



HIGH-PERFORMANCE
HEMOSTASIS MADE SIMPLE.

THAT'S
REAL
STOPPING
POWDER.



A NEW SOLUTION FOR TODAY'S BLEEDING CHALLENGES



This material is intended for Health Care Professionals in the US.

THE POWDER TO BE VERSATILE

Meeting today's surgical bleeding challenges.

NOW HIGH-PERFORMANCE HEMOSTASIS IS SIMPLER THAN EVER:

PROVEN

The only hemostatic agent indicated for minimal, mild, and moderate bleeding.¹⁻¹³

READY TO USE

No reconstitution, mixing, or thawing.¹

CONTAINS HUMAN-DERIVED THROMBIN¹

In the physiologic coagulation cascade, thrombin converts fibrinogen into fibrin.¹⁴

VERSATILE

- Effective for focal (pooling/flowing) bleeding¹
- Allows broad coverage to treat large area bleeding without the need for a power source or spray kit¹
- Effective on bony and soft tissue¹



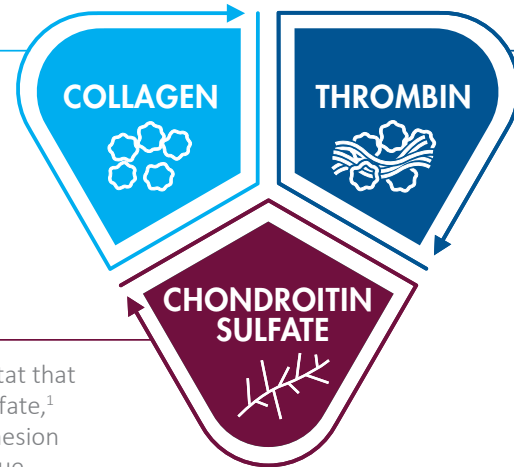
THE FORMULA FOR SUCCESS:

3 SYNERGISTIC COMPONENTS + **1 SIMPLE BELLOWS APPLICATOR** = **HIGH-PERFORMANCE HEMOSTASIS**

FOR A COHESIVE AND STABLE CLOT

MECHANICAL HEMOSTASIS

The (porcine-derived) collagen in HEMOBLAST™ Bellows supports a controlled swell.¹ Additionally, in the coagulation cascade, collagen is known to induce platelet aggregation and coagulation.¹⁴

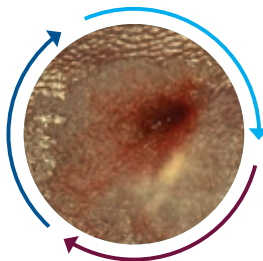


PHYSIOLOGIC HEMOSTASIS

HEMOBLAST™ Bellows contains (human-derived) thrombin.¹ Thrombin converts fibrinogen to fibrin, a basic element in a blood clot.¹⁴

COHESION

HEMOBLAST™ Bellows is the only hemostat that contains (bovine-derived) chondroitin sulfate,¹ included for the purpose of providing cohesion between the wound and surrounding tissue.



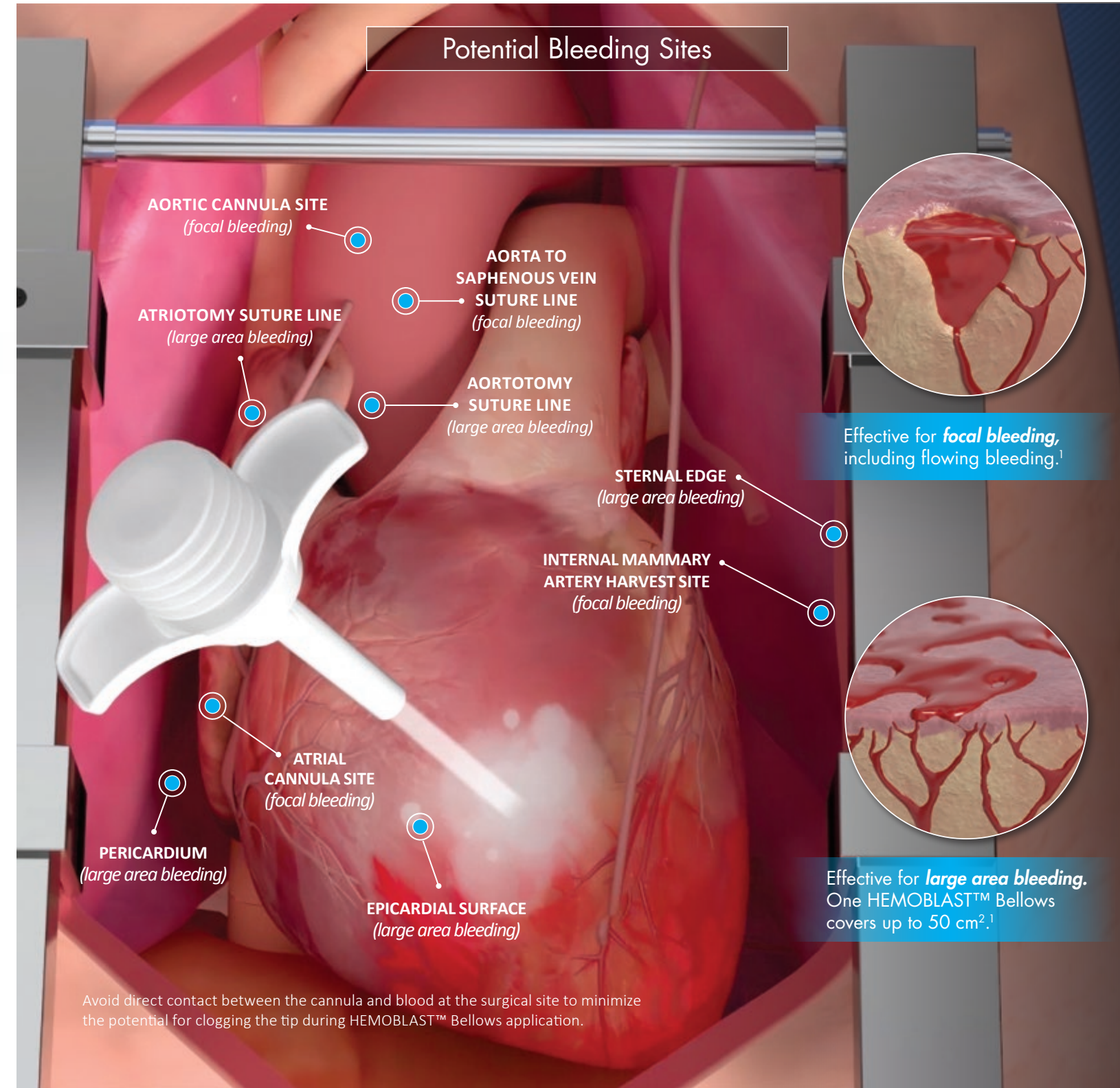
HEMOBLAST™ Bellows clot in a porcine liver model

The clot formed by HEMOBLAST™ Bellows offers visibility of the wound site after application. The hemostatic powder resorbs within 4 weeks.

HEMOBLAST™ Bellows is indicated in surgical procedures as an adjunct to hemostasis when control of minimal, mild, and moderate bleeding by conventional procedures is ineffective or impractical, except in neurosurgical, ophthalmic, and urological procedures.

EFFICACY, EASE, & VERSATILITY – ALL IN ONE.^{1,15}

In the US pivotal trial, one HEMOBLAST™ Bellows handled minimal, mild, and moderate bleeding in most cases, including application to focal and large area bleeding conditions.¹



THE POWDER TO PERFORM

Hemostasis that meets a new standard.

THE ONLY PRODUCT INDICATED AS AN ADJUNCT TO HEMOSTASIS FOR MINIMAL, MILD, AND MODERATE BLEEDING¹⁻¹³

Biom'up developed the SPOT GRADE™ scale also known as the Surface Bleeding Severity Scale (SBSS) to quantitatively determine the amount of bleeding from a surgical wound and standardize bleeding definitions across surgical specialties and procedures. HEMOBLAST™ Bellows performed impressively, receiving indications for the control of SPOT GRADE™ bleeding levels 1 through 3, covering oozing to flowing bleeding.¹

SPOT GRADE™ SCALE		HEMOBLAST™ BELLOWS Effective hemostasis on SPOT GRADE™ levels 1 through 3: minimal, mild, and moderate bleeding for approved indications. ¹				
SPOT GRADE™	0	1	2	3	4	5
Maximum Expected ACS-ATLS* Shock Risk Class	1	1	1	2	3	4
Verbal Descriptor	None	Minimal	Mild	Moderate	Severe; not immediately life-threatening	Extreme; immediately life-threatening
Visual Descriptor	Dry	Oozing	Pooling	Flowing	Streaming	Gushing
Expected Intervention(s)	None	Manual pressure, cautery, adjuvant hemostat(s)	Manual pressure, cautery, suture, adjuvant hemostat(s)	Manual pressure, cautery, suture, adjuvant hemostat(s)	Manual pressure, cautery, suture, staples, tissue repair	Manual pressure, cautery, suture, staples, tissue repair
Flow Rate (mL/min) Ranges for Target Bleeding Site ¹⁶						
1 (cm ²)	0	[0;4.8]	[4.8; 12.0]	[12.0; 25.3]	[25.3; 102.0]	[102.0; +∞]
10 (cm ²)	0	[0;9.1]	[9.1; 20.0]	[20.0;71.3]	[71.3; 147.4]	[147.4; +∞]
50 (cm ²)	0	[0;13.5]	[13.5; 28.0]	[28.0;117.3]	[117.3; 192.7]	[192.7; +∞]

EFFICACY THAT'S PROVEN¹

The US pivotal study evaluating the safety and efficacy of HEMOBLAST™ Bellows against absorbable gelatin sponge and thrombin involved 242 patients randomized across 16 sites and found HEMOBLAST™ Bellows statistically superior at achieving hemostasis:

- 71.1% vs. 45.8% at 3 minutes (p=0.0001)¹
- 93.1% vs. 73.5% at 6 minutes (p=0.0001)¹
- No clinical signs or symptoms of postoperative bleeding with HEMOBLAST™ Bellows within 24 hours¹
- Lower rate of surgical rescue treatment (2.9% vs. 13.3%) (p=0.0129)¹

POSTOPERATIVE BLEEDING DATA

0% SIGNS OR SYMPTOMS OF POSTOPERATIVE BLEEDING¹

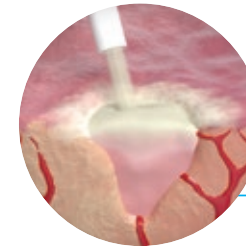
0% REOPERATIONS DUE TO BLEEDING¹

APPLICATION THAT'S EASY¹



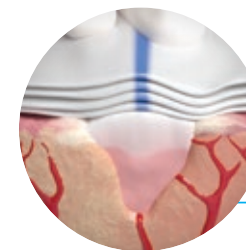
1 Blot Excess Blood

Blot excess blood from the target bleeding site with gauze/pad or suction. The wound surface should be as dry as possible just before application.



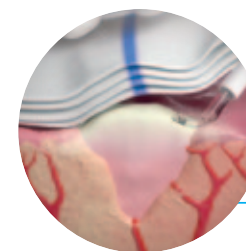
2 Apply HEMOBLAST™ Bellows

Apply HEMOBLAST™ Bellows to the source of bleeding by compressing the bellows. Enough implant material should be applied to cover the entire source of bleeding.



3 Hold Wet Lap Pad

Immediately apply wound-appropriate pressure using a wet laparotomy pad. Hold for approximately 3 minutes. Gently lift the laparotomy pad and inspect the area.



4 Once Hemostasis is Achieved, Irrigate Excess

Once hemostasis is achieved, excess powder not incorporated in the hemostatic clot should be removed by gentle irrigation.

If hemostasis has not been achieved, repeat steps 1-4 or use an alternate method of hemostasis treatment. Please refer to the Instructions for Use for full prescribing information.¹

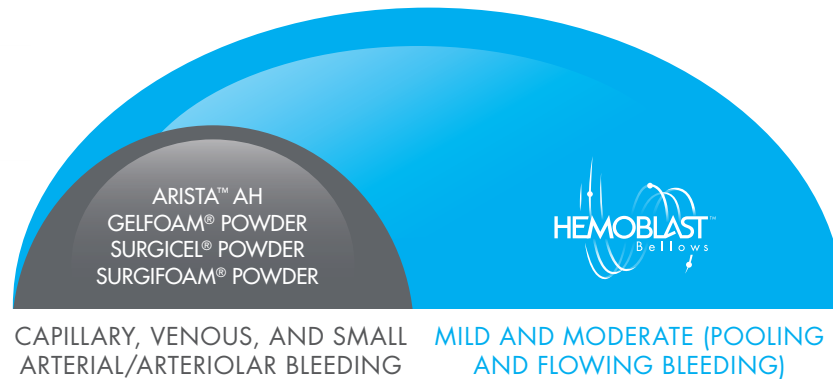
THE POWDER TO SIMPLIFY

High-performance hemostasis in a ready-to-use powder.

THE ONLY POWDER WITH THROMBIN^{1,2,4-6}

HEMOBLAST™ Bellows contains thrombin for efficacy on minimal, mild, and moderate bleeding.¹

Handles Oozing, Pooling, and Flowing Bleeding¹



Handles Minimal, Mild, Moderate, Focal, and Large Area Bleeding¹

Applied Dry, No Reconstitution Required¹

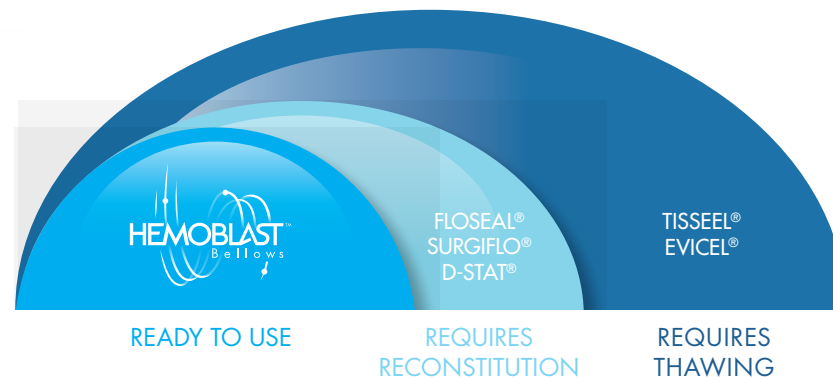
MORE VERSATILITY FOR MORE APPLICATIONS¹

Compared to flowable hemostats, only HEMOBLAST™ Bellows addresses minimal, mild, and moderate bleeding, easily allows coverage of focal and large area bleeding, and does not require reconstitution.¹

READY WHEN YOU NEED IT¹

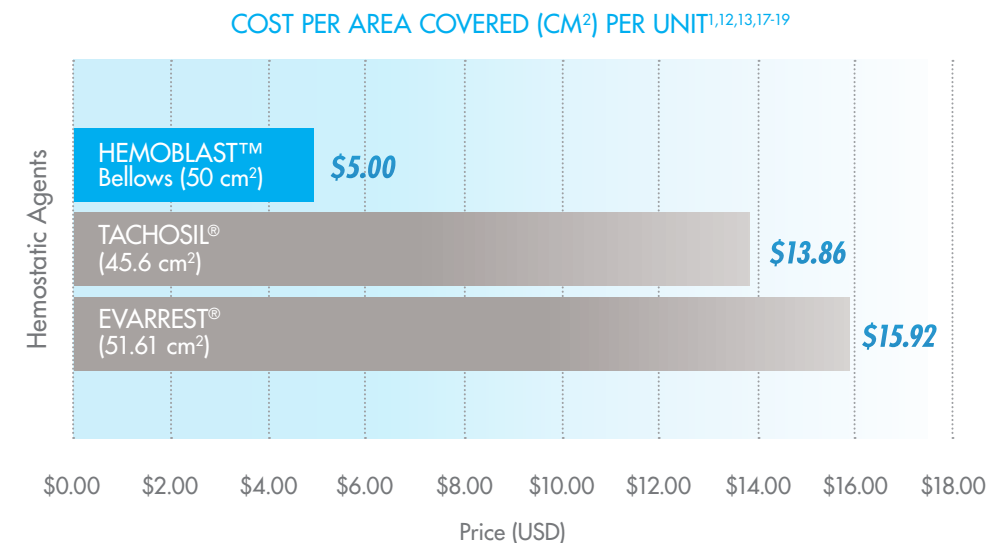
Because it does not require advance preparation, HEMOBLAST™ Bellows optimizes hospital staff time and provides a possible solution to avoid waste from unused product.¹

Stay Ready for Unexpected Bleeding



MORE COVERAGE, MORE SAVINGS^{1,12,13,17-19}

With up to 50 cm² coverage per unit, HEMOBLAST™ Bellows provides more coverage for less cost than fibrin sealant patches.^{1,12,13,17-19}



Covers More Bleeding Area for Less^{1,12,13,17-19}

LESS COST & HASSLE^{1,7,8}

Unlike fibrin sealants, HEMOBLAST™ Bellows is proven effective on moderate bleeding, including pooling and flowing bleeding, while possibly eliminating the extra cost, hassle, and risk of air gas embolism of a spray set and external gas set-up.^{1,7,8}

Covers Pooling and Flowing Bleeding¹

No Spray Sets or Known Risk of Air Gas Embolism



With excellent versatility and coverage, HEMOBLAST™ Bellows is designed to simply and effectively meet your bleeding challenges.¹



HIGH-PERFORMANCE HEMOSTASIS MADE SIMPLE.

QUANTITY PER BELLOWS	PER PACK CONTENT	REFERENCE*
1.65 grams	1 bellows and 1 short 10 cm cannula	BQF02-US

*Minimum order quantity: one case of 12 units

To request a clinical evaluation or order HEMOBLAST™ Bellows:
Call 1-833-HEMOPRO (1-833-436-6776)
Visit www.hemoblast.com/us/evaluation.
E-mail orders@biomup.com

1. HEMOBLAST™ Bellows Hemostatic Agent [instructions for use]. Biom'up SA. **2.** ARISTA AH Absorbable Hemostatic Particles Instructions for Use. CR Bard, Inc. **3.** Avitene Microfibrillar Collagen Hemostat [instructions for use]. CR Bard, Inc. **4.** Gelfoam Absorbable Gelatin Powder [instructions for use] Pharmacia and Upjohn Co. **5.** Surgicel sales brochure. 074300-170608. Somerville NJ; Ethicon Inc. **6.** Surgifoam Absorbable Gelatin Powder package insert. Somerville NJ; Ethicon Inc. **7.** TISSEEL Fibrin Sealant [prescribing information]. Deerfield, IL: Baxter Healthcare. **8.** Evicel Fibrin Sealant [prescribing information]. Somerville NJ; Ethicon Inc. **9.** FLOSEAL Hemostatic Matrix [instructions for use]. Deerfield, IL: Baxter Healthcare. **10.** SURGIFLO Hemostatic Matrix Kit [instructions for use]. Somerville, NJ; Ethicon Inc. **11.** D-Stat Flowable Hemostat Instructions for Use. Vascular Solutions, Inc. **12.** TachoSil Fibrin Sealant Patch [prescribing information]. Takeda AS. **13.** Evarrest Fibrin Sealant Patch [prescribing information]. Somerville, NJ; Ethicon Inc. **14.** Spotnitz, W. Hemostats, Sealants, and Adhesives: A Practical Guide for the Surgeon. *Am Surg.* 2012;78:1305-1321. **15.** Biom'up, internal data. Data derived from clinical use of 186 cases in Germany and France (PME report). **16.** Spotnitz, WD; Zielske, D; Centis, V; et al. The SPOT GRADE: A New Method for Reproducibly Quantifying Surgical Wound Bleeding. *Spine.* 2018;43(11):E664-E671. **17.** 2016 IMS Hemostat Revenue, Unit, and ASP Sales Data. **18.** biom'up, company data. ET-2015-001-PC-019. **19.** biom'up, company data.

Caution: Federal law restricts this device to sale on or by the order of a physician. The trademark of HEMOBLAST™ Bellows and SPOT GRADE™ are the property of Biom'up. The trademarks of the products listed herein are trademarks of their respective manufacturer. Please refer to the Instructions for Use accompanying each device for further information.