EYE CATCHING
SymPeptide™
FOR FULLER BEAUTIFUL EYELASHES
LEADING THE WAY TO GORGEOUS LASHES...
EYELASHES
THE BUZZ AROUND LONG EYELASHES

Long eyelashes are considered a sign of femininity in many cultures. No wonder, women seek to enhance their eyelash length and volume!

Longer, more luscious lashes have the potential to transform one's face...

False eyelashes and lash extensions are the latest beauty trend!!!
EYELASH PRODUCTS
TARGETING A BOOMING MARKET

**Marini Lash**
Eyelash conditioner – “Next generation eyelash enhancement technology”

**Latisse**
The first & only FDA-approved prescription treatment for “longer, fuller, darker lashes”

**multiPLExEYE**
Natural Lash Enhancer – “Achieve a 152% increase in appearance of lash length”

**Marini Lash**
Eyelash conditioner – “Next generation eyelash enhancement technology”
EYELASHES
GROWTH CYCLE

> Three stages of hair growth: anagen (active/growth phase), catagen (transition/regression phase) and telogen (resting phase)

> Hair on the eyelashes and eyebrows have a very short active anagen phase of about 30-45 days that explains why they are shorter than scalp hair. Approximately 60-80% of the eyelashes are in this phase

> Entire duration of cycle for the eyelashes is 3-4 months where as the scalp hair cycle is about 3-6 years
FOCUS ON EYELASH GROWTH
SymPeptide™
FOR MAXIMUM IMPACT

✓ SymPeptide™ lengthens and thickens the eyelashes

✓ SymPeptide™ fortifies the hair, noticeably intensifying one's expression

SymPeptide™: supporting the newest lash treatment technology for naturally beautiful, truly plentiful eyelashes!
SymPeptide™ 226EL, 235
EYELASH GROWTH

> SymPeptide 226EL - 1000ppm solution in Water/Glycerin
> INCI: Water (Aqua), Glycerin, Myristoyl Pentapeptide-17
> Symrise product number: 903289

> SymPeptide 235 - 1000ppm solution in Glycerin/Water
> INCI: Glycerin, Water (Aqua), Myristoyl Hexapeptide-16
> Symrise product number: 696059
SymPeptide™ 226EL & 235
HAIR GROWTH *in vitro* DATA

Keratin Genes

SymPeptide 226EL and 235 significantly stimulate keratin genes

- Agilent DNA Microarray Assay on EpiDermFT™ consisting of Normal Human-derived Epidermal Keratinocytes
- Percent increase in gene expression over untreated control after 24 hours with 10ppm peptide exposure
SymPeptide™ 226EL
EYELASH GROWTH *in vivo* DATA I

**Thicker and Longer Eyelash**

> Panel of 15 subjects, 24-82 years old

> Test product - a conditioner with 10% SymPeptide™ 226EL (100ppm peptide)

> Product applied daily once at night using eyeliner brush at the root of the lashes for 2 weeks

> Eyelash measurement by SigmaScan software
SymPeptide™ 226EL
EYELASH GROWTH in vivo DATA I

25% Increase in Eyelash Length After 2 Weeks of Use
SymPeptide™ 226EL
EYELASH GROWTH in vivo DATA I

Thicker and Longer Eyelash After 2 Weeks of Use
SymPeptide™ 226EL
EYELASH GROWTH in vivo DATA II

Thicker and Longer Eyelash

> Panel of 4 subjects

> Test products: eyeliner serum with
  - 5% SymPeptide™ 226EL (50ppm peptide)
  - 10% SymPeptide™ 226EL (100ppm peptide)

> Products applied on the root of the lashes once a day at night

> Measurements at 2, 4 and 6 weeks - Canon 5-DMII calibrated with
  micrometers to accurately calculate distal length and width. Cameras
  mounted on permanently fixed tripods shooting directionally above the
  anterior eye lids. Patients are inclined on a physicians lab chair to
  maintain subject stability. Software programs are a composite of
  commercially available Canfield, Hasselblad and proprietary programs
  to represent eyelash density analysis
SymPeptide™ 226EL
EYELASH GROWTH in vivo DATA II

5% SymPeptide™ 226EL: Right Eyelash After 2-6 Weeks of Use

Day 0
Day 14 – 10.47%
Day 28 – 46.3%
Day 42 – 59.14%

Symrise, always inspiring more...
SymPeptide™ 226EL
EYELASH GROWTH *in vivo* DATA II

5% SymPeptide™ 226EL: Left Eyelash After 2-6 Weeks of Use

Day 0

Day 14 – 7.13%

Day 28 – 22.04%

Day 42 – 26.16%
SymPeptide™ 226EL

EYELASH GROWTH *in vivo* DATA II

10% SymPeptide™ 226EL: Left Eyelash After 2-6 Weeks of Use

Day 0

Day 14 – 46.26%

Day 28 – 66.39%

Day 42 – 72.29%
SymPeptide™ 226EL
EYELASH GROWTH in vivo DATA II

10% SymPeptide™ 226EL: Right Eyelash After 2-6 Weeks of Use

Day 0

Day 14 – 25.8%

Day 28 – 40.94%

Day 42 – 63.19%
SymPeptide™
Promocell Dermal Papilla Hair *in vitro*
Cell Culture

Cyquant DNA Assay on Non-Confluent HFDPC/ 3 passages

Percent Increase After 48 hrs

- **control**
- **JM**
- **PTR**
- **100 ppm P226/ Electrolyte**
SymPeptide™
FORMULATION GUIDELINES

> Sold as 1000ppm (0.10% peptide) solution in Glycerin/Water
> Colorless to pale beige solution with very low odor – no impact on formulation aesthetics
> Use level: 2-10%
> Soluble in water, ethanol and glycols
> Stability at pH 4-8 and temperature up to 100°C
> Reduce anionic ingredients
> Simpler formulations help ensure release of peptides on the skin
A FRUITFUL PARTNERSHIP
SymPeptide™
THERAPEUTIC PEPTIDE INC

> New partner for Symrise
> TPI conducts own drug discovery program

Molecular CAD/ AutoDock Drug Design

Multiple research SPPS - solid phase peptide synthesis – capability (5-20 grams per run)

Multiple large scale SPPS capability (Kilograms per run)

Symrise, always inspiring more...
SymPeptide™
THERAPEUTIC PEPTIDE INC

> TPI manufactures peptides at own production facility

Large Scale Kilogram HPLC Production

Complete Microbiology Screening

Skin Analytical/ Human Testing

Complete Cell Culture Facility

> Solution Phase Peptides Synthesis in development
Each peptide screened for biological activity

Linear oligopeptide connected to naturally derived fatty acid chains for better bioavailability (lipo-oligopeptides or LOPs)

Not only alters the diffusion/absorption properties of the oligopeptide but also its mode of action

Anti-aging, wound healing, immune stimulation, hair growth, anti-acne and other anti-microbial applications
# SymPeptide™

## NOVEL PEPTIDE SERIES

> Largest library of peptides for commercialization

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**Symrise, always inspiring more...**
SymPeptide™

SUMMARY

> SymPeptides are bioavailable lipo-oligopeptides
> 226EL and 235 stimulate keratin genes
> Help boost growth of natural eyelashes
> Visible effect in 2-4 weeks at the recommended use level