

Esano™ ACA

Amnion / Chorion / Amnion Membrane Allograft



Allograft Membranes

We are transforming the regenerative therapeutics market, bringing the power of human evolution to the healing of all.

Why amniotic membrane?

Human amniotic membrane forms the innermost layer of placenta tissue. The avascular membrane acts as a protective barrier for the developing fetus. Its properties provide a wide variety of potential benefits in regenerative medicine.

Protective covering

The membrane sheet provides a protective covering that may aid in wound management

Immunogenicity

The amniotic membrane has unique non-immunological properties¹

Scaffold

The extracellular matrix acts as a scaffolding and potentiates the migration and adhesion of resident cells²

Growth Factors

Natural cytokines in the membrane³

Why Esano ACA

Esano ACA is intended for the repair, reconstruction, replacement, or supplementation of a patient's injured tissue.

Benefits of Esano™ ACA:

- Placental tissue allograft composed of three layers: amnion, chorion, amnion
- Non-side specific orientation for application
- Thicker membrane for deep wounds or exposed anatomy that can be easily positioned or repositioned for improved conformity^{4,5}
- Enhanced tensile strength, adheres well, and easy to apply
- Can be used in a hydrated or dehydrated state
- Retains important major structural proteins and ECM biochemicals that are naturally present in placental tissue⁶

[1] Park C, Y, Kohanim S, Zhu L, Gehlbach P, L, Chuck R, S: Immunosuppressive Property of Dried Human Amniotic Membrane. *Ophthalmic Res* 2009;41:112-113. doi:10.1159/000187629.

[2] The presence of extracellular matrix was confirmed by internal measurements of collagen (Sirius Red, Chondrex) and Hyaluronic Acid (Hyaluronan Quantikine ELISA Kit, R&D Systems).

[3] The presence of growth factors confirmed by 3rd party testing using

Fluorescent Multiplex ELISA (Quantbody® Human Growth Factor Array, Ray BioTech).

[4] Oyen ML, Cook RF, Calvin SE. Mechanical failure of human fetal membrane tissues. *J Mater Sci Mater Med* 2004;15:651-658.

[5] Chua WK, Oyen ML. Do we know the strength of the chorioamnion? A critical review and analysis. *Eur J Obstet Gyn Reprod Biol* 2009; 144(Suppl 1): S128-133.

[6] Data on File

What is Esano ACA?

Esano ACA is a dehydrated amniotic/chorionic/amniotic membrane sheet protective covering to aid in wound management.

Potential Esano ACA Applications

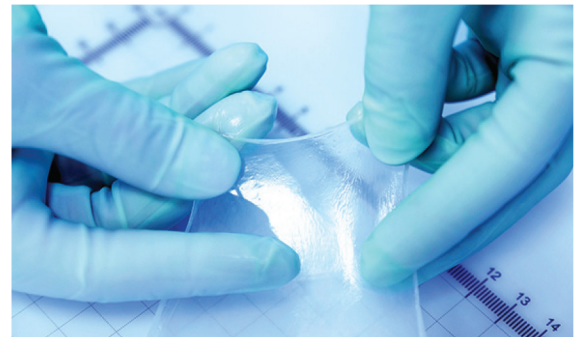
- + Podiatry/Vascular
- + Wound Management
- + Orthopaedic Surgery
- + Other Surgical Scenarios

Potential Esano ACA Benefits

- + Flexible
- + Protective Covering
- + Non-Steroidal
- + All-Natural

Evolution Biologyx Quality

Esano ACA is processed in compliance with all current Good Tissue Practices as mandated by the United States Food and Drug Administration and the American Association of Tissue Banks. We pride ourselves on requiring quality standards and testing that exceed industry standards.



Our process

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| <p>1 Screening
Extensive donor screening to ensure donor suitability</p> | <p>3 Acquisition
Tissue is delivered and processing is initiated within 24 hours</p> | <p>5 Sterilization
Esano ACA is terminally sterilized for additional level of safety</p> | <p>7 Shipping
Priority shipping with storage instructions</p> |
| <p>2 Birth
All tissue collected from caesarean section births to ensure quality and safety</p> | <p>4 Processing
Tissue is cleaned and processed using proprietary methods</p> | <p>6 Storage
Esano ACA is packaged to be stored at ambient temperatures</p> | <p>8 Application
Preparation instructions and records portal access included for HCT/P tracking</p> |

Sizes available

Esano ACA is provided in an amnion/chorion/amnion configuration to provide enhanced rigidity.

Small Sizes	Product Code	Large Sizes	Product Code
2 x 2 cm	EsanoACA-0202	4 x 4 cm	EsanoACA-0404
2 x 3 cm	EsanoACA-0203	4 x 6 cm	EsanoACA-0406
2 x 4 cm	EsanoACA-0204	4 x 8 cm	EsanoACA-0408