SUMMARY OF: P040024/S079

DEVICE/COMPANY NAME: Restylane®/Perlane®/Restylane-L®/Perlane-L® Injectable Gel/Q-Med AB

EXECUTIVE SUMMARY/BACKGROUND

The sponsor submitted this 180-Day Supplement (P040024/S079) to introduce a new "container closure system" for products approved under PMA P040024 (Restylane®/Perlane®/Restylane-L®/Perlane-L® Injectable Gel). The current "container closure system" for the Restylane products is a syringe comprised of a luer-lock connector, tip cap, syringe barrel, plunger, plunger rod and finger grip. The only components that contact the product are the tip, plunger and syringe barrel. The proposed new syringe provides a new ergonomic design of both the finger grip and plunger rod. In addition, the proposed syringe incorporates a new luer lock adapter with a single-use, tamper-evident feature to provide a more secure connection of the needle during use. There are no changes to the gel itself or the syringe material that contacts the gel. For the plunger, although there were no changes to the plunger material itself, the plunger supplier did change from (b) (4) . The manufacturer likes to introduce a new (b) (4) glass syringe from the supplier (b) (4)

DESCRIPTION OF CHANGES/REASON FOR SUPPLEMENT

The supplement was submitted seeking approval of a new syringe that will be used to inject the approved soft tissue gels - Restylane®/Perlane®/Restylane-L®/Perlane-L® Injectable Gel. The new 1 mL glass syringe will be supplied by (b) (4) (b) (4)

INDICATIONS FOR USE

Restylane: Restylane is indicated for mid-to-deep dermal implantation for the correction of moderate to severe facial wrinkles and folds, such as nasolabial folds. Restylane is also indicated for submucosal implantation for lip augmentation in patients over the age of 21.

Restylane-L: Restylane-L is indicated for mid-to-deep dermal implantation for the correction of moderate to severe facial wrinkles and folds, such as nasolabial folds. Restylane-L is also indicated for submucosal implantation for lip augmentation in patients over the age of 21.

Restylane Silk: Restylane Silk is indicated for submucosal implantation for lip augmentation and dermal implantation for correction of perioral rhytids in patients over the age of 21.

Restylane Lyft (Formally Perlane-L): Restylane Lyft is indicated for implantation into the deep dermis to superficial subcutis for the correction of moderate to severe facial folds and wrinkles, such as nasolabial folds.

Restylane Lyft is also indicated for subcutaneous to supraperiosteal implantation for cheek augmentation and correction of age-related midface contour deficiencies in patients over the age of 21.

Perlane: Perlane is indicated for implantation into the deep dermis to superficial subcutis for the correction of moderate to severe facial folds and wrinkles, such as nasolabial folds.

DEVICE DESCRIPTION

A new 1 mL glass syringe from the supplier (b) (4) , will be introduced. The new syringe has a tamper proof opening to increase safety. The syringe barrel, silicone and rubber tip cap are composed of the same materials as the currently approved glass syringe from (b) (4) The new syringe only differs in the opening design. Both syringes have a luer-lock adapter, however, the new syringe has four tamper seals and is opened by breaking the seals instead of unscrewing the tip cap from the luer-lock adapter as with the current syringe. There are no changes made to the dimensions of the syringe.

The manufacturer/supplier of the syringe (b) (4)) is certified for ISO 13485, ISO 9001, ISO 14001 and ISO 15378. The certificates are issued by (b) (4) (b) (4) The manufacturer/supplier of the plungers, (b) (4) has an established quality management system for medical devices and is certified for ISO 9001 and ISO 15378. The certificate is issued by (b) (4) (b) (4)

FUNCTIONAL STUDIES

The sponsor has provided dimensional analysis, gauging, liquid and air leakage, dye testing, break loose/glide force, separation force, unscrewing torque, ease of assembly, overriding resistance, stress cracking, dead space, tip cap break force, piston seal blowback, leakage testing with E-Z fill syringe, and extrusion testing with the gel. The results show the proposed syringe meets acceptance criteria.

BIOCOMPATIBILITY

Biocompatibility testing per ISO 10993 was conducted. The dermal filler-contacting components (the syringe, plungers, luer-lock, and rubber tip cap) were tested for cytotoxicity, intracutaneous reactivity testing and maximization sensitization. The data provided are adequate to ensure the subject device biocompatibility.

STERILIZATION

Adequate sterilization information was provided to support the product sterility. The barrels of the syringes are sterilized via (b) (4) by the manufacture of the syringes. (b) (4) e, is added to the gel/barrel product to complete the final finished subject device. Also provided is the Processes Qualification report for the gel product in the (b) (4) syringe. The sponsor also provided testing to demonstrate that after sterilization, no growth of microbes was observed in the gel product. To support that the gel product is sterile in the (b) (4) syringe, the sponsor provided endotoxin and sterility testing on the gel product in the final finished subject device that was sterilized in the (b) (4) syringe.

SHELF LIFE

The sponsor proposes (b) (4) months of shelf-life. To support this, accelerated aging data at (b) (4) [redacted] are provided. The parameters measured were OVS Torque, OVS Pull-off Force, and Flange Breakage.

(b) (4) [redacted] inges under accelerated conditions and under real-time conditions s also provided. And the parameters measured were: PH, gel content, swelling factor, lidocaine concentration, microbiology integrity and piston blowback testing.

The sponsor states that the rationale for making conclusions is the knowledge from prior stability studies on Restylane products which show that the degradation observed after 36 months at (b) (4) is not larger than after (b) (4) [redacted]

HUMAN FACTORS

The Human Factors studies of the subject device are not needed because the proposed (b) (4) [redacted] syringe with (b) (4) [redacted] is already in use with other marketed products in the US and therefore, no significant safety issues or medication errors with this syringe and (b) (4) [redacted] are identified.

LEACHABLES

None provided; none required.

GMP ISSUES

(b) (4) [redacted] with their procedures established under 21 CFR 820.50 (Purchasing Controls). The firm's activities are adequate.

ELECTRICAL SAFETY/EMC **N/A**

MECHANICAL SAFETY **N/A**

SOFTWARE **N/A**

CLINICAL DATA N/A

LABELING

The product labeling was revised and included directions for use for all the approved (under P040024) dermal filler materials, namely, Restylane®, Restylane-L®, Perlane®, Perlane-L® and Restylane® Silk.

CONCLUSION

The sponsor provided adequate functional study data (bench testing data) which showed the proposed new syringe met all the product acceptance criteria. The syringe components that come in contact with the soft tissue filler materials were tested for biocompatibility, namely, cytotoxicity, irritation and sensitization per ISO 10993 and the biocompatibility study data provided is adequate. Shelf-life data on both the syringe and the syringes filled with the gel at both accelerated and real-time conditions are provided. The data support a shelf-life of (b) (4) months. Sterilization information provided is adequate and support the subject device sterility. Adequate risk analysis was provided to address the GMP issues. Human Factors studies are not needed as the design of the syringe is not new. A draft product revised product labeling is provided with direction for use of all the approved (approved under P040024) dermal filler gels. The supplement is recommended approved.