510(k) Summary

Submitter: Biocompatibles UK Ltd.
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Contact: Dr. Alistair Taylor

510(k) Numbers and Product Codes of equivalent devices.

Biocure, Inc,
GelSpheres™ Microspheres
510K Number: #023089
Product Code: HCG
CFR Section: 882.5950

Indications for Use and Intended Population

"GelSpheres™/BeadBlock™ Compressible Microspheres are indicated for Embolization of hypervascular tumors and arteriovenous malformations (AVM’s)."

Device Description

GelSpheres™ and BeadBlock™ Compressible Microspheres are preformed soft, deformable microspheres that occlude arteries for the purpose of blocking the blood flow to a target tissue, such as a hypervascular tumor or arteriovenous malformations (AVM’s). GelSpheres™ and BeadBlock Compressible Microspheres consist of a macromer derived from polyvinyl alcohol (PVA). The fully polymerized microsphere is approximately 90% water and is compressible to approximately 20-30% by diameter. GelSpheres™ and BeadBlock Compressible Microspheres is dyed blue to aid in the visualization of the microspheres in the delivery syringe. The microspheres can be delivered through typical microcatheters in the 1.8-5Fr range.

GelSpheres™ Compressible Microspheres is supplied sterile and packaged in sealed glass vials. BeadBlock™ Compressible Microspheres is supplied sterile and packaged in a polycarbonate syringe. Two quantities will be available in a vial: (1) 1.0 mL GelSpheres™/BeadBlock™ Compressible
Microspheres in sterile physiologic buffered saline (PBS) to a volume of 8 mL, and (2) 2.0mL GelSpheres™/BeadBlock™ Compressible Microspheres in sterile PBS to a volume of 8 mL.

GelSpheres™ and BeadBlock Compressible Microspheres are supplied in several unit sizes covering the range from 100μm to 1200μm diameter. At the time of use, GelSpheres™/BeadBlock™ Compressible Microspheres is mixed with a nonionic contrast agent, e.g. Omnipaque, to make a 30-50% by weight solution. The bolus of contrast agent elutes from the vascular bed to leave a radiolucent, embolized vessel.

**Similarities and Differences to Predicates**

The Intended Use of GelSpheres™/BeadBlock™ Compressible Microspheres and the predicate device are the same and unchanged other than product names. This pre-market notification addresses the change of the final packager from Biocure, Inc to Biocompatibles UK LTD.

There are more similarities than differences when comparing Biocompatibles, GelSpheres™/BeadBlock™ to the predicate devices.

**Performance Standards**

GelSpheres™/BeadBlock Compressible Microspheres meet the following Performance Standards:

- Guidance For Industry; 2000: FDA Guidance for Neurological Embolization Products
- ISO/EN 10993-4; 1993 Biological Evaluation of Medical Devices, Part 4: Selection of tests for interaction with blood.
Biocompatibles UK Ltd.

510(k) Pre-Market Notification

GelSpheres™ Compressible Microspheres
BeadBlock™ Compressible Microspheres

- AAMI TIR 22; 1998 – Guidance for application of EN 11607, Packaging for terminally sterilized products
- EN 554: Sterilization of Medical Devices – validation and Routine Control of Sterilization by Moist Heat

Conclusion

There are more similarities than differences between the predicate device and the Biocompatibles GelSpheres™/BeadBlock™ Compressible Microspheres. The product and primary packaging are identical and unchanged from K023089. The predicate device and GelSpheres™/BeadBlock™ Compressible Microspheres have the same intended use, warnings and contraindications. The predicate device and GelSpheres™/BeadBlock™ Compressible Microspheres are identical in design, and unchanged from K023089. When used in accordance with the instructions for use, by qualified personnel, the Biocompatibles GelSpheres™/BeadBlock™ Compressible Microspheres are safe and effective, as indicated, for the intended use.
Biocompatibles U.K. Ltd  
c/o Mr. John Greenbaum  
Generic Devices Consulting  
20310 SW 48th Street  
Ft. Lauderdale, Florida 33332

Re: K033761  
Trade/Device Name: Gelspheres™ Embolic Agent/Beadlock™ Embolic Agent  
Regulation Number: 21 CFR 882.5950  
Regulation Name: Artificial Embolization Device  
Regulatory Class: III  
Product Code: HCG  
Dated: November 28, 2003  
Received: December 8, 2003

Dear Mr. Greenbaum:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA’s issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act’s requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.
This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4659. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html

Sincerely yours,

Miriam O. Provost
for
Celia M. Witten, Ph.D., M.D.
Director
Division of General, Restorative and Neurological Devices
Office of Device Evaluation
Center for Devices and Radiological Health

Enclosure
Indications for Use

510(k) Number (if known): K033761

Device Name: GelSpheres™ Embolic Agent/Beadlock™ Embolic Agent

Indications For Use: GelSpheres™ Compressible Microsphere and BeadBlock™ Compressible Microspheres are intended for embolization of hypervascular tumors and arteriovenous malformations.

Prescription Use \(\checkmark\) AND/OR Over-The-Counter Use

(Please do not write below this line—continue on another page if needed)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Miriam C. Nachamkin
Division Sign-Off
Division of General, Restorative and Neurological Devices

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