

GENERAL OPEN  
SURGERY

# Monomax<sup>®</sup> 3/0

SPECIALLY ENGINEERED FOR  
PLASTIC AND RECONSTRUCTIVE SURGERY

# Monomax<sup>®</sup> 3/0

## THE MONOFILAMENT ADVANTAGE



THE MAIN ADVANTAGES OF USING A MONOFILAMENT SUTURE ARE:

- Less infection promoting effect
- A more gentle pass through the tissue
- Reliable knotting

Monomax 3/0 CAN BE RECOMMENDED FOR RECONSTRUCTIVE PROCEDURES SUCH AS:

- Breast surgery
- Facial reconstruction
- Thorax surgery

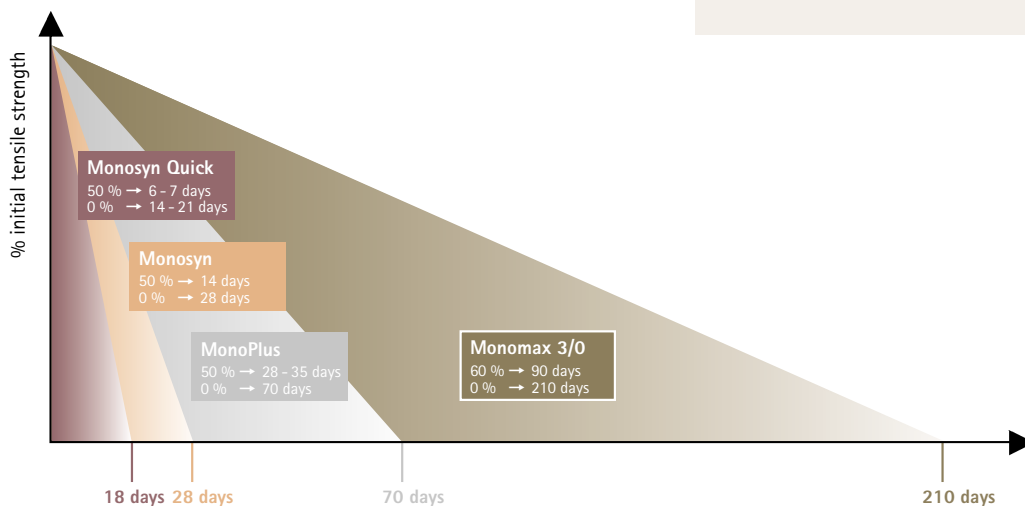
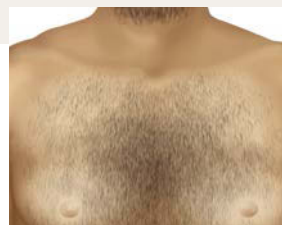
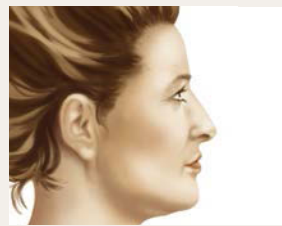
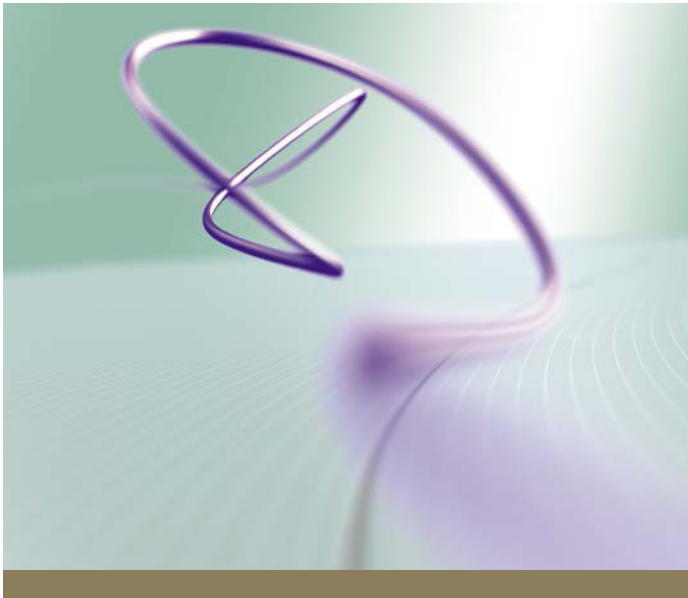


Figure 1: Tensile strength retention of the B. Braun Synthetic Monofilament Sutures



### INNOVATION

Monomax is the first suture material made of the patented Poly-4-hydroxybutyrate polymer. Smooth passage through the tissue and the longest degradation profile existing are some of the benefits that this new generation suture material presents.

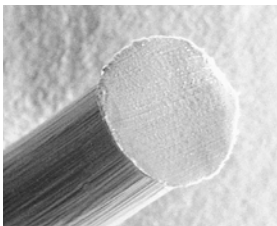
### THE ADVANTAGES OF USING MONOFILAMENT SUTURES:

1. Less infection promoting effect<sup>1,2</sup>



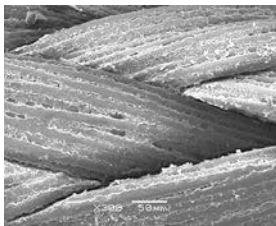
"Monofilament sutures showed a significantly lower level of bacterial infiltration and colonization"<sup>2</sup>

2. Improved wound healing, due to the smooth passage through the tissue:



Monofilament sutures:

- Smooth surface
- Low tissue drag
- Low tissue damage



Braided sutures:

- High frictional coefficient
- High tissue drag
- Normally coated to reduce tissue drag effect

3. Reliable knotting, due to the longitudinal elasticity of monofilaments<sup>3</sup>

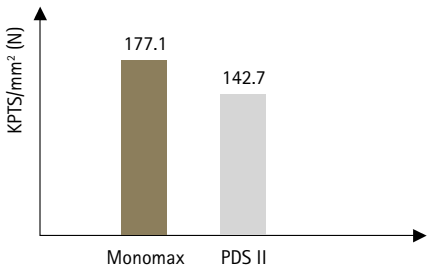
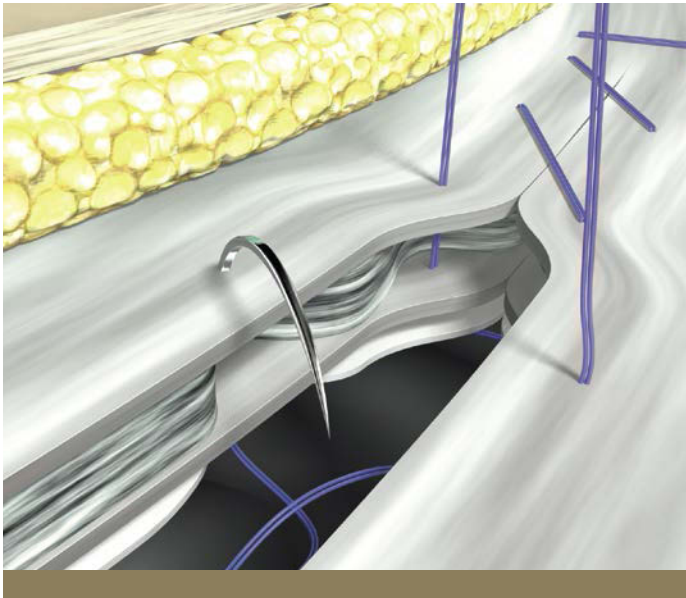


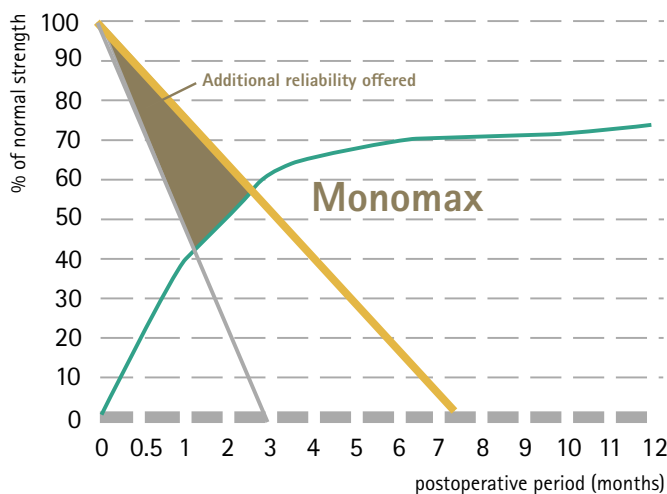
Figure 2:  
Comparison of knot pull tensile strength (USP 1).

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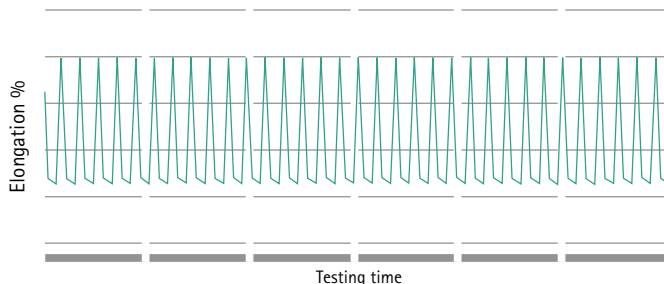
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## DEGRADATION PROFILE



## CYCLES BETWEEN 5 AND 20 N



Graph shows response of Monomax to continuously applied force peaks.

## EXTRA LONG DEGRADATION PROFILE<sup>4</sup>

Its special degradation profile sustains 50% of its original strength for more than 3 months.

Monomax provides excellent wound support during the healing process without the need of using a non-absorbable material.

- Strength recovery abdominal wall
- Monomax degradation profile
- Polydioxanone degradation profile

Figure 3:  
Abdominal wall strength recovery compared with Monomax and polydioxanone suture degradation profiles.

## FLEXIBILITY

Its unique Shock-Z characteristics provide wound compliance and outstanding knot security, which makes Monomax both comfortable in use for the surgeon, and for the patient.

Figure 4:  
Elongation of Monomax after applying pressure peaks (5–20 N) vs. time. The thread shows no deformation.



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## Monomax is clearly the answer for those plastic surgeons that no longer want to compromise!

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McCoy Moretz, MD,  
FACS,  
President,  
F.A.C.E. of Beverly Hills

During my more than 23 years of clinical experience and working with thousands of patients, I have been frustrated by the compromise of not having one suture to provide all the excellent technical properties that are found in various suture materials.

My goal is to always produce the most outstanding cosmetic results. In the area of facial plastic surgery, there has been a long-standing controversy over the use of non-absorbable sutures, which provide added security and minimal tissue reactivity, versus absorbable sutures which generally provide more comfort for the patient as well as less risk of granuloma, but which may experience tissue reactions and extrusion. There has always been the need to compromise one feature for another, until now!

Monomax combines the advantages of both types of sutures. Given it has the longest degradation profile available, Monomax provides the security to ensure the proper formation of collagen for long term tissue strength while at the same time being absorbed by hydrolysis when the material is no longer necessary.

In addition, the enhanced flexibility of Monomax helps me to easily maintain the natural vectors of facial pull and to achieve excellent aesthetic results that both my patients and I can immediately appreciate.

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## THE SURGEON'S CHOICE












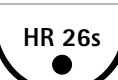


Structure	Monofilament
Chemical composition	Poly-4-hydroxybutyrate
Colour	Violet
Size	USP 3/0 (metric 2.5)
Tensile strength retention	50% tensile strength retention at 90 days guaranteed
Mass absorption	Essentially completed between 13 months and more than 36 months
Indication	General soft tissue approximation, especially when the use of an absorbable monofilament suture with an extended wound support up to 15 weeks is indicated. I.e. abdominal wall closure
Sterilization	Ethylene oxide (EO)



References

- Alexander JW, Solomkin JS, Edwards MJ. Updated Recommendations for Control of Surgical Site Infections. Annals of Surgery. 2011;253(6):1082-93.
- Choi HJ, Chae HD. Comparison of E. coli infiltration between new absorbable sutures. J Korean Surg Soc. 2009;77(1):1-6.
- Data on file: Test number PTR/22/0907/MAU according to standard EP SOP/02/FF/013.en.5 (KPTS) and to standard USP SOP/02/FF/014.en.3 (LPTS).
- IFU Monomax

# NEEDLE-THREAD COMBINATION

Needle  length mm	Thread  length cm colour	USP (metric)						
		5/0 (1)	4/0 (1.5)	3/0 (2)	2/0 (3)	0 (3.5)	1 (4)	2 (6)
3/8 circle reverse cutting needle								
	45 Violet			B0041845				
	45 Violet			B0041855				
3/8 circle reverse cutting needle with precision point								
	45 Violet			B0041863				
	45 Violet			B0041879				
1/2 circle round bodied needle								
	70 Violet			B0041982				
	70 Violet			B0041061				
	70 Violet			B0041053				
	70 Violet			B0041010				
	70 Violet			B0041092				
	70 Violet			B0041112				
	70 Violet			B0041153				
	70 Violet			B0041348				

**B** Box of 24 units

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