OsteoSponge® is 100% demineralized cancellous allograft, serving as a foundational biologic surgeons can confidently build their fusion strategy around. Its compressible, shape-memory architecture efficiently retains bone marrow aspirate, making it an excellent graft extender without sacrificing osteoinductive potential. A robust portfolio of peer-reviewed clinical publications across spine and foot & ankle supports its consistent fusion performance and long-standing clinical confidence.

OsteoSponge® Demineralized Bone Matrix Publications

Publication Citation	Year	Product	Specialty	Study Type	Study Design	Materials & Methods	Results Summary
1. Brigido et al., 2013 **A retrospective analysis evaluating allogeneic cancellous bone sponge for foot and ankle arthrodesis** PubMed abstract: https://pubmed.ncbi.nlm.nih.gov/23260986/	2013	OsteoSponge	Foot and Ankle	Clinical	Retrospective, Multi-Center	Retrospective series of 47 patients (80 joints) who underwent foot and ankle arthrodesis with 6 month and 12 month follow-up.	97.5% fusion rate (total joints); 96% fusion rate (45/47patients) at 12 months. Statistically significant improvement in pain and function at 6 and 12 months (47 patients).
2. Chopko, 2016 **Percutaneous thoracolumbar decompression combined with percutaneous pedicle screw fixation and fusion** PubMed Central (abstract & full text): https://pmc.ncbi.nlm.nih.gov/articles/PMC5039853/	2016	OsteoSponge	Spine	Clinical	Retrospective	13 patients under local or mild sedation underwent image guided percutaneous thoracolumbar fusion - utilizing pedicle screw fixation, local bone, OsteoSponge soaked in BMA and OsteoSelect inserted onto the facet region through the pedicle screw access path.	Statistically significant reduction of pain seen at both 2 week post op and 40 weeks. CT images notes solid fusion mass medial to screw head (Fig 3).
3. Girasole et al., 2013 **Transforaminal lumbar interbody fusion rates using a novel titanium implant and demineralized cancellous allograft bone sponge** PubMed Central abstract & full article: https://pmc.ncbi.nlm.nih.gov/articles/PMC4288454/	2013	OsteoSponge	Spine	Clinical	Retrospective Case Series	Single-level TLIF with OsteoSponge+BMA in Titan cage (exposes more surface area of graft). Independent fusion analysis using CT in two separate follow-up groups, one at 6 months and one at 12 months.	97%+ fusion rate at 12 months for interbody fusion (37 of 38 patients fused)
4. Miller et al., 2012 **Rationale, characteristics, and clinical performance of the OsteoSponge®** Publisher abstract & full text (Dove Medical Press): https://www.dovepress.com/rationale-characteristics-and-clinical-performance-of-the-osteosponger-peer-reviewed-fulltext-article-ORR	2012	OsteoSponge	Spine/ General	Clinical	1) Expert Summary, 2) Pre-Clinical, 3) Prospective Clinical Case Studies	1) Athymic nude mouse transplantation model of OsteoSponge at 2 and 4 weeks 2) Prospective series of 45 patients undergoing ACDF with OsteoSponge 3) Prospective randomized study of 28 patients comparing OsteoSponge + BMA to rhBMP-2 in posterior lumbar cage	1) Week 2 OsteoSponge had neovascularization and early bone healing, Week 4 showed new bone formation and osteoinductivity.2) Solid fusion achieved in all patients at 2 year followup. 3) OsteoSponge with BMA performed similarly to rhBMP-2 in achieving anterior fusion at 2 years.
5. Protzman et al., 2014 **Biologic augmentation of foot and ankle arthrodeses with an allogeneic cancellous sponge** Institutional abstract summary: https://pubmed.ncbi.nlm.nih.gov/24762149/	2014	OsteoSponge	Foot and Ankle	Clinical	Prospective Case Series	Prospective series of 25 patients (45 joints) undergoing foot and ankle arthrodesis with 6 month and 12 month follow-up.	97.8% fusion rate (total joints); 96% fusion rate (24/25 patients) at 6 months and 12 months. Statistically significant improvement in pain and function at 6 and 12 months.