

e.p.t.q. is safe with lower MoD than the other fillers. The low MoD value is the standard for a safe filler.

e.p.t.q.

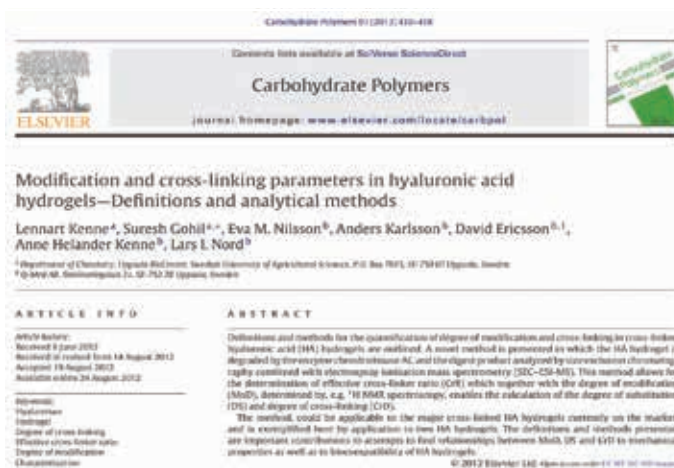
DNA

TECHNOLOGIES

MoD

(Degree of Modification)

Total amount of BDDE in a hyaluronic acid filler



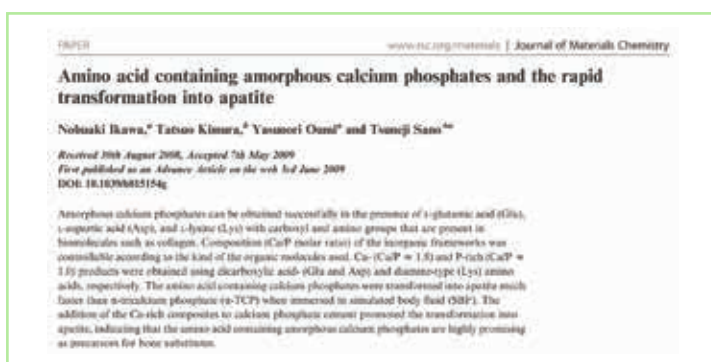
Sample	e.p.t.q. S 100	e.p.t.q. S 300	e.p.t.q. S 500	Product A	Product B	Product C
MoD (%)	1.18	1.53	1.89	7.68	11.23	8.07

e.p.t.q. Through the 9 Essential process, e.p.t.q. has no calcification by eliminating the by-product combination reaction.

e.p.t.q.

※ Calcification ?

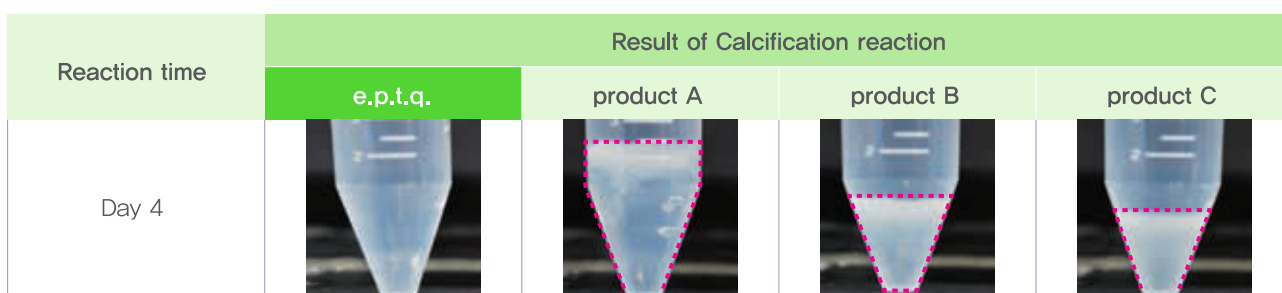
Calcification is a major cause of nodules formation caused by combining carboxyl groups in HA and byproducts of the filler manufacturing process.



Ref. Nobuaki Ikawa et al, 2009

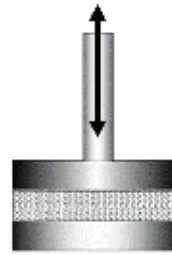
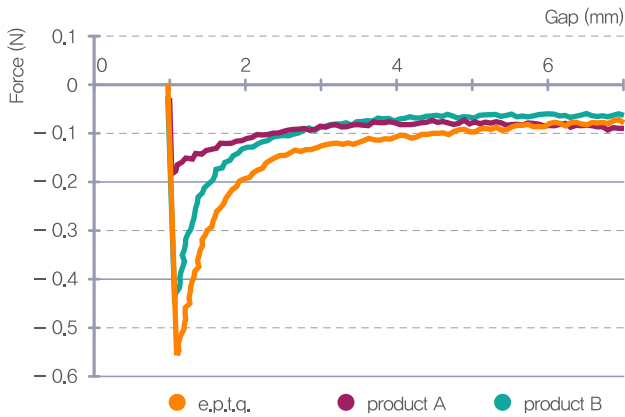
Rank	reaction	ratio	Solution
1	Inflammation	23,7 %	Low MoD
2	Edema	11,2 %	Low MoD
3	Necrosis	9,1 %	
4	Bruise	8,6 %	
5	Nodule	8,2 %	Calcification prevention
6	Others	39,2 %	
		100,0 %	

Ref. Types of side effect by the dermal filler, KFDA, 2014



Ref. Calcification reaction experiment in HA filler, 2019 JeteMa Co., Polymer Lab

**e.p.t.q.** has less migration due to high cohesiveness. It is good for shaping and long-lasting effect.



※ Experimental conditions  
 Instrument : Rheometer, Kinexus, Malvern, U.K.)  
 Corn: 20 mm, stainless steel plate  
 Mode: pull away / Speed: 100 μm/s / Inversed gap: 1 mm / Temp.: 25 °C

※ e.p.t.q. is **-0.3666** and **-0.1104** superior to A and B as a result of Tack test

Sample	e.p.t.q.	Product A	Product B
Cohesiveness (N)	<b>-0.5583</b>	<b>-0.1917</b>	<b>-0.4479</b>

Ref. Comparison of properties of Dermal HA filler, Department of Dermatology, College of Medicine, Chung-ang University, 2017

**e.p.t.q.** has proven to be equal to or better than the control group in Researcher evaluation and Patient satisfaction evaluation.

※ In order to demonstrate the efficacy and safety of e.p.t.q. S500 and Product R, we conducted a single-institution, randomized, double-blind and matched-pair phase 3 clinical trial for 63 subjects.

**Researcher evaluation(WSRs)**

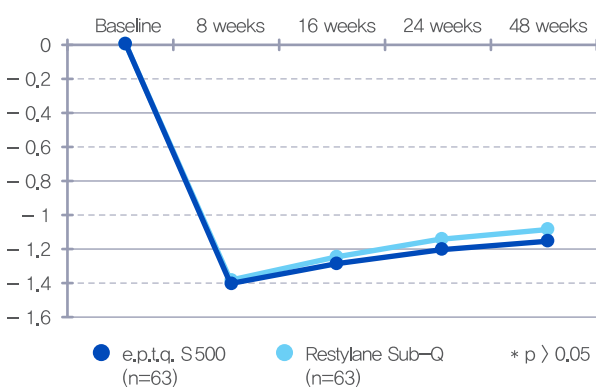


Figure 1. Changes in WSRs mean value at 8, 16, 24 and 48 weeks compared to baseline assessed by blinded investigators

**Patient satisfaction(GAIS)**

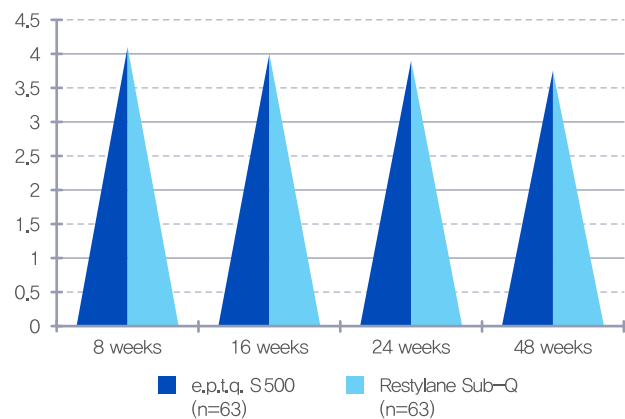


Figure 2. GAIS mean values at 8, 16, 24 and 48 weeks evaluated by subjects

Ref. Department of Dermatology, College of Medicine, Chung-ang University, 2016