ISSN 2053-1435

The pmfa Journal

plastic surgery | maxillofacial surgery | aesthetic medicine

Volume 9 Issue 2 | December/January 2022 www.thepmfajournal.com | @PMFAJournal

Dexlevo unveils GOURI, the first Liquid type PCL (polycaprolactone) Injectable for fundamental anti-ageing care

Booming needs on the aesthetic medicine field

Non- or minimally-invasive procedures are all the rage when it comes to aesthetic medicine trends. Worldwide, this is one of the main trends of the aesthetic medicine field. Botulinum toxin, hyaluronic acid, and skin-boosters are the most popular procedures.

People have wanted remarkable changes through the volumising effect of fillers and there are a lot of volumising fillers that have sprung up on the market. However, a new trend has come up.

People want to delay their ageing and the need for healthy and young skin is getting bigger and bigger.

Following this trend, GOURI is a quite suitable product. DEXLEVO's GOURI is the first fully Liquid type PCL Injectable for the neo-collagenesis on the entire face.

GOURI's features

GOURI rejuvenates our skin through the collagenesis on the entire face. Unlike existing fillers, GOURI provides natural improvements to the total skin condition through neo-collagenesis. This is because GOURI has no micro-particles. It is homogenously soluble in water. So, it has a smooth and acceptable extrusion force and we can inject it with a 30 to 35G needle. This is injected very uniformly into the dermal or subdermal layer. GOURI, as a biodegradable polymer, naturally degrades naturally due to hydrolysis. Compared to hyaluronic acid, it has a longer cosmetic performance.

GOURI has various features that can compensate for the limits of existing products. Existing dermal fillers fill wrinkles or give volume in a localised area. But they are not suitable for the improvement of entire skin quality. Also, HA washes out quickly. GOURI doesn't give you an instant volume or anti-wrinkle effect but can restore the collagen synthesis of the entire face. Existing products are focused on filling wrinkles, volumising and temporary improvements. There are some products that came out using collagenesis as a keyword and have yielded satisfying results. But, for the entire effect, they should be injected into the entire face. This brings a lot of pain and inconvenience. Also, we cannot overlook the side effects related to the microparticles inside existing fillers.

Clinical reference

- **COLLAGENESIS: Skin thickens through collagen increase**
  To evaluate neocollagenesis, biopsy specimens of a six-week-old female Sprague Dawley rat were obtained at one, two, four and six weeks after the filler injection.

  While the expression level of collagen upon MT staining in the PBS-injected group increased only slightly over time, the GOURI injected group showed a marked

increase during the first six weeks.

The degree of dermal thickening in the PBS injected group did not induce clinical distinction, compared to GOURI.

Biopsy specimens from the GOURI group, however, showed increased thickness of the dermis since the first week, sparing that of the subcutaneous fat. In addition, volume expansion and stretching are achieved by the activation of fibroblasts (Figure 1).

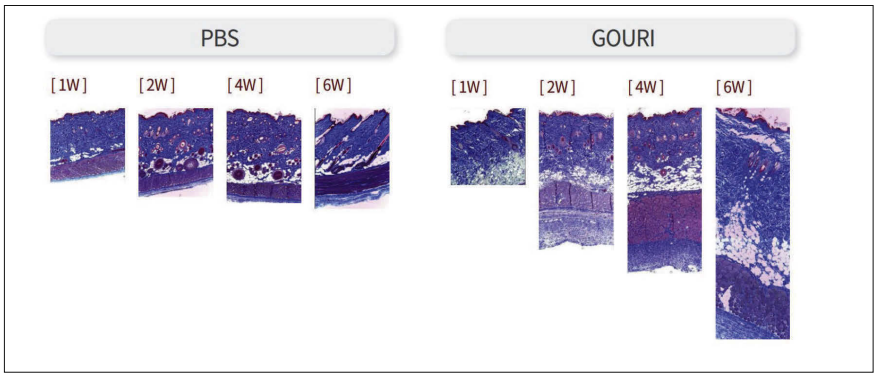

Figure 1: Histological changes over six weeks after filler. It shows more densely packed and increased dermal collagen in the GOURI injected tissue, demonstrating that the maximal dermal thickness at week six may be attributed to neocollagnesis.
PBS = phosphate-buffered saline

- **WRINKLE IMPROVEMENT: Wrinkle improvement rate increased up to 48%**

Up to 1ml was injected into the intramuscular cavity of 29 subjects to evaluate wrinkle improvement.

Independent evaluators and testers assessed the CFGS (Crow's Feet Grading Scale) for each of the application areas of GOURI and a competitor at two weeks, four weeks, and 12 weeks after the final application.

The GOURI injection group showed a higher improvement rate on both resting (A) and laughing (B).

- **SKIN ELASTICITY: Elevation of dermal elasticity immediately after treatment**

Skin elasticity at the injected site of a six-week-old female Sprague Dawley rat was calculated using R2, R5 and R7 values measured by cutometer CM580 immediately after one, two and four weeks after injection. R2 value, defined as Ua/UF, is considered as the most important parameter reflecting gross elasticity.

Cutometer evaluation data and histological evaluation in rat skin supports that dermal rejuvenation can be achieved by increasing skin elasticity and dermal collagen with GOURI. The increased dermal thickness was not enough to fill skin folds and lift depressed areas, but sufficient to induce rejuvenation (Figure 2).

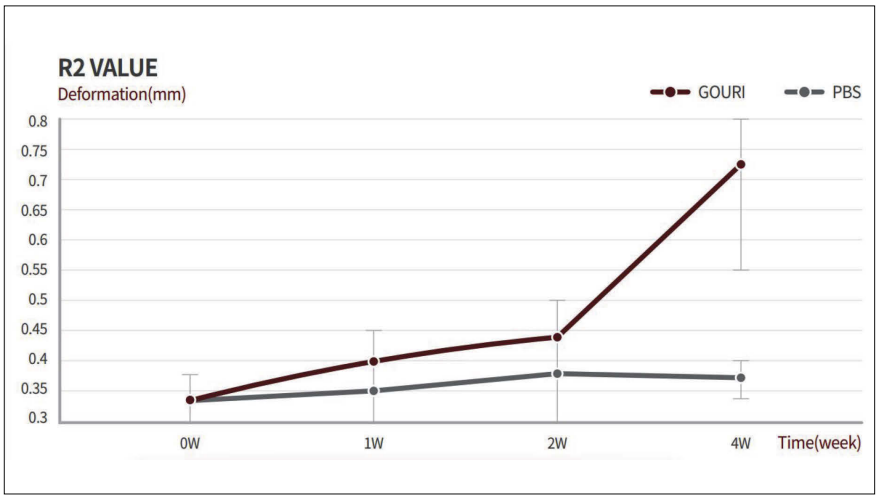

Figure 2: Chronological change of skin elasticity as measured by a Cutometer. R2 value reflecting dermal elasticity showed a gradual elevation until week four.

Summary

As the beauty market grows enormously, the needs and tastes of consumers become more diversified. In the meantime, more and more people long for a fundamental treatment for ageing.

Stimulating collagen synthesis is the solution for the skin-ageing.

GOURI is the first Fully Liquid type PCL (polycaprolactone) Injectable. GOURI improves skin quality on the entire face in an easy and safe way. The volumising effect and hydration effect of existing fillers are quite satisfying, but, GOURI provides collagenesis, which is essential to deal with skin-ageing in a fundamental way.

DEXLEVO launched 'GOURI' onto the global markets at the Aesthetic and anti-aging Medicine World Congress (AMWC) 2021. GOURI received positive consideration from various global companies. GOURI is expected to be the first of a new category of Fundamental Anti-Ageing care.

About DEXLEVO

Established in 2013, DEXLEVO (CEO: Yu-Je-Won) manufactures polymer-based beauty aesthetic devices. DEXLEVO got a patent for CESABP technology (Collagenesis-Enabled Solubilized Active and Biodegradable Polymer Technology) that enables regeneration of natural skin collagen, without the use of micro-particles.

GOURI obtained the CE certificate as a medical device in 2021. In Korea, DEXLEVO successfully completed Phase 1 and Phase 2 clinical trials and is expected to get KFDA approval in 2022. Plus, the US FDA procedure is in progress.

DEXLEVO