C ADIP'SCULPT

# AUTOLOGOUS FAT TRANSFER KITS

FOR AESTHETIC & RECONSTRUCTIVE SURGERY

www.adipsculpt.com

Fat transfer has become a commonly used procedure in the surgeons' daily practice, offering their patients a more natural and personalised outcome. Adipose tissue's filling and regenerative properties make it an ideal candidate in both aesthetic and reconstructive procedures.

Adipose tissue is a sophisticated combination of cells including adipocytes, progenitor cells and stem cells. The tissue requires proper handling to ensure it maintains its functionalities. Paying attention to each step of the lipofilling technique is essential to ensure adipose cell viability and to obtain the desired volumising and rejuvenating effect.

Thanks to years of research, Adip'sculpt has identified the key steps of the fat grafting technique, leading to the development of innovative tools and protocols which provide adipose tissue of optimal quality and ensure high fat retention rates.

### Advantages & Innovations

Adip'sculpt has developed a variety of user-friendly kits to treat different areas and indications. Our wide product range allows you to harvest and inject nano, micro and macro lobules.



#### ALL-IN-ONE

Adip'sculpt fat transfer kits provide all the required elements to perform the lipofilling technique.



#### STERILE & SINGLE-USE

Our kits are sterile, double-sealed and disposable to eliminate the risk of infection.



#### **OPTIMAL SAFETY**

The whole procedure is performed in a closed system to ensure patient's safety by reducing the risk of bacterial contamination.



#### REGULATORY COMPLIANT

Kits are CE marked as well as FDA & TGA cleared and manufactured meeting ISO 13485 (2016).



#### LONG LASTING RESULTS

The Adip'sculpt procedure delivers industry-leading retention rates, thanks to dedicated protocols and specifically designed components, optimising each step of the lipofilling.



#### ATRAUMATIC METHOD

The washing & centrifugation protocol (low speed and short duration) greatly limits the secretion of pro-inflammatory molecules and preserves the integrity of fat cells.

### **INDICATIONS**

The **small volume** product range is designed to perform the following procedures:

- Facial rejuvenation
- Facial reconstruction
- Hand rejuvenation
- Lipodystrophy correction
- Scar correction or revision
- Wound healing
- Genital rejuvenation
- Penile augmentation

The **large volume** product range is designed to perform the following procedures:

- Breast augmentation
- Breast malformation, asymmetry or ptosis correction
- Breast reconstruction after partial or total mastectomy
- Gluteal augmentation
- Scar revision
- Calf augmentation or reconstruction

### ADIP'SCULPT PROTOCOL

Tissue preservation is key to its survival. Adip'sculpt instruments, technique and protocols ensure efficient tissue harvesting, while controlling the negative pressure and preserving adipose / Stromal Vascular Fraction (SVF) cells, leading to:

- Increased retention rates: 70 to 90%
- Decreased oil release, cyst formation, necrosis, inflammation.

### INFILTRATION OF THE TUMESCENT SOLUTION

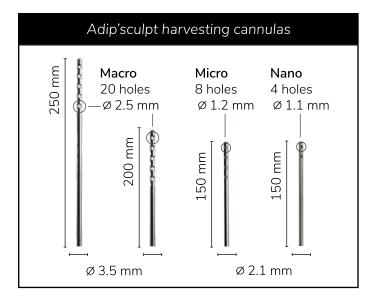


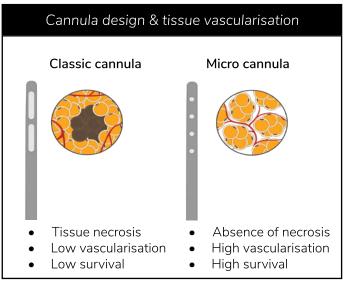
Pre-tunneling and infiltration of the tumescent solution (avoid local anaesthetic if the patient is under general anaesthesia as it is toxic for the SVF cells  $^{1-2}$ ) with the provided infiltration cannula will ensure a better diffusion of the solution in the donor site (resulting in greater retention rates of the transferred tissue), as well as making the harvesting easier.

### TISSUE HARVESTING

### • Cannulas size and design

The size of the harvested lobules affects the fat retention rates, as small adipose lobules ensure a better vascularisation <sup>3</sup>. Adip'sculpt harvesting cannulas have been specifically designed to harvest micro lobules adapted to each indication. The blunt micro cannulas also preserve the integrity of the adipose cells, ensuring their viability <sup>4</sup>.

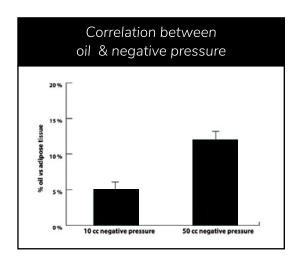




1. New insight into lidocaine and adrenaline effects on human adipose stem cells. Girard et. al Aesthetic Plast Surg. 2013 Feb; 37 (1): 144-52 - 2. Local anesthetics: Use and Effects in autologous Fat Grafting - Girard et. al. Surgery Curr Res 2013, 3: 4 - 3. Autologous Fat Grafting in the Breast: Critical Points and Technique Improvements. Hivernaudet. al Aesthetic Plast Surg. 2015 Jun 18 - 4. Lipofilling: Critical points for successful fat grafting. Girard et. al. J Ästhet Chir 2014;7: 93-97 - Studies sponsored by Stemcis

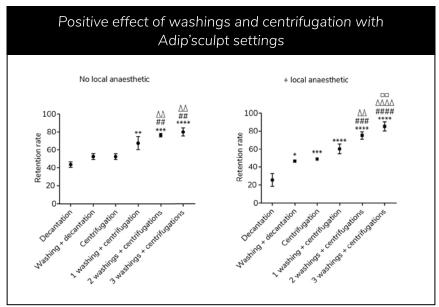
#### Negative pressure

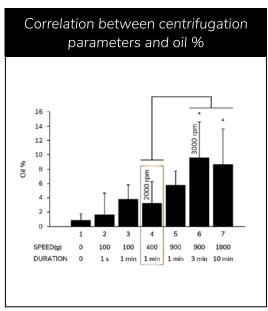
High negative pressure damages the adipose cells' membrane. A low negative pressure (10 ml in a 60 ml syringe / 2 ml in a 10 ml syringe) will ensure optimal adipose cells viability. Adip'sculpt developed and patented the 60 ml Spinfill syringes to ensure low pressure thanks to its lockable plunger in 10 ml increments.



### ■ WASHING AND CENTRIFUGATION

Once harvested, the adipose tissue needs to be purified as it contains cell debris and toxic molecules. To increase the retention, the tissue is washed and leftover solutions removed. Adip'sculpt has shown that centrifugation is the most efficient technique; however, the parameters must be set at a low speed and short duration to concentrate the tissue while preserving cell viability <sup>5-6</sup>.





### Injection

Adip'sculpt fine injection cannulas ensure the deposition of a small amount of adipose tissue per channel, maximising the vascularisation of the transferred tissue and thus ensuring high retention rates.



Macrofill & Macrofill medium 14G x 200 mm / 14G x 130 mm



 $\label{eq:microfill} \textbf{Microfill} \\ \textbf{17G} \times 100 \text{ mm} / \textbf{20G} \times 50 \text{ mm}$ 



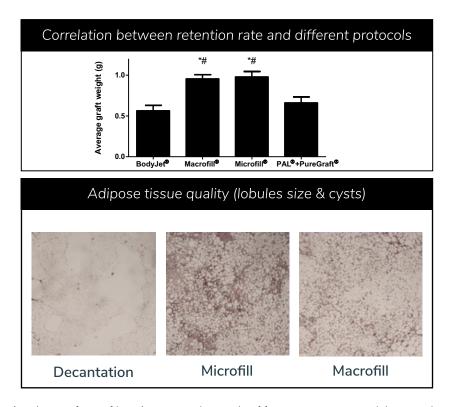
 $\begin{tabular}{ll} \textbf{Nanofill} \\ \textbf{22G} \times 50 \mbox{ mm} / \textbf{22G} \times 70 \mbox{ mm} \end{tabular}$ 

**5.** Effect of washes and centrifugation on the efficacy of lipofilling with or without local anesthetic - Girard et.al. Plast Reconstr Surg Glob Open 2015; 3 (8): e496 - **6.** Effect of centrifugation and washing on adipose graft viability: A new method to improve graft efficiency - Aesthetic Plast Surg. 2013 Feb; 37 (1): 144-52 - Hoareau et. al. J Plast Reconstr Aesthet Surg. 2013 May; 66 (5): 712-9 Studies sponsored by Stemcis

### Studies & research

### ■ Comparative study of 4 protocols

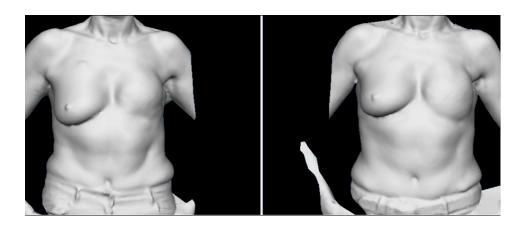
Comparative study (in the same patient) with different techniques has shown that Microfill and Macrofill have greater retention rates than other devices.



Autologous fat grafting: A comparative study of four current commercial protocols Hivernaud V, Lefourn B, Robard M, Guicheux J, Weiss P. J Plast Reconstr Aesthet Surg. 2016 Dec 14 - Independent study

### Clinical study

A clinical study performed on 23 patients (breast reconstruction after DIEP surgery) with the Macrofill kit has shown fat retention rates >70% (6 months post-surgery).



Refined method of lipofilling following DIEP breast reconstruction: 3D analysis of Graft Survival Nelissen X, Lhoest F, Preud'Homme L. Plast Reconstr Surg Glob Open 2015 Sep; 3 (9): e526 - Independent study

### SMALL VOLUMES

# nanofill

- Facial rejuvenation
  - Fine lines
  - Periorbital / perioral areas
- Facial reconstruction
- Scar correction or revision

VOLUME

1-10 ML

# microfill

- Facial rejuvenation
- Hand rejuvenation
- Facial reconstruction
- Scar correction or revision
- Lipodystrophy correction

VOLUME

**10-50** ML



# nanofill



Nanofill is the first fat transfer system designed to harvest adipose lobules as small as **1.1 mm** and inject pure fat through a **22G** cannula. The removable plunger permits the centrifugation of the syringe while the plunger socket keeps the fat in a closed compartment.

### **INDICATIONS**

- Facial rejuvenation : volume enhancement & skin rejuvenation
  - Fine lines
  - Periorbital / perioral areas
- Scar correction or revision
- Facial reconstruction

1-10 мі

### INSTRUMENTS



| I mind adon camilala |      |
|----------------------|------|
| (Ø 2.1 mm × 150 mm)  | with |

1 harvesting cannula 4 holes (Ø 1.1 mm) (Ø  $1.7 \times 2.1 \text{ mm} \times 150 \text{ mm}$ )

1 infiltration cannula

2 needles - 16G / 22G

**2 Luer-Lock syringes** - 10 ml with removable plunger

2 injection cannulas - 22G (Ø 0.5 - 0.7 mm x 50 mm) (Ø 0.5 - 0.7 mm x 70 mm)

2 Luer-Lock syringes - 1 ml

3 Luer-Lock syringes caps holders

3 Luer-Lock syringes caps

1 nut to secure the rotor

1 FLL-FLL connector

## m<u>i</u>crofill



Microfill's fine harvesting cannula ensures the collection of small adipose lobules - **1.2 mm** - resulting is smooth and even injection, as well as better vascularisation of the injected tissue. The harvested tissue is washed and spun in dedicated tubes, preventing air contamination. Injection is performed with **17G** or **20G** cannula.

### INDICATIONS

- Facial rejuvenation: volume enhancement & skin rejuvenation
- Neck Upper chest rejuvenation
- Facial reconstruction
- Hand rejuvenation
- Scar correction or revision
- Lipodystrophy correction

10-50 ML



1 infiltration cannula

 $(\emptyset 2.1 \text{ mm } \times 150 \text{ mm})$ 

1 harvesting cannula 8 holes - (Ø 1.2 mm)

 $(\emptyset 1.7 \times 2.1 \text{ mm} \times 150 \text{ mm})$ 

4 Luer-Lock syringes - 10 ml

2 injection cannulas

**17G** (Ø 1.2 - 1.4 mm x 100 mm)

**20G** (Ø 0.7 - 0.9 mm x 50 mm)

4 Luer-Lock syringes - 1 ml

2 centrifugation tubes - 50 ml

**1 needle** - 18G

1 transfer cannula

 $(\emptyset 3.0 \text{ mm} \times L130 \text{ mm})$ 

1 nut to secure the rotor

2 FLL-FLL connectors

### LARGE VOLUMES

# macrofill medium

- Breast augmentation / reconstruction
- Breast malformation, asymmetry or ptosis correction
- Scar revision
- Calf reconstruction or augmentation
- Lipodystrophy correction

VOLUME

50-150 ML

### macrofil

- Breast augmentation / reconstruction
- Breast malformation, asymmetry or ptosis correction
- Calf reconstruction or augmentation
- Scar revision
- Gluteal augmentation
- Lipodystrophy correction

VOLUME

150-500 ML





Macrofill medium's patented incremental syringes (4) ensure low pressure harvesting (10 ml increment), as well as washing and centrifugation of the tissue in the syringes (without air contamination), thanks to its lockable and removable plunger. The tissue will then be smoothly injected through a 14G cannula.

### INDICATIONS

- Breast augmentation / reconstruction
- Breast malformation, asymmetry or ptosis correction
- Scar revision
- Calf reconstruction or augmentation
- Lipodystrophy correction

50-150 мг





1 infiltration cannula

 $(\emptyset \ 2.1 \ mm \ \times \ 250 \ mm)$ 

1 harvesting cannula

20 holes - (Ø 2.5 mm)

 $(\emptyset \ 3.0 \times 3.5 \ mm \times 250 \ mm)$ 

4 incremental syringes - 60 ml

2 injection cannulas - 14G

 $(\emptyset 1.7 - 2.1 \text{ mm} \times 200 \text{ mm})$ 

 $(\emptyset 1.7 - 2.1 \text{ mm} \times 130 \text{ mm})$ 

6 Luer-Lock syringes - 10 ml

1 needle - 18G NOKOR

5 Luer-Lock syringes caps

1 nut to secure the rotor

2 FLL-FLL connectors

## macrofill



Macrofill is part of the same product range as Macrofill medium. Macrofill has 6 incremental harvesting syringes, offers the choice between 2 harvesting cannulas and has more injection syringes, allowing the harvesting and injection of larger amount of adipose tissue.

### INDICATIONS

- Breast augmentation / reconstruction
- Breast malformation, asymmetry or ptosis correction
- Calf reconstruction or augmentation
- Scar revision
- Gluteal augmentation
- Lipodystrophy correction

150-500 ML





| 1 infiltration cannula (Ø 2.1 mm × 250 mm)            | 6 incremental syringes - 60 ml       | <b>2 needles</b> - 18G / 18G NOKOR |
|---|--------------------------------------|------------------------------------|
|   | 2 injection cannulas - 14G           | 8 Luer-Lock syringes caps          |
| 2 harvesting cannulas                                 | (Ø 1.7 - 2.1 mm x 200 mm)            |                                    |
| 20 holes - (Ø 2.5 mm)                                 | (Ø 1.7 - 2.1 mm x 130 mm)            | 1 nut to secure the rotor          |
| $(\emptyset \ 3.0 \times 3.5 \ mm \ \times 250 \ mm)$ |                                      |                                    |
| (Ø 3.0 x 3.5 mm x 200 mm)                             | <b>10 Luer-Lock syringes</b> - 10 ml | 2 FLL-FLL connectors               |

### COMPLEMENTARY PRODUCTS

adip'spin

Centrifuge and rotors for Adip'sculpt product range

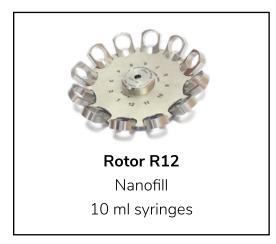
spinfill

Complementary incremental syringes

# adip'spin







Adip'spin is a modern bench top centrifuge offering a wide range of applications (for Adip'sculpt product range as well as other products). Adip'spin is a safe, quiet, versatile and easy to maintain device.

### **A**DVANTAGES

Adip'spin is part of the Adip'sculpt protocol. It allows soft and short centrifugation, ensuring high preservation of adipose lobules, thus increasing fat retention rates.

- Pre-programmed with Adip'sculpt settings
- Free mode (custom settings):
  - Set speed from 100 to 3000 RPM (900g)
  - Set duration from 1 to 99 min
- Fully compatible with Adip'sculpt products
- Rotors (autoclavable) specifically designed for Adip'sculpt products



Spinfill is a complementary product for the Macrofill range. The 60 ml incremental syringes are used when a very large amount of adipose tissue is required (>400 ml). The Spinfill syringes are designed to control the vacuum while harvesting, thanks to a patented notched plunger. The low pressure improves the survival of the adipocytes by preventing the membrane from breaking.



### INSTRUMENTS

The Spinfill syringe kit is packaged in a box containing:

3 individual bags of 2 incremental Luer-Lock syringes (60 ml) each one including:

- 3 Luer-Lock syringe caps
- 2 FLL-FLL connectors
- 1 nut for the rotor

### Designed and manufactured by Stemcis

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KTA product brochure (EU) - June 2021





