
Feature Article

‘What Do You Want to Make Those Eyes at Me For?’ The Rise of Eyelash Enhancers

The appearance of long, thick eyelashes which can be fluttered flirtatiously or coyly at the opposite sex has always been a key element when looking at ideals of beauty. From babies to animals and even cartoon characters, the appearance of full lashes is an attractive feature.

People, especially women have been dyeing, colouring, adorning and elongating lashes way back into history. Starting with the Egyptians in around 4,000 BC when kohl first became popular, followed by Cleopatra and her famously depicted eye make-up in 69 -30 BC, to the invention of mascara in 1840 by Eugene Rimmel. The first modern day mascara, made from mixing coal dust and petroleum jelly appeared in 1913 from American chemist T. L. Williams who called his product Maybelline, a combination of his sister Mabel's name and Vaseline! This was swiftly followed by the invention of false lashes made from human hair in 1916, eye lash curlers in the 1920s, waterproof mascaras in the 1930s and the mascara applicator wands and tubes we all know today in the 1950s.¹ These days you can't go far into an evening of television watching without coming across adverts for the latest innovation in mascara applicator brushes or the mind blowing, illusionary thickening power of their latest formulation. It seems that making your eyelashes a stand out part of your face is by no means a new fashion.



It's thought that about 50% of all cosmetic sales are for mascara products, with over 60% of women worldwide being regular wearers. Even research by Mintel in February 2012 showed that 33% of 9 to 17 year olds wear mascara on a daily basis!

So, as people find long, full lashes to be attractive, many then seek to obtain the best lashes that they possibly can, just like the holy grail of anti-ageing.

According to Medical Insights, global sales of physician-dispensed eyelash products reached \$164.1 million in 2012. Growth in this sector is projected at 10.2% per year up to 2017.

So there is no doubt that there is a burgeoning market for eyelash enhancement products for those people who don't possess what they see as 'adequate' lashes and who want to improve on what nature gave them or time and tide took away. Of course, it's worth bearing in mind that most of the products available for eyelash enhancement can also be and are used in the eyebrow area.

So, what is available if you're considering adding an eyelash enhancing product to your clinic offering? Well, there are in fact a staggering number currently now being sold into the UK marketplace as this sector has exploded in recent years. In this feature article, I take a look at the various active ingredients being promoted and give a brief summary of the brands available to you (not an exhaustive list), which we hope will help you along the journey to finding the right product for your clinic and your clients.

Eyelashes and how they grow...

Like other hair on our bodies, eyelashes have a similar growth cycle (anagen, catagen and telogen), and vary in thickness, proliferation and strength. However, what makes eyelashes different to say hairs on your scalp include some unique properties of their growth cycle, such as a relatively long telogen (resting) phase and a short anagen (growth) phase, a slow rate of growth, and a lack of influence by androgens. It's thought that these characteristics may allow for specific interventions to be made using specially formulated products to take advantage of the properties of the lash and improve the appearance of them.

Some people will have always had thin, fine, short or sparse lashes, whilst others will have lost the fullness of their lashes due to various factors. Things which contribute to eyelash loss or damage include age, illness and

associated medical treatments (such as alopecia or cancer treatment drugs) or other environmental factors such as the over use of eye make-up products, eye make-up removal products, false lashes, curling devices as well as UV exposure which can make lashes brittle and prone to breaking. The medical term for inadequate or not enough lashes is hypotrichosis.

We have around 100 to 150 lashes, arranged in two or three rows of follicles on our upper eyelids, the lower eyelashes are much fewer, by about half. Their main function of course is to protect the eye from debris and trigger the blinking reflex. The life cycle of an eyelash can be anything from 5 to 11 months with the anagen phase lasting 1 to 2 months and the telogen phase 4 to 9 months. The differing lengths of the anagen phase amongst different individuals has an effect on the final length that the hair achieves, thus the developing of an ability to extend the anagen phase would be advantageous to a product aimed at enhancing lashes.ⁱⁱ

Key ingredients in eyelash enhancing products...

The products available on the market seem to fall into two main categories, the prescriptions only medicines or POMs and the non-POMs or non-prescriptive, cosmetic formulations, which account for the majority. Clearly licensing and thus safety and efficacy evidence requirements will differ depending on the categorisation of the products, and much legal wrangling has occurred, mostly in the USA over the composition of many products and the marketing claims of many competitors, along with the legal status of their products – drug or cosmetic.

In general there are two main types of ingredients being used in eyelash enhancing products; these are prostaglandin analogues (commonly prescriptive drugs) and various peptides (cosmetics).

The key to all eyelash enhancing products, no matter which camp their main active ingredient is in, is how high up the ingredient list it actually is. The further down the list, the lower the concentration or smaller the amount of active ingredient present in the product, thus this will likely have a bearing on results or at least the speed with which results are seen and maintained. This of course has an overall bearing on patient satisfaction and perceived value for money if they don't start to see results as quickly as they expect.

The marketing of products is tricky and claiming that the product can 'grow' lashes is mostly avoided (particularly after some of the legal battles over the years) as this implies a medical outcome, rather than a cosmetic one; instead terms tend to stick to claims of 'conditioning', 'enhancing' 'fuller looking', 'thicker appearance' without actually claiming 'growth'. In fact some manufacturers have gone as far as including a disclaimer to avoid all doubt that their products are cosmetics, for the benefit of the U.S. FDA by stating things along the lines of, '[product] is not intended to stop, prevent, cure, relieve, reverse or reduce eyelash or eyebrow loss or to promote the growth of eyelashes or eyebrows.'

Prostaglandin Analogues

Almost twenty years ago, Ophthalmologists started to notice that some of the prostaglandin based drugs that they were prescribing to treat patients with glaucoma or ocular hypertension were causing the side effect of increased eyelash growth or hypertrichosis.

Various of the prostaglandin (PGF) analogues, available to eye specialists, are now documented in the medical journals as causing varying degrees of hypertrichosis in glaucoma patients, (along with other side effects which are less desirable such as increased pigmentation in the surrounding skin of the eye and in the iris). The drugs named include latanoprost (Xalatan from Pfizer), travoprost (Travatan by Alcon), tafluprost (Taflostan by Santen Pharma), bimatoprost (Lumigan from Allergan), and isopropyl unoprostone (Rescula).ⁱⁱⁱ

Thus, in 2007, following some licence agreements for the acquisitions of some patents, Allergan embarked on clinical trials using their 0.03% bimatoprost prostaglandin analogue, (the ethylamide derivative of 17-phenyl-trinor PGF2alpha) Lumigan® for cosmetic use as an eyelash enhancer, with plans to initially launch it under the name Lumilash.

In December 2008, the product (rebranded as Latisse®) was approved by the U.S. FDA as a prescription only product to 'increase the length, thickness and darkness of eyelashes in people with hypotrichosis of the eyelashes'.

Bimatoprost activates prostamide alpha F2 receptors found in the hair follicle to stimulate its growth rate. It is a lipid compound derived from fatty acids which is designed to bind to prostaglandin receptors which are present in the hair, particularly in the dermal papilla and outer root sheath. Although the precise mechanism of action is unknown, prostaglandin receptors are thought to be involved in the development and regrowth of the hair follicle by increasing the percent of hairs in, and the duration of, the anagen phase. The company claims results are visible after 8 weeks, with full results at 16 weeks, although lashes will eventually return to normal through a hair growth cycle if the product is discontinued.

However, nothing is always as good as it sounds, and there is quite a lengthy list of possible side effects from bimatoprost use for cosmetic eyelash growth including: burning sensation (eyelid), erythema periorbital, eye swelling, eyelid irritation, eyelid oedema, eyelids pruritus, iris hyperpigmentation, lacrimation increase, madarosis and trichorrhexis (temporary loss of a few lashes to loss of sections of eyelashes, and temporary eyelash breakage, respectively), periorbital and lid changes associated with a deepening of the eyelid sulcus, rash (including macular, erythematous, and pruritic limited to the eyelids and periorbital region), skin discolouration (periorbital), and blurred vision.^{iv}

Another disadvantage encountered by Latisse users, albeit a minor one, which it is claimed adds to the expense, is the single use (one per eye, per application) disposable applicators required to deliver the solution. This is not required with the many cosmetic products available on the market. However, Allergan argue that the single use, sterile, dose specific designed brushes ensure the proper and accurate application by the patient (i.e. only at the base of the upper eyelashes and not to the lower lashes) due to the potential side effects such as increased brown pigmentation to the pupil which is permanent. A small annoyance for a better treatment outcome perhaps.

Several companies have created products based on prostaglandin analogues, at various concentrations, as non-prescription cosmetics, which has been controversial and has led to some legal action (both between different manufacturers and between the manufacturer and the U.S. FDA), as well as withdrawals and reformulations. Some of the products, available in the UK or in the USA that contain or have at some point in their history contained prostaglandin analogues include MD Lash Factor, Revitalash, Jan Marini, LiLash, neuLash (Isopropyl Cloprostenate), Lashes to Die For (17 Phenyl Trinor PGE2 SA), and RapidLash (Isopropyl Cloprostenate).^{vi}

During 2008, Allergan sued seven different companies selling cosmetic eyelash products under the names MassiveLash, DermaLash, Luxette, Age Intervention, Revitalash and MD Lash Factor that contained the bimatoprost prostaglandin. Allergan claimed the products infringed a patent for using the substance to grow eyelashes which it held the licence for.^{vii} It also sued Cayman Chemical Company, a chemical supply company, which allegedly provided all of the beauty firms with the bimatoprost that they then allegedly placed in their eyelash growth products.^{viii}

Although products can legally contain prostaglandin analogues, the issue between 'medical' and 'cosmetic' comes down to the concentration used, with cosmetic products using very low concentrations, which means that the active prostaglandin analogue is practically at the end of the ingredient list by percentage, and in some cases peptides are included to boost the effect. Also, to avoid being taken as a medicine and thus requiring a licence, a product needs to be careful about the physiological or anatomical changes that it can have on the body such as hair growth or pigmentary changes etc. All of this makes the regulation of the eyelash enhancers, just like cosmeceuticals and other contentious products like dermarollers, a very controversial arena.

For those who want to read more on the so called '[Prostaglandin Legal Wars](#)' – this makes for a good, if perhaps biased summation of the timelines and facts.

Latisse® is not currently available in the UK marketplace, while Allergan seeks to gain licensing for an eyelash growth indication from the MHRA and European regulators. Back in January 2012, we reported that some UK clinics were promoting the prescription only glaucoma treatment product Lumigan® off-label to the public pending the approval of Latisse® which was raising concerns.

Allergan was concerned that this practice could put them at risk from a regulatory stand point, in that they were doing so without support and appropriate training from Allergan or validated third parties which could result in incorrect or incomplete patient advice on the product application and potential complications from use, leading to increased reports of adverse reactions of the Lumigan® product prior to a license for Latisse® being granted.

Allergan have assured us that they are working as hard and fast as they can to bring Latisse® to the UK market.

Peptides

Due to the drug licensing issues, dependent on concentration, when using a prostaglandin analogue as a base for a cosmetic lash enhancer, as well as some of the now known side effects, many manufacturers have looked at the use of peptides as an alternative to improve lashes. Some have incorporated widely used and ready-formulated peptides, along with added botanicals and moisturisers, while others have created proprietary and patented formulations of their own.

The use of peptides as an alternative to prostaglandin analogues has led to increased marketing efforts which point out that products are non-prescriptive and prostaglandin free, thus side effect free in terms of eye discolouration etc., as advantageous characteristics for their product over the leading U.S. prostaglandin brand (Latisse®).

One of the commonly used peptides is the catchy sounding Myristoyl Pentapeptide-17. Both this peptide and Myristoyl Pentapeptide-16 were developed by a company called Symrise who create active ingredients for the cosmetic industry^x. Their clinical trials have shown a 25% increase in lash length when the peptide is used in eyelash serums. It's believed that the peptides encourage eyelash growth by stimulating the keratin genes in the body which are responsible for growing the lashes. As well as being a key ingredient in the Obagi ElastiLash and Zoria Boost, both detailed below, a quick Google search finds it mentioned as a key ingredient in many globally available products including Idol Lash, City Lash, Derma MD Lash & Brow Enhancer and LUCA Lash. The peptide is also commonly found in finger nail strengthening products.^x

Other, unique peptides and peptide combinations or blends have been developed and used by many of the brands listed below.

Product Brands

The following lists the main brands and products aimed at eyelash enhancing which are currently available in the UK marketplace. The list is in alphabetical order for fairness.

Ageless Lashes

Developed by Image Skincare and distributed in the UK by Skin Geeks Ltd, the Ageless Lashes product uses a blend of peptides as well as Follicusan® (used in shampoos to treat alopecia), plus hydrolysed soy protein to repair damaged hair, and various botanicals including clotsfoot flower, achillea millefolium and cinchona succirubra bark extracts to provide nutrients for the hair bulb.

The product is available in a black or clear solution to be applied once (ideally twice) a day, morning (using the black as an eyeliner or the clear) and/or at night (using the clear), by applying a thin line to the base of the eyelashes.



Before and after images provided by the manufacturer from their own study show an enhancement in eyelashes after twice daily use over a period of 4 to 6 weeks.

The product is available in a 7.9ml size and wholesales at £45.85 with an RRP of £95.99.

For more information, please visit www.skingeeks.co.uk.

amalian LASHES



According to 4Tmedical, amalian LASHES, launched in June 2012, is a novel proprietary formulation using a prostaglandin derivative for eyelash revitalisation which is patent pending. Made in Germany by S&V Technologies AG, the solution is enriched and encapsulated with a hyaluronic acid complex.

They note that the product has been clinically reviewed by Dermatologists and Ophthalmologists and that there have been no reports of ocular irritation, iris or eyelid hyper-pigmentation.

The active ingredient is a prostaglandin derivative from the PGF-2 alpha family, at an extremely low concentration, which is

encapsulated in a polysaccharide (HA) complex that acts as a carrier to get it to the hair follicles, in a slow release mechanism, without irritating the surrounding tissues of the eye. The product is water based, so unlike some others on the market it contains no alcohol or preservatives which make it more tolerable for users as some allergic reactions are avoided.

The mode of action of the active ingredient is to neutralise 'bad' prostaglandin and thus allow the naturally produced prostaglandin in the body to work better and improve the quality of the lashes.

amalian LASHES is applied with an eyeliner brush once a day, preferably in the evening, to give noticeable results in 4 to 6 weeks*.

The product is only available through direct clinic sales. Expect to pay £40+ (4ml) with an RRP of £80 - £100.

*A randomised clinical study from the University of Hamburg, Germany^{xi} looking into the safety and efficacy of amalian LASHES on 30 individuals (26 females and 4 males) over 12 weeks showed that at week six 89% of the study participants were very satisfied or satisfied with the efficacy of the formulation. Satisfaction was rated using the global aesthetic improvement scale (GAIS),

standard photos and a survey of both test subjects and blind evaluators. Evaluations of clinical photos comparing lashes at baseline and six weeks showed an improvement in overall lash prominence.



For more information, please visit www.4tmedical.com/amalian-lashes.

Marini Lash Eyelash Conditioner



Jan Marini Skin Research state on their own website that; "in 2005 Jan Marini Skin Research revolutionised eyelash enhancement with a technological first that inspired a host of imitators."

It's true that their actions courted them some controversy and ultimately legal action.

In November 2007, the U.S. FDA seized 12,682 applicator tubes of the Jan Marini line Age Intervention Eyelash worth approximately \$2 million. This was on the grounds of it being an unapproved and misbranded drug because Jan Marini had promoted the product, which contained bimatoprost, to increase eyelash growth and had not sought FDA approval for it by demonstrating safety and efficacy. The company claimed to have ceased the manufacture and shipping of Age Intervention Eyelash in September 2006.^{xii}



The company then reformulated their Age Intervention Eyelash product as Age Intervention Eyelash Conditioner, not using bimatoprost, but faced legal action from Allergan over patent infringement involving the use of a prostaglandin analogue. They acknowledged Allergan's patents, the product was withdrawn and the lawsuit dropped.^{xiii}

So third time lucky, Jan Marini came out with Marini Lash in mid-2008 using a proprietary peptide blend. As the product is non-prostaglandin based, they note that there is no risk of discolouration and no eye irritation has been reported. The product has been Dermatologist and Ophthalmologist safety tested, as well as undergoing an independent study for a year with a grant from JMSR. Reported side effects do not go beyond transient and mild irritation in some people.

One study on 27 females over 33 weeks showed that 85% of subjects exhibited an enhanced eyelash appearance when looking at photographic results at 6 weeks, with 36% having a moderate response (less than 50% enhancement), 27% having a strong response (50-75% enhancement) and 36% a dramatic response (more than 100% enhancement).^{xiv}

Like many other products now available, its key ingredient is Myristoyl Pentapeptide-17, although this is combined with Myristoyl Tetrapeptide-12.

The product is applied sparingly once per day in the evening to the upper eyelash line at the root. Typically initial results are reported from 4 to 6 weeks. The product is supplied in various sizes, 2.46ml is a 2 month supply, 5.56ml is a 6 month supply and 7.4ml is a 1 year supply. Expect to pay £55.00 for the 5.56ml version with an RRP of £105.

For more information, please visit www.jmsreurope.com.

MD® Lash Factor Eyelash Conditioner

Having also faced legal action over patent infringement from Allergan in 2007 for the use of dechloro ethylcloprostenolamide, a prostaglandin analogue in its product, which had been proven to be effective^{xv}, the company reformulated using a non-prostaglandin approach.

MD® Lash Factor was developed by Dr. Susan F. Lin, a practicing American physician in women's health, anti-ageing and aesthetic medicine for over 21 years. It is distributed in the UK by Baron Health & Beauty.

The product claims thicker, longer, looking-looking lashes in as little as 30 days, following daily application at night, and is Ophthalmologist tested.



BEFORE



AFTER

MD® Lash Factor Eyelash Conditioner utilises a cytokine complex, including milk protein which it claims provides eyelashes with the nutrients necessary for improvement and healthy growth.

It includes thiotaine (ergothioneine), a mushroom-derived peptide and antioxidant which helps protect and nourish the lashes. The solution also contains panthenol (provitamin B5) for moisturising and biotin (vitamin H) for supporting the health of cells.

In an independent clinical study by a board certified Ophthalmologist, the product showed no affect on visual acuity, cornea, eyelid, and conjunctiva. There were no changes in colour or deposits on contact lenses. In a one month study 95% of users reported an improvement in the overall appearance of lashes with an average increase of 53% increase in length.

Some users have reported a mild irritation at the base of their upper lashes while using the product, although most report no or minimal irritation after a few weeks of use. Once an optimal result is achieved, the manufacturers recommend repeated use 2 or 3 times a week for maintenance. The product has an RRP of £79.95 (3ml) and £109.95 (6ml).

For more information, please visit www.baronhb.com.

OBAGI ELASTILash Eyelash Solution

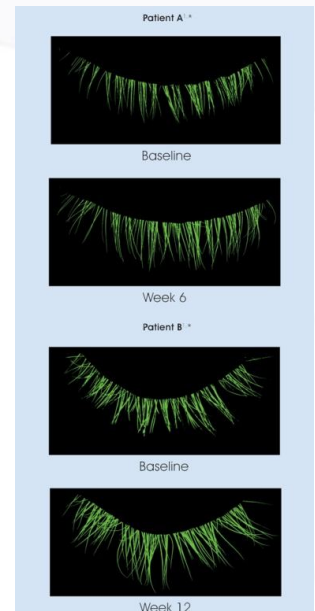
Obagi Medical, well known for its skincare ranges has launched a non-prescription product aimed at achieving the appearance of thicker, fuller lashes which is called ELASTILash Eyelash Solution. It is distributed in the UK by Obagi distributor, Health Xchange Pharmacy. According to the manufacturers the product has proven safety and efficacy having been Dermatologist and Ophthalmologist tested.

The key ingredient is again Myristoyl Pentapeptide-17. According to the manufacturer who conducted in-house clinical trials, 7 out of 10 patients reported the appearance of thicker fuller lashes in as little as 6 weeks.

The product is to be applied generously once a day to the upper lashes, at night, with each pack expected to last 2 to 3 months.

Expect to pay £22 + VAT (2.5ml) with an RRP of typically double, at around £45+.

For more information, please visit www.obagi.uk.com



PRIORI® MD Clinical Lash & Brow Enhancer



Well known skin care brand PRIORI® MD, distributed in the UK by Cosmeceuticals Ltd has introduced its Clinical Lash & Brow Enhancer as part of its Target Skin Therapy™ range.

The product boasts a proprietary and patented Triple Lipopeptide Complex™ which has been formulated, it claims, to dramatically enhance the appearance of eyelashes and eyebrows in as little as two weeks.

Clinical tests showed an increase in length and up to 27.75% increase in eyelash thickness and density after only this short period, followed by 43% at 4 weeks and a 56.01% increase in density at six weeks. The trial data quoted by the manufacturers relates to a 5 and 30 subject studies.

The manufacturers note that PRIORI® MD Clinical Lash & Brow Enhancer is the first and only prostaglandin-free lash enhancer that utilises three different potent lipopeptides (Myristoyl Pentapeptide-17, Myristoyl Hexapeptide-16 and Myristoyl Octapeptide-1,) which helps to strengthen and enhance the appearance of length and thickness.

Additional ingredients include glycerine, sodium hyaluronate, butylene glycol and rthylhexylglycerin to help condition, moisturise and nourish to promote healthier, stronger and shinier-looking lashes; botanical extracts including camellia sinensis leaf extract (a mixture of green and white tea leaves), cucumis sativus fruit extract, chamomilla recutita extract and aloe barbadensis leaf juice to help soothe, calm and moisturise lashes; panthenol (pro-vitamin B5) to promote flexibility and durability and an encapsulated vitamin complex that helps promote lash/brow health and provides proper nutrition essential for stimulating and encouraging new growth in the form of retinyl palmitate (pro-vitamin A), tocopheryl acetate (vitamin E), ascorbyl palmitate (vitamin C) and phospholipids.

The product is applied to the base of the upper eyelashes once a day, at night time, and has an RRP of £80 (4ml).

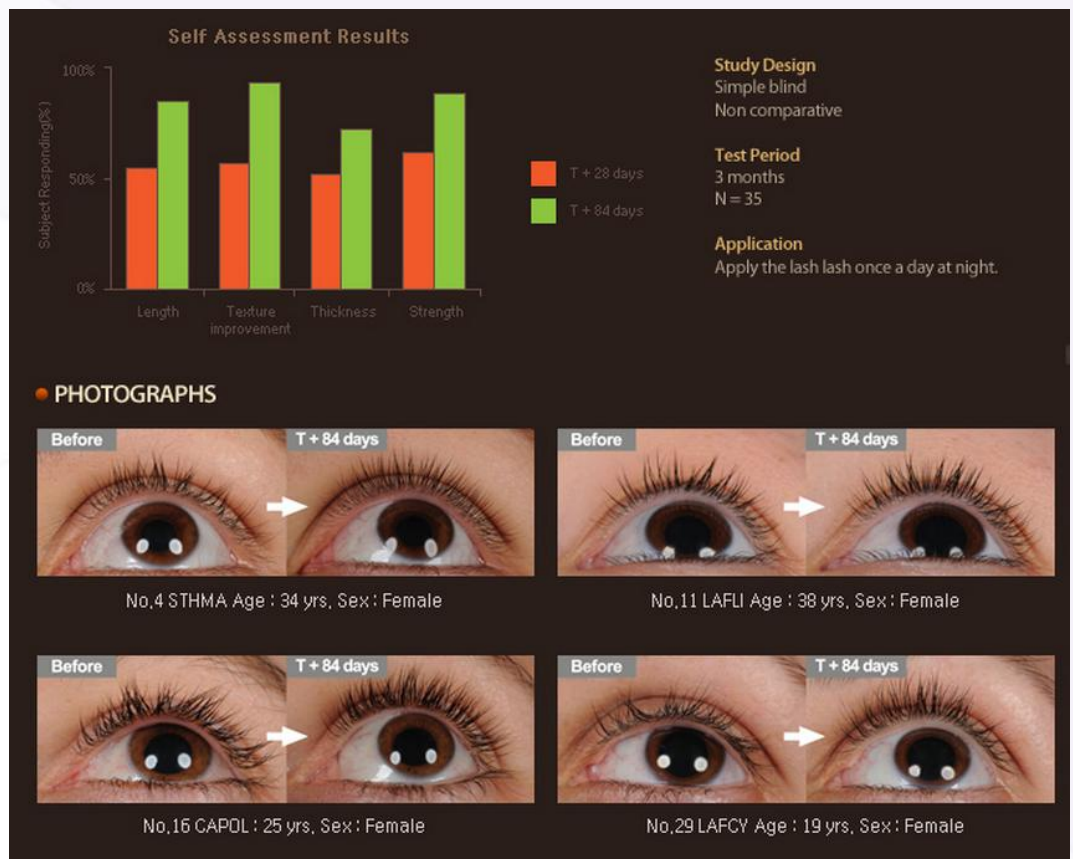
For more information, please visit www.cosmeceuticals.co.uk.



Renokin Lash Lash

Manufactured by Korea based hair restoration firm Renokin and distributed in the UK by Dermagenica, Renokin Lash Lash contains patented biomimetic peptides of Caregen (Decapeptide-18 (CG-WINT), Oligopeptide-54 (CG-Nokkin), Decapeptide-10 (CG-Keramin2) and Oligopeptide-42 (CG-Fibramin)) which it is claimed prevents hair cell damage as a result of stress and UV exposure as well as additional environmental factors.

This inhibits hair loss and provides nutrition to the hair follicle resulting in the hair root becoming thicker and healthier.



The product is believed to affect the growth phase of the eyelash hair cycle in two ways, first it increases the length of the growth phase and second it increases the number of hairs in the growth phase.

Unlike competitor products (and its own initial launch packaging) which are in the form of an eyeliner style applicator which is dipped into the solution and then withdrawn for application, the Lash Lash now comes in a pen light applicator (its smart applicator) with a button which is pressed down 8 to 10 times until the serum comes out at the tip. This is then applied across the base of the eyelashes on both the upper and lower eyelash lines. The product is applied once a day, at night, with initial visible results of thicker and longer lashes expected at 8 weeks, fuller lashes should be noticed at 12 to 16 weeks. Before and after results on the manufacturer's website are somewhat inconclusive to the casual viewer.



For more information, please visit www.renokin.com or <http://dermagenica.co.uk/lash-lash>

RevitaLash™ Advanced Eyelash Conditioner

The RevitaLash™ brand is manufactured by Athena Cosmetic Inc. and distributed in the UK by Skin Brands Ltd.

It was developed by Dr. Michael Brinkenhoff, an Ophthalmologist, as a special gift for his wife, while she was recovering from breast cancer. Intensive chemotherapy treatments had damaged her eyelashes, leaving them sparse, breakable and fragile. After extensive research with a team of cosmetic chemists, Dr. Brinkenhoff formulated an eyelash conditioner that, after just a few weeks, gave a renewed look to her eyelashes. Soon friends and family wanted to know her secret and the product, RevitaLash Eyelash Conditioner was born. Sadly, Gayle Brinkenhoff, the inspiration for the product, recently passed away, but her legacy is the continuation of the successful brand which gives a proportion of its sales revenue back to breast cancer charities.

It is marketed as an eyelash conditioner and not as a growth inducing product, which is for good reason given that it was one of the products in the patent infringement cases brought by Allergan in 2008 when it originally contained bimatoprost. Athena Cosmetics voluntarily removed its bimatoprost product from the market following the seizure by the FDA of the Jan Marini product in late 2007. It was reformulated in 2008 to use another prostaglandin analogue, Trifluoromethyl Dechloro Ethylprostenolamide, in a lower concentration than required for drug approval.

Then in 2011 came a new formulation, RevitaLash Advanced, introduced as the 'next generation' of the product, in time for the company's five year anniversary. This time the solution is made up of a different prostaglandin analogue, peptides and botanicals. The key ingredients are Dechloro Dihydroxy Difluoro Ethylcloprostenolamide, Biotinyl Tripeptide-1 and Octapeptide-2.

RevitaLash Advanced is water based so contains no alcohol, thus reducing certain associated allergic reactions. The manufacturers do note that the product can cause eye irritation and redness in some people, and that discontinuation or a slow tolerance build up may be required.

Independent clinical studies, quoted by the manufacturers, state that over 90% of test subjects noted improvement in the appearance of their eyelashes after eight weeks of product use. Statistically significant improvements in the appearance of the eyelashes were noted at each data point in the study: at Day 21, Day 28, Day 42 and Day 56. Ease of application of the product was appreciated by 90% of the subjects and over 92% said that their eyelashes appeared more lush and youthful.^{xvi}



Sadly for Athena Cosmetics though, legal action has not gone away and as of March 2013, they face prohibition from marketing and selling the RevitaLash Advanced Eyelash Conditioner product in the USA following a civil case brought by Allergan which claimed that they were violating State law on unfair competition based on the labelling, advertising and marketing of their product. This ruling, which the company is appealing, does not affect international sales or the sales of other RevitaLash hair enhancing products in the USA.

The product is applied once a day, ideally at night, to both top and bottom lashes, with results visible noted 3 to 10 weeks.

The product comes in two sizes and wholesales at £40.43 + VAT (3.5ml, 6 month supply) and £28.13 + VAT (2ml, 3 month supply), with an RRP of £97 and £67.50 respectively.

A RevitaBrow product is also available targeted specifically at use on the eyebrows, due in part to the consistent use of the eyelash enhancing products by users on their eyebrows as well. It comes with a different applicator for ease of use in that area.

For more information, please visit www.skinbrands.co.uk/brands/revitalash

Zoria Boost Lash Intensifying Serum

Manufactured by OCuSOFT, a pioneer in over the counter eyelid cleansing products, (also the company behind the botulinum toxin enhancing product Zytaze™), the Zoria Boost Lash Intensifying Serum was launched at the start of 2013 and is distributed in the UK by Eden Aesthetics.

It was developed by Ophthalmologist and biochemist [Dr. Lili Fan](#). It uses a patented polypeptide including Myristoyl Pentapeptide-17 and Cocoyl-Oligopeptide-1, along with camellia sinensis (green tea extract), soy amino acid and magnesium ascorbyl phosphate, which it claims naturally enhances the eyelash through the three stages of hair growth. It claims to stimulate keratin genes and hair follicles during the anagen phase, as well as strengthening, conditioning and protecting the hair during the catagen and telogen phases.

In a clinical study^{xvii} quoted by the company which looked at 15 people across all age ranges who applied the product to the root of their lashes each night for 2 to 6 weeks, it was reported that thicker, darker, and longer looking eyelashes could be seen after 2 weeks of use.



The product comes in a larger 6ml size, which is much larger than most competitor products and is applied once a day at night. Expect to pay a cost price of £68.00 + VAT with an RRP of £139.00.

For more information, please visit www.edenaesthetics.com/products-range.php?Range=12

Conclusions

The market for eyelash enhancing products, like many other areas of the aesthetic industry is fast becoming inundated. All products are promising essentially the same thing and are not always able to adequately prove and put their money where their mouth is when it comes to rock hard clinical data to prove efficacy. Certainly comparative trials and studies are conspicuous by their utter absence.

With so much competition and the lines blurred over the use of various compounds for pseudo-medical results yet touting a cosmetic indication, it's no wonder that it is becoming a regulation 'hot potato' where only the marketers and lawyers can truly win.

Many of the brands featured have reformulated over the years due to one legal issue or another which leaves the users wondering which was better, the old formulation or the new one, and makes brand loyalty perhaps an issue for some. I can't help but think about the consumer outcry that Kelloggs faced when it reformulated the Special K cereal recipe this summer! The internet is full of reviews citing 'this one is better than that one' but without peer reviewed data and comparison studies, it's impossible to take on board more than this anecdotal evidence when deciding which camp to choose.

So, it comes down to some serious research looking at the differing compounds used, their concentration and history in hair enhancement science, (I'll leave the scientists amongst you to do that!) Then it comes down to cost, both to you and your clients. The average price per ml to the public of the above detailed brands is £22.36; that works out at about 50 pence per daily application. So will your clients care if they splash out on one of the lower priced £50 products and it doesn't quite work for them? Or will a £100+ product, which takes a little more thought to invest in, be a thorn in the side of your credibility if they complain that it didn't deliver quite what they expected. Of course, they may all love both products and come back for bucket loads for the next decade! Yet, it is worth noting that a high price tag is not proof of efficacy, so it's key to compare and contrast the active ingredients and available data (if there is any!) to make sure that you make the right choice for you and your patients.

One thing is for certain, all the products note that discontinuation of use will result in the eyelashes returning to their original state during one cycle of the hair growth, so once the desired results are achieved, users will need to spend money on ongoing maintenance top-ups with the products at least a couple of times a week, thus ensuring repeat purchase of course!

It's clear that most of the evidence and drive within the eyelash enhancement market lies in the prostaglandin analogues, although Allergan have the bimatoprost solution clearly sewn up. Ongoing research is showing that other options may well be open to exploration, as a paper published only this last summer showed comparing the use of four prostaglandin analogues of rabbit eyelashes, which concluded by saying; "today, only bimatoprost is approved for growing eyelashes, and our research shows that tafluprost could be further explored by the cosmetic and pharmaceutical industry. Additional research using travoprost and latanoprost as agents for eyelash growth should be performed in the future using prolonged treatment periods to determinate whether or not these prostaglandin analogues induce eyelash growth, and investigate other possible side effects."^{xvii}

We truly won't know the state of the market and how it will change in the future until Latisse is given its UK licence as a prescription solution. Despite comprehensive data to back up its science, safety and efficacy, the simple act of requiring a prescription will mean that many of the products detailed above will still maintain good market share due to their greater availability and reduced cost to the consumer. There will of course be some migration to try the product and many Doctor and Nurse – led medical aesthetic clinics will no doubt be keen to offer this premium product which won't be accessible in beauty salons and on the Internet.



Lorna Jackson

Lorna has been Editor of The Consulting Room™, the UK's largest aesthetic information website, for a decade, since 2003. She has become an industry commentator on a number of different areas related to the aesthetic industry, collating and evaluating statistics and writing feature articles, blogs, newsletters and reports for The Consulting Room™ and various consumer and trade publications, including *Cosmetic News*, *Journal of Aesthetic Nursing*, *Aesthetic Medicine* and *Aesthetic Dentistry Today*. Lorna has also been asked to present at various industry events, including Smart Ideas, BACN and Merz Aesthetics Business Workshops and the FACE Conference.

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