

Cutting Edge Ingredients

A CLOSER LOOK AT SOME OF THE MOST BUZZWORTHY NEW INGREDIENTS IN ANTIAGING SKIN CARE.

By Inga Hansen



New products that promise to “unlock a more youthful appearance,” “turn back the hands of time,” and “reset the aging process” bombard consumers and skincare professionals on a seemingly daily basis. While we know that topical skincare is vital to skin health, the question is, do these new ingredients deserve a space on your retail shelves?

“The jury is still out on a lot of these new actives,” says Michael Gold, MD, founder of Gold Skin Care in Nashville. “Most people are offering them as a ‘try this; it’s new’ or using them in combination with retinoids. We need more clinical data and we have to see how they perform over time.”

We spoke with chemists and physicians and asked them to share their thoughts on which new topical ingredients show the greatest promise of living up to their hype.

Heparan Sulfate

Heparan sulfate—an essential glycosaminoglycan in skin health—has been studied for decades. “Understanding how heparan sulfate controls how cells in the dermis function has been a long-term research interest in my laboratory,” says Richard L. Gallo, MD, PhD, head of the Gallo Lab at the University of California, San Diego School of Medicine. “We believe that because heparan sulfate is a co-factor for many other enzymes and growth factors in the skin, it essentially serves as good fertilizer that helps everything in the dermis work better.”

“Heparan sulfate has been called the ‘master molecule,’ because it helps every part of our skin,” says Dr. Gold. “But the heparan sulfate molecule is too large to penetrate the stratum corneum, so we were not able to create a product [incorporating it].”

This changed when a skincare startup Sente developed a heparan sulfate analog that it believed could deliver the active into the dermis. They approached Dr. Gallo for testing. “The molecule has a very unique shape—it’s linear, almost like a needle—and it does in fact penetrate the epidermis, dermis and basement membrane,” says Dr. Gallo. “We believe its penetration capacity has more to do with its shape than with its size.”

An eight-week study of Sente cream involving 15 patients, published in the July 2015 *Journal of Drugs in Dermatology*, showed improvement in skin hydration, firmness, elasticity, barrier function, and global fine lines and wrinkles.

“I was quite amazed at how beneficial a topical application of heparan sulfate can be in skin damage repair and remodeling,” says Dr. Gallo.