

# UVA PIT System

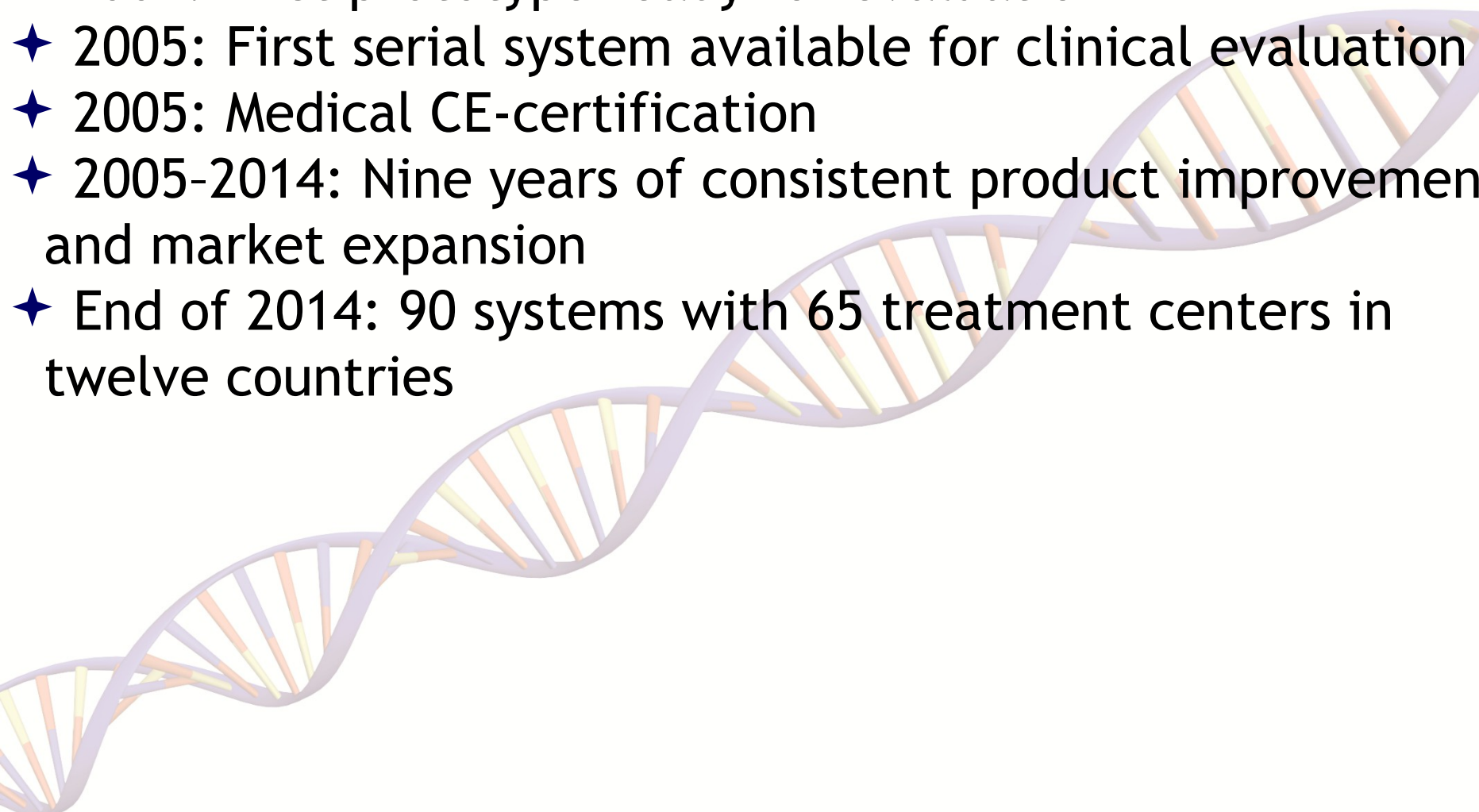
Dr Alain BOHBOT Chu Strasbourg  
Mr Marcel CEUPPENS SDconsult



Made by MedTechSolutions  
GmbH

# UVA PIT System

## UVA PIT System history

- ◆ 2004: First prototype ready for evaluation
  - ◆ 2005: First serial system available for clinical evaluation
  - ◆ 2005: Medical CE-certification
  - ◆ 2005-2014: Nine years of consistent product improvement and market expansion
  - ◆ End of 2014: 90 systems with 65 treatment centers in twelve countries
- 

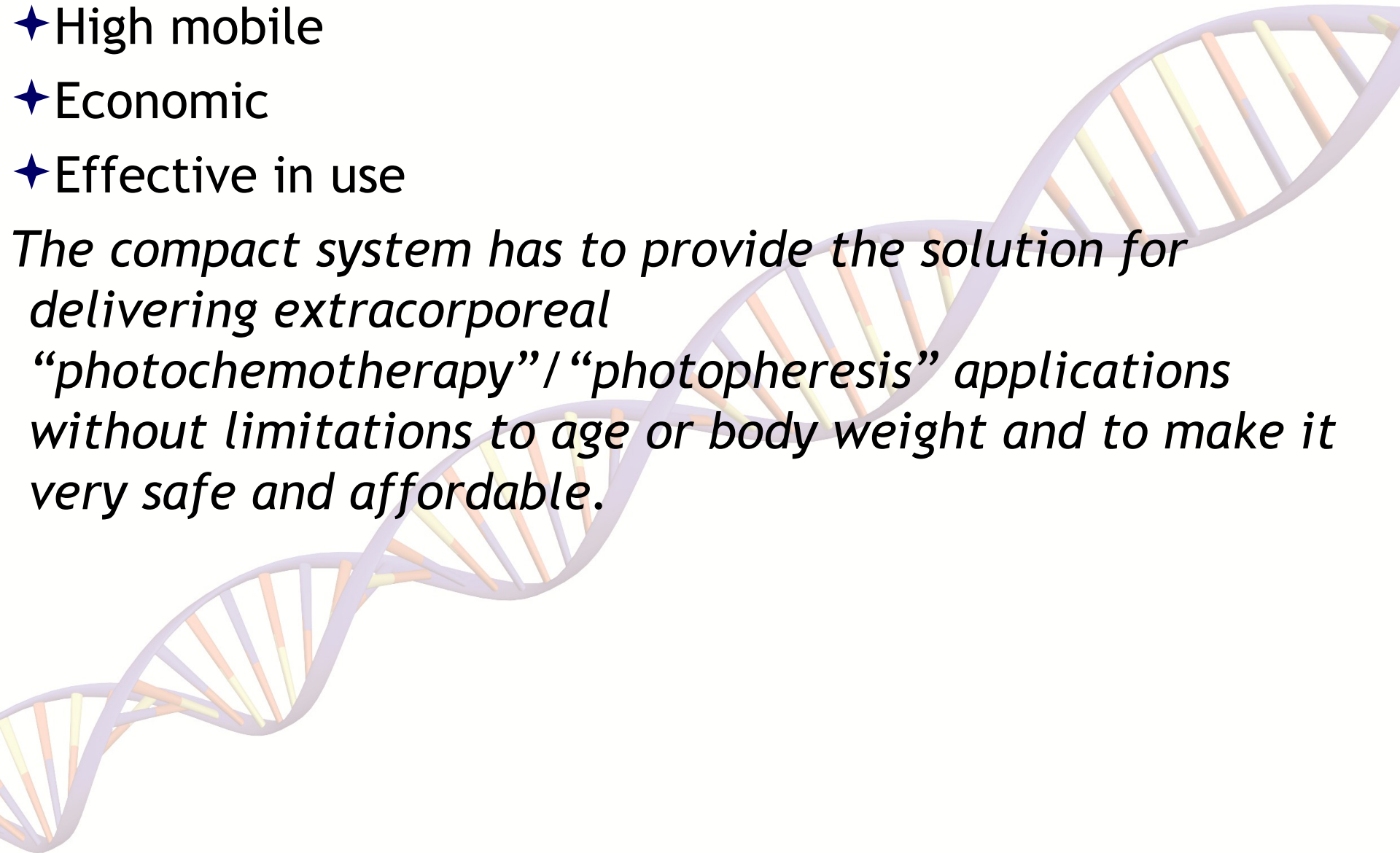
## Initial Goals

The UVA PIT System has been developed to be:

- ◆ High mobile
- ◆ Economic
- ◆ Effective in use

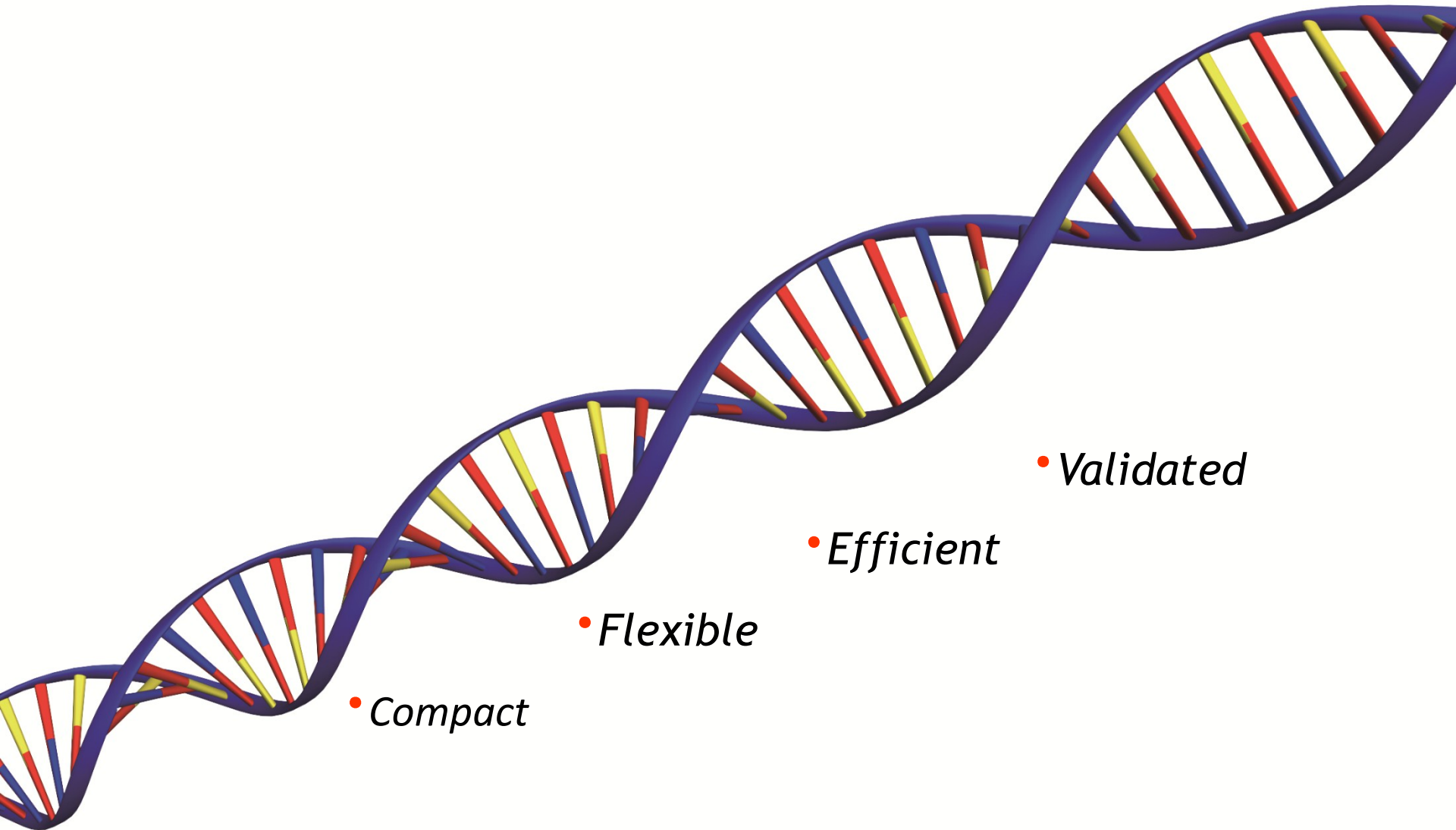
*The compact system has to provide the solution for delivering extracorporeal “photochemotherapy” / “photopheresis” applications without limitations to age or body weight and to make it very safe and affordable.*

# UVA PIT System



# ***UVA PIT*** System

## Photo Immune Therapy



- *Compact*

- *Flexible*

- *Efficient*

- *Validated*

# UVA PIT System



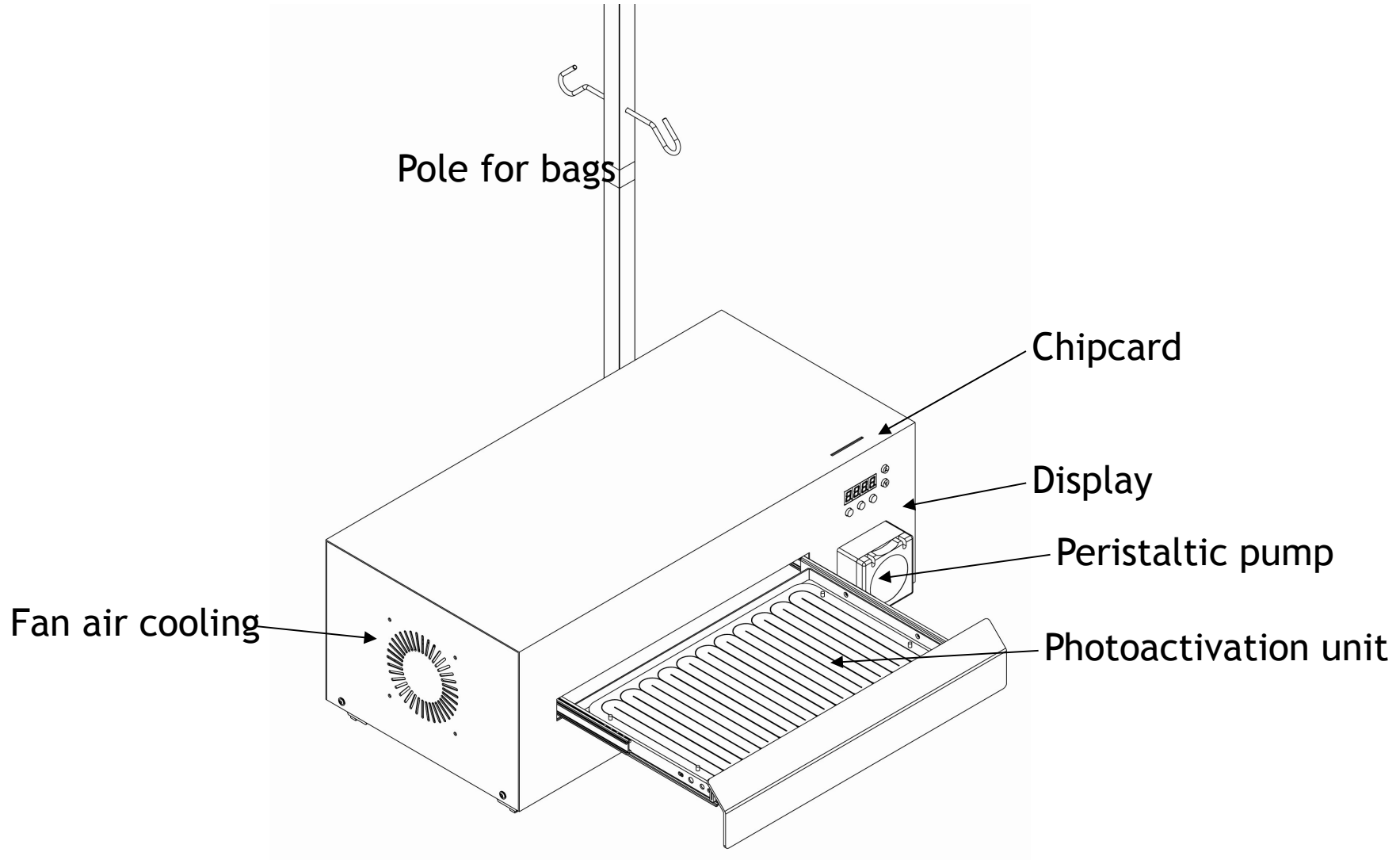
## Ex-vivo treatment

- ◆ More safety
- ◆ More patient comfort
- ◆ Understandable technique
- ◆ Closed system (using SCD, microFilter)

## In-line treatment *SCD connection to the collection line*

- ◆ *Possible in some countries under locally validated protocols*

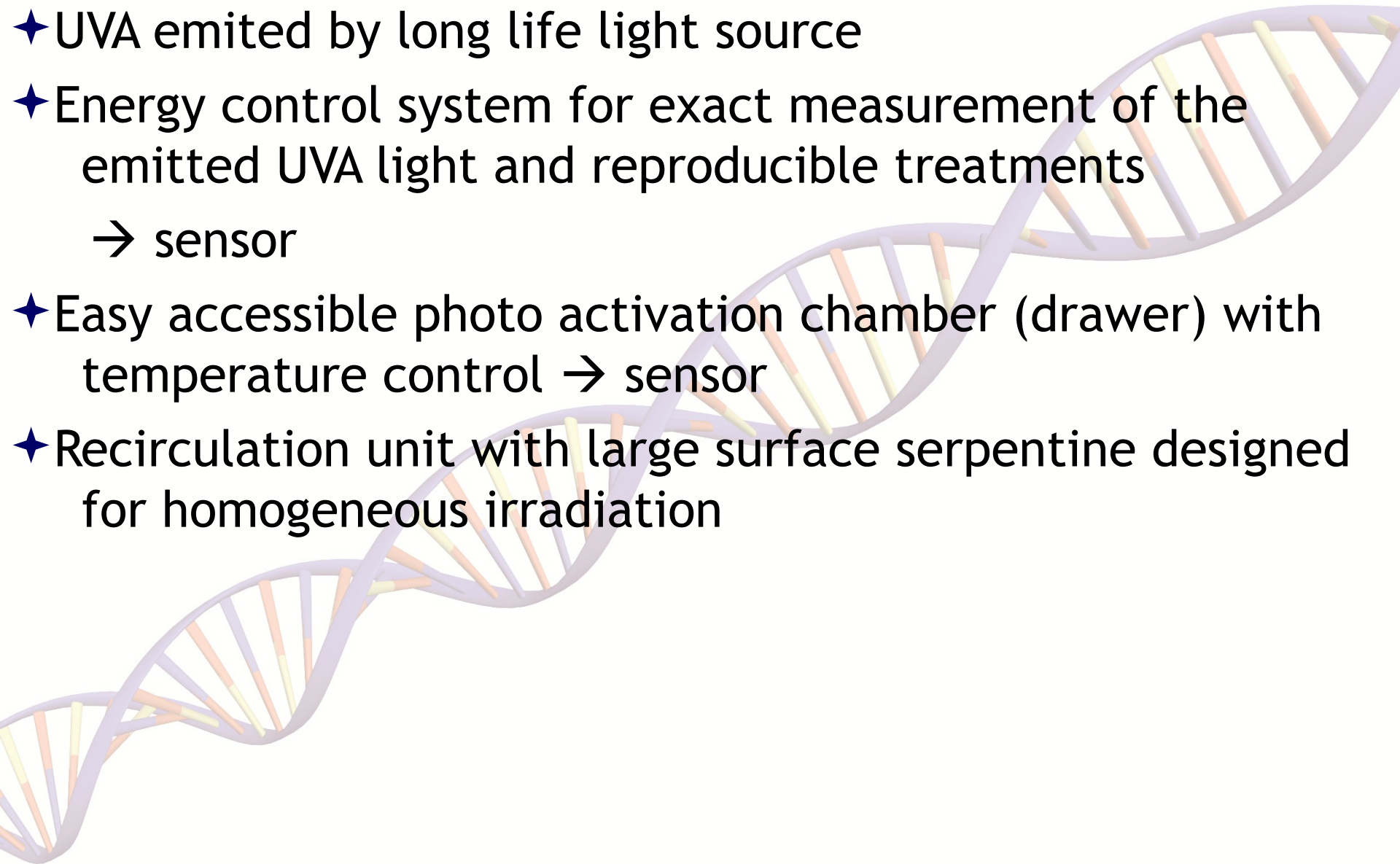
# UVA PIT System



# UVA PIT System

Features designed & reduced to real needs

- ★ UVA emitted by long life light source
- ★ Energy control system for exact measurement of the emitted UVA light and reproducible treatments
  - sensor
- ★ Easy accessible photo activation chamber (drawer) with temperature control → sensor
- ★ Recirculation unit with large surface serpentine designed for homogeneous irradiation





- ◆ Air cooling system with PTC system
- ◆ Touch screen display for essential parameters and easy programming
- ◆ Data to be entered :  
Haematocrit and Volume
- ◆ Automatic energy calculation
- ◆ Database collection available :





# UVA PIT System

Med-Tech-Blood Component Data Manager Ver 3.4

SAVE

DOC

CSV

DATABASE

PRINT

RESET

**Photo Immune Therapy**

Pat.-Name/Nr:

Kit Batch-no:

**Program**

Number Of Tx:

Collection:

**Buffy Coat**

Donation:

Reference-no:

Batch-No:

Operator:

Psoralen-Batch:

Result:

Apheresis System:

Anticoagulant:

**Comments**

Comments:

**Process timing**

Date:

Start\_time:

End\_time:

Total\_time:

Pause\_time:

No Of Pauses:

**Parameters**

Volume (ml):

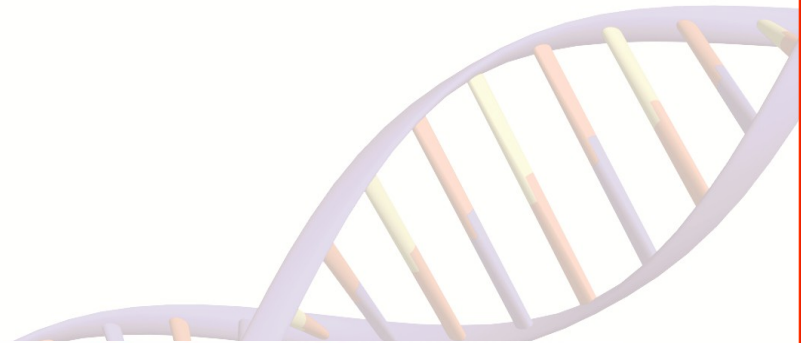
Hct (%):

Energy/J:

Temperature (°C):

**Result**

Procedure Completed:



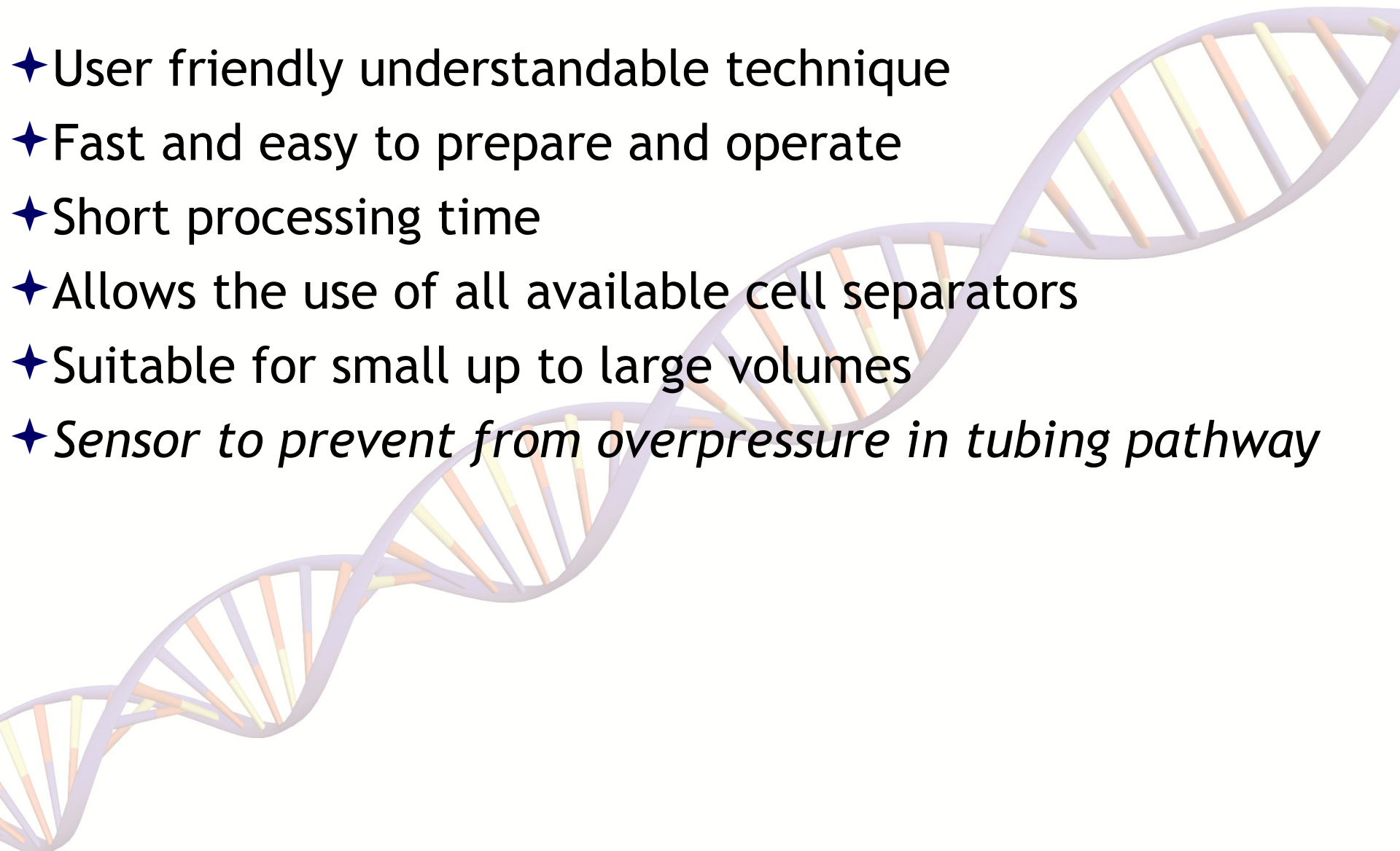
**Photo Immune Therapy**

<b>Photo Immune Therapy</b>	<b>Processing Time</b>
Pat.-Name/Nr : Ms Jessica Miller	Date : 25.07.2014
Kit Batch-no :	Start Time : 10:00:01
<b>Program</b>	End Time : 10:05:08
Number of Tx : 2 of 5	Total Time : 5:21
Collection : 1311500	Pause Time : 0:00
<b>Buffy Coat</b>	No of Pauses : 00
Donation : xxx	<b>Parameters</b>
Reference No : 13 15009	Volume (ml) : 100
Batch No : 13115009	Hct (%) : 1.0
Operator : P D House	Energy/J : 008.82
Psoralen-Batch : xxx	Temperature (°C) : 0030.0
Result : ok	<b>Result</b>
Apheresis System : Biomedical GmbH	Procedure Completed: OK
Anticoagulant : Heparin	
<b>Comments</b>	
Comments : complete blood count 5/714	

Example of a printout.

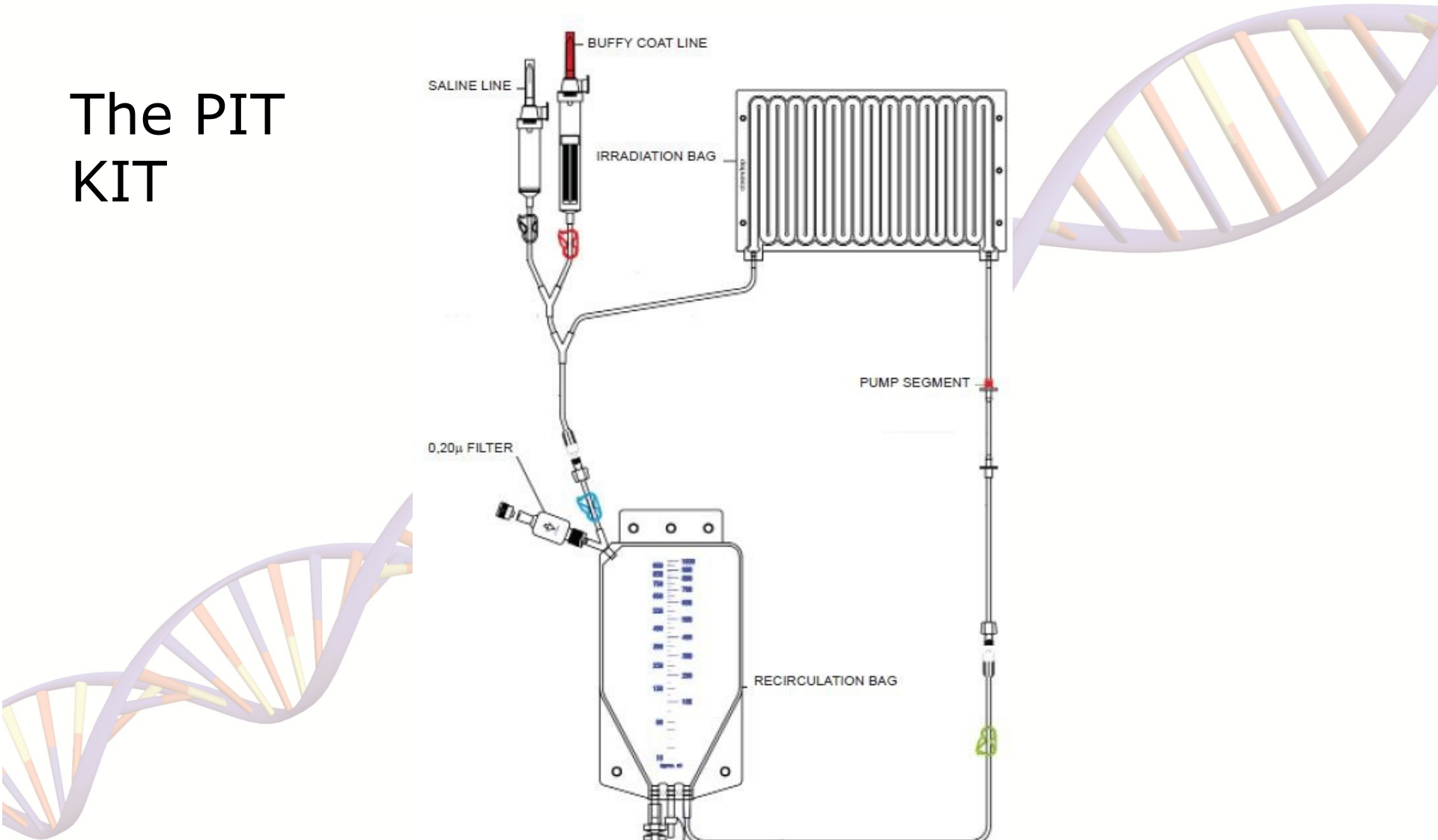
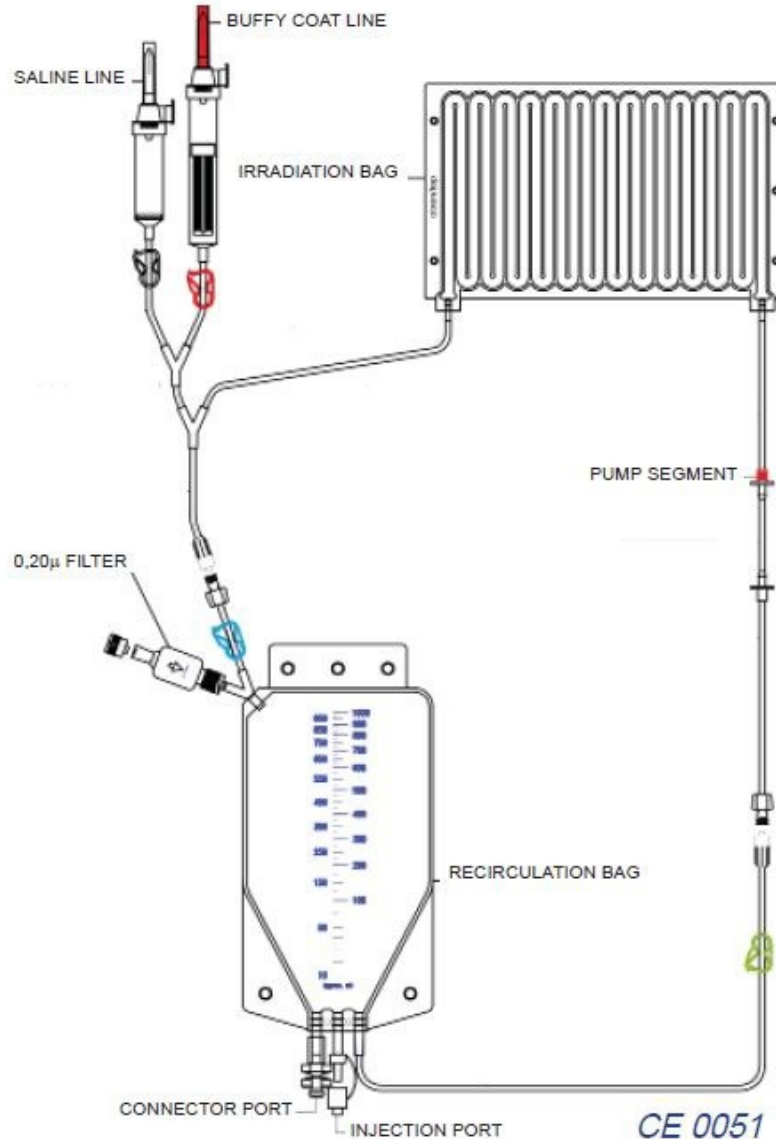
Data base software mask and print out

# UVA PIT System

- ◆ User friendly understandable technique
  - ◆ Fast and easy to prepare and operate
  - ◆ Short processing time
  - ◆ Allows the use of all available cell separators
  - ◆ Suitable for small up to large volumes
  - ◆ *Sensor to prevent from overpressure in tubing pathway*
- 

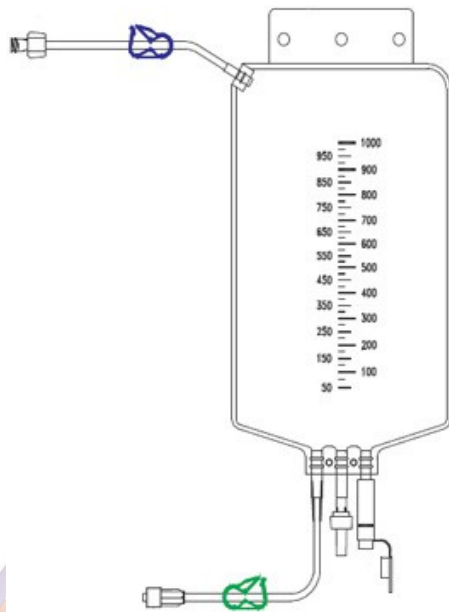
# UVA PIT System

The PIT  
KIT



# UVA PIT System

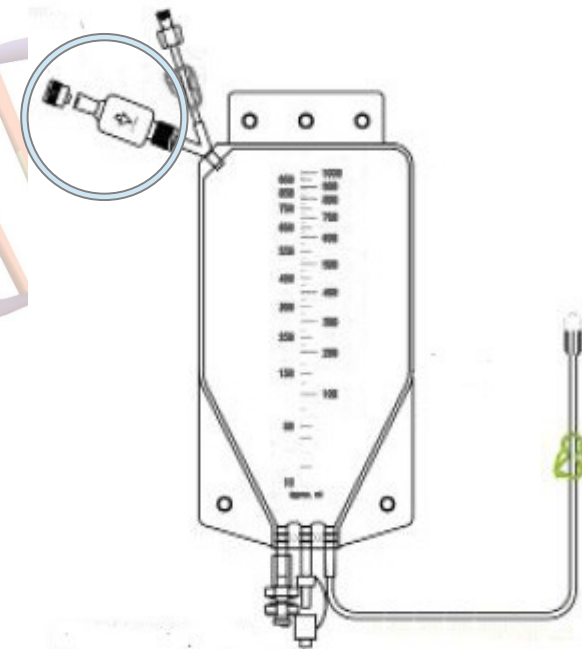
Previous PitKit



New PitKit

- ◆ Reservoir bag redesigned to improve mixing of blood components, saline and drug

- ◆ *Drug (8MOP) is introduced through a protective 0,20 micron filter*



the PIT KIT

## UVA PIT System

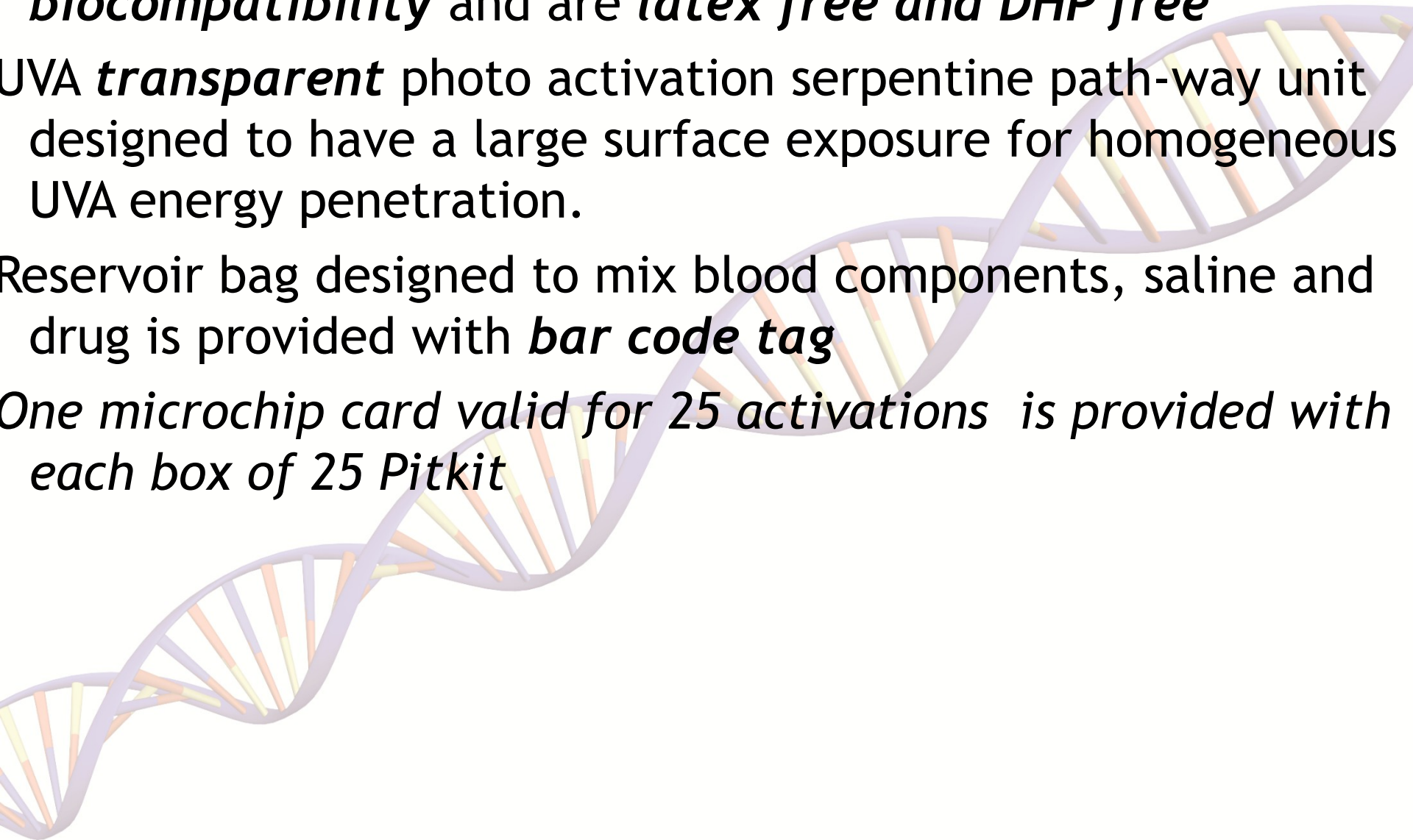
Materials in direct contact with blood are tested for

***biocompatibility*** and are ***latex free and DHP free***

***UVA transparent*** photo activation serpentine path-way unit designed to have a large surface exposure for homogeneous UVA energy penetration.

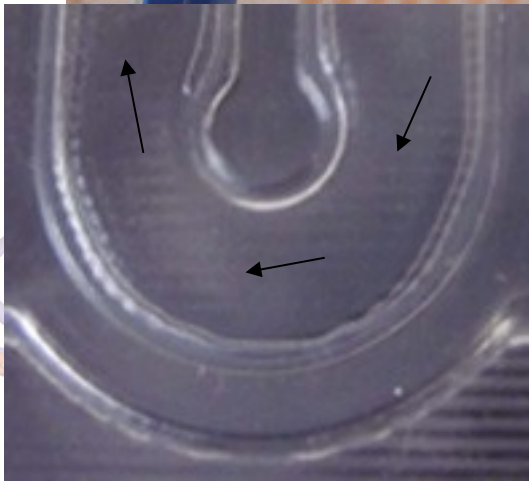
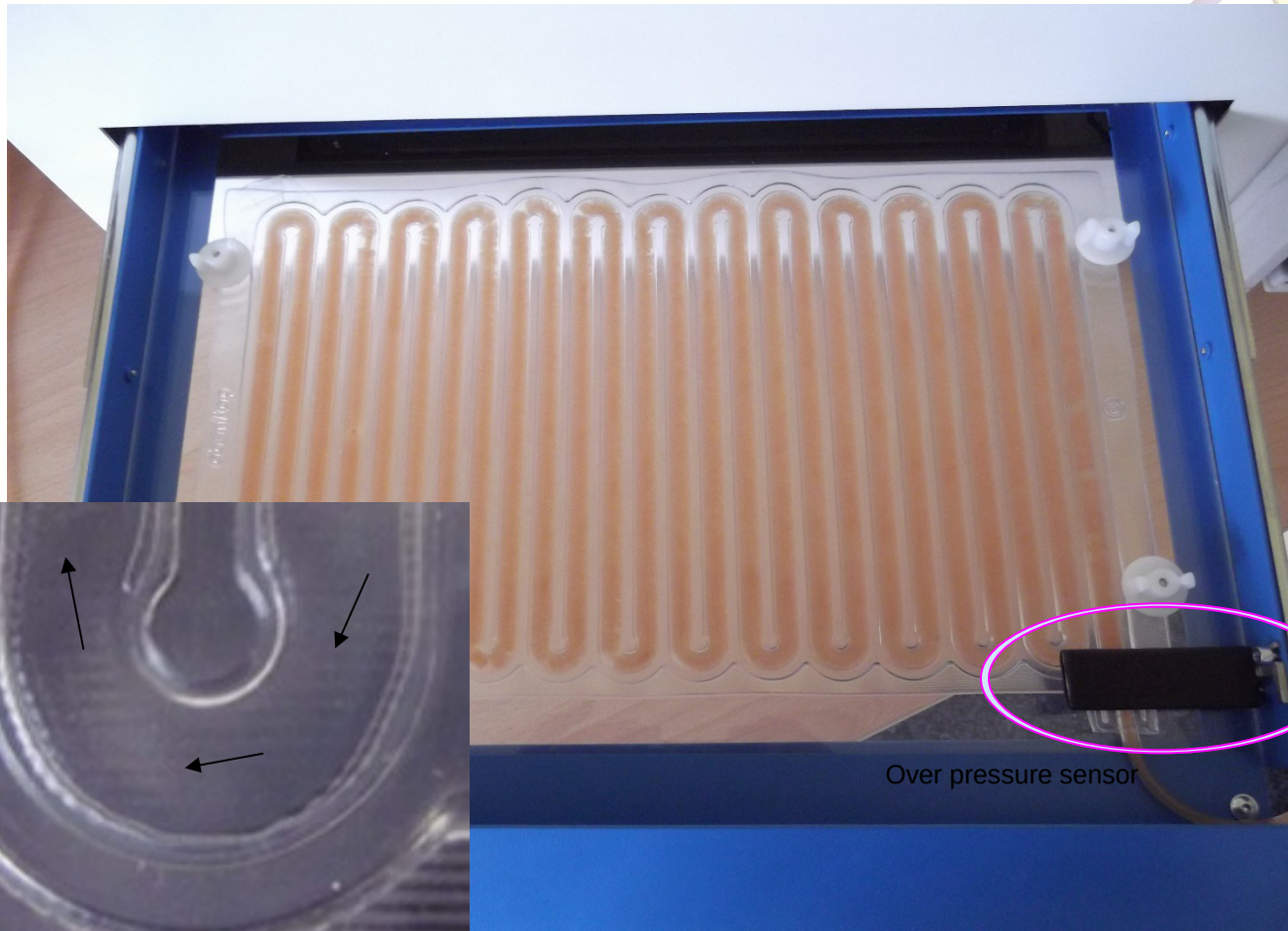
Reservoir bag designed to mix blood components, saline and drug is provided with ***bar code tag***

***One microchip card valid for 25 activations*** is provided with each box of 25 Pitkit



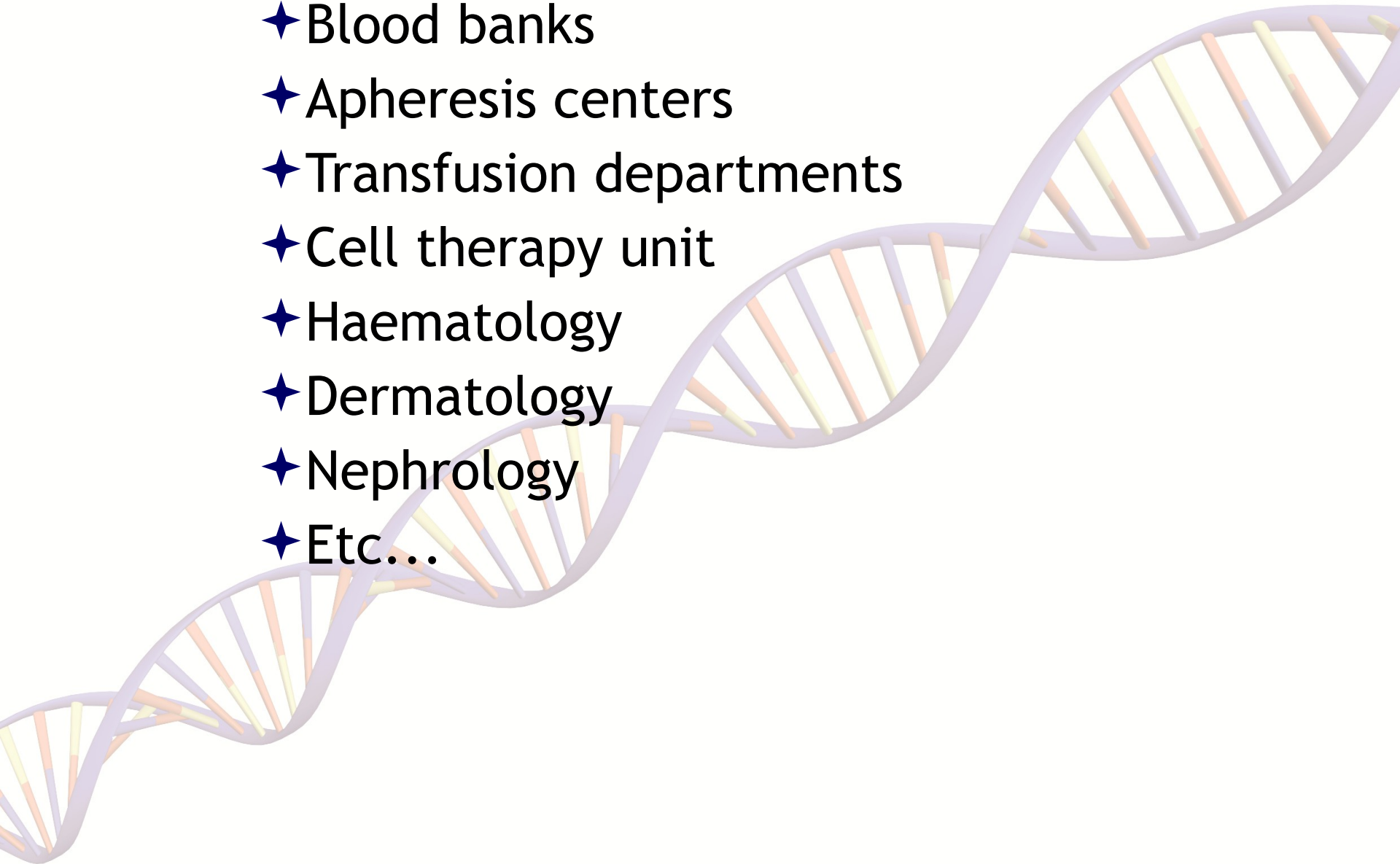


# UVA PIT System



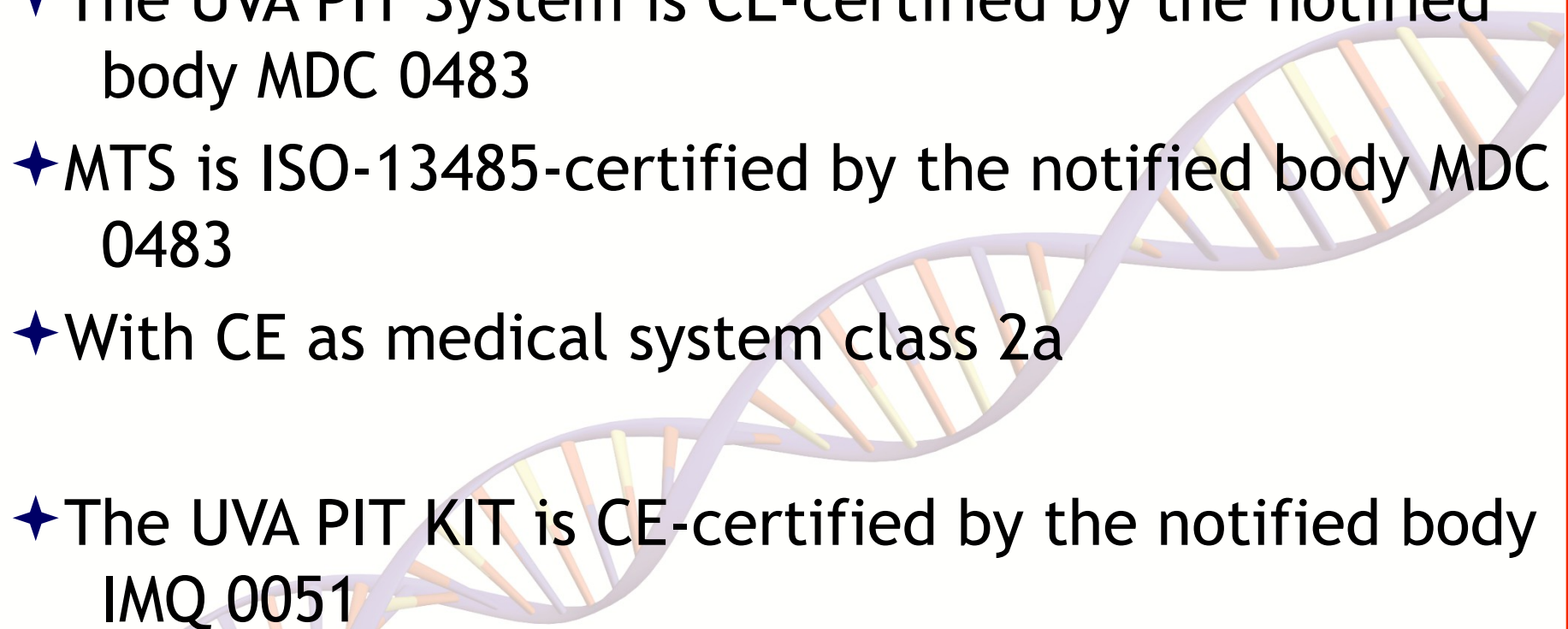
# Where to use UVA-PIT System

- ◆ Blood banks
- ◆ Apheresis centers
- ◆ Transfusion departments
- ◆ Cell therapy unit
- ◆ Haematology
- ◆ Dermatology
- ◆ Nephrology
- ◆ Etc...





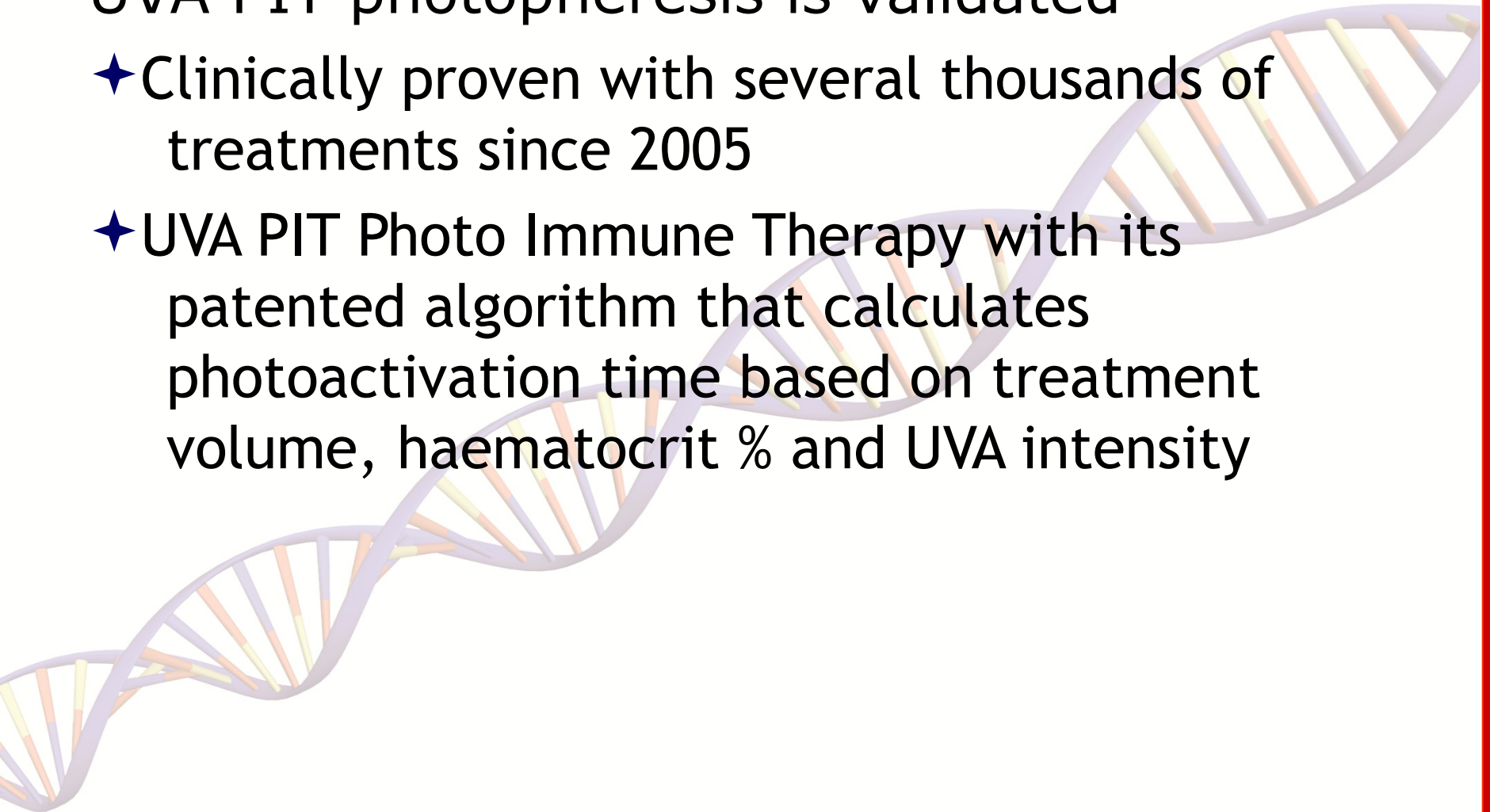
# UVA PIT System

- ★ The UVA PIT System is CE-certified by the notified body MDC 0483
  - ★ MTS is ISO-13485-certified by the notified body MDC 0483
  - ★ With CE as medical system class 2a
  - ★ The UVA PIT KIT is CE-certified by the notified body IMQ 0051
- 

# UVA PIT System

UVA PIT photopheresis is validated

- ★ Clinically proven with several thousands of treatments since 2005
- ★ UVA PIT Photo Immune Therapy with its patented algorithm that calculates photoactivation time based on treatment volume, haematocrit % and UVA intensity



# UVA PIT System

Thank you for your attention...

*visit the PIT website at the following :*

[www.pitsystem.eu](http://www.pitsystem.eu)



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