DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
10903 New Hampshire Avenue
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January 13, 2017

Endomagnetics, Ltd
Dr. Andrew Shawcross
Chief Operations Officer
The Jeffreys Building
Cowley Road
Cambridge CB4 OWS UK

Re: K163541
Trade/Device Name: Magseed Magnetic Marker System
Regulation Number: 21 CFR 878.4300
Regulation Name: Implantable clip
Regulatory Class: Class II
Product Code: PBY
Dated: December 13, 2016
Received: December 16, 2016

Dear Dr. Shawcross:

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. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to 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); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); 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.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

David Krause -S

for Binita S. Ashar, M.D., M.B.A., F.A.C.S.
Director
Division of Surgical Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Food and Drug Administration

Indications for Use

Form Approved: OMB No. 0910-0120
Expiration Date: January 31, 2017
See PRA Statement on last page.

510(k) Number *(if known)* K163541

Device Name Endomag Magseed Magnetic Marker

Indications for Use *(Describe)*

The Endomag Magseed Magnetic Marker is intended to be placed percutaneously in the breast to mark temporarily (< 30 days) a lumpectomy site intended for surgical removal. Using imaging guidance (such as ultrasound or radiography) or aided by non-imaging guidance (Endomag Sentimag® System) the Endomag Magseed Magnetic Marker is located and surgically removed with the target tissue.
The Endomag Sentimag® System is intended for the non-imaging detection and localization of the "Endomag Magseed Magnetic Marker" that has been implanted in a lumpectomy site intended for surgical removal.

Type of Use *(Select one or both, as applicable)*

☒ Prescription Use (Part 21 CFR 801 Subpart D) ☐ Over-The-Counter Use (21 CFR 801 Subpart C)

PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON A SEPARATE PAGE IF NEEDED.

FOR FDA USE ONLY

Concurrence of Center for Devices and Radiological Health (CDRH) *(Signature)*

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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1.1 SUBMITTER INFORMATION

Submitter's Name:	Endomagnetics Ltd.
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Contact Person:	Andrew Shawcross
	Chief Operations Officer
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Email:	ashawcross@endomag.com
Date summary prepared:	13 December 2016

1.2 DEVICE INFORMATION

Trade name:	Magseed Magnetic Marker and Sentimag System
Common name:	Tissue Marker, Marker Delivery System and Detection System
Classification name:	Temporary Tissue Marker
Regulation:	21 CFR 878.4300
Device Classification:	Class II
Product Code:	PBY

1.3 PREDICATE DEVICE

Sentimag System, Sentimark Magnetic Marker System (K153044).

1.4 DESCRIPTION OF DEVICE

The Magseed Magnetic Marker is identical to the Sentimark Magentic marker described in K153044. Only the trade name has changed. The Magseed Magnetic Marker is supplied to end users as a pre-packaged sterile, single-use delivery system. The system comprises an individual soft magnetic marker

(magnetic seed) and a 18-gauge needle delivery system that is used to deliver the seed to the intended deployment location. This product is designed as a single use device that is supplied sterile in an individual sealed tyvek pouch.

This Premarket Submission is solely concerned with a reduction in the length of the 18-gauge needle cannula that is used to introduce the Magseed Magnetic Marker. K153044 describes two device configurations, where:

- REF: SM18-1-12 has a length of 12cm
- REF: SM18-1-20 has a length of 20cm

This submission solely considers a reduction in the needle canulla to a minimum length of 5cm.

- REF: SM18-1-05 has a length of 5cm
- REF: SM18-1-07 has a length of 7cm

There is no revision to the implanted marker.

The Sentimag Detector remains identical to that described in K153044

The Sentimag System is intended for the non-imaging detection and localization of the Magseed Magnetic Marker that has been implanted in a lumpectomy site intended for surgical removal.

The Sentimag System and Magseed Magnetic Marker System are designed for use in an operating room environment by suitably trained physicians who are experienced in diagnosis and treatment of breast lesions.

The Sentimag System aids the surgeon to detect surgically invasively magnetic marker material that has been placed for the purpose of detecting a non-palpable lesion, and to locate target excision sites.

Prior to a lumpectomy procedure, the Magseed Magnetic Marker is placed percutaneously into the breast, using imaging guidance such as ultrasound or radiography, to temporarily mark a site intended for surgical removal. During a surgical procedure, the hand-held Sentimag probe emits an alternating magnetic field that detects the magnetic response of the Magseed magnetic marker, this signal is converted by the base unit into a visual and audible response that is similar in use to the predicate device.

1.5 INTENDED USE

The Endomag Magseed Magnetic Marker is intended to be placed percutaneously in the breast to mark temporarily (< 30 days) a lumpectomy site intended for surgical removal. Using imaging guidance (such as ultrasound or radiography) or aided by non-imaging guidance (Endomag Sentimag® System) the Endomag Magseed Magnetic Marker is located and surgically removed with the target tissue.
The Endomag Sentimag® System is intended for the non-imaging detection and

localization of the "Endomag Magseed Magnetic Marker" that has been implanted in a lumpectomy site intended for surgical removal.

1.6 SUMMARY OF TECHNOLOGICAL CHARACTERISTICS

The Magseed Magnetic Marker System utilizes non-imaging technologies that are comprised of a console that incorporates electronics and a simple user interface, plus a probe handpiece.

A location marker is placed percutaneously in situ at the clinical target site by a delivery system and then the detector handpiece is used for the intraoperative detection and localization of the implanted marker.

The handpiece is connected by a flexible cable to a console unit that provides the user with a visual indication of the presence and proximity of the marker.

1.7 DISCUSSION OF NON-CLINICAL TESTS SUBMITTED

No additional non-clinical testing was carried out over and above those discussed in K153044:

- There is no revision in device materials or processes and the common design elements remain unchanged for the introduction of the shorter needle cannulas.
- The product risk management file was reviewed and no additional risks, revisions in wording or scoring were identified for the introduction of the shorter needle cannulas.

1.8 CONCLUSION

The Sentimag Magnetic Marker System has the same Intended Use as the predicate device. The different technological characteristics do not raise any new questions of safety or effectiveness. The test, verification and validation data presented in this submission demonstrate substantial equivalence of the Sentimag Magnetic Marker System.