Medical Device Advisory



Health Products Regulation Group Health Sciences Authority 11 Biopolis Way #11-03 Helios Singapore 138667 Website: www.hsa.gov.sg

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EXACTECH EQUINOXE SHOULDER SYSTEM WITH DEFECTIVE PACKAGING: OXIDATION RISKS

The Health Sciences Authority (HSA) would like to alert healthcare professionals about possible health risks associated with the Equinoxe Shoulder System joint replacement devices. These devices were manufactured by Exactech between 2004 and August 2021 and were packaged in defective bags.

Background

Equinoxe Shoulder System are joint replacement devices used in skeletally mature adults with degenerative diseases or fractures of the glenohumeral joint, or revision surgery in cases of failed glenohumeral joint replacement. Such joint replacement devices typically include a plastic (polyethylene) articulating component.

Risks of Increased Oxidation of Polyethylene Components

Some Equinoxe Shoulder System devices, manufactured between 2004 and August 2021, were packed in defective bags which had one missing oxygen barrier layer.

Elevated transmission of oxygen could occur from the external environment, leading to unintended oxidation of the polyethylene device component packaged within these defective bags. Early degradation of the polyethylene component can increase the risk of:

- early and excessive device wear,
- component fracture,
- device failure,
- new or worsening pain,
- bone loss,
- swelling in the affected area, or
- revision surgery as a result of these issues.

Affected Equinox Shoulder Devices

Details of Equinoxe Shoulder System implants, packaged in defective bags and previously supplied for implantation of local patients, can be found below.

Catalogue Number	Device Description	Period of Manufacture
314-02-02	GLENOID, PEGGED, CEMENTED, Mates with 38, 41, 44 head, alpha curvature, Small	Between 2004
314-02-13	GLENOID, PEGGED, CEMENTED, Mates with 47, 50, 53 head, beta curvature, Medium	and August 2021
314-02-22	GLENOID, POSTERIOR AUGMENT, PEGGED, CEMENTED, Mates with 38, 41, 44, 47 head, Small, 8°, LEFT	2021

314-13-03	CAGE GLENOID, CEMENTED, Mates with 38, 41, 44 head, alpha	
	curvature, Medium	1
314-13-13	CAGE GLENOID, CEMENTED, Mates with 47, 50, 53 head, beta	1
	curvature, Medium	1
314-13-14	CAGE GLENOID, CEMENTED, Mates with 47, 50, 53 head, beta	1
	curvature, Large	
320-36-00	REVERSE SHOULDER, 36mm Humeral Liner, +0mm	i i
320-36-03	REVERSE SHOULDER, 36mm Humeral Liner, +2.5mm	I
320-38-00	REVERSE SHOULDER, 38mm Humeral Liner, +0mm	1
320-38-03	REVERSE SHOULDER, 38mm Humeral Liner, +2.5mm	1
320-38-10	REVERSE SHOULDER, 38mm Constrained Humeral Liner, +0mm	1
320-38-13	REVERSE SHOULDER, 38mm Constrained Humeral Liner, +2.5mm	1
320-42-00	REVERSE SHOULDER, 42mm Humeral Liner, +0mm	I
320-42-10	REVERSE SHOULDER, 42mm Constrained Humeral Liner, +0mm	

Recommendations for Healthcare Professionals

Healthcare professionals are advised not to implant any Equinoxe Shoulder Systems packaged in defective bags. See Appendix A for the full list of impacted devices.

Prophylactic removal of a well-functioning device from patients who are not experiencing new or worsening symptoms is not recommended.

Monitor patients implanted with affected Equinoxe Shoulder System devices that were manufactured between 2004 and August 2021, for potential device wear, failure, or bone loss. Where device failure is suspected, X-ray examination to further evaluate the patient and their implanted device should be considered.

Where necessary, discuss the benefits and risks of all relevant treatment options, including revision surgery, with your patients.

Reporting of Adverse Events associated with Equinoxe Shoulder System

Healthcare professionals are reminded to report all adverse events (AE) and/or suspected AEs related to Equinoxe Shoulder System to the Medical Devices Cluster, Health Products Regulation Group, HSA at Tel: 6866 1048, or report online using the e-form below.



AE Reporting e-Form

Confirmation of the causality of the AE is not a prerequisite for reporting to HSA; as long as there is a suspicion that a medical device may be related to a serious adverse event, an AE report may be submitted.

Yours faithfully

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MS WONG WOEI JIUANG ASSISTANT GROUP DIRECTOR MEDICAL DEVICES CLUSTER HEALTH PRODUCTS REGULATION GROUP HEALTH SCIENCES AUTHORITY

Catalogue Number	Device Description		
314-01-02	GLENOID, KEELED, CEMENTED, Mates with 38, 41, 44 head, alpha curvature, Small		
314-01-03	GLENOID, KEELED, CEMENTED, Mates with 38, 41, 44 head, alpha curvature, Medium		
314-01-04	GLENOID, KEELED, CEMENTED, Mates with 38, 41, 44 head, alpha curvature, Large		
314-01-12	GLENOID, KEELED, CEMENTED, Mates with 47, 50, 53 head, beta curvature, Small		
314-01-13	GLENOID, KEELED, CEMENTED, Mates with 47, 50, 53 head, beta curvature, Medium		
314-01-14	GLENOID, KEELED, CEMENTED, Mates with 47, 50, 53 head, beta curvature, Large		
314-01-15	GLENOID, KEELED, CEMENTED, Mates with 47, 50, 53 head, beta curvature, Extra Large		
314-02-02	GLENOID, PEGGED, CEMENTED, Mates with 38, 41, 44 head, alpha curvature, Small		
314-02-03	GLENOID, PEGGED, CEMENTED, Mates with 38, 41, 44 head, alpha curvature, Medium		
314-02-04	GLENOID, PEGGED, CEMENTED, Mates with 38, 41, 44 head, alpha curvature, Large		
314-02-12	GLENOID, PEGGED, CEMENTED, Mates with 47, 50, 53 head, beta curvature, Small		
314-02-13	GLENOID, PEGGED, CEMENTED, Mates with 47, 50, 53 head, beta curvature, Medium		
314-02-14	GLENOID, PEGGED, CEMENTED, Mates with 47, 50, 53 head, beta curvature, Large		
314-02-15	GLENOID, PEGGED, CEMENTED, Mates with 47, 50, 53 head, beta curvature, Extra Large		
314-02-22	GLENOID, POSTERIOR AUGMENT, PEGGED, CEMENTED, Mates with 38, 41, 44, 47 head, Small, 8°, LEFT		
314-02-23	GLENOID, POSTERIOR AUGMENT, PEGGED, CEMENTED, Mates with 41, 44, 47, 50 head, Medium, 8°, LEFT		
314-02-24	GLENOID, POSTERIOR AUGMENT, PEGGED, CEMENTED, Mates with 44, 47, 50, 53 head, Large, 8°, LEFT		
314-02-25	GLENOID, POSTERIOR AUGMENT, PEGGED, CEMENTED, Mates with 44, 47, 50, 53 head, Extra Large, 8°, LEFT		
314-02-32	GLENOID, POSTERIOR AUGMENT, PEGGED, CEMENTED, Mates with 38, 41, 44, 47 head, Small, 8°, RIGHT		
314-02-33	GLENOID, POSTERIOR AUGMENT, PEGGED, CEMENTED, Mates with 41, 44, 47, 50 head, Medium, 8°, RIGHT		
314-02-34	GLENOID, POSTERIOR AUGMENT, PEGGED, CEMENTED, Mates with 44, 47, 50, 53 head, Large, 8°, RIGHT		
314-02-35	GLENOID, POSTERIOR AUGMENT, PEGGED, CEMENTED, Mates with 44, 47, 50, 53 head, Extra Large, 8°, RIGHT		
314-04-22	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 38, 41, 44, 47 head, FOR CEMENTED USE ONLY, Small, 12°, LEFT		
314-04-23	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 41, 44, 47, 50 head, FOR CEMENTED USE ONLY, Medium, 12°, LEFT		
314-04-24	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 44, 47, 50, 53 head, FOR CEMENTED USE ONLY, Large, 12°, LEFT GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 44, 47, 50, 53 head, FOR		
314-04-25	CEMENTED USE ONLY, Extra Large, 12°, LEFT GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 38, 41, 44, 47 head, FOR		
314-04-32	CEMENTED USE ONLY, Small, 12°, RIGHT		
314-04-33	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 41, 44, 47, 50 head, FOR CEMENTED USE ONLY, Medium, 12°, RIGHT		
314-04-34	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 44, 47, 50, 53 head, FOR CEMENTED USE ONLY, Large, 12°, RIGHT		
314-04-35	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 44, 47, 50, 53 head, FOR CEMENTED USE ONLY, Extra Large, 12°, RIGHT		
314-06-22	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 38, 41, 44, 47 head, FOR CEMENTED USE ONLY, Small, 16°, LEFT		
314-06-23	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 41, 44, 47, 50 head, FOR CEMENTED USE ONLY, Medium, 16°, LEFT		
314-06-24	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 44, 47, 50, 53 head, FOR CEMENTED USE ONLY, Large, 16°, LEFT		

Appendix A: Affected Equinoxe Shoulder System devices manufactured between 2004 and August 2021

314-06-25	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 44, 47, 50, 53 head, FOR CEMENTED USE ONLY, Extra Large, 16°, LEFT	
314-06-32	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 38, 41, 44, 47 head, FOR CEMENTED USE ONLY, Small, 16°, RIGHT	
314-06-33	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 41, 44, 47, 50 head, FOR CEMENTED USE ONLY, Medium, 16°, RIGHT	
314-06-34	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 44, 47, 50, 53 head, FOR CEMENTED USE ONLY, Large, 16°, RIGHT	
314-06-35	GLENOID, POSTERIOR AUGMENT, PEGGED, Mates with 44, 47, 50, 53 head, FOR CEMENTED USE ONLY, Extra Large, 16°, RIGHT	
314-13-02	CAGE GLENOID, CEMENTED, Mates with 38, 41, 44 head, alpha curvature, Small	
314-13-03	CAGE GLENOID, CEMENTED, Mates with 38, 41, 44 head, alpha curvature, Medium	
314-13-04	CAGE GLENOID, CEMENTED, Mates with 38, 41, 44 head, alpha curvature, Large	
314-13-13	CAGE GLENOID, CEMENTED, Mates with 47, 50, 53 head, beta curvature, Medium	
314-13-14	CAGE GLENOID, CEMENTED, Mates with 47, 50, 53 head, beta curvature, Large	
314-13-15	CAGE GLENOID, CEMENTED, Mates with 47, 50, 53 head, beta curvature, Extra Large	
314-13-22	CAGE GLENOID, POSTERIOR AUGMENT, CEMENTED, Mates with 38, 41, 44, 47 head, Left, Small	
314-13-23	CAGE GLENOID, POSTERIOR AUGMENT, CEMENTED, Mates with 41, 44, 47, 50 head, Left, Medium	
314-13-24	CAGE GLENOID, POSTERIOR AUGMENT, CEMENTED, Mates with 44, 47, 50, 53 head, Left, Large	
314-13-25	CAGE GLENOID, POSTERIOR AUGMENT, CEMENTED, Mates with 44, 47, 50, 53 head, EXTRA LARGE, Left	
314-13-32	CAGE GLENOID, POSTERIOR AUGMENT, CEMENTED, Mates with 38, 41, 44, 47 head, Right, Small	
314-13-33	CAGE GLENOID, POSTERIOR AUGMENT, CEMENTED, Mates with 41, 44, 47, 50 head, Right, Medium	
314-13-34	CAGE GLENOID, POSTERIOR AUGMENT, CEMENTED, Mates with 44, 47, 50, 53 head, Right, Large	
314-13-35	CAGE GLENOID, POSTERIOR AUGMENT, CEMENTED, Mates with 44, 47, 50, 53 head, EXTRA LARGE, Right	
320-36-00	REVERSE SHOULDER,36mm Humeral Liner, +0mm	
320-36-03	REVERSE SHOULDER,36mm Humeral Liner, +2.5mm	
320-36-10	REVERSE SHOULDER,36mm Constrained Humeral Liner, +0mm	
320-36-13	REVERSE SHOULDER,36mm Constrained Humeral Liner, +2.5mm	
320-38-00	REVERSE SHOULDER,38mm Humeral Liner, +0mm	
320-38-03	REVERSE SHOULDER,38mm Humeral Liner, +2.5mm	
320-38-10	REVERSE SHOULDER,38mm Constrained Humeral Liner, +0mm	
320-38-13	REVERSE SHOULDER,38mm Constrained Humeral Liner, +2.5mm	
320-40-00	Humeral Liner	
320-40-03	Humeral Liner	
320-40-10	Constrained Humeral Liner	
320-40-13	Constrained Humeral Liner	
320-42-00	REVERSE SHOULDER,42mm Humeral Liner, +0mm	
320-42-03	REVERSE SHOULDER,42mm Humeral Liner, +2.5mm	
320-42-10	REVERSE SHOULDER,42mm Constrained Humeral Liner, +0mm	
320-42-13	REVERSE SHOULDER,42mm Constrained Humeral Liner, +2.5mm	
320-44-00	Humeral Liner	
320-44-03	Humeral Liner	
320-44-10	Constrained Humeral Liner	
320-44-13	Constrained Humeral Liner	
320-46-00	REVERSE SHOULDER,46mm Humeral Liner, +0mm	
320-46-03	REVERSE SHOULDER,46mm Humeral Liner, +2.5mm	
320-46-10	REVERSE SHOULDER,46mm Constrained Humeral Liner, +0mm	
320-46-13	REVERSE SHOULDER,46mm Constrained Humeral Liner, +2.5mm	