

# Skin and Tissue Substitutes

## Table of Content

- Purpose
- Description & Definitions
- Criteria
- Coding
- Document History
- References
- Special Notes
- Keywords

<u>Effective Date</u>	6/2001
<u>Next Review Date</u>	8/15/2024
<u>Coverage Policy</u>	Surgical 73
<u>Version</u>	6

**Member-specific benefits take precedence over medical policy and benefits may vary across plans. Refer to the individual's benefit plan for details [\\*](#).**

## Purpose:

This policy addresses Skin and Tissue Substitutes.

- For skin substitutes used for breast reconstruction see policy Breast Procedures, Surgical 10.

## Description & Definitions:

**Skin and Tissue Substitutes** are temporary or permanent to aid in wound closure, promote healing, replace skin layers and protect affected areas.

Types of skin and tissue substitutes include but are not limited to the following:

- **Allogeneic:** produce from persons, other than the patient's themselves.
- **Autologous:** produce from the patient's own body.
- **Composite:** produce from a mix of materials of various origins.
- **Synthetic:** produce from man-made materials.
- **Xenographic:** produce from non-human organisms /animals.

**NOTE:** Preferred products are listed by medical condition below. The individual must try and fail or have a contraindication to at least two preferred products prior to seeking an alternative FDA approved product, at which time will be reviewed on a case-by-case basis by a Medical Director.

## Criteria:

**Skin and tissue substitutes** are considered medically necessary, clinically superior and/or preferred products for **1 or more** of the following medical conditions:

- **Abdominal wounds** use of **1 or more** of the following:
  - **Alloderm** (Alloderm RTM, Alloderm RTU, acellular dermal tissue matrix) [Q4116] for individuals for surgical repair of complex abdominal wall wounds due to **1 of the** following:
    - Abdominal compartment syndrome
    - Complex and contaminated abdominal wall reconstructions
    - High-risk abdominal wall defect
    - Increased risk for mesh-related complications
    - Infection
    - Intestinal fistulization

- Parastomal hernia
  - Ventral, abdominal repair
- **Dermacell** (DermACELL, DermACELL AWM or DermACELL AWM Porous) [Q4122] for surgical repair of complex abdominal wall wounds due to **1 or more** of the following:
  - Abdominal compartment syndrome
  - Complex and contaminated abdominal wall reconstructions
  - High-risk abdominal wall defect
  - Increased risk for mesh-related complications
  - Infection
  - Intestinal fistulization
  - Parastomal hernia
  - Ventral, abdominal repair
- **Strattice** (Reconstructive Tissue Matrix) [Q4130]
- **Burn Wounds** use of **1 or more** of the following:
  - **Alloskin** (Theraskin) fresh frozen product [Q4115], [Q4121], [Q4123], [Q4141]
  - **Artiss** (fibrin sealant) [C9250] for individuals with severe burns
  - **Biobrane** (Biosynthetic Dressing) [A6021], [A6022], [A6023], [A6024] for individuals as temporary covering of superficial partial-thickness burn wounds
  - **Epicel** (cultured epidermal autograft) [15150], [15151], [15152], [15155], [15156], [15157] for individuals with **1 or more** of the following:
    - Deep dermal burns comprising a total body surface area of greater than or equal to 30%
    - Full thickness burns comprising a total body surface area of greater than or equal to 30%
  - **EZ Derm** [Q4136]
  - **Integra Bilayer Matrix Wound Dressing (BMWD)** [Q4104] when autografting is not feasible
  - **Integra dermal regeneration template (DRT)** or **Integra Omnigraft dermal regeneration matrix** [Q4105] when autografting is not feasible
  - **Integra Meshed Bilayer Wound Matrix** [Q4108] when autografting is not feasible
  - **StrataGraft** (allogeneic cultured keratinocytes and dermal fibroblasts in murine collagen-dsat cellular sheet) [Q4100]
  - **Suprathel** [A2012]
  - **TransCyte (allogeneic human dermal fibroblasts, a biosynthetic dressing)** [Q4182] when used as a temporary wound covering to treat second and third degree burns
- **Diabetic Foot Wounds** (ulcers) use of 1 or more of the following:
  - **Allopatch (FlexHD, AllopatchHD, or Matrix HD)** [Q4128]
  - **Amnioband (Guardian)** [Q4151, Q4168]
  - **Apligraft (graftskin culture-derived human skin equivalent (HSE))** [Q4101] for indications of **1 of the following**:
    - As an adjunct with standard diabetic foot ulcer care for the treatment of full-thickness neuropathic diabetic foot ulcers that extend through the dermis but are without tendon, muscle, joint capsule, or bone exposure, and have not adequately responded to a three week or greater duration of conventional ulcer therapy (ie, surgical debridement, complete off-loading and standard dressing changes.)
  - **DermACell (DermACELL AWM or DermACELL AWM Porous)** [Q4122]
  - **Dermagraft** [Q4106] use for **All** of the following:
    - Full-thickness diabetic foot ulcers of greater than three weeks duration that extend through the dermis, but without tendon, muscle, joint capsule, or bone exposure
  - **EpiCord** [Q4187] use for **All** of the following:
    - Treatment of partial and full-thickness neuropathic diabetic foot ulcers that have not healed with standard conservative therapy (such as surgical debridement, complete off-loading, and standard dressing changes) attempted for at least 1 month but not greater than 52 weeks duration with no capsule, tendon or bone exposed, when used in conjunction with standard diabetic ulcer care
  - **Epifix** [Q4186]

- **Grafix CORE** (GrafixPL Core) [Q4132]
- **Grafix PRIME** (GrafixPL PRIME, Stravix, StravixPL) [Q4133]
- **Graftjacket NOW** Regenerative Tissue Matrix (RTM) [Q4107]
- **Integra Bilayer Matrix Wound Dressing (BMWD)** [Q4104]
- **Integra dermal regeneration template (DRT)** or **Integra Omnigraft dermal regeneration matrix** [Q4105]
- **Integra Meshed Bilayer Wound Matrix** [Q4108]
- **Oasis Wound Matrix** [Q4102], [Q4103], [Q4124] for indications of **ALL** of the following:
  - Diabetic partial and full-thickness ulcers of the lower extremity that have failed standard wound therapy of at least 4-weeks duration
- **PriMatrix** [Q4110]
- **Theraskin** (fresh frozen products) [Q4121] for **All of the** following:
  - Treated foot has adequate blood supply as evidenced by **1 or more** of the following:
    - Presence of a palpable pedal pulse
    - Ankle-brachial index (ABI) of  $\geq 0.70$
  - Treatment is expected to last no more than twelve weeks
- **Grafix, Grafix CORE (GrafixPL Core)** [Q4132]
- **Dystrophic Epidermolysis Bullosa** use of 1 or more of the following:
  - **Dermagraft** [Q4106]
  - **OrCel** (Bilayered cellular matrix) [Q4100] for individuals with recessive dystrophic epidermolysis bullosa undergoing reconstructive hand surgery
- **Ocular Application** use of 1 or more of the following:
  - AmbioDisk [V2790]
  - Amnioexcel (Bio Excel) [Q4137]
  - AmnioExcel Plus [Q4137]
  - Amnifix [Q4100]
  - Amniogen-200
  - Amniogen-45
  - Amniogen-A
  - Amniogen-C 0.5 cc [Q4100]
  - AmnioGraft
  - Amniomatix (BiodMatrix) [Q4139]
  - AmnioPro [Q4100]
  - AmnioShield [Q4100]
  - AmnioPro Flow
  - Artacent Ocular
  - BioRenew, BioRenew Flow [Q4162, Q4163]
  - BioSkin, WoundEx [Q4163]
  - BioSkin Flow, WoundEx Flow [Q4162]
  - EpiFix [Q4145], [Q4186]
  - Neox 100 or Clarix 100 [Q4156]
  - Prokera
- **Venous insufficiency** (chronic venous wounds, Venous stasis ulcers) use of **1 or more** of the following:
  - **Amnioband** (Guardian) [Q4151, Q4168] for **All** of the following:
    - partial and full-thickness ulcers
    - Difficult-to-heal chronic venous ulcers of the lower extremity that have failed standard wound therapy of at least 4-weeks duration
  - **Apligraft** (graftskin, culture-derived human skin equivalent (HSE)) [Q4101] for indications of **all of the** following:
    - As an adjunct with standard therapeutic compression in the treatment of chronic, non-infected, partial and/or full-thickness skin ulcers due to venous insufficiency of greater than one month duration which have not adequately responded following a one month period of

- conventional ulcer therapy (such as standard dressing changes, and standard therapeutic compression)
- **Epifix** [Q4186]
- **Grafix, Grafix CORE (GrafixPL Core)** [Q4132]
- **Oasis** Wound Matrix [Q4102], [Q4103], [Q4124] for all of the following:
  - Difficult-to-heal chronic venous ulcers of the lower extremity that have failed standard wound therapy of at least 4-weeks duration
- **PriMatrix** [Q4110]
- **Theraskin** (fresh frozen products) [Q4121] for all of the following:
  - Partial or full thickness venous stasis ulcer of greater than four weeks duration for which standard wound therapy has failed
  - Treated foot has adequate blood supply as evidenced by 1 of the following:
    - Presence of a palpable pedal pulse
    - Ankle-brachial index (ABI) of  $\geq 0.70$
  - Treatment is expected to last no more than twelve weeks
- The following are considered **contraindications** to this procedure and are therefore **not medically necessary**:
  - Absence of adequate blood supply
  - Chronic or active infection
  - Exudate consistent with heavy bacterial contamination, or eschar/necrotic tissue that would interfere with graft take and healing
  - Known hypersensitivity to any of the components of the product

Skin and Tissue Substitutes that are not medically necessary, not clinically superior and/or preferred products, to include, but are not limited to, the following:

- AC5 Advanced Wound System (AC5) [A2020]
- ACM Surgical Collagen
- ACM Surgical Extra Advanced Collagen
- ACM Surgical Extra Advanced Collagen Powder
- Acesso DL [Q4293]
- Acesso TL [Q4300]
- ActiGraft [Q4100]
- Activate Matrix [Q4301]
- Adherus Dural Sheet
- Affinity [Q4159]
- AlloGen [Q4212]
- AlloMax
- AlloWrap DS or dry [Q4150]
- AltiPly [Q4235]
- Ambio Choice
- American Amnion AC Tri-Layer [Q4305]
- American Amnion AC [Q4306]
- American Amnion [Q4307]
- AmmnioHeal [Q4100]
- Amnio Wound [Q4181]
- AmnioAmp-MP [Q4250]
- AmnioArmor [Q4188]
- AmnioBind [Q4225]
- AmnioCord [Q4227]
- AmnioCoreTM [Q4227]
- AmniCore Pro [Q4298]
- AmniCore Pro+ [Q4299]
- AmnioCyte Plus [Q4242]
- AmnioFill [Q4100]
- AmnioFix [Q4100]
- Amnio-Maxx, Amnio-Maxx Lite [Q4239]
- AmnioMTM [Q4100]
- Amnion Bio [Q4211]
- Amnio Quad-Core [Q4294]
- AMNIOREPAIR [Q4235]
- AmnioShield
- AmnioStrip [Q4100]
- AmnioText [Q4245]
- Amniotext patch [Q4247]
- Amnio Tri-Core Amniotic [Q4295]
- Amnio Wrap2 [Q4221]
- AMNIPLY [Q4249]
- Apis [A2010]
- Architect, Architect FX, Architect Px Extracellular Collagen Matrix [Q4147]
- Artacent AC, 1 mg [Q4189]
- Artacent Cord [Q4216]
- Artacent wound [Q4169]

- Artelon [A4100 OR Q4100]
- Arthrex GraftRope [Q4100]
- ArthroFlex (FlexGraft) [Q4125]
- Ascent [Q4213]
- Autologel
- Autologous blood derived wound factors
- Autologous Platelet Gel
- Autologous Platelet-Derived Growth Factors
- Avance® Nerve Graft [Q4100]
- Avaulta Plus [Q4100]
- Avive [Q4100]
- Avotermin [Q4100]
- AxoBioMembrane
- AxoGuard Nerve Protector [Q4100]
- Axolotl Ambient [Q4215]
- Axolotl Cryo [Q4215]
- Axolotl DualGraft [Q4210]
- Axolotl Graft [Q4210]
- Barrera SL or Barrera DL [Q4281]
- BellaCell HD [Q4220]
- BellaDerm® Acellular Hydrated Dermis [Q4220]
- Bio-ConneKt Wound Matrix [Q4161]
- Biodesign (Surgisis) Hiatal Hernia MatriX [Q4100]
- Biodesign (Surgisis) Inguinal Hernia Matrix [Q4100]
- Biodesign (Surgisis) RVP [Q4100]
- BioDfactor [Q4199]
- BioDfence [Q4140]
- BioDFence DryFlex [Q4138]
- BioFix [Q4100]
- BioNextPATCH [Q4228]
- Biostat Biologx fibrin sealant
- Biovance [Q4154]
- Biovance Tri-Layer or Biovance 3L [Q4283]
- BioWound (WoundFix, BioWound, WoundFix Plus, BioWound Plus, WoundFix Xplus or BioWound Xplus) [Q4217]
- CardioCel [Q4100]
- CarePATCH [Q4236]
- Celera Dual Layer/Celera Dual Membrane [Q4259]
- CellerateRX [Q4236]
- Cellesta Cord [Q4214]
- Cellesta Flowable Amnion (25 mg per cc); per 0.5 cc [Q4185]
- Cellesta or Cellesta Duo, per sq cm [Q4184]
- Clarix Cord 1K [Q4148]
- Clarix Regenerative Matrix [Q4100]
- Cocoon membrane [Q4264]
- Cogenex Amniotic Membrane [Q4229]
- Cogenex Flowable Amnion [Q4230]
- CollaFix [Q4100]
- Collamend [Q4100]
- CollaSorb [Q4100]
- CollaWound [Q4100]
- Coll-e-Derm [Q4193]
- Collexa [Q4100]
- Complete ACA [Q4302]
- Complete AA [Q4303]
- Complete SL [Q4270]
- Complete FT [Q4271]
- Conexa [Q4100]
- Cor matrix patch [Q4100]
- CoreCyte [Q4240]
- CoreText [Q4246]
- Corplex [Q4232]
- Corplex P [Q4231]
- Cortiva Allograft Dermis
- C-QUR Biosynthetic Mesh
- CRXa
- Cryo-Cord [Q4237]
- CryoMatrix [Q4100]
- CryoSkin [Q4100]
- Cuffpatch [Q4100 OR A4100]
- Cygnus [Q4170]
- Cygnus Dual [Q4282]
- Cymetra Injectable Allograft [Q4112]
- Cytal [Q4166]
- DermaBind SL [Q4284]
- DermaBind DL [Q4287]
- DermaBind CH [Q4288]
- DermaClose RC [Q4100]
- Dermacyte Amniotic Membrane Allograft [Q4248]
- Derma-Gide [Q4203]
- DermaPure, per sq cm [Q4152]
- DermaSpan™ [Q4126]
- Dermavest and Plurivest, per sq cm [Q4153]
- Derm-Maxx [Q4238]
- Duraform [Q4100]
- DuraGen Dural Graft Matrix [Q4100]

- DuraGen Plus [Q4100]
- Dual Layer Impax Membrane [Q4262]
- Dural Sealant System [Q4100]
- DuraMatrix™ [Q4100]
- DuraSeal Spine Sealant System [Q4100]
- Durepair Regeneration Matrix [Q4100]
- Emerge Matrix [Q4297]
- Endoform Dermal Template [Q4100]
- ENDURAGen Collagen Implants [Q4100]
- Enverse [Q4258]
- EpiBurn [Q4100]
- Epidex [Q4100]
- EPIEFFECT [Q4278]
- Esano A [Q4272]
- Esano AAA [Q4273]
- Esano AC [Q4274]
- Esano ACA [Q4275]
- Evicel Fibrin Sealant
- Excellagen [Q4149]
- FloGraft [Q4100]
- FlowerAmnioFlo [Q4177]
- FlowerAmnioPatch [Q4178]
- FlowerDerm [Q4179]
- Fluid Flow [Q4206]
- Fluid GF / Fluid Flow [Q4206]
- Fortaderm
- Fortiva Porcine Dermis [Q4100]
- GalaFLEX [Q4100]
- GalaFORM [Q4100]
- GalaSHAPE [Q4100]
- Gammagraft Skin Substitute [Q4111]
- Genesis Amniotic Membrane [Q4198]
- GORE BIO-A [Q4100]
- GRAFIX PLUS [Q4304]
- GraftJacket Xpress [Q4113]
- Helicoll [Q4164]
- HMatrix [Q4164]
- Human Health Factor 10 Amniotic Patch (HHF10-P) [Q4224]
- Hyalomatrix [Q4117]
- HydroFix [Q4100]
- Inforce
- InnovaBurn or InnovaMatrix XL [A2022]
- InnovaMatrix AC [A2001]
- Innovamatrix FS [A2013]
- Innovamatrix PD [A2023]
- Integra Flowable Wound Matrix [Q4114]
- InteguPly [Q4126]
- Interfyl, 1 mg [Q4171]
- Keramatrix [Q4165]
- Kerasorb Wound Matrix [Q4165]
- Kerecis Omega3, MariGen Shield [Q4158, A2019]
- Keroxx [Q4202]
- Lamellas XT [Q4291]
- Lamellas [Q4292]
- LiquidGen
- Lyoplant [Q4100]
- Marigen, per sq cm (Omega 3 Omega3 MariGen, Omega3 MariGen Shield, Omega3 Wound ECM, Omega3 Wound Matrix (Kerecis fish skin graft)) [A2019]
- MatrACELL [Q4100]
- Matriderm
- Matrion [Q4201]
- Matristem, MatriStem wound matrix (Now Cytal Wound Matrix) [Q4118]
- Medeor [Q4100]
- MediHoney [Q4100]
- Mediskin [Q4135]
- Membrane Graft, Membrane Wrap [Q4205]
- Membrane Wrap-Hydro TM [Q4290]
- MemoDerm (DermaSpan, TranZgraft, InteguPly) [Q4126]
- Meso BioMatrix (now Resolve Matrix™) [A2024]
- MiAmnion [Q4100]
- Miro3D [A2025]
- Miroderm (MIRODERM, Miromatrix Biological Mesh, M Micromesh) See breast reconstruction [Q4175]
- Microlyte Matric [A2005]
- Micromatrix Biological Mesh (Micromesh) [Q4118]
- Mirragen advanced wound matrix [A2002]
- MLG-Complete [Q4256]
- MyOwn Skin, includes harvesting and preparation procedures [Q4226]
- Neoform Dermis™ (Cortiva formerly known as AlloMax, NeoForm) [Q4100]
- NeoMatriX [Q2021]
- Neopatch [Q4176]
- NeoStim DL [Q4267]

- NeoStim Membrane [Q4266]
- NeoStim TL [Q4265]
- Neox Cord 1K, Neox Cord RT, or Clarix Cord 1K [Q4148]
- Neox Flo or Clarix Flo [Q4155]
- Neuragen [C9352]
- NeuraWrap [C9353]
- Neuroflex [Q4100]
- NeuroMatrix [C9355]
- NeuroMend collagen nerve wrap [C9361]
- Novachor [Q4194]
- Novafix [Q4208]
- Novafix DL [Q4254]
- NovaSorb [A2006]
- NuCel Liquid [Q4100]
- NuDyn (SurFactor) [Q4233]
- NuDyn DL or NuDYN DL MESH [Q4285]
- NuDYN SL or NuDYN SLW [Q4286]
- NuShield Orthopedics, NuShield Spine [Q4160]
- Oasis Tri-Layer Matrix [4124]
- Ologen
- Omeza [A2014]
- ORION [Q4276]
- OrthADAPT (Equine-derived decellularized collagen products (e.g., OrthADAPT, Unite, and Unite Biomatrix), OrthADAPT Bioimplant [Q4100]
- OrthoFlo [Q4100]
- OsseoGuard [Q4100]
- Ovation [Q4100]
- OviTex [Q4100]
- PalinGen [Q4173]
- PalinGen XPlus [Q4174]
- Pegasus Equine Acellular Graft
- Pelvicol
- Pelvisoft
- Peri-Guard® Repair Patch [Q4100]
- Peri-Strips Dry [Q4100]
- Permacol Biologic Implant [C9364]
- PermeaDerm B [A2016]
- PermeaDerm C [A2018]
- PermeaDerm Glove [A2017]
- Phasix Mesh™ [C1781]
- Phoenix Wound Matrix [A2016]
- PolyCyte, for topical use only [Q4241]
- Porcine-derived polypropylene composite wound dressing
- Preclude® Pericardial Membrane [Q4100]
- Preclude® Vessel Guard [Q4100]
- Procenta [Q4310]
- ProgenaMatrix [Q4222]
- ProMatrX [Q4174]
- Promogran Collagen [Q4100]
- ProText [Q4246]
- PTFE Felt [Q4100]
- Puracol [Q4100]
- PuraPly [Q4195]
- PuraPly Antimicrobial [Q4196]
- PuraPly XT [Q4197]
- Puros Dermis [Q4100]
- PX50®, PX50® Plus [Q4100]
- Rebound Matrix [Q4296]
- RECELL [C1832]
- REGUaRD, for topical use only [Q4255]
- Relese [Q4257]
- ReNu – bulking agent.
- Renuva – facial bulking agent
- Repliform [C1781]
- Repriza [Q4143, Q4180]
- Restore Orthobiologic Soft Tissue Implant [Q4100]
- Restorigin, 1 cc [Q4192]
- Restorigin, per sq cm [Q4191]
- Restrata [A2007]
- Restrata MiniMatrix [A2026]
- Revita [Q4180]
- Revitalon, per sq cm [Q4157]
- RevoShield+ Amniotic Barrier [Q4289]
- RX Flow [Q4100]
- Rx Membrane [Q4100]
- SafeBlood
- Seamguard [Q4100]
- Sanopellis [Q4308]
- SERI™ Surgical Scaffold [Q4100]
- Signature APatch [Q4260]
- SJM™ Pericardial Patch [Q4100]
- SkinTE [Q4200]
- SportMatrix
- SportMesh [Q4100]
- SteriShield [Q4100]
- Supra SDRM [A2011]

- Surederm [Q4200]
- SurFactor (NuDyn) [Q4233]
- SurgiCORD [Q4218]
- Surgigraft, per sq cm [Q4183]
- SurgiGRAFT-DUAL [Q4219]
- SurgiMend [C9358, C9360]
- Surgisis Inguinal Hernia Matrix
- Surgisis® AFP™ Anal Fistula Plug
- Surgisis® Biodesign
- Surgisis® Gold™ Hernia Repair Grafts
- SurGraft [Q4209]
- SurGraft FT [Q4268]
- SurGraft TL [Q4263]
- SurGraft XT [Q4269]
- Symphony [A2009]
- Tag [Q4261]
- TalyMed [Q4127]
- TarSys [Q4100]
- TenoGlide [C9356]
- Tensix [Q4146]
- TheraForm
- TheraGenesis [A2008]
- TissueMend [Q4146]
- Tornier® [Q4146]
- Truskin [Q4167]
- Tutopatch™ Bovine Pericardium
- Unite [Q4100]
- Vascu-Guard [Q4100]
- Vaso Sheild
- Vendaje [Q4252]
- Vendaje AC [Q4279]
- Veritas [C9354]
- VersaShield [Q4100]
- Viaflow [Q4100]
- VIA Matrix [Q4309]
- Vim [Q4251]
- Vitagel Surgical Hemostat
- WoundFix, WoundFix Plus, WoundFix Xplus [Q4217]
- WoundPlus membrane or E-Graft [Q4277]
- Xceed [Q4100]
- Xcell Amnio Matrix [Q4280]
- XCellerate [Q4234]
- XCelliStem [A2004]
- XCM biologic [Q4142]
- Xelma [Q4100]
- XenMatrix
- XenoSure - Biologic Vascular Patch [Q4100]
- X-repair
- XWRAP, per sq cm [Q4204]
- Zenith [Q4253]

## Coding:

Medically necessary with criteria:

Coding	Description
15150	Tissue cultured skin autograft, trunk, arms, legs; first 25 sq cm or less
15151	Tissue cultured skin autograft, trunk, arms, legs; additional 1 sq cm to 75 sq cm (List separately in addition to code for primary procedure)
15152	Tissue cultured skin autograft, trunk, arms, legs; each additional 100 sq cm, or each additional 1% of body area of infants and children, or part thereof (List separately in addition to code for primary procedure)
15155	Tissue cultured skin autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 25 sq cm or less
15156	Tissue cultured skin autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; additional 1 sq cm to 75 sq cm (List separately in addition to code for primary procedure)
15157	Tissue cultured skin autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; each additional 100 sq cm, or each additional 1% of body area of infants and children, or part thereof (List separately in addition to code for primary procedure)
15271	Application of skin substitute graft to trunk, arms, legs, total wound surface area up to 100 sq cm; first 25 sq cm or less wound surface area
15272	Application of skin substitute graft to trunk, arms, legs, total wound surface area up to 100 sq cm; each additional 25 sq cm wound surface area, or part thereof (List separately in addition to code for primary procedure)
15273	Application of skin substitute graft to trunk, arms, legs, total wound surface area greater than or equal to 100 sq cm; first 100 sq cm wound surface area, or 1% of body area of infants and children
15274	Application of skin substitute graft to trunk, arms, legs, total wound surface area greater than or equal to 100 sq cm; each additional 100 sq cm wound surface area, or part thereof, or each additional 1% of body area of infants and children, or part thereof (List separately in addition to code for primary procedure)
15275	Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area up to 100 sq cm; first 25 sq cm or less wound surface area
15276	Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area up to 100 sq cm; each additional 25 sq cm wound surface area, or part thereof (List separately in addition to code for primary procedure)
15277	Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area greater than or equal to 100 sq cm; first 100 sq cm wound surface area, or 1% of body area of infants and children
15278	Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area greater than or equal to 100 sq cm; each additional 100 sq cm wound surface area, or part thereof, or each additional 1% of body area of infants and children, or part thereof (List separately in addition to code for primary procedure)
17999	Unlisted procedure, skin, mucous membrane and subcutaneous tissue
65778	Placement of amniotic membrane on the ocular surface; without sutures
65779	Placement of amniotic membrane on the ocular surface; single layer, sutured

65780	Ocular surface reconstruction; amniotic membrane transplantation, multiple layers
65781	Ocular surface reconstruction; limbal stem cell allograft (eg, cadaveric or living donor)
65782	Ocular surface reconstruction; limbal conjunctival autograft (includes obtaining graft)
A2012	SUPRATHEL, per sq cm
A6021	Collagen dressing, sterile, size 16 sq in or less, each
A6022	Collagen dressing, sterile, size more than 16 sq in but less than or equal to 48 sq in, each
A6023	Collagen dressing, sterile, size more than 48 sq in, each
A6024	Collagen dressing wound filler, sterile, per 6 in
C9250	Human plasma fibrin sealant, vapor-heated, solvent-detergent (Artiss), 2 ml
Q4100	Skin substitute, not otherwise specified
Q4101	Apligraf, per square centimeter
Q4102	Oasis wound matrix, per sq cm
Q4103	Oasis burn matrix, per sq cm
Q4104	Integra bilayer matrix wound dressing (BMWD), per sq cm
Q4105	Integra dermal regeneration template (drt) or integra omnigraft dermal regeneration matrix, per square centimeter
Q4106	Dermagraft, per square centimeter
Q4107	Graftjacket, per square centimeter
Q4108	Integra matrix, per square centimeter
Q4110	Primatrix, per square centimeter
Q4115	AlloSkin, per square centimeter
Q4116	Alloderm, per square centimeter
Q4121	TheraSkin, per square centimeter
Q4122	Dermacell, per square centimeter
Q4123	AlloSkin RT, per sq cm
Q4124	OASIS ultra tri-layer wound matrix, per sq cm
Q4128	FlexHD, or AllopatchHD, per sq cm
Q4130	Strattice tm, per square centimeter
Q4132	Grafix core and grafixpl core, per square centimeter
Q4133	Grafix prime, grafixpl prime, stravix and stravixpl, per square centimeter
Q4136	Ez-derm, per square centimeter
Q4137	AmnioExcel, AmnioExcel Plus or BioDExcel, per sq cm
Q4139	AmnioMatrix or BioDMatrix, injectable, 1 cc
Q4141	AlloSkin AC, per sq cm
Q4145	EpiFix, injectable, 1 mg
Q4151	AmnioBand or Guardian, per sq cm
Q4156	Neox 100 or Clarix 100, per sq cm
Q4162	WoundEx Flow, BioSkin Flow, 0.5 cc
Q4163	WoundEx, BioSkin, per sq cm
Q4168	AmnioBand, 1 mg
Q4182	Transcyte, per square centimeter
Q4186	Epifix, per sq cm
Q4187	Epicord, per sq cm
V2790	Amniotic membrane for surgical reconstruction, per procedure

Considered Not Medically Necessary:

Surgical 73

Page 10 of 17

Coding	Description
A2001	Innovamatrix ac, per square centimeter
A2002	Mirragen Advanced Wound Matrix, per sq cm
A2004	XCelliStem, 1 mg
A2005	Microlyte Matrix, per sq cm
A2006	NovoSorb SynPath dermal matrix, per sq cm
A2007	Restrata, per sq cm
A2008	TheraGenesis, per sq cm
A2009	Symphony, per sq cm
A2010	Apis, per sq cm
A2011	Supra SDRM, per sq cm
A2013	Innovamatrix fs, per square centimeter
A2014	Omeza Collagen Matrix, per 100 mg
A2015	Phoenix Wound Matrix, per sq cm
A2016	PermeaDerm B, per sq cm
A2017	PermeaDerm Glove, each
A2018	PermeaDerm C, per sq cm
A2019	Kerecis Omega3 MariGen Shield, per sq cm
A2020	AC5 Advanced Wound System (AC5)
A2021	NeoMatriX, per sq cm
A2022	InnovaBurn or InnovaMatrix XL, per sq cm
A2023	InnovaMatrix PD, 1 mg
A2024	Resolve Matrix, per sq cm
A2025	Miro3D, per cu cm
A2026	Restrata MiniMatrix, 5 mg
A4100	Skin substitute, FDA-cleared as a device, not otherwise specified
C9352	Microporous collagen implantable tube (NeuraGen Nerve Guide), per cm length
C9353	Microporous collagen implantable slit tube (NeuraWrap Nerve Protector), per cm length
C9354	Acellular pericardial tissue matrix of nonhuman origin (Veritas), per sq cm
C9355	Collagen nerve cuff (NeuroMatrix), per 0.5 cm length
C9356	Tendon, porous matrix of cross-linked collagen and glycosaminoglycan matrix (TenoGlide Tendon Protector Sheet), per sq cm
C9358	Dermal substitute, native, nondenatured collagen, fetal bovine origin (SurgiMend Collagen Matrix), per 0.5 sq cm
C9360	Dermal substitute, native, nondenatured collagen, neonatal bovine origin (SurgiMend Collagen Matrix), per 0.5 sq cm
C9361	Collagen matrix nerve wrap (NeuroMend Collagen Nerve Wrap), per 0.5 cm length
C9362	Porous purified collagen matrix bone void filler (Integra Mozaik Osteoconductive Scaffold Strip), per 0.5 cc
C9364	Porcine implant, Permacol, per sq cm
G0428	Collagen meniscus implant procedure for filling meniscal defects (e.g., cmi, collagen scaffold, menaflex)
Q4111	Gammagraft, per square centimeter
Q4112	Cymetra, injectable, 1 cc
Q4113	Graftjacket xpress, injectable, 1 cc
Q4114	Integra flowable wound matrix, injectable, 1 cc
Q4117	Hyalomatrix, per square centimeter
Q4118	Matristem micromatrix, 1 mg

Q4123	AlloSkin RT, per square centimeter
Q4125	Arthroflex, per square centimeter
Q4126	Memoderm, dermaspan, tranzgraft or integuply, per square centimeter
Q4127	Talymed, per square centimeter
Q4134	HMatrix, per sq cm
Q4135	Mediskin, per square centimeter
Q4138	BioDFence DryFlex, per square centimeter
Q4140	BioDFence, per square centimeter
Q4142	Xcm biologic tissue matrix, per square centimeter
Q4143	Repriza, per square centimeter
Q4146	Tensix, per square centimeter
Q4147	Architect, architect px, or architect fx, extracellular matrix, per square centimeter
Q4148	Neox Cord 1K, Neox Cord RT, or Clarix Cord 1K, per square centimeter
Q4149	Excellagen, 0.1 cc
Q4150	AlloWrap DS or dry, per sq cm
Q4152	DermaPure, per sq cm
Q4153	Dermavest and Plurivest, per sq cm
Q4154	Biovance, per sq cm
Q4155	Neox Flo or Clarix Flo 1 mg
Q4157	Revitalon, per sq cm
Q4158	Kerecis Omega3, per sq cm
Q4159	Affinity, per sq cm
Q4160	Nushield, per square centimeter
Q4161	Bio-connekt wound matrix, per square centimeter
Q4164	Helicoll, per square centimeter
Q4165	Keramatrix, per square centimeter
Q4166	Cytal, per sq cm
Q4167	Truskin, per sq cm
Q4169	Artacent wound, per sq cm
Q4170	Cygnus, per square centimeter
Q4171	Interfyl, 1 mg
Q4173	PalinGen or PalinGen XPlus, per sq cm
Q4174	PalinGen or ProMatrX, 0.36 mg per 0.25 cc
Q4175	Miroderm, per sq cm
Q4176	Neopatch or Therion, 1 sq cm
Q4177	FlowerAmnioFlo, 0.1 cc
Q4178	FlowerAmnioPatch, per square centimeter
Q4179	FlowerDerm, per square centimeter
Q4180	Revita, per sq cm
Q4181	Amnio Wound, per sq cm
Q4183	Surgigraft, per sq cm
Q4184	Cellesta or Cellesta Duo, per sq cm
Q4185	Cellesta Flowable Amnion (25 mg per cc); per 0.5 cc
Q4188	AmnioArmor, per sq cm
Q4189	Artacent AC, 1 mg
Q4190	Artacent AC, per sq cm
Q4191	Restorigin, per sq cm

Q4192	Restorigin, 1 cc
Q4193	Coll-e-Derm, per sq cm
Q4194	Novachor, per sq cm
Q4195	Puraply, per square centimeter
Q4196	Puraply am, per square centimeter
Q4197	Puraply xt, per square centimeter
Q4198	Genesis Amniotic Membrane, per sq cm
Q4199	Cygnus matrix, per sq cm
Q4200	SkinTE, per sq cm
Q4201	Matrion, per sq cm
Q4202	Keroxx (2.5 g/cc), 1 cc
Q4203	Derma-Gide, per sq cm
Q4204	XWRAP, per sq cm
Q4205	Membrane Graft or Membrane Wrap, per sq cm
Q4206	Fluid Flow or Fluid GF, 1 cc
Q4208	Novafix, per sq cm
Q4209	SurGraft, per sq cm
Q4210	Axolotl Graft or Axolotl DualGraft, per sq cm
Q4211	Amnion Bio or AxoBioMembrane, per sq cm
Q4212	AlloGen, per cc
Q4213	Ascent, 0.5 mg
Q4214	Cellesta Cord, per sq cm
Q4215	Axolotl Ambient or Axolotl Cryo, 0.1 mg
Q4216	Artacent Cord, per sq cm
Q4217	WoundFix, BioWound, WoundFix Plus, BioWound Plus, WoundFix Xplus or BioWound Xplus, per sq cm
Q4218	SurgiCORD, per sq cm
Q4219	SurgiGRAFT-DUAL, per sq cm
Q4220	BellaCell HD or Surederm, per sq cm
Q4221	Amnio Wrap2, per sq cm
Q4222	ProgenaMatrix, per sq cm
Q4224	Human Health Factor 10 Amniotic Patch (HHF10-P), per sq cm
Q4225	AmnioBind, per sq cm
Q4226	MyOwn Skin, includes harvesting and preparation procedures, per sq cm
Q4227	AmnioCoreTM, per sq cm
Q4228	BioNextPATCH, per sq cm
Q4229	Cogenex Amniotic Membrane, per sq cm
Q4230	Cogenex Flowable Amnion, per 0.5 cc
Q4231	Corplex P, per cc
Q4232	Corplex, per sq cm
Q4233	SurFactor or NuDyn, per 0.5 cc
Q4234	XCellerate, per sq cm
Q4235	AMNIOREPAIR or AltiPly, per sq cm
Q4236	carePATCH, per sq cm
Q4237	Cryo-Cord, per sq cm
Q4238	Derm-Maxx, per sq cm
Q4239	Amnio-Maxx or Amnio-Maxx Lite, per sq cm

Q4240	CoreCyte, for topical use only, per 0.5 cc
Q4241	PolyCyte, for topical use only, per 0.5 cc
Q4242	AmnioCyte Plus, per 0.5 cc
Q4244	Procenta, per 200 mg
Q4245	AmnioText, per cc
Q4246	CoreText or ProText, per cc
Q4247	Amniotext patch, per sq cm
Q4248	Dermacyte Amniotic Membrane Allograft, per sq cm
Q4249	AMNIPLY, for topical use only, per sq cm
Q4250	AmnioAmp-MP, per sq cm
Q4251	Vim, per sq cm
Q4252	Vendaje, per sq cm
Q4253	Zenith Amniotic Membrane, per sq cm
Q4254	Novafix DL, per sq cm
Q4255	REGUaRD, for topical use only, per sq cm
Q4256	MLG-complete, per square centimeter
Q4257	Relese, per square centimeter
Q4258	Enverse, per square centimeter
Q4259	Celera per sq cm (Celera dual layer or celera dual membrane, per square centimeter)
Q4260	Signature a patch, per sq cm
Q4261	Tag, per square centimeter
Q4262	Dual Layer Impax Membrane, per sq cm
Q4263	SurGraft TL
Q4264	Cocoon Membrane
Q4265	NeoStim TL, per sq cm
Q4266	NeoStim Membrane, per sq cm
Q4267	NeoStim DL, per sq cm
Q4268	SurGraft FT, per sq cm
Q4269	SurGraft XT, per sq cm
Q4270	Complete SL, per sq cm
Q4271	Complete FT, per sq cm
Q4272	Esano A, per sq cm
Q4273	Esano AAA, per sq cm
Q4274	Esano AC, per sq cm
Q4275	Esano ACA, per sq cm
Q4276	ORION, per sq cm
Q4277	WoundPlus membrane or E-Graft, per sq cm
Q4278	EPIFFECT, per sq cm
Q4278	Vendaje AC, per sq cm
Q4280	Xcell Amnio Matrix, per sq cm
Q4281	Barrera SL or Barrera DL, per sq cm
Q4282	Cygnus Dual, per sq cm
Q4283	Biovance Tri-Layer or Biovance 3L, per sq cm
Q4284	DermaBind SL, per sq cm
Q4285	NuDYN DL or NuDYN DL MESH, per sq cm
Q4286	NuDYN SL or NuDYN SLW, per sq cm
Q4287	DermaBind DL, per sq cm

Q4288	DermaBind CH, per sq cm
Q4289	RevoShield+ Amniotic Barrier, per sq cm
Q4290	Membrane Wrap-Hydro TM, per sq cm
Q4291	Lamellas XT, per sq cm
Q4292	Lamellas, per sq cm
Q4293	Acesso DL, per sq cm
Q4294	Amnio Quad-Core, per sq cm
Q4295	Amnio Tri-Core Amniotic, per sq cm
Q4296	Rebound Matrix, per sq cm
Q4297	Emerge Matrix, per sq cm
Q4298	AmniCore Pro, per sq cm
Q4299	AmniCore Pro+, per sq cm
Q4300	Acesso TL, per sq cm
Q4301	Activate Matrix, per sq cm
Q4302	Complete ACA, per sq cm
Q4303	Complete AA, per sq cm
Q4304	GRAFIX PLUS, per sq cm
Q4305	American Amnion AC Tri-Layer, per sq cm
Q4306	American Amnion AC, per sq cm
Q4307	American Amnion, per sq cm
Q4308	Sanopellis, per sq cm
Q4309	VIA Matrix, per sq cm
Q4310	Procента, per 100 mg

U.S. Food and Drug Administration (FDA) - approved only products only.

## Document History:

### Revised Dates:

- 2024: April
- 2023: August
- 2022: August, November
- 2021: September
- 2020: September
- 2016: April, May
- 2015: March, June, November, December
- 2014: January, April, October
- 2013: May
- 2012: February, May, November, December
- 2011: January, April, May, November
- 2010: January, April, June, July, August, September, December
- 2009: January, April
- 2008: February, April, May
- 2007: July, August
- 2006: January
- 2005: June
- 2002: July

### Reviewed Dates:

- 2019: September
- 2018: January, February
- 2017: November
- 2016: January, June
- 2015: April, May

- 2014: May
- 2008: January
- 2004: March

Effective Date:

- June 2001

## References:

Specialty Association Guidelines; Government Regulations; Winifred S. Hayes, Inc; UpToDate; Literature Review; Specialty Advisors; National Coverage Determination (NCD); Local Coverage Determination (LCD).

(2023). Retrieved Aug 2, 2023, from MCG 26th Edition: <https://careweb.careguidelines.com/ed26/index.html>

Chronic Wound Care Guidelines: Composition of bioengineered skin substitutes. (2016). Retrieved Aug 3, 2023, from Wound Healing Society (WHS): <https://onlinelibrary.wiley.com/doi/10.1111/wrr.12434>

Guidance, Compliance & Regulatory Information (Biologics). (2022). Retrieved Aug 3, 2023, from FDA: <https://www.fda.gov/vaccines-blood-biologics/guidance-compliance-regulatory-information-biologics>

Local Coverage Determination (LCD) - Application of Bioengineered Skin Substitutes to Lower Extremity Chronic Non-Healing Wounds L35041. (2019). Retrieved Aug 3, 2023, from CMS- LCD- Novitas: <https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcid=35041&ver=113&keyword=skin&keywordType=starts&areaid=all&docType=NCA,CAL,NCD,MEDCAC,TA,MCD,6,3,5,1,F,P&contractOption=all&sortBy=relevance&bc=1>

Local Coverage Determination (LCD) - Application of Skin Substitute Grafts for Treatment of DFU and VLU of Lower Extremities L36377. (2019, Jan 8). Retrieved Aug 3, 2023, from LCD - First Coast: <https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcid=36377&ver=7&keyword=skin%20substitute&keywordType=starts&areaid=all&docType=NCA,CAL,NCD,MEDCAC,TA,MCD,6,3,5,1,F,P&contractOption=all&sortBy=relevance&bc=1>

Local Coverage Determination (LCD) - Skin Substitute Grafts/Cellular and/or Tissue-Based Products for the Treatment of Diabetic Foot Ulcers and Venous Leg Ulcers L36690. (2023, Aug 1). Retrieved Aug 3, 2023, from LCD CGS Administrators: <https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcid=36690&ver=42>

National Coverage Determination (NCD) Porcine SKIN and Gradient Pressure Dressings - 270.5. (Longstanding). Retrieved Aug 3, 2023, from CMS - NCD: <https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?NCDId=139>

Procedure Fee Files & CPT Codes. (2023). Retrieved Aug 3, 2023, from Department of Medical Assistance Services: <https://www.dmas.virginia.gov/for-providers/rates-and-rate-setting/procedure-fee-files-cpt-codes/> & <https://www.dmas.virginia.gov/for-providers/cardinal-care-transition/>

Skin and Tissue Substitutes. (2023). Retrieved Aug 2, 2023, from HAYES: <https://evidence.hayesinc.com/search?q=%257B%2522text%2522:%2522Skin%2520and%2520Tissue%2520Substitutes%2522,%2522title%2522:null,%2522termsource%2522:%2522searchbar%2522,%2522page%2522:%257B%2522page%2522:0,%2522size%2522:50%257D,%2522type%2522:%2522all%2522}>

Skin substitutes. (2023, May 8). Retrieved Aug 3, 2023, from UpToDate: [https://www.uptodate.com/contents/skin-substitutes?search=Skin%20and%20Soft%20Tissue%20Substitutes&topicRef=14990&source=see\\_link](https://www.uptodate.com/contents/skin-substitutes?search=Skin%20and%20Soft%20Tissue%20Substitutes&topicRef=14990&source=see_link)

Skin Substitutes. (2023). Retrieved Aug 3, 2023, from American Society of Plastic Surgeons: <https://www1.plasticsurgery.org/search/?ref=/&q=skin+substitutes>

## Special Notes: \*

Medical policies can be highly technical and complex and are provided here for informational purposes. These medical policies are intended for use by health care professionals. The medical policies do not constitute medical advice or medical care. Treating health care professionals are solely responsible for diagnosis, treatment, and medical advice. Sentara Health Plan members should discuss the information in the medical policies with their treating health care professionals. Medical technology is constantly evolving, and these medical policies are subject to change without notice, although Sentara Health Plan will notify providers as required in advance of changes that could have a negative impact on benefits.

Services mean both medical and behavioral health (mental health) services and supplies unless We specifically tell You otherwise. We do not cover any services that are not listed in the Covered Services section unless required to be covered under state or federal laws and regulations. We do not cover any services that are not Medically Necessary. We sometimes give examples of specific services that are not covered but that does not mean that other similar services are covered. Some services are covered only if We authorize them. When We say You or Your We mean You and any of Your family members covered under the Plan. Call Member Services if You have questions.

## Keywords:

Skin and Tissue Substitutes, SHP Surgical 73, Allogeneic Skin and Tissue Substitutes, AlloPatch, Alloskin AC, Alloskin RT, Arthrex GraftRope, ArthroFlex (FlexGraft), Avotermin, BioDfactor, BioDfence, Biostat Biologx fibrin sealant, CellerateRX, Clarix Regenerative Matrix, Clarix Flo/Neox Flo Particulate Matrices, CollaFix, CRXa, Cygnus, Cymetra Injectable Allograft, Dermagraft-TC, Evicel Fibrin Sealant, FlowerDerm, FlowerFlow, FlowerPatch, Gammagraft Skin Substitute, Grafix CORE, Grafix PRIME, GraftJacket Xpress, Inforce, Matrix HD, MemoDerm, Neoform, Neuragen, NeuraWrap, Neuroflex, NeuroForm, NuCel Liquid, NuShield Orthopedics, NuShield Spine, Promogran Collagen, Repriza, TenoGlide, Tensix, Alloderm, Alloderm Select RTM, AlloMax, Amnioexcel, Amnioxfix, Amniogen-200, Amniogen-45, Amniogen-A, Amniogen-C 0.5 cc, Amniomatrix, AmnioPro, AmnioShield, AmnioPro Flow, Apligraft, graftskin, Artiss, Biodexcel, BioMatrix, BioRenew, BioSkin, BioSkin Flow, BioRenew Flow, Dermacell, Dermagraft, Dermamatrix, EpiFix, FlexHD, Neox, Theraskin, WoundEx, WoundEx Flow, Ocular Applications, Xenographic Skin and Tissue Substitutes, Integra Bilayer Matrix Wound Dressing, Integra, Integra Meshed Bilayer Wound Matrix, Oasis Wound Matrix, OrCel, burns, autograft, full thickness burns, deep partial thickness burns, tissue, chronic venous ulcers, full thickness ulcers, Architect Extracellular, Avaulta Plus, Axogen 2 Nerve Wrap, Biodesign (Surgisis) Hiatal Hernia MatriX, Biodesign (Surgisis) Inguinal Hernia Matrix, Biodesign (Surgisis) RVP, Collamend, Conexa, Cor matrix patch, Cuffpatch, DermaMatrix Acellular Dermis, Duraform, Durepair Regeneration Matrix, Endoform Dermal Template, ENDURAGen Collagen Implants, Excellagen, E-Z Derm, Integra Flowable Wound Matrix, Integra Dermal Regeneration Template, Matriderm, Matristem, Mediskin, Menaflex Collagen Meniscus Implant, Meso BioMatrix, NeuroMatrix, NeuroMend collagen nerve wrap, Oasis Tri-Layer Matrix, OrthADAPT Bioimplant, OsseoGuard, Pegasus Equine Acellular Graft, Pelvicol, Pelvisoft, Permacol Biologic Implant, Porcine-derived polypropylene composite wound dressing, PriMatrix acellular dermal tissue matrix, Restore Orthobiologic Soft Tissue Implant, Strattice Reconstructive Tissue Matrix, SurgiMend, Surgisis Inguinal Hernia Matrix, Surgisis RFP Anal Fistula Plug, TissueMend, Unite, Veritas, Vitagel surgical hemostat, XCM biologic, XenMatrix, PuraPly, PuraPly Antimicrobial, PuraPly XT, Autologous Skin and Tissue Substitutes, Epicel, Deep dermal burns, Autogel, Autologous Platelet-Rich Plasma, Autologous Platelet Gel, Autologous Platelet-Derived Growth Factors, Biodmatrix, Epidex, SafeBlood, Composite Skin and Miscellaneous Tissue Substitutes, TransCyte, Biobrane Biosynthetic Dressing, Talymed, Synthetic Skin and Tissue Substitutes, wound healing, Artelon, C-QUR Biosynthetic Mesh, Dural Sealant System, DuraSeal Spine Sealant System, Hyalomatrix, PTFE Felt, SportMesh, Suprathel, X-repair, lower extremity ulcers, AlloGen, Amnio Wrap2, AmnioCoreTM, AmnioCyté Plus, Amnio-Maxx, Amnion Bio, AMNIOREPAIR, AmnioText, Amniotext patch, Artacent Cord, Ascent, Axolotl Ambient, Axolotl Cryo, Axolotl DualGraft, Axolotl Graft, BellaCell HD, BioNextPATCH, BioWound, BioWound Plus, BioWound Xplus, carePATCH, Cellesta Cord, Cogenex Amniotic Membrane, Cogenex Flowable Amnion, Coll-e-Derm, CoreCyte, CoreText, Complex, Complex P, Cryo-Cord, Dermacyte Amniotic Membrane Allograft, Derma-Gide, Derm-Maxx, Epicord, Fluid Flow, Fluid GF, Membrane Graft, Membrane Wrap, MyOwn Skin, Novachor, Novafix, NuDyn, PolyCyte, Procenta, ProgenaMatrix, ProText, SkinTE, Surederm, SurFactor, SurgiCORD, SurgiGRAFT-DUAL, SurGraft, WoundFix, WoundFix Plus, WoundFix Xplus, XCellerate, Alloderm RTU, Strattice, Amnioband, Grafix, Graftjacket, AmbioDisk, AmnioGraft, Artacent Ocular, Prokera