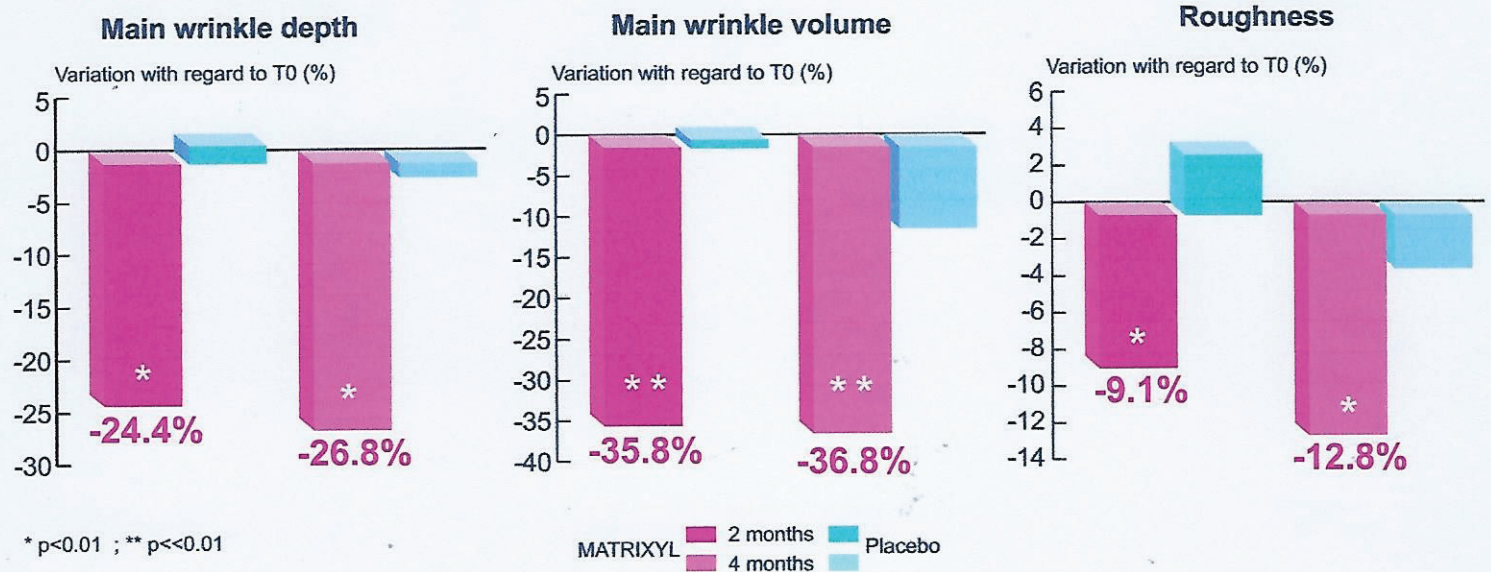


In vivo study in collaboration with Professor REVUZ from Mondor Hospital

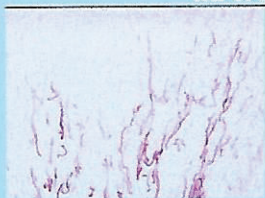
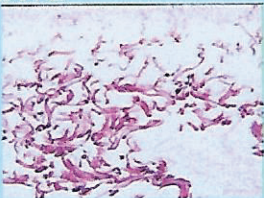
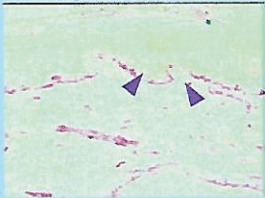
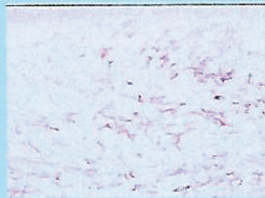
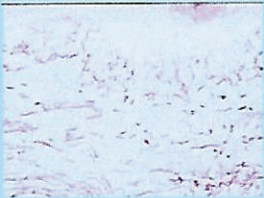
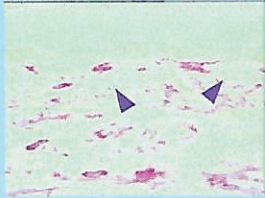
Profilometry and image analysis - 2 and 4-month study versus placebo

Two groups of 30 volunteers / Twice-daily application on the face and décolleté for 4 months of a cream containing 5% MATRIXYL for one group and a placebo for the other / Image analysis by profilometry on Silflo® prints at T0, T2 and T4 months. Biopsies on 12 volunteers.

Clinical study:



Biopsies :

ELASTIN			COLLAGEN IV		
T0	T4 months	Results	T4 months	Results	
MATRIXYL		Notable increase of density and thickness of fibres.	MATRIXYL	Regular distribution	
					
Excipient		No change	Excipient	Irregular distribution	
					

MATRIXYL, which peptide belongs to the family of Matrikines (Peptidic fragments, messengers of the natural process of tissue repair), is designed to replace retinol and its esters as an efficient anti-wrinkle active ingredient. It acts through specific mechanisms, without any toxicological danger.

MATRIXYL equals and exceeds retinol activity. It can be incorporated in any skin care product, all over the world.



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Profilometry and image analysis - 6-month study:

Against placebo:

25 volunteers / Twice-daily application on one half of the face a cream containing 3% MATRIXYL versus placebo / Image analysis by profilometry.

- Wrinkle depth	:	- 21.6%*
- Roughness	:	- 16.4%*
- Wrinkle volume	:	- 24.4%*
- Main lines density	:	- 46.8%*
- Wrinkles surface	:	- 67.8%*

*significant with regard to t0 (p<0.01)

Before treatment



After treatment



Against vitamin C:

10 volunteers / Twice-daily application on one half of the face a cream containing 3% MATRIXYL versus a commercially available cream containing 5% vitamin C / Image analysis by profilometry.

	Matrixyl	Vit. C
- Wrinkle depth	- 21.8%*	1.1%ns
- Roughness	- 13.5%**	3.6%ns
- Wrinkle volume	- 24.4%*	0.3%ns
- Main lines density	- 32.8%**	17.8%ns
- Wrinkles surface	- 49.3%**	28.0%ns

* significant with regard to vitamin C (p≤0,07)

** highly significant with regard to vitamin C (p≤0,01)

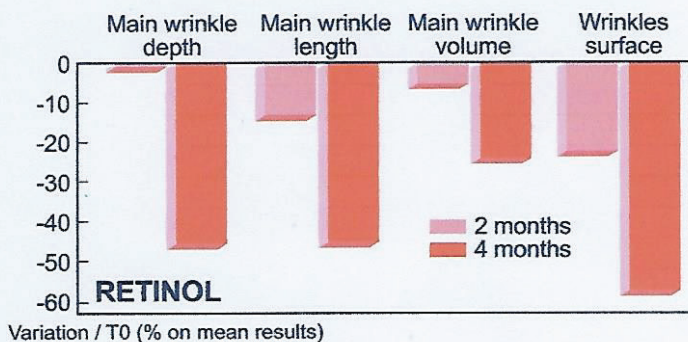
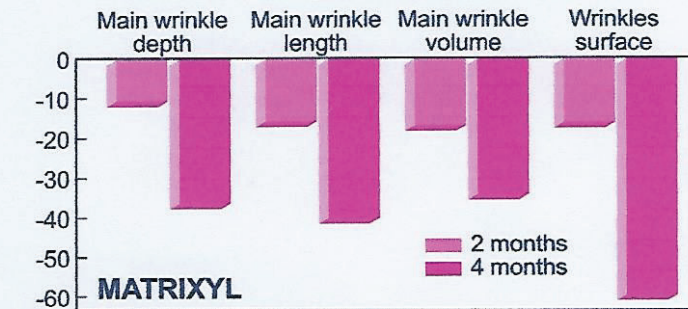
ns no significant

Matrixyl confirms its strong anti-wrinkle efficacy, whereas the cream with vitamin C is inactive.

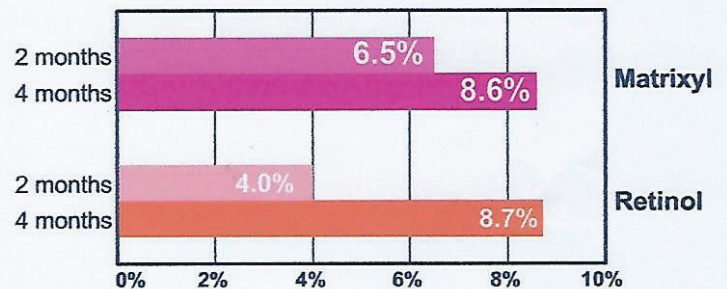
Profilometry and image analysis - 2 and 4-month study versus RETINOL:

16 volunteers / daily application for two months then twice-daily application for the following two months / cream containing 3% MATRIXYL versus cream containing 0.07% Retinol / Image analysis by profilometry, dermatological evaluation and echography.

Image analysis



Echography: improvement of skin thickness



Before treatment



After a 4-month treatment

Dermatological evaluation

Variation with regard to T0 (%)	MATRIXYL 4%		Retinol	
	2 months	4 months	2 months	4 months
Forehead	-26.67	-31.11	-20.00	-28.89
Periorbital area	-13.46	-19.23	-11.32	-16.98
Nasogenian groove	-0.20	-20.41	-9.80	-25.49

The anti-wrinkle efficacy of MATRIXYL is confirmed and acts more rapidly than retinol (and without irritation phenomena).

Skin thickness increases by 6.5% in 2 months and 8.6% in 4 months.

Evaluation by the Dermatologist confirms the anti-wrinkle effect, even on the forehead and the perinasal area.