

What is LacertaMatrix™?

LacertaMatrix™ is a single use, non-pyrogenic, flexible, and conformable wound matrix made from alligator-derived hyaluronic acid (HA) and porcine gelatin.¹

What are the benefits of American Alligator Hyaluronic Acid (HA)?^{1,2,3}

American Alligator Hyaluronic Acid (HA) is considered beneficial, especially for wound healing, because it can enhance the body's natural repair process by supporting cell infiltration, hydration, and in promoting tissue regeneration by reducing inflammation in chronic wounds^{2,3,4,5}

⇒ **Tissue Repair & Regeneration**

Studies have shown that HA is crucial for wound healing, promoting cell migration (like skin cells), collagen deposition, and blood vessel formation (angiogenesis)^{2,3,4,5}

⇒ **Modulates Inflammation**

HA can form protective “cables” that bind inflammatory cells, preventing excessive tissue damage during immune responses.^{6,7}

⇒ **Cellular Communication**

HA has shown to interact with cell surface receptors (like CD44) to influence cell proliferation, differentiation, and immune responses, controlling inflammation.^{6,7}

⇒ **Size Matters**

Different molecular sizes of HA (high vs. low weight) have distinct roles, with large HA supporting structure and smaller fragments potentially triggering repair, a complex balance.^{8,9}

Application

- ⇒ Select a device size which is slightly larger than the wound. LacertaMatrix™ can be applied as a whole sheet or trimmed so that it contacts the wound margins.
- ⇒ Multiple devices to a maximum of 200cm² may be applied in a single procedure as needed to support the patient's wound size.
- ⇒ Inspect the packaging to ensure it is intact and undamaged.
- ⇒ Using aseptic technique, carefully remove the LacertaMatrix™ device from the double pouch configuration.
- ⇒ Ensure that LacertaMatrix™ conforms to the underlying wound bed. Place the device in maximum contact with healthy, well-vascularized tissue for best results.
- ⇒ LacertaMatrix™ will resorb into the wound over time (typically over a period of approximately 2 weeks).
- ⇒ Protect LacertaMatrix™ using an appropriate secondary dressing. Wound type, location, size, depth, amount of exudate, and user preference should be used to determine the optimal dressings.
- ⇒ Change the secondary dressing as needed to maintain a moist, clean wound area. Frequency of secondary dressing change will be dependent upon volume of exudates produced and type of dressing used and the clinician's need to inspect the wound bed for signs of infection or healing.
- ⇒ To protect LacertaMatrix™ from adhering to the secondary dressing, consider applying a non-adherent dressing over the device to help protect the tissue while facilitating an optimal moist wound healing environment.

Available Sizes

Part Code /SKU #	Description	Size (SQ CM)
LAC-011	LacertaMatrix™ 1cm x 1cm	1
LAC-012	LacertaMatrix™ 1cm x 2cm	2
LAC-013	LacertaMatrix™ 1cm x 3cm	3
LAC-025	LacertaMatrix™ 2.5cm x 2.5cm	7
LAC-024	LacertaMatrix™ 2cm x 4cm	8
LAC-033	LacertaMatrix™ 3cm x 3cm	9

Part Code /SKU #	Description	Size (SQ CM)
LAC-034	LacertaMatrix™ 3cm x 4cm	12
LAC-044	LacertaMatrix™ 4cm x 4cm	16
LAC-050	LacertaMatrix™ 5cm x 5cm	25
LAC-048	LacertaMatrix™ 4cm x 8cm	32
LAC-088	LacertaMatrix™ 8cm x 8cm	64
LAC-100	LacertaMatrix™ 10cm x 10cm	100

References: 1. LacertaMatrix Instructions For Use (IFU) 2. Garantziotis S, Savani RC. Hyaluronan biology: A complex balancing act of structure, function, location and context. *Matrix Biol.* 2019 May;78-79:1-10. doi: 10.1016/j.matbio.2019.02.002. Epub 2019 Feb 23. PMID: 30802498; PMCID: PMC6774756. 3. Matthew Dovedytis, Zhuo Jie Liu, Samuel Bartlett, Hyaluronic acid and its biomedical applications: A review, *Engineered Regeneration*, Volume 1, 2020, Pages 102-113, ISSN 2666-1381, <https://doi.org/10.1016/j.engreg.2020.10.001>. 4. Mitch Sanders, Mia Hanna, Vanessa Vu, Lindsay Poland. Alligator-Derived Hyaluronic Acid: Bacteriostatic and Fungastatic Properties Against Pathogens. *Wound Masterclass Volume 1: Issue 3, December 2022, Pages 60-67.* 5. Kawano Y, Patrulea V, Sublet E, Borchard G, Iyoda T, Kageyama R, Morita A, Seino S, Yoshida H, Jordan O, Hanawa T. Wound Healing Promotion by Hyaluronic Acid: Effect of Molecular Weight on Gene Expression and In Vivo Wound Closure. *Pharmaceuticals (Basel).* 2021 Mar 28;14(4):301. doi: 10.3390/ph14040301. PMID: 33800588; PMCID: PMC8065935. 6. Toole BP. Hyaluronan-CD44 Interactions in Cancer: Paradoxes and Possibilities. *Clin Cancer Res.* 2009 Dec 15;15(24):7462-7468. doi: 10.1158/1078-0432.CCR-09-0479. PMID: 20008845; PMCID: PMC2796593. 7. Petrey AC, de la Motte CA. Hyaluronan, a crucial regulator of inflammation. *Front Immunol.* 2014 Mar 11;5:101. doi: 10.3389/fimmu.2014.00101. PMID: 24653726; PMCID: PMC3949149. 8. Tavianatou AG, Caon I, Franchi M, Piperigkou Z, Galesso D, Karamanos NK. Hyaluronan: molecular size-dependent signaling and biological functions in inflammation and cancer. *FEBS J.* 2019 Aug;286(15):2883-2908. doi: 10.1111/febs.14777. Epub 2019 Feb 21. PMID: 30724463. 9. Ruppert SM, Hawn TR, Arrigoni A, Wight TN, Bollyky PL. Tissue integrity signals communicated by high-molecular weight hyaluronan and the resolution of inflammation. *Immunol Res.* 2014 May;58(2-3):186-92. doi: 10.1007/s12026-014-8495-2. PMID: 24614953; PMCID: PMC4106675.

Indications for Use

The LacertaMatrix™ is intended for use in the management of the following wounds:

- ⇒ Partial and full thickness wounds
- ⇒ Pressure ulcers
- ⇒ Venous ulcers
- ⇒ Diabetic ulcers
- ⇒ Chronic vascular ulcers
- ⇒ Tunneled/ undermined wounds
- ⇒ Surgical wounds (donor sites, grafts, post Moh's surgery, post laser surgery, podiatric, wound dehiscence)
- ⇒ Trauma wounds (abrasions, lacerations, partial thickness burns, and skin tears)
- ⇒ Draining wounds

Contraindications

- ⇒ Do not use the device in patients with a known sensitivity to materials of porcine (pig) or reptilian (alligator) origin.
- ⇒ LacertaMatrix™ is not indicated for use on third degree burns.



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