

stryker

Capture the **gold**



Introducing the

Bone Vac

autologous bone dust collector

Revisit the data

With autologous, viable cells and regenerative nature, drilled bone dust can be a valuable adjunct to other bone growth agents. Here's a look at just some of the data reflecting its **osteogenic, osteoinductive and osteoconductive potential**.



Contains viable bone-building cells¹⁻⁶

Osteoblasts, osteoclasts, osteocytes

Osteoprogenitor/mesenchymal stem cells

Osteoblast expression markers



Exhibits early and late markers

correlated with the osteoblastic phenotype (ALP activity, collagen synthesis and calcium deposition)³

7x
osteoblast proliferation¹

100%
progressive new bone formation seen when using a cervical interbody cage⁴



Upregulates factors

involved in bone cell recruitment, maturation, healing and remodeling (IL-6, IL-11, MCP-1, IBSP, VEGF, OPG, RANKL)¹



Releases cytokines and growth factors

with known anabolic effects on bone healing (IL-1 β , IL-6, TGF- β , VEGF, FGF-Basic, PDGF-BB)¹



Reimagine what's possible

Put bone dust to work for you, quickly and easily. Using your existing drill and surgical suction, the Bone Vac collects drilled bone dust through existing surgical suction. That arms you with the regenerative benefits of gold standard, autologous bone, delivered with a simplicity and price your surgical and administrative teams will like.

"It's malleable... I can easily put that into the disc space."

Spine surgeon



Cleanly ejects all collected material via one push; no inverting mesh baskets or scraping out loose bone dust



Autologous bone supports the gold standard



Putty-like consistency enables efficient shaping and placement

Viability of bone dust

Bone dust can contain viable bone-forming cells and expression markers, even after drilling, and reflects **osteogenic, osteoinductive and osteoconductive** potential¹⁻⁶

Aids ortho/spine, otology, cranial and other procedures where **bone regeneration/fusion is desired**

"That's definitely more bone than I usually get."

Spine surgeon

Effective with **fluted or cutting burs** (not fine shaping/diamond burs)



13cc capacity filter **can be used multiple times** during case to capture all available bone dust

Works with existing drill and standard surgical suction tubing, tip and source

Double sterile barrier packaging with point-of-use assembly instructions enhances setup and usability



Drape clip secures device in sterile field

No need to keep upright; eliminates management hassles

Disposable; no added cleaning/manpower

4ft flexible tubing included



End caps **maintain suction** if filter is removed



One push bone removal with integrated plunger; no inverting baskets or scraping out loose bone dust

SIMPLE COLLECTABLE EFFICIENT

"I like the bone plug that it dispenses."

Spine surgeon

Cost conscious

- May apply CPT 20936 (harvest of autograft from same surgical site)⁷
- Can reduce use of additives
- Equipment compatibility limits capital expenses
- May reduce care/cost of complications associated with iliac crest harvesting or immunologic response to non-autograft materials

"This is so simple to use. I can't believe how simple this is."

Scrub tech

"Nothing is better than using the patient's own bone... the cost savings alone."

Scrub tech

Rediscover the value

The Bone Vac is a golden opportunity to get more of what you want – gold standard autologous bone – during your ortho/spine, otology, cranial or other procedures where bone regeneration is desired. To trial the Bone Vac product or to get more information contact your Neurosurgical sales representative, **call 800 253 3210 or visit neurosurgical.stryker.com.**

Part number	Product description	Quantity
5400-800-000	Bone Vac	5 per box

Visit StrykerGoodAsGold.com for objective clinical evidence

- Gao, R. et al. "Human Spinal Bone Dust as a Potential Local Autograft." *Spine*. (2018): 43.4
- Roth, A. et al. "Improved Autologous Cortical Bone Harvest and Viability With 2Flute Otologic Burs." *The Laryngoscope*. (2017)
- Gupta, A. et al. "Comparison of Osteogenic Potential of Calvarial Bone Dust, Bone Fragments, and Periosteum." *The Journal of Craniofacial Surgery*. (2009)
- Shad, A. et al. "Use of the Solis cage and local autologous bone graft for anterior cervical discectomy and fusion: early technical experience." *Journal of Neurosurgery Spine*. (2005)
- Patel, V. et al. "Histologic Evaluation of High Speed Burr Shavings Collected During Spinal Decompression Surgery." (2009)
- Ichiyanagi, T. et al. "Isolation of mesenchymal stem cells from bone marrow wastes of spinal fusion procedure (TLIF) for low back pain patients and preparation of bone dusts for transplantable autologous bone graft with a serum glue." *BioScience Trends*. (2010)
- Current Procedural Terminology 2020, American Medical Association. Chicago, IL 2020*

Neurosurgical

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