

# JETEMA NEWSLETTER

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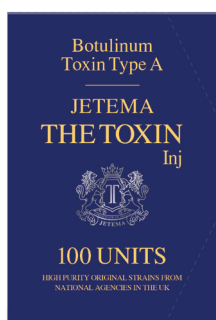


## Jetema steps up as a global aesthetic leader with 'THE TOXIN', botulinum toxin type A in July 2020

To learn more about 'THE TOXIN', we have interviewed the Director of R&D department of Jetema toxin factory.

### Interview with Seung-ho Kim,

Director of R&D of Jetema toxin factory



*Please tell us about the development process of THE TOXIN.*

It is upsetting how the sources of botulinum toxin strains in Korea always had been unclear and even have legal issues. Two companies

have been embroiled in legal disputes that have dragged on for years regarding the origin of the strain. So we wanted to introduce the legitimately commercialized strains from the UK and be confident about the source of the strain. Our strain is listed on gene bank with full genome sequencing data (NCBI registration No. CP046450), thus is completely free from controversy of strain source.

*Please explain the benefits of THE TOXIN.*

THE TOXIN has 3 major advantages by introducing the latest patented processes developed by our R&D department. First, we excluded animal-derived ingredients in the entire process to prevent BSE (Bovine Spongiform Encephalopathy) infection. We even excluded plant-derived ingredients that can induce allergies such as wheat, nuts, and soybeans.

Next, THE TOXIN has the world's shortest culturing time by utilizing a patented culture media composition. We also raised productivity by reducing drying time and product loss rate ( $\leq 4\%$ ) with our advanced drying process, whereas other companies create a higher loss rate, and to supplement the loss, their toxin content is overdosed, which is related to safety and antibody formation.

Last but foremost, THE TOXIN has minimized the potential immunogenicity risk by reducing toxin protein content to 2.48ng per

100 units vial. Jetema has succeeded in developing a purification process that prevents inactivation of the toxin, so the residual content is all activated protein with high and consistent potency and high purity (99.5%). Minimized immunogenicity is crucial because of two reasons. Botulinum toxin injection for therapeutic indications requires periodic injections of hundreds of units, which may lead to antibody formation. Also, people start to get botulinum toxin injections at a young age in the early 20s for aesthetic purposes. Multiple injections can lead to secondary treatment failure with the production of neutralizing antibodies; therefore, it is crucial to prevent the formation of neutralizing antibodies in the first place by using THE TOXIN with low immunogenicity risk.

### *Registration plan for THE TOXIN*

Jetema is cooperating with CRO company and RA consulting agency, who already have experience registering competing products in the US. Gap analysis for CTD preparation will be completed by October for fast-track FDA approval. We also established a factory that complies with cGMP, and we have the latest facilities introduced from the US and Europe so that we can be downhill all the way to enter the US and European markets. In recognition of THE TOXIN's merits, a contract with Brazil has already been signed before launching, and clinical trials for Korea and Brazil will be simultaneously conducted. Jetema is also preparing a clinical trial for various indications for therapeutic purposes in addition to cosmetic purposes.

### *Any comments you want to add?*

All in all, we are confident that THE TOXIN is the safest and most effective botulinum toxin type A product in the market. If you are interested in being our partner, please contact f-sales@jetema.com for discussion!



Clinical application of a new hyaluronic acid filler based on its rheological properties and the anatomical site of injection

Won Lee<sup>1</sup>, Jeung-Hyun Yoon<sup>2</sup>, Ik-Soo Koh<sup>3</sup>, Wook Oh<sup>4</sup>, Ki-Wook Kim<sup>5</sup> and Eun-Jung Yang<sup>6\*</sup>

Summary of the Journal

**Objective** The successful use of injectable fillers requires an understanding of rheological properties and anatomy so that the most appropriate form of hyaluronic acid may be selected for patients. The purpose of this study was to determine whether e.p.t.q. fillers are appropriate for forehead augmentation considering their rheological properties and the anatomical site of injection.

**Methods** The rheological properties of e.p.t.q. S100, S300, S500, Restylane, and Juvederm Volbella were assessed (Table 1). After comparing the rheological properties, the authors chose

e.p.t.q.S300 for forehead augmentation. e.p.t.q.S300 was injected into the foreheads of 40 patients for aesthetic purposes.

**Results** e.p.t.q. S300 was determined to be an appropriate filler for the forehead because of its adequate cohesiveness. The injection procedure employed was easy and safe when applied to the pre-periosteal layer using a 22G cannula. None of the patients had complications. The satisfaction assessment performed 1 month after the procedure revealed that 95% of patients were very satisfied and 5% was satisfied.

Product	G' (Pa)	G'' (Pa)	Complex viscosity (cP)	Cohesiveness (N)	Tan δ	Complex modulus	Elasticity (%)
e.p.t.q.S100	37	15	323,859	0.4184	0.4269	40	71
e.p.t.q.S300	128	27	1,048,864	0.6102	0.2137	131	83
e.p.t.q.S500	224	57	1,847,607	0.8776	0.2551	231	80
Restylane	349	145	3,011,188	0.3509	0.4180	378	71
Juvederm Volbella	99	21	814,593	0.3046	0.2189	101	83

Table 1. Rheological properties of hyaluronic acid fillers

Discussion

When injecting a soft tissue filler behind the frontal muscle layer (pre-periosteal), the filler must withstand the compressive pressure of the frontal muscle. Therefore, it is important to choose the filler with sufficient cohesiveness to withstand compressive and shear forces. The rheological results of e.p.t.q. S300 were not

too soft or too rigid with sufficient cohesiveness and elastic moduli, which makes the molding easier and migration less likely and the volume was maintained well when the filler was injected. e.p.t.q. S300 was determined to be an appropriate filler for the forehead augmentation.

Congratulatory message from Taiwan for e.p.t.q. CE approval!

“I would like to congratulate Jetema on your recent achievement of CE approval for e.p.t.q.!

I know about e.p.t.q. from many colleagues, congresses, and journals that e.p.t.q. has a low MoD (modification degree) and comparatively high cohesiveness.

For all I know, only a few Korean companies have CE approval for hyaluronic acid filler with lidocaine. This definitely calls for celebration and as now you have the passport issued to enter the European market, may you prosper and rise higher in your endeavors for the success in the European market. I look forward to meeting epitique soon in the Taiwanese market.

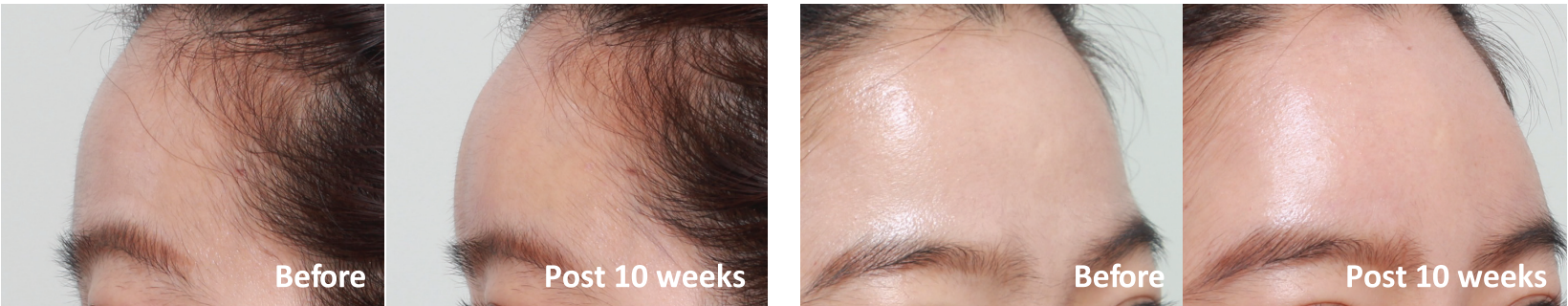
Best of luck!”



- Dr. Po Han Patrick Huang, Dermatologist, Taiwan



e.p.t.q. Global Case Reviews



Area Treated: Forehead contouring. Product used: e.p.t.q. S300. Amount injected: 4mL

e.p.t.q. has received  
CE approval

CE



e.p.t.q.(epitique) with lidocaine had recently acquired CE approval in January 2020. Since its launch in 2017, a total 21 out of 434,817 syringes sold (0.002618%) were reported with swelling side effects, boasting its safety due to its excellent manufacturing process and low BDDE content.

From 48 weeks of clinical study comparing WSRS and GAIS with Restylane Sub-Q, e.p.t.q. S500 showed non-inferiority for both efficacy and safety. Due to high cohesiveness and viscoelasticity, global cases we received from our client doctors showed excellent results as below.



Area treated: rhinoplasty  
Product used: e.p.t.q. S500  
Amount injected: 0.5mL



Area treated: jaw line contouring  
Product used: e.p.t.q. S500  
Amount injected: 3mL

\*These procedures are under the sole responsibility of the physician, and product authorizations may vary by country.



## Jetema Activities



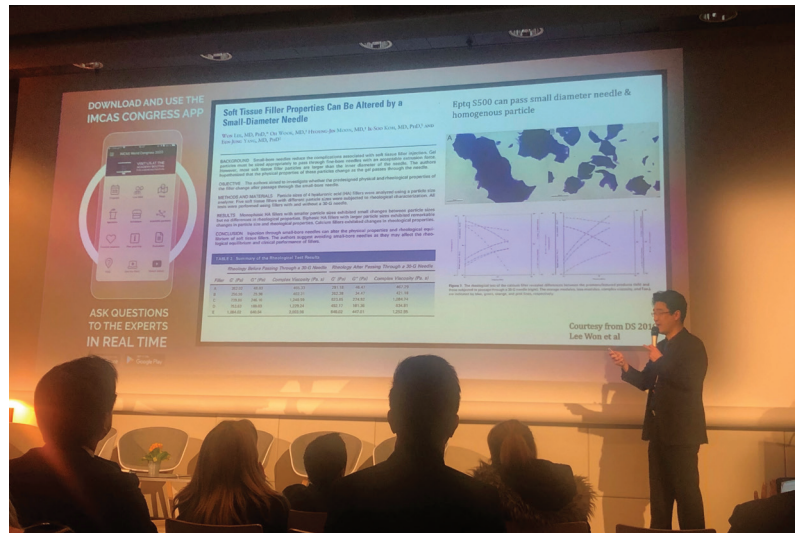
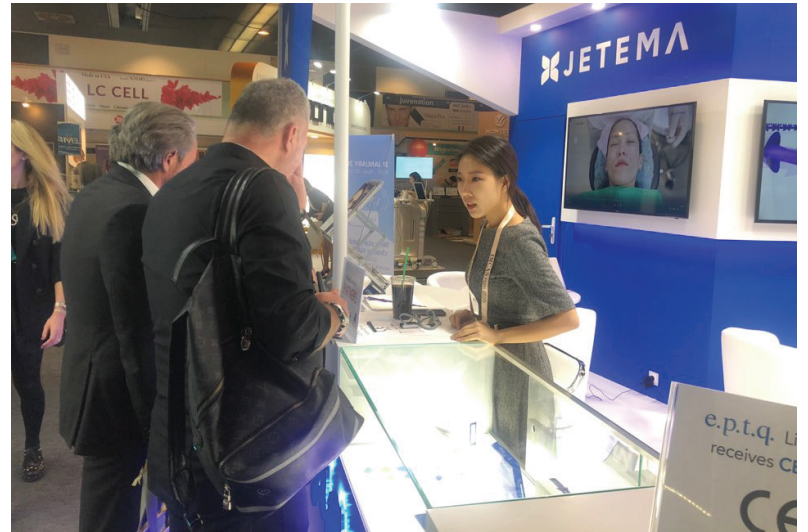
### Doctors' visit from Kazakhstan

Jetema invited doctors to visit Korea to learn more about e.p.t.q. They experienced the newest injection technique through live demonstration and were awarded with certificate.



### IMCAS, Paris 2020

Jetema participated in IMCAS, Paris 2020. Dr. Won Lee gave a lecture about e.p.t.q. and its superiority in safety and cohesiveness. Jetema will also be attending AMWC this year.



## Jetema News

Jetema has been listed on KOSDAQ in November 2019. SK financial analyst has said, "when THE TOXIN sales are added this year, Jetema will have a complete k-beauty portfolio and establish a new growth engine for sales."



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