New Filler Approvals
Refyne, Defyne, Vollure, Revanesse

Karol A Gutowski, MD, FACS
Hot Topics
Merz - Advisory Board
Suneva Medical - Instructor

Will use brand names due to lack of distinguishing generic names
Levels of Evidence and Qualifying Studies (Therapeutic Studies):

I  High-quality, multi-centered or single-centered, randomized controlled trial with adequate power (N ≥ 100); or a systematic review of these studies

II Lesser-quality, randomized controlled trial; prospective cohort study; or systematic review of these studies

III Retrospective comparative study; case-control study; or a systematic review of these studies

IV Case series

V Expert opinion; case report or clinical example; or evidence based on physiology, bench research or "first principles"
FDA Approvals Since Last Meeting

- 12/9/16 Restylane Refyne (Hyaluronic Acid)
- 12/9/16 Restylane Defyne (Hyaluronic Acid)
- 3/17/17 Juvederm Vollure XC (Hyaluronic Acid)
- 8/4/17 Revanesse Ultra (Hyaluronic Acid)
  - Not yet available in USA
**Match Filler to Need**

**Lips**
*Goals*: Easy molding and spreadability
*Challenges*: Avoid visible edges and bumps

**Wrinkles/Folds**
*Goals*: Moldable, integrate well with movement
*Challenges*: Resist shearing and mild compressive forces

**Midface Volumization**
*Goals*: Volume restoration, 3-D contouring
*Challenges*: Resist shearing and compressive forces
Restylane Refyne & Restylane Defyne (aka Emervel)

- Galderma
- Cross-linked hyaluronic acid injectable soft tissue filler
  - Defyne is more cross-linked
- Produced by *Streptococcus*
- 20 mg HA/mL + lidocaine
- Duration up to 1 year
- Cost: $321 for 1 cc syringe ($265 for Restylane)

**Indications:** Injection into mid-to-deep dermis for correction of moderate to severe facial wrinkles & folds in patients >21 years.

- Defyne for deeper folds
What’s Different? Flexibility

Flexibility xStrain (%) Logarithmic Scale

- Restylane Lyft
- Restylane
- Restylane Silk
- Restylane Defyne
- Restylane Refyne
A multi-center, non-comparative study to evaluate the perception of facial expressions following correction of wrinkles and folds in the lower face using 

*Restylane® Refyne and Restylane® Defyne*

(Emervel® Classic and Emervel® Deep containing Lidocaine)
Treatment Areas

- Nasolabial folds
- Oral commissures
- Marionette lines
- Radial cheek folds
- Sulcus mentalis
Photographed Facial Expressions at Maximum Contraction

- **Relaxed Face**: Right
- **Big Smile**: Right
- **Relaxed Face**: Frontal
- **Big Smile**: Frontal
- **Closed Big Smile**: Frontal
- **Grimace***: Frontal
- **Pursed Kiss**: Frontal
- **Blowing Candle**: Frontal
- **Relaxed Face**: Left
- **Big Smile**: Left
Animation 1 Month After Injection

Treatment:
- 1.7 mL Defyne: each NLF 0.6, mental sulcus mentalis 0.5
- 2.6 mL Refyne: each radial cheek folds 0.3, each marionette 0.4, each oral commissure 0.6

Touch-up:
- 0.2 mL Refyne: each radial cheek folds 0.1

Less downturn
One Month Investigator Assessment

Naturalness of Expression

- Maintained 71%
- Enhanced 24%
- Reduced 5%

- 79% looked younger
- 89% looked more attractive
Flexibility vs Lift (G’)

- Juvederm Ultra
- Belotero Balance
- Juvederm Ultra Plus
- Juvéderm Vollure
- Juvederm Voluma
- Juvederm Volbella
- Restylane
- Restylane Silk
- Restylane Defyne
- Restylane Lyft

Flexibility (xStrain) % vs Support (G')(PA)
Juvederm Vollure XC

- Allergan
- Cross-linked hyaluronic acid injectable soft tissue filler
- Produced by *Streptococcus*
- 17.5 mg HA/mL + lidocaine
  - (Ultra & Ultra Plus: 24 mg, Voluma: 20 mg, Volbella 15 mg)
- Duration up to 18 months
- Cost: $365 for 1 cc syringe

**Indications:** Injection into mid-to-deep dermis for correction of moderate to severe facial wrinkles & folds in patients >21 years.
Vollure: Pivotal Study

• Double blinded split face NLF injections
  – Touch up injection at 30 days
  – Median 1.7 cc per NLF
  – Compared to Restylane

• At least 1 point improvement (Scale 1 to 5)

• Effectiveness
  – 93% at 6 months
  – 85% at 9 months
  – 58% at 12 months
  – 59% at 18 months
Vollure Role in Facial Injections

• Compared to Juvederm Ultra & Ultra Plus
  – All less water absorption
  – Less cohesive (spreads more in tissue)
• Volbella: Low G’
  – Thinnest, most spread
  – Fine lip lines, tear troughs
• Vollure: Intermediate G’
  – Nasolabial folds
  – Allows for natural facial movements
• Voluma: Highest G’
  – Thickest, least spread
  – Deep malar injection
Revanesse Ultra

- Prollenium (Canada)
- Cross-linked hyaluronic acid injectable soft tissue filler
- Produced by *Streptococcus*
- 25 mg HA/mL
  - (Revanesse Pure: 15 mg, Revanesse: 25 mg, Revanesse Lips: 15 mg)
- Duration up to 9 to 12 months
- Cost: TBD

**Indications:** Injection into mid-to-deep dermis for correction of moderate to severe facial wrinkles & folds in patients >21 years.
Revanesse Ultra: Clinical Trials

• Double blinded split face NLF injections
• At least 1 point improvement (Scale 1 to 5)
• 78% maintained improvement at 6 months
Summary

• New fillers for dynamic lines
• New filler for static lines
• New filler from new manufacturer to USA
• Clinical relevance?
Botox Approved for Forehead

• Botox (onabotulinumtoxinA) past approvals
  – Moderate to severe glabellar lines with corrugator and/or procerus muscle activity (20u)
  – Moderate to severe lateral canthal lines with orbicularis oculi activity (24u)

• FDA Approval October 2017
  – Moderate to severe forehead lines associated with frontalis muscle activity (20u + 20u in glabella)
New Filler Approvals
Refyne, Defyne, Vollure, Revanesse

Karol A Gutowski, MD, FACS
Hot Topics
Download at DrGutowski.com > For Physicians