

Urgent Field Safety Notice

- (1) No-React® BioConduit (NRAC),**
- (2) No-React® BioPulmonic Conduit (NRPC),**
- (3) No-React® Injectable BioPulmonic (NRIP),**
- (4) No-React® BioMitral (NRM),**
- (5) No-React® BioAortic (NRA)**

FSCA-001-22, 2022-04-13

Field Safety Notice – Hold of Product

Date: 2022-04-13

Attention: Distributors of Heart Valves

Details on affected devices:

BioIntegral Surgical, Inc. is asking for a hold to be placed on all bioprosthetic heart valves (1) No-React® BioConduit (NRAC), (2) No-React® BioPulmonic Conduit (NRPC), (3) No-React® Injectable BioPulmonic (NRIP), (4) No-React® BioMitral (NRM), (5) No-React® BioAortic (NRA). This includes an immediate hold on all implantations and sales of the product until results of the investigation are received.

Description of the problem:

BioIntegral Surgical, Inc. is investigating the possible presence of *Mycobacteria chelonae* in products from lot numbers NR200830 and NR201115. We strongly believe that BioIntegral Surgical, Inc. is not the source, however, investigations are underway to determine this. Hazards to the patient include possible infection. However, our sterilization method and storage solution ensure that no growth is possible, as far as we know.

Since we are dealing with valves implanted in Berlin, all for endocarditis, the risk of mortality to the patient is much lower in regards to Mycobacteria, compared to endocarditis itself.

Advise on action to be taken by the user:

- Place a hold on all sales and surgeries using bioprosthetic heart valve products indicated above by BioIntegral Surgical, Inc.
- Await further update from BioIntegral Surgical, Inc. regarding investigation results. This may take up to 3 to 5 weeks or sooner. We will provide a status report as soon as possible.
- For patients implanted with a BioIntegral Surgical, Inc. valve who are presenting fever should be tested for blood and specifically culture Mycobacteria.

Transmission of this Field Safety Notice:

This notice needs to be passed on all those who need to be aware within your organisation (distributors) or to any organisation where the potentially affected devices have been transferred.

Please transfer this notice to other organisations (distributors' customers) on which this action has an impact.

Contact reference person:

Dr. S. Gabbay, MD
Medical Director and CEO

BioIntegral Surgical, Inc.
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The undersign confirms that this notice has been notified the appropriate Regulatory Agency

In short, we at BioIntergal Surgical, Inc. believe that the source of the *Mycobacteria* is the water used in the heat exchangers of the bypass machines. We have received no communication in regard to testing the water system, nor were we given the explants of our products to conduct testing as per our procedures. This FSCA is due to three cases of *Mycobacteria chelonae* that occurred in Berlin in each of 2020, 2021, and 2022 respectively (once per year, but all reported at once; statistically, one per year, thus the benefit of our valve outweighs the risk) and one case in France 2022. Since no hospital in question cooperated with us for the testing of the water, we realize that one laboratory is not enough to produce results- we are unclear why this lab waited over a year to release results from 2020 that were not notified to us- it is beyond our comprehension. To remove all doubt, we will be conducting tests through an independent third-party laboratory on multiple lot numbers in question and will additionally be conducting acid-fast stain testing for every future lot produced to ensure safety of the patients and traceable evidence availability and to reduce our reliance on certain hospitals' cooperation. We will follow-up with articles separately.

We hope to receive results from this investigation as soon as possible to continue helping to save lives of many patients. We believe we will be able to continue to be the company that produces valves able to resist infections better than any other valve in the market.



Dr. S. Gabbay, MD
Medical Director and CEO