

DERMAL FILLER PRODUCT COMPARISON

Manufacturer	Product(s)	Key Component	Description	Regulatory Status
ABR-Development	Atléan BTCP	BTCP	Tricalcium phosphate suspended in hyaluronic acid.	CE mark.
Adoderm	VARIODERM Fine Line VARIODERM VARIODERM Plus VARIODERM Subdermal	Non-animal Hyaluronic Acid	6mg/ml; for superficial wrinkles and lip augmentation. 12 mg/ml; for medium wrinkles and lip contour. 18 mg/ml; for deep wrinkles and volume. 27 mg/ml; for volume augmentation and facial contouring.	Marketed in Europe and other countries.
Alcon Laboratories, Inc.	Silikon 1000	Silicone	Purified, medical grade polydimethylsiloxane oil – 1000 cs. For microdroplet injection.	Silikon 1000 is approved by the FDA for retinal detachments, but not for facial filler indications. Off label use only.
Allergan	Zyderm 1 Zyderm 2 Zyplast	Purified Bovine Collagen + Lidocaine	Purified bovine-based collagen 35 mg/ml x 6. Purified bovine-based collagen 65 mg/ml x 6. Purified bovine-based collagen 35 mg/ml, cross-linked with glutaraldehyde x 6. *All collagen products contain 0.3% lidocaine.	Worldwide Worldwide Worldwide
	CosmoDerm CosmoPlast	Purified Human-based Collagen + Lidocaine	Purified human-based collagen 35 mg/ml. Purified human-based collagen 35 mg/ml, cross-linked with glutaraldehyde. *All collagen products contain 0.3% lidocaine.	Worldwide Worldwide
	HydraFill – Softline	Non-animal Hyaluronic Acid	Non-animal, cross-linked cohesive hyaluronic acid 24 mg/g.	CE mark.
	HydraFill – Softline Max	Non-animal Hyaluronic Acid	Non-animal, cross-linked cohesive hyaluronic acid 24 mg/g.	CE mark.
	Juvéderm ULTRA 2	Non-animal Hyaluronic Acid + Lidocaine	Non-animal, cross-linked cohesive hyaluronic acid 24 mg/g.	CE mark.
	Juvéderm ULTRA 3	Non-animal Hyaluronic Acid + Lidocaine	Non-animal, cross-linked cohesive hyaluronic acid 24 mg/g.	CE mark.
	Juvéderm ULTRA 4	Non-animal Hyaluronic Acid + Lidocaine	Non-animal, cross-linked cohesive hyaluronic acid 24 mg/g. *All Juvéderm ULTRA products contain 0.3% lidocaine.	CE mark.
Juvéderm VOLUMA	Non-animal Hyaluronic Acid	Non-animal, cross-linked cohesive hyaluronic acid 20 mg/g.	CE marked for facial volume restoration.	
Anteis S.A.	Esthélis – Soft 20 mg/ml Esthélis – Basic 22.5 mg/ml Fortélis Extra	Hyaluronic Acid Hyaluronic Acid	Non-animal 5 phase cross-linked hyaluronic acid with CPM (Cohesive Polydensified Matrix) technology.	Approved in Europe, Canada, Israel, South Korea and other markets globally. CE Pending.
Artes Medical	ArteFill	PMMA	20% polymethylmethacrylate (PMMA) – 30 to 50 microns – 80% purified bovine collagen gel and 0.3% lidocaine.	FDA approved.
BioForm	Radiesse	CaHA	Synthetic calcium hydroxylapatite (CaHA- 55.7%) microspheres, 25 – 45 microns, suspended in an aqueous polysaccharide gel (1.3% sodium carboxymethylcellulose USP, 6.4% glycerin USP & 36.6% water USP).	Worldwide
BioForm Medical (Russia)	Argiform	PAAG	Generation polyacrylamide gel comprised of 95% polyacrylamide and 5% water.	N/A
BioPolymer GmbH & Co. KG	MATRIDEX MATRIDUR MATRIGEL	DEAE Sephadex	MATRIDEX: synthetic hyaluronic acid sodium salt 25 mg, hypromellose 15 mg, positively charged DEAE sephadex particles 25 mg (cross-linked dextran). MATRIDUR: synthetic stabilized hyaluronic acid sodium salt 25 mg and hypromellose 5 mg. MATRIGEL: stabilized HA 12.25 mg.	CE mark – no FDA approval.
ColBar LifeScience Ltd.	EVOLENCE EVOLENCE Breeze	Porcine Collagen	35 mg of cross-linked porcine (tendons) collagen – glycation with a natural sugar – dispersed in a phosphate buffered saline solution. Glymatrix technology provides a collagen that extends the benefits for up to 12 months.	Approved in Europe, Canada, Israel, South Korea and other markets globally. Not yet approved by the FDA. For investigational use only in U.S.
Contura International A/S	Aquamid Aquamid Reconstruction	PAAG	2.5% cross-linked hydrophilic polyacrylamide gel (PAAG) and 97.5% water.	Not yet approved by the FDA – trials under way. For investigational use only in U.S. CE marking: CE 0543 – March 2001. Sold in more than 30 countries around the world.
Dermabiol Institute of Kuhra Vital GmbH	Rhegecoll	PMMA	Rhegecoll: 40% bovine collagen from U.S. calves, 15% A.D.N., 5% embryoblastos (stem cell) 10% polymethacrylate, 15% copolymer 4-G, 15% stabilizer / emulsifier.	Not approved in U.S., worldwide registrations pending.

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Dermatech (Paris)	DermaLive Dermadeep	HEMA / EMA	60% stabilized hyaluronic acid plus 40% acrylic hydrogel (hydroxyethylmetacrylate – HEMA and ethylmetacrylate (EMA) co-polymer particles by volume. DermaLive – 200 mg 45 – 65 micro beads, 14.4 mg HA. Dermadeep – 200 mg 80 – 110 micro beads, 14.4 mg HA.	DermaLive – Approved in Europe 1998, Canada 2003. Dermadeep – Approved in Europe 1998, Canada 2003.
Fascia Biosystems	Fascian	Fascia	Human allograft material – fascia, collected from human cadaver donors. Reconstituted with sterile normal saline, 0.5% lidocaine.	Fascian is a tissue product as classified by the FDA, there are no off-label uses – hence a physician can use as desired.
FibroGen, Inc.	FG-5017 (rhCIII) – synthetic human collagen (type III).	Human Collagen	FG-5017 dermal filler is comprised of a cross-linked formulation of recombinant human collagen type III in saline with lidocaine. Formed collagens based on human DNA sequences in yeast cultures.	Pending approval. Completed human safety clinical trial of recombinant human collagen type III. The pivotal efficacy and safety study required for regulatory approval of FG-5017 is expected to begin in 2005.
FuHua High Molecular Matter Company, Ltd.	Amazingel	PAAG	Hydrophilic Polyacrylamide Gel.	Approved in Asia – China in 2000.
FzioMed, Inc.	Laresse Dermal Filler	Carboxymethylcellulose, Polyethylene Oxide	Non-permanent, long lasting, ultra smooth dermal filler, containing no bacterial or animal by-products, no cross-linking chemicals and no gel particles.	CE mark approved.
Isolagen, Inc.	Isolagen	Autologous fibroblast cells	Isolagen – autologous cellular system – cultured human fibroblasts.	Available only in UK. Filed IND with FDA – approved.
Laboratories ORGéV	MacDermol S MacDermol R	Avian Hyaluronic Acid / Chitosan	MacDermol S – Avian non cross-linked hyaluronic acid (2.1%) sodium chloride. MacDermol R – Avian cross-linked hyaluronic acid (3.4%) chitosan chondroitin sulfate sodium chloride.	CE mark – no FDA approval.
LCA Pharmaceutical	Hyaluderm	Hyaluronic Acid	Hyaluderm – non cross-linked sodium hyaluronate, 2.0% to 2.5%.	CE mark – no FDA approval.
Medicis	Restylane Restylane Touch Restylane Perlane Restylane Sub-Q	NASHA	NASHA gel – a non-animal hyaluronic acid, stabilized with BDDE. The differentiation is in the size of the NASHA particles, to assure a tissue-tailored range of products. Restylane Touch – 500,000 particles per ml. Restylane – 100,000 particles per ml. Restylane Perlane – 10,000 particles per ml. Restylane Sub-Q – 1,000 particles per ml.	Restylane is approved in the U.S. and Canada. Restylane Perlane and Restylane Fine Lines are approved in Canada / pending FDA approval. Sub-Q is in the approval process.
Mentor Corporation in conjunction with Genzyme Corporation	Puragen Puragen Plus Prevelle Silk	Hyaluronic Acid	Puragen/Puragen Plus: Non-animal derived double cross-linked (DXL technology). Puragen Plus contains lidocaine integrated directly into the formulation. Prevelle Silk: Non-animal derived cross-linked hyaluronic acid, 5.5 mg/ml.	Puragen/Puragen Plus: Europe clearance – CE mark. FDA clearance pending. Prevelle Silk: FDA clearance pending.
Merz Pharma GmbH & Co. KGaA	Belotero Soft – 20 mg/ml Belotero Basic – 22.5 mg/ml	Hyaluronic Acid	Non-animal double phase cross-linked hyaluronic acid – via biofermentation – with CPM (Cohesive Polydensified Matrix) technology.	CE mark – October 2004 – Merz received the marketing rights for Germany, Austria, Switzerland, Russia and Italy from Anteis SA. U.S. approval pending.
Nordic Aesthetics (by S&V, Germany)	Amalian I Amalian II Amalian III Amalian Lip Amalian Balance	Non-animal Hyaluronic Acid	8.4 mg/ml, bi-phasic gel of cross-linked HA micro-particles dispersed in non cross-linked HA (CIS technology), 1 ml and 2 ml syringes. 24 mg/ml, bi-phasic gel of cross-linked HA micro-particles dispersed in non cross-linked HA (CIS technology), 1 ml and 2 ml syringes. Same as above. 24 mg/ml, biphasic gel of cross-linked HA micro-particles dispersed in non cross-linked HA (CIS technology), 0.5 ml and 1 ml syringes. 12 mg/ml, non cross-linked HA for skin rejuvenation and hydration, 2 ml syringe.	CE mark. CE mark. CE mark. CE mark. CE mark.

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Manufacturer	Product(s)	Key Component	Description	Regulatory Status
Polymekon	BIO-ALCAMID – Face BIO-ALCAMID – Lips BIO-ALCAMID – Body Bioinblue – Lips Bioinblue – DeepBlue	Poly – Acrylamide PVA	BIO-ALCAMID – 96% water and 4% synthetic reticulate polymer (poly-Alkyl-mide). Lips is soft and compact. Face has the same composition (it is not a dilution), Body has the same consistency as the Face form, but contains more material. Bioinblue – PVA (polyvinyl alcohol 8%) and water (92%).	BIO-ALCAMID – CE mark in 2001 – no FDA approval. Bioinblue – CE mark in 2003 – no FDA approval.
ProCytech SA	Outline Fine Outline Original Outline Ultra Evolution	Poly – Acrylamide-co-DADMA	Outline is absorbable poly (acrylamide-co-DADMA) gel. Evolution is a mixture of microscopic soft spheres of polyvinyl in a viscoelastic gel of poly (acrylamide-co-DADMA) gel.	Approved in Europe.
Prollenium Medical Technologies	Revanesse Revanesse Ultra ReDexis	Hyaluronic Acid	Revanesse – cross-linked HA 25 mg, hypromellose 12.5 mg. Revanesse Ultra – high viscosity, cross-linked, reticulated hyaluronic acid 25 mg, hypromellose 15 mg. ReDexis – cross-linked reticulated hyaluronic acid 25 mg, hypromellose 15 mg, dextronomer DEAE 25 mg.	Approved in Canada. U.S. approval pending.
Q-Med AB	Restylane Restylane Touch Restylane Perlane Restylane Sub-Q Restylane Lipp Restylane Vital Macrolane VRF30 Macrolane VRF20	NASHA Non-animal Hyaluronic Acid	NASHA gel – a non-animal hyaluronic acid, stabilized with BDDE. The differentiation is in the size of the NASHA particles, to assure a tissue-tailored range of products. Restylane Touch – 500,000 particles per ml. Restylane – 100,000 particles per ml. Restylane Perlane – 10,000 particles per ml. Restylane Sub-Q- 1,000 particles per ml. Concentration 20 mg/ml.	Restylane is approved worldwide with the exception of Japan. Restylane Perlane, Restylane Sub-Q and Restylane Touch are approved worldwide with the exception of Japan and U.S. U.S. approval in progress. Restylane Lipp approved in Europe. CE mark.
Rofil / Philoderm	REVIDERM Rofilan Beautical 2 Beautical 5	Dextran-Sephadex Hyaluronic Acid Poly Acrylamide	REVIDERM – 25 mg/ml sephadex (Dextran) 40-60 microns, 20 mg/ml cross-linked synthetic hyaluronic acid. Rofilan – 20 mg/ml cross-linked hyaluronic acid. Beautical 2 – Polyacrylamid gel. Beautical 5 – Polyacrylamid gel.	Approval in Europe, Canada and most other countries. Not approved in the U.S.
Sanofi-Aventis	Sculptra – U.S., also known as New-Fill or New-Filla	PLLA	Poly-L-Lactic acid (PLLA) hydrogel belonging to the family of aliphatic polyesters. Synthesized from corn.	FDA has approved Sculptra as the only product for the restoration and/or correction of the signs of facial fat loss (lipoatrophy). Approved in Europe in 2000 as NewFill – 2004 as Sculptra for facial aesthetic use.
Teoxane Laboratories	Teosyal Global Action Teosyal Deep Lines Teosyal Kiss Teosyal Ultra Deep Teosyal First Lines Teosyal Touch Up Teosyal Meso	Hyaluronic Acid	100% hyaluronic acid-based, resorbable and of non-animal origin.	Europe CE mark. FDA approval in progress.
Uroplasty	Bioplastique	Silicone	Solid silicone microspheres (100 to 400 and 600 µm) suspended in a polyvinylpyrrolidone vector.	CE mark.