



Microlyzer.
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WHAT IS

MICROLYZER ?

Microlyzer is a medical device which offers an option of obtaining the “Microfat & Nanofat” for fat transfer procedures and also more importantly, the “Non-enzymatic Stromal Vascular Fraction”.

Microlyzer is designated as a blade-filter and a cartridge formation which is aimed to be used with fat tissue processing in order dissociate by tearing the Stromal Vascular Fraction cells off the adipose tissue.





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MICROFAT NANO TRANSFER

Microlyzer

MICROFAT
NANO TRANSFER

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THE HISTORY OF ADIPOSE TISSUE AND REGENERATIVE MEDICINE & THE IDEA OF **MICROLYZER**

The adipose tissue is known as one of the most important sources generically for “stem cells”. ASCs are isolated at the point of care from the lipoaspirate tissue as the stromal vascular fraction. The most common isolation method requires the use of collagenase enzyme thus adipose stem cells are able to be isolated using various techniques however some of the methods are being considered more than “minimally manipulated” by current good manufacturing practice requirements. Alternatively, mechanical isolation methods are set to demonstrate whether the possibility

of isolation of ADSCs.

The design of Microlyzer offers 2-way connectors of Microlyzer cartridges with luer-connectors for syringes. One side syringe with lipoaspirate is affixed and the other side there is a vacant same volume syringe is attached. The Microlyzer cartridge is a nest fort he blade-filters. The blade-filters are 2400 to 600 microns. The device requires 3 steps of cutting of lipoaspirate for mechanical separation of the cells from the ECM.





20
ml
15
10
5

SINGLE USE ONLY

1
2
3
4
5
6
7



WHY

NON-ENZYMATIC

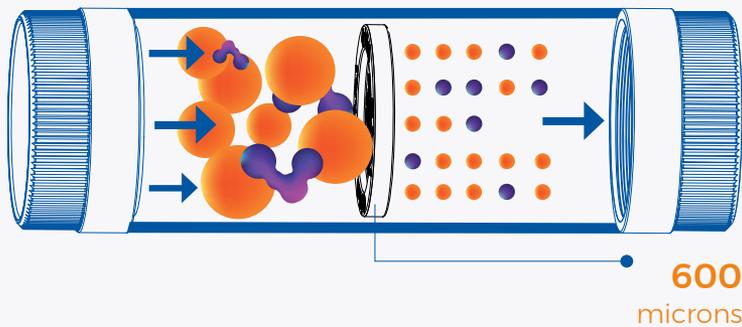
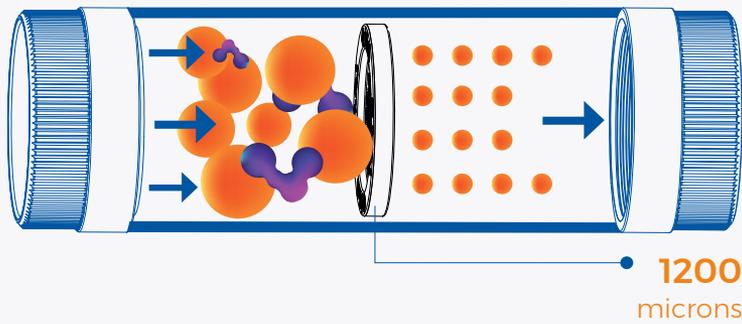
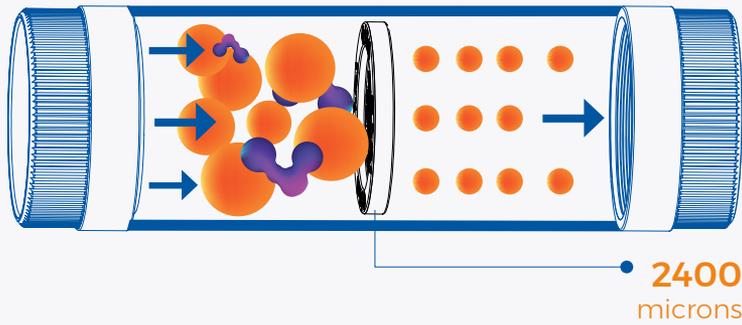
SVF OPTION IS

IMPORTANT?

The standard enzymatic SVF isolation methods have been demonstrated with clinical benefits. However the enzymatic method requires longer protocol durations, higher costs and risks associated to presence of enzyme residual activities in the frame of regulation issues. Our method and device may be an alternative to enzymatic isolation methods due to the factors of regulation restraints, costs and duration of the isolation processes.

The Microlyzer protocol offers a very cost-effective option, high nucleated cell yields, very fast and by the absence of enzyme presence in the protocol; much safer and easier to use within the frame of regulation.





HONEYCOMB DESIGN

Along with the Microlyzer device, the whole adipose tissue is being processed through the blade-filter from one side to another. During R&D process of Microlyzer blade-filters, we evaluated the best possible design for the adipose tissue to be processed.



MICROLYZER HONEYCOMB SHAPE FILTERS	HOLES	BLADE-EDGES
2400 microns	73 holes	438 blades
1200 microns	151 holes	936 blades
600 microns	559 holes	3354 blades

BLADE-FILTER SIZE (PROCESSED MICROFAT / NANO FAT)	INJECTABLE CAPABILITY (GAUGE)
2400 microns	Up to 18 G
1200 microns	Up to 21 G
600 microns	Up to 30 G

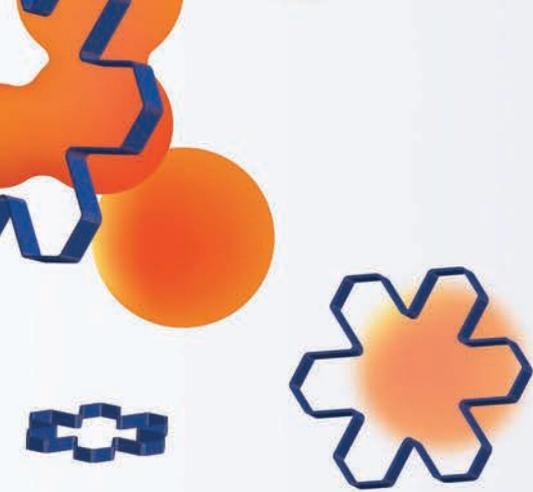


WHO WE ARE?

T-Biyoteknoloji Ltd Sti and T-LAB brand was established in Bursa in 2012 as a dedicated company in the field of manufacturing, developing and marketing of medical devices for regenerative medicine. In Turkey, we accomplished to manufacture the country's first CE Class IIb certified PRP KIT in 2014 and became the leader of this field in our country. Since then, the company has been attending to various congresses either domestic or international in order to expand its market. Domestically, we are based in 70 cities along with our dealers network and we export our products to more than 35 countries worldwide.

In 2018, we developed and manufactured the non-anticoagulant PRP preparation method product, NEXT PRP Syringe, which is also CE Class IIb certified. Also in 2018, as international expansion vision, we registered our T-LAB brand name in over 50 countries.





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**T-Biyoteknoloji Laboratuvar Estetik Medikal
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