exactech is required to follow up with any patients who have had the affected devices implanted. | Date of communication: |
|------------|--|------------------------|
| Print Name | | |
| Signature | | |
| Date | | |

It is important that your organization confirms that you have received the Field Safety Notice and takes the actions detailed in this Field Safety Notice.

Your organization's reply is the evidence we need to monitor the progress of the proposed actions.

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DRAFT_Exactech Field Safety Notice_EN_IT(2)

Final Audit Report

2021-08-26

| Created: | 2021-08-26 |
|-----------------|--|
| Ву: | Damon Speight (damon.speight@exac.com) |
| Status: | Signed |
| Transaction ID: | CBJCHBCAABAAFcpi7-shP6Eff9ISrzxpaZUuTgP7VpCI |
| | |

"DRAFT_Exactech Field Safety Notice_EN_IT(2)" History

- Document created by Damon Speight (damon.speight@exac.com) 2021-08-26 - 6:22:54 PM GMT- IP address: 98.180.91.86
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CRC2021-01-29-03 - GXL Liners

Attachment 1: Product Information (EU)

<u>The Brand Name and The Common Name, Classification Name, Or Usual Name Of The Device</u> <u>And The Intended Use Of The Device.</u>

The GXL Liners for Novation, Acumatch and MCS systems is a finished device provided sterile.

The Brand Name and the Common Name:

*Note, any sales before 2009, were prior to upclass and will not have a CE certificate number

All serial numbers for the following catalog numbers are potentially within the scope of this correction:

| European Country | Catalog Number | Product Description | CE Number | Year First Sold | GTIN |
|---------------------|-------------------|---|--------------|-----------------------|----------------|
| France | | | *Not | | |
| | 130-28-51 | Novation GXL Liner, Neutral, 28mm ID, Group 1 Cups | Applicable | 2008 | 10885862022066 |
| | 130-28-52 | Novation GXL Liner, Neutral, 28mm ID, Group 2 Cups | CE 549082 | 2009 | 10885862022073 |
| | 132-28-51 | Novation GXL Liner, Lipped, 28mm ID, Group 1 Cups | CE 549082 | 2009 | 10885862023155 |
| | 132-28-52 | Novation GXL Liner, Lipped, 28mm ID, Group 2 Cups | CE 549082 | 2009 | 10885862023162 |
| | 132-32-52 | Novation GXL Liner, Lipped, 31mm ID, Group 2 Cups | CE 549082 | 2009 | 10885862023315 |
| | 132-32-53 | Novation GXL Liner, Lipped, 32mm ID, Group 3 Cups | CE 549082 | 2009 | 10885862023322 |
| | 132-32-54 | Novation GXL Liner, Lipped, 32mm ID, Group 4 Cups | CE 549082 | 2009 | 10885862023339 |
| | 132-36-53 | Novation GXL Liner, Lipped, 36mm ID, Group 3 Cups | CE 549082 | 2009 | 10885862023421 |
| Germany | 130-32-51 | Novation GXL Liner, Neutral, 32mm ID, Group 1 Cups | CE 549082 | 2011 | 10885862207074 |
| | 130-32-52 | Novation GXL Liner, Neutral, 32mm ID, Group 2 Cups | CE 549082 | 2010 | 10885862022165 |
| | 130-32-53 | Novation GXL Liner, Neutral, 32mm ID, Group 3 Cups | CE 549082 | 2010 | 10885862022172 |
| | 130-32-54 | Novation GXL Liner, Neutral, 32mm ID, Group 4 Cups | CE 549082 | 2014 | 10885862022189 |
| | 130-32-55 | Novation GXL Liner, Neutral, 32mm ID, Group 5 Cups | CE 549082 | 2015 | 10885862022196 |
| | 130-36-52 | Novation GXL Liner, Neutral, 36mm ID, Group 2 Cups | CE 549082 | 2016 | 10885862207081 |
| | 130-36-53 | Novation GXL Liner, Neutral, 36mm ID, Group 3 Cups | CE 549082 | 2011 | 10885862022233 |
| | 130-36-54 | Novation GXL Liner, Neutral, 36mm ID, Group 4 Cups | CE 549082 | 2011 | 10885862022240 |
| | 130-36-55 | Novation GXL Liner, Neutral, 36mm ID, Group 5 Cups | CE 549082 | 2011 | 10885862022257 |
| | 132-32-51 | Novation GXL Liner, Lipped, 32mm ID, Group 1 Cups | CE 549082 | 2011 | 10885862207029 |
| | 132-36-52 | Novation GXL Liner, Lipped, 36mm ID, Group 2 Cups | CE 549082 | 2011 | 10885862207036 |
| | 136-32-51 | Novation GXL Liner, +5mm Lateralized, 32mm, G1- 48/50mm Cups | CE 549082 | 2010 | 10885862024275 |
| | 136-32-52 | Novation GXL Liner, +5mm Lateralized, 32mm, G2- 52/54mm Cups | CE 549082 | 2011 | 10885862024282 |
| | 136-32-53 | Novation GXL Liner, +5mm Lateralized, 32mm ID, Group 3 Cups | CE 549082 | 2014 | 10885862024299 |
| | 136-32-54 | Novation GXL Liner, +5mm Lateralized, 32mm ID, Group 4 Cups | CE 549082 | 2015 | 10885862024305 |
| | 136-32-55 | Novation GXL Liner, +5mm Lateralized, 32mm ID, Group 5 Cups | CE 549082 | 2015 | 10885862024312 |
| | 136-36-52 | Novation GXL Liner, +5mm Lateralized, 36mm, G2- 52/54mm Cups | CE 549082 | 2011 | 10885862024329 |

| European Country | Catalog Number | Product Description | CE Number | Year First Sold | GTIN |
|---------------------|-------------------|--|--------------------|-----------------------|----------------|
| | 136-36-53 | Novation GXL Liner, +5mm Lateralized, 36mm, G3- 56/58mm Cups | CE 549082 | 2011 | 10885862024336 |
| | 136-36-54 | Novation GXL Liner, +5mm Lateralized, 36mm, G4- 60/62mm Cups | CE 549082 | 2011 | 10885862024343 |
| | 136-36-55 | Novation GXL Liner, +5mm Lateralized, 36mm, G5- 64/66/68mm Cups | CE 549082 | 2012 | 10885862024350 |
| | 138-32-51 | Novation GXL Liner, 10 Deg Face, 32mm ID, Group 1 Cup | CE 549082 | 2012 | 10885862024732 |
| | 138-36-52 | Novation GXL Liner, 10 Deg Face, 32mm ID, Group 2 Cup | CE 549082 | 2011 | 10885862024749 |
| | 138-36-53 | Novation GXL Liner, 10 Deg Face, 32mm ID, Group 3 Cup | CE 549082 | 2011 | 10885862024756 |
| | 138-36-54 | Novation GXL Liner, 10 Deg Face, 32mm ID, Group 4 Cup | CE 549082 | 2012 | 10885862024763 |
| | 138-36-55 | Novation GXL Liner, 10 Deg Face, 32mm ID, Group 5 Cup | CE 549082 | 2014 | 10885862024770 |
| Greece | 132-28-24 | Acumatch GXL 15 Degree Liner, 28mm Size D | *Not Applicable | 2008 | 10885862023063 |
| | 132-28-25 | Acumatch GXL 15 Degree Liner, 28mm Size E | *Not Applicable | 2008 | 10885862023070 |
| | 132-32-55 | Novation GXL Liner, Lipped, 32mm ID, Group 5 Cups | *Not Applicable | 2008 | 10885862023346 |
| Italy | 132-36-54 | Novation GXL Liner, Lipped, 36mm ID, Group 4 Cups | CE 549082 | 2012 | 10885862023438 |
| Portugal | 130-40-53 | Novation GXL Liner, Neutral, 40mm ID, Group 3 Cups | CE 549082 | 2016 | 10885862207098 |
| | 130-40-54 | Novation GXL Liner, Neutral, 40mm ID, Group 4 Cups | CE 549082 | 2015 | 10885862207104 |
| | 132-40-53 | Novation GXL Liner, Lipped, 40mm ID, Group 3 Cups | CE 549082 | 2017 | 10885862207043 |
| | 132-40-54 | Novation GXL Liner, Lipped, 40mm ID, Group 4 Cups | CE 549082 | 2016 | 10885862207050 |
| Spain | 130-40-55 | Novation GXL Liner, Neutral, 40mm ID, Group 5 Cups | CE 549082 | 2011 | 10885862207111 |
| | 132-22-70 | Novation GXL Liner, G00, 22mm ID | CE 549082 | 2010 | 10885862022967 |
| | 132-40-55 | Novation GXL Liner, Lipped, 40mm ID, Group 5 Cups | CE 549082 | 2010 | 10885862207067 |