



Innovative solutions for reducing biospecimens pre-analytical variability

Collection

Transfer

Grossing

Storage

**Fixation** 

Decal

**Processing** 

## Milestone evidence based "chain of custody" for reducing the impact of pre-

## **Collection**



# **Transfer**



# Grossing



# Storage

#### **TissueSAFE**

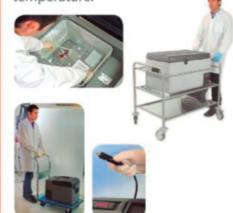
Vacuum sealing of fresh biospecimens in plastic bags. Elimination of formalin from the surgery theatre.





#### T-Cart

Storage and transfer of specimens at 4°C with monitoring of time/ temperature.



For car transfer

ID, time and temperature documentation. Device and reader.





Library of macro digital images of specimen.

MacroPATH pro/lean





#### LeanSTATION Bx

The new macro digital workstation for small biopsies.





### **ProCUT**

Slicing device for fresh or fixed tissues.





#### CheckLITE

Laser based checking of biospecimens thickness.



#### SealSAFE

Vacuum resealing (in the same transfer bag) of specimens to be stored, with a preset ratio specimen weight/formalin.









Storage bag with preset specimen weight/formalin ratio and with specimen data label

The basic technologies used in pre-analytical processes have been mature for a long time and have lagged behind improvements in analytical processes.

Control of an optimal histological practice must start at the surgery/ theatre level. For this reason the development team at Milestone is applying the rigorous mind-set of analytical chemistry to standardize the pre-analytical step with the goal of reducing its variability.

## analytical variability.

### **Fixation**



# **Decalcification**



#### FixSTATION 1R

Fixation system with agitation, and time control.





#### FixCONTROL

Fixation system with agitation, temperature and time control.



#### FixCONTROL W.E.

For **over-the weekend** operation.
Fixation for a preset time and subsequent transfer of rack in holding solution.



#### ColdFIX

Cold fixation in formalin and ethanol at 4°C for enhanced recovery of nucleic acids.



#### - BoneSTATION

Shorter decalcification time protocols. Fixation plus decalcification with agitation, time and temperature control.



#### DecalMATE

Fully automatic fixation plus decalcification with agitation at preset time and temperature.



#### MOL-Decal 10

An innovative decalcifying agent for optimized molecular biology results.



At this time pre-analytical variables are beyond the control of the laboratory.

Tissue fixation is critical but exposure to fixative prior to accessioning in the laboratory cannot be controlled.



# Tissue processing

### Hybrid/Dual Retort Automated

#### LOGOS

Rapid microwave tissueprocessor. 210/300 cassettes. Up to 10 mm.



#### LOGOS J

Rapid microwave tissueprocessor. 48 cassettes. 3 mm.



#### BATCH FULLY AUTOMATED

#### **PATHOS DELTA**

Rapid microwave tissueprocessor. 210/300 cassettes. 5 mm.



Optimization, standardization and documentation of each phase of the FFPE manufacturing process is the pre-requisite for accurate and consistent analytical results.



# Tissue processing

#### SEMI-AUTOMATED DUAL RETORT

#### HISTOS

Rapid microwave tissueprocessor. 110 cassettes. 3-5 mm.



#### MANUAL

#### KOS

Rapid microwave tissue processor. 45 cassettes. 3mm.



### Milestone's waves of innovation

From the operating room to rapid tissue processing





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