

January 19, 2021

Orthocon, Inc. Howard Schrayer Official Correspondent 1 Bridge Street, Suite 121 Irvington, New York 10533

Re: K202363

Trade/Device Name: HBP7 Settable Hemostatic Bone Putty

Regulatory Class: Unclassified

Product Code: MTJ

Dated: December 17, 2020 Received: December 18, 2020

Dear Howard Schrayer:

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. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database located at https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm identifies combination product submissions. 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 <u>Federal Register</u>.

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) for devices or postmarketing safety reporting (21 CFR 4, Subpart B) for combination products (see

https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to https://www.fda.gov/medical-device-problems.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (https://www.fda.gov/training-and-continuing-education/cdrh-learn). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice) for more information or contact DICE by email (DICE@fda.hhs.gov) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Cindy Chowdhury, Ph.D., M.B.A.
Assistant Director
DHT4B: Division of Infection Control
and Plastic Surgery Devices
OHT4: Office of Surgical
and Infection Control Devices
Office of Product Evaluation and Quality
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: 06/30/2023 See PRA Statement below.

510(k) Number <i>(if known)</i> K202363				
Device Name HBP7 Settable Hemostatic Bone Putty				
Indications for Use (Describe) HBP7 Settable Hemostatic Bone Putty is indicated for the control mechanical barrier or tamponade.	ol of bleeding from cut or damaged bone by acting as a			
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)			
CONTINUE ON A SEPARATE PAGE IF NEEDED.				

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

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510(k) Summary

Contact: Howard Schrayer

Orthocon, Inc.

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Fax: 914-231-7884 hs.ss@lucidmedical.net

Date Prepared: August 17, 2020

Device Trade Name: HBP7 Settable Hemostatic Bone Putty

Manufacturer: Orthocon, Inc.

1 Bridge Street, Suite 121 Irvington, NY 10533

Common Name: Bone wax

Classification: Unclassified

Product Code: MTJ

Predicate Devices

Primary Predicate

CP Medical Bone Wax A formulation based on

beeswax, paraffin and isopropyl palmitate

[510(k) K024372]

Reference Predicate

Orthocon, Inc.

HBP4 Hardening, Resorbable Hemostatic Bone Putty

510(k) K141502

Orthocon, Inc. MONTAGE Settable Hemostatic Bone

Putty

510(k) K152005

Indications for Use:

HBP7 Settable Hemostatic Bone Putty is indicated for the control of bleeding from cut or damaged bone by acting as a mechanical barrier or tamponade.

Device Description:

HBP7 Settable Hemostatic Bone Putty is a sterile, biocompatible, nonabsorbable material of putty-like consistency for use in the control of bleeding from bone surfaces. The single use HBP7 device contains two separate components of putty-like consistency comprised of granular calcium phosphate, paraffin oil, vitamin E acetate, a triglyceride, and a mixture of nonabsorbable, polyether-based polymers. When mixed together, the components of the HBP7 device form a nonabsorbable putty-like material that can be applied directly to bleeding bone. The resulting hardening material is primarily comprised of calcium phosphate. HBP7 must be mixed immediately prior to use.

When applied to surgically cut or traumatically broken bone, HBP7 Settable Hemostatic Bone Putty achieves local control of bleeding by acting as a mechanical barrier (tamponade).

Substantial Equivalence and Predicate Devices:

The device was shown to be substantially equivalent to previously cleared bone wax devices including CP Medical Bone Wax (K024372), HBP4 Hardening Resorbable Hemostatic Bone Putty (K141502) and Montage Settable Hemostatic Bone Putty (K152005).

Performance Testing:

Bench testing, biocompatibility and animal functionality testing performed on HBP7 Settable Hemostatic Bone Putty demonstrate that the device is substantially equivalent to the predicate devices in intended use, technological characteristics, and performance. This testing included the following:

Bench Testing was conducted to verify the device's handling properties, to characterize the device's performance over a range of temperatures and to evaluate the device's dissolution properties. The following bench studies were completed: relative stiffness, spreadability, stickiness, temperature sensitivity, electrocautery compatibility, dissolution and swelling.

<u>Biocompatibility Testing</u> was conducted to evaluate the device's biocompatibility in accordance with the recommendations of ISO 10993. The following biocompatibility studies were conducted on the final, finished, gamma-irradiated sterile device in accordance with the GLP requirements: cytotoxicity, irritation, sensitization, acute systemic toxicity, genotoxicity, implantation, local tissue toxicity, hemolysis, endotoxicity and pyrogenicity.

<u>Animal Testing</u> included animal studies to demonstrate intraoperative in vivo hemostasis and resistance to irrigation.

The following table summarizes the substantial equivalence of HBP7 to the predicate devices.

Predicate Comparison Table

Manufacturer	Orthocon, Inc.	CP Medical	Orthocon, Inc.
Trade Name	HBP7 Settable Hemostatic Bone Putty	CP Medical Bone Wax	MONTAGE™ Settable, Resorbable Hemostatic Bone Putty
510(k) Number	Subject Device - TBD	K024372	K141502 and K152005
Type of Device/ Product Code	Bone wax / MTJ	Bone wax / MTJ	Bone wax / MTJ
	HBP7 Settable Hemostatic	The CP Medical Bone Wax is	MONTAGE Settable,
	Bone Putty is indicated in the	indicated for use in the control	Resorbable Hemostatic Bone
	control of bleeding from cut or	of bleeding from bone	Putty is indicated in the control
Indications for Use	damaged bone by acting as a	surfaces.	of bleeding from cut or
	mechanical barrier or		damaged bone by acting as a
	tamponade		mechanical barrier or
			tamponade
Intended Use	Bone hemostasis	Bone hemostasis	Bone hemostasis
Mechanism of Action	Mechanical tamponade that	Mechanical tamponade that	Mechanical tamponade that
	occludes vascular openings in	occludes vascular openings in	occludes vascular openings in
	damaged bone	damaged bone	damaged bone
Form of Device	HBP7 Settable Hemostatic	CP Medical Bone Wax is a	MONTAGE Settable,
	Bone Putty is formulated as a	putty-like material formulated	Resorbable Hemostatic Bone
	two-part putty/putty device that	from bee's wax, isopropyl	Putty is formulated as a two-
	forms a "settable" (hardening)	palmitate and paraffin that is	part putty/putty device that
	putty when manually mixed at	kneaded to soften and apply	forms a "settable" (hardening)
	the time of surgery.	and then forms a firm	putty when manually mixed at
		tamponade after application.	the time of surgery.

	Radiopaque – Contains	Not radiopaque	Radiopaque – Contains
Radiopacity	hydroxyapatite and β-		hydroxyapatite and β-
	tricalcium phosphate		tricalcium phosphate
	Sterile mixture of two	Sterile mixture of bee's wax,	Sterile mixture of two
	components of putty-like	isopropyl palmitate and paraffin	components of putty-like
	consistency comprised of	that forms a putty-like	consistency comprised of
	granular calcium phosphate,	consistency with no chemical	granular calcium phosphate,
	(hydroxyapatite and β-	interactions.	(hydroxyapatite and β-
	tricalcium phosphate),		tricalcium phosphate),
	paraffin, vitamin E acetate,		calcium stearate, vitamin E
	triacetin, and a mixture of		acetate, triacetin, 1,4-
	nonabsorbable polymers.		butanediol and a mixture of a
	HBP7 is to be mixed		lactide-diester and polyester-
Materials	immediately prior to use.		based (lactide and
	Resulting settable material		caprolactone) absorbable
	from the two putties is		polymers. MONTAGE is to
	primarily comprised (> 60% by		be mixed immediately prior to
	weight) of calcium phosphate		use. Resulting settable
	similar to the mineral phase of		material from the two putties
	native bone tissue.		is primarily comprised (> 60%
			by weight) of calcium
			phosphate similar to the
			mineral phase of native bone
			tissue.
Absorbable	No	No	Yes

In Vivo Residence Time	Permanent Implant	Permanent Implant	Greater than 30 days primarily due to presence of calcium phosphate
Method of	Manually applied and spread	Manually applied and spread	Manually applied and spread
Application	onto bone tissue	onto bone tissue	onto bone tissue
Degradation Process	Nonabsorbable in the body – permanent implant	Nonabsorbable in the body - permanent implant	The non-calcium salt and non-polymeric components degrade via dissolution; the polymer degrades via hydrolysis and calcium salts degrade via chemical dissolution and/or cellular removal
Sterility	Provided sterile for single use by gamma irradiation	Provided sterile for single use by gamma irradiation	Provided sterile for single use by gamma irradiation
Set Time	Sets (hardens) within minutes of application	N/A	Sets (hardens) within minutes of application

Conclusion

HBP7 is substantially equivalent to previously cleared bone hemostasis devices with respect to intended use, general technological characteristics and performance.