



# Hyaluronic Acid

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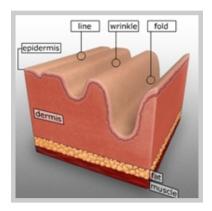






### Hyaluronic Acid Injection Introduction

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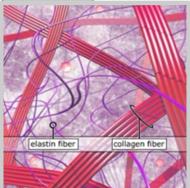


#### Where Do Wrinkles Form?

Your skin consists of two layers known as the epidermis and the dermis. The epidermis, or outer layer of the skin, acts as the skin's primary defense against the environment. The dermis, or innermost layer of the skin, is composed primarily of connective tissue and provides the skin with a support network. Most facial wrinkles and deeper folds occur within the dermal layer of the skin.



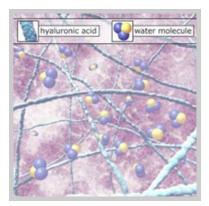




#### What Causes Wrinkles?

Within the connective tissue of the dermis, collagen and elastin fibers form a network that provides the skin with structure, support, and elasticity. Furthermore, fat cells and other molecules, such as hyaluronic acid, help to create volume beneath facial skin. With time, this network of collagen and elastin fibers breaks down, and hyaluronic acid molecules and fat cells that create volume are depleted. Together, breakdown and depletion of these molecules result in wrinkles and other changes to facial skin.

When used as standalone treatments or with other procedures, injectable fillers can reduce or eliminate wrinkles and scars, create fuller lips, and treat lipoatrophy, or fat loss beneath the skin. With little downtime and almost immediate results, injectable fillers offer a safe, effective method of restoring a smoother, more youthful appearance.



# The Basics of Hyaluronic Acid Fillers

Hyaluronic acid is a naturally occurring complex sugar molecule that forms large matrices in the connective tissue of the body, such as skin and cartilage. Much like a sponge, its primary function is to bind and absorb water molecules, which creates volume in the face. Hyaluronic acid fillers are generally used to treat facial wrinkles and folds and to enhance the appearance of the lips. One of the fastest growing dermal filler treatments available, hyaluronic acid fillers work by replacing the hyaluronic acid in the body that has depleted over time, which restores the volume beneath the skin's surface.





Types of Hyaluronic Acid Fillers			
Туре	Description	Treatment Area	Results
Hylaform	purified from rooster combs	various facial wrinkles	lasts up to 6 months
Hylaform Plus	purified from rooster combs	various facial wrinkles	lasts 4 to 6 months
Restylane	non-animal derived hyaluronic acid produced in a laboratory	various facial wrinkles	lasts up to one year
Juvederm	non-animal derived hyaluronic acid produced in a laboratory	various facial wrinkles	lasts up to 12 months
Captique	non-animal derived hyaluronic acid produced in a laboratory	various facial wrinkles	lasts up to one year

#### Types of Hyaluronic Acid Fillers

While there are a variety of hyaluronic acid fillers, some of the most common are Hylaform®, Restylane®, and Juvederm®. Hylaform®, marketed by INAMED Aesthetics, consists of avian, or bird-derived, hyaluronic acid. Restylane®, marketed by Medicis, and Juvederm®, marketed by Allergan, are both non-animal derived forms of hyaluronic acid produced in the laboratory. Hyaluronic acid fillers are generally biocompatible, which means allergy skin testing is not required prior to treatment.



## Procedure Preparation

Depending on the extent of treatment, hyaluronic acid injection procedures typically last between fifteen and sixty minutes. Prior to the start of your procedure, the treatment areas will be cleansed, usually using an alcohol based cleaner. Unlike collagen injections, hyaluronic acid injections do not include an anesthetic agent. Therefore, a local or topical anesthetic may be used to numb the treatment area during the procedure.



#### Hyaluronic Acid Injection Procedure

Using an ultra fine needle, hyaluronic acid is injected into the dermis at several points along the edge of the treatment area. After approximately two to three injections, the physician will massage the treatment area. The physician will continue injecting the filler along the length of the wrinkle or fold until maximum correction has been achieved. If a local anesthesia has not been used, you may feel some minor stinging from the injections. As the injected hyaluronic acid molecules attract and bind water molecules, the volume beneath the skin will increase, restoring a smoother, more youthful appearance.







## Hyaluronic Acid Injection Recovery

Immediately following the injections, you may experience some redness, slight stinging, minor swelling, or bruising in the treatment area. Tiny scabs may also form at the injection sites. These symptoms typically disappear within two to three days. Bandaging is not necessary and most patients are able to resume normal activities immediately following treatment.



#### Hyaluronic Acid Injection Results

The body will eventually metabolize and absorb the injected hyaluronic acid over time. Therefore, while the effects are immediate, hyaluronic acid injections do not provide the same long-lasting results that may be gained from cosmetic surgery. Although the longevity of results varies by patient, results from hyaluronic acid injections are typically maintained for six to twelve months.