

Supplies

Provided

- Matrix plate
- Sensor tray
- Micronizers
- Luer connector
- NFC tag
- Dispenser 1
- PCL
- Bed film

Additional Supplies (not provided)

- Syringes (5ml*, 10ml, 50ml (2-3 each))
- **21-gauge, 1 inch needle***
- Syringe caps
- Surgical tools
- 50ml normal saline
- Standing rack
- Waste tray

*These supplies **must be the exact specifications**. No substitutions. Additional supplies without asterisks can be substituted at the professionals' discretion.

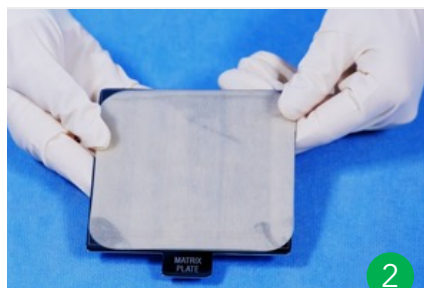
Bed Film & PCL Amount Per Kit Size

	Small	Medium	Large
Bed film	1 ea.	2 ea.	3 ea.
PCL Length	364 mm	667 mm	1,100 mm

Roles

- S** Surgeon
- 1** Non-sterile staff
- 2** Surgeon or sterile staff

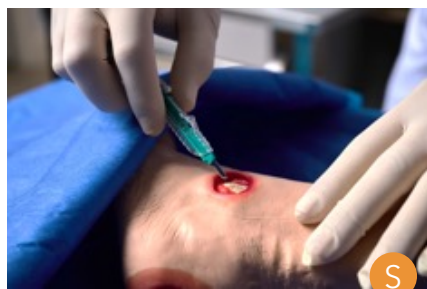
Procedure Steps



1. Prepare sterile field and inject tumescent

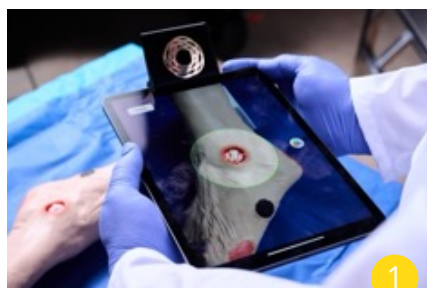
- Fill one or two 30-50ml luer lock syringe(s) with normal saline (leave 10ml of free space)
- Attach bed film to matrix plate
- Turn PCL cover clockwise until 5-10cm of PCL comes out
- Inject appropriate amount of tumescent to fat harvesting area and allow at least 5-10 minutes of infiltration prior to beginning fat harvest

*see pg 17 in SOP



2. Debride wound

- Debride and prepare wound bed—free of necrotic tissue



3. Detect wound measurements with AiD Regen Tablet

- Set up surgeon, patient, and wound information on AiD Regen tablet
- Use AiD Regen tablet to snap a photo and detect wound measurements
- Send file to printer

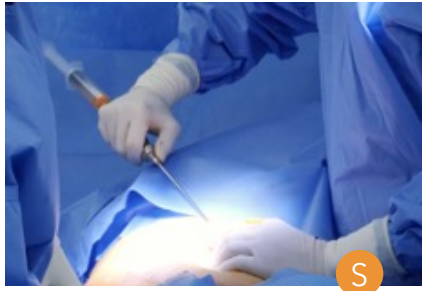
*see pg 17 in SOP



4. Print scaffold

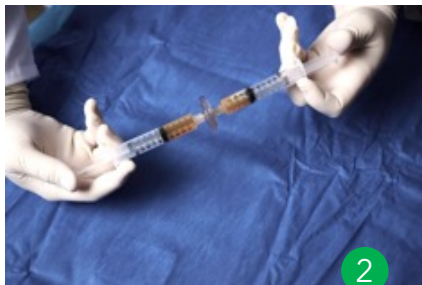
- Insert NFC tag into printer,
- Insert Sensor Tray
- Select SCAFFOLD on screen,
- Insert matrix plate with bed film
- Insert Dispenser into Dispenser 1 Dock
- Remove knob and install PCL into inlet of Dispenser 2 Dock

*see pg 19 in SOP



5. Harvest fat

- Perform fat harvesting to collect amount of fat determined by AiD Regen tablet



6. Micronize

- Connect the 10ml syringe containing harvest fat to an empty 10ml syringe with the Red Micronizer
- Pass fat back and forth 10 times
- Repeat micronizing steps with the Yellow, Green, and Blue Micronizers

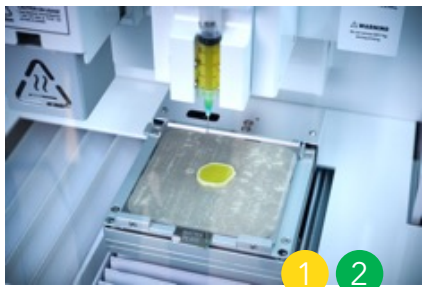
*see pg 20-21 in SOP



7. Tissue and fluid separation

- Using luer-to-luer connector, connect the 10ml syringe of micronized fat to a 30-50ml syringe of normal saline 3 times the amount of fat.
- Push fat into saline syringe, gently mix by inverting and place on standing rack with syringe cap face down
- Once settled, while still inverted cap or tip down, gently discard blood and fluid beneath adipose layer

*see pg 21-22 in SOP



8. Print bio ink

- Transfer the determined volume of Bio Ink into 5ml syringe
- Remove air then place 21G-1 inch needle securely on tip
- Select BIO INK 1 on printer screen
- Load Bio Ink into Dispenser 2 Dock and perform printing

*see pg 25-26 in SOP



9. Apply patch

- After 10-15 minutes of cooling, patch will solidify
- With forceps, cut and peel off white scaffold, pick up patch and place on wound site
- Apply first dressing
- Apply second dressing

*see pg 26-28 in SOP