

Analytical Control De Mori - MicroDay 2019 – Padova & Milano

The logo for Indicia features the word "indicia" in a black, cursive script font. It is centered over a large, light pink circle. To the right of this circle are two smaller, solid pink circles of different sizes. Below the word "indicia" is a thick, horizontal pink brushstroke that tapers at both ends.

*indicia*

Ultra fast microbiology testing solution

metis *an Indicia Trademark*

# What is Metis technology about ?

- A **rapid** method for microbiological testing using **flow cytometry** for **Quality Control** in food and cosmetic industries
- Key advantages



Speed



Easy  
workflow



Sensitive



Flexible



Reliable

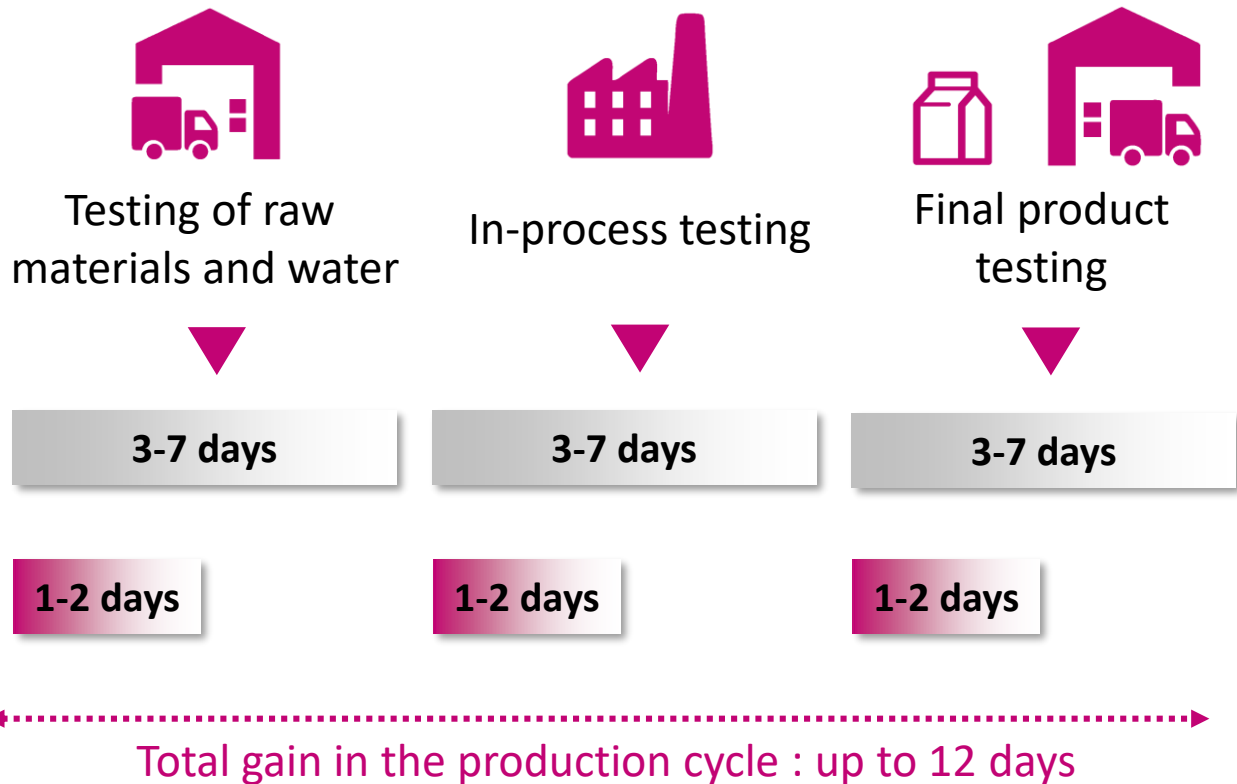
- Ultimate benefit for your company



Enhance  
your  
profitability

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# Save time ... and money



**Reduce leadtime**

**Release your product faster  
with maximum reliability**

**Decrease up to 20%  
Of the storage area**

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# A 3 steps easy to achieve workflow



1

Enrichment

Minimum 12 h  
Optimum 24 h



2

Labeling with  
**METIS Fluo4Life<sup>®</sup>**  
viability markers  
+  
counterstaining with  
**METISol Blue<sup>®</sup>**  
Inhibition of  
natural autofluorescence

45 min



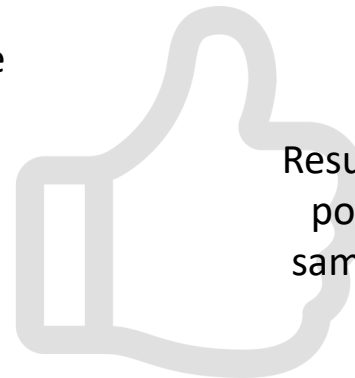
3

Counting of the viable cells with  
**Becton Dickinson Accuri C6 PLUS<sup>®</sup>**  
flow-cytometer

30 s per sample



Results on **METISoft<sup>®</sup>** :  
positive and negative  
samples at a glance.

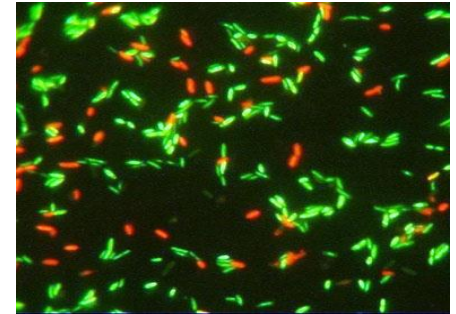


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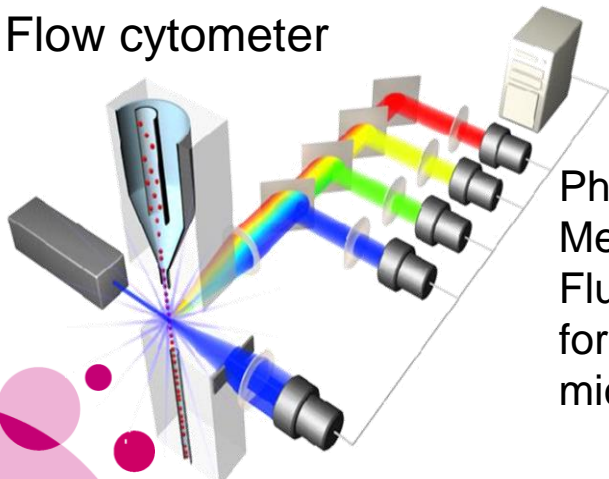
# Principle



METIS has developed proprietary fluorescent mixes for viable micro-organisms labelling :  
**Bacteria, Yeast, Molds**



Flow cytometer



Physical parameters  
Measure &  
Fluorescence detection  
for individual viable  
microorganisms counting



Direct correlation  
with traditional plate count  
on more than hundred species



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## PRESENCE / ABSENCE RESULTS in 24 to 48 h

Sensitivity  
< 1 CFU / g

Total Viable Count Sterility testing  
10 to 100 times more sensitive than ATP metry

+

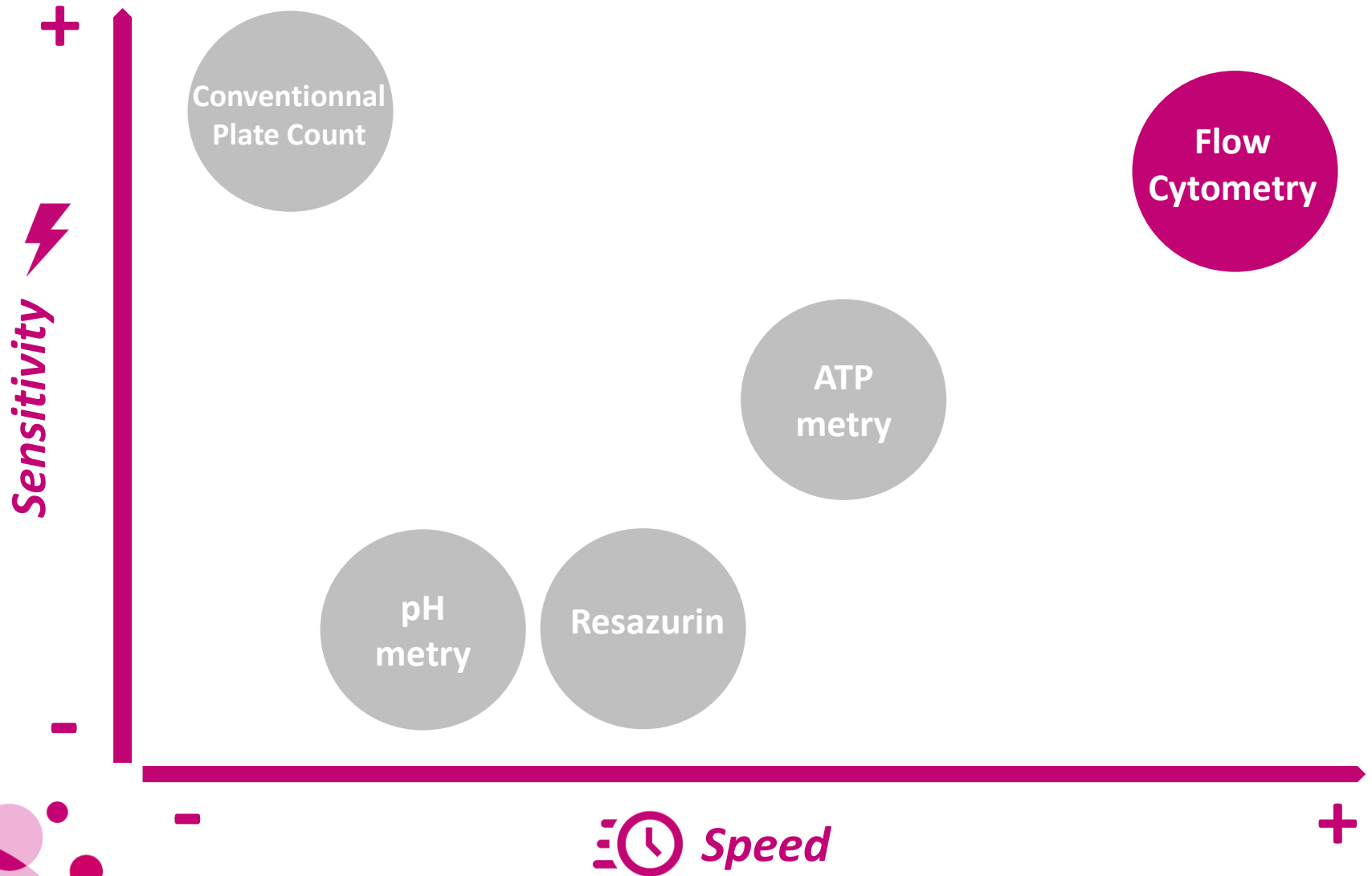
## TYPE OF CONTAMINATION

YEASTS  
&  
MOLD  
SPORES

BACTERIA

a unique multiparametric detection  
allowing the discrimination between  
bacteria and yeasts & mold spores

# Methods comparison





Scalable automation solutions with 2 separate devices for a minimum operator time

★ **Semi-automated**

Manual labeling + automatic reading

Using BD Accuri C6 PLUS®



★ ★ **Labelling automation high throughput**

Automated labeling on an Integra pipetting robot

+ automatic reading using BD Accuri C6 PLUS®



★ ★ ★ **Full automation high throughput**

Automated dilution, pooling and labeling on a pipetting Hamilton workstation

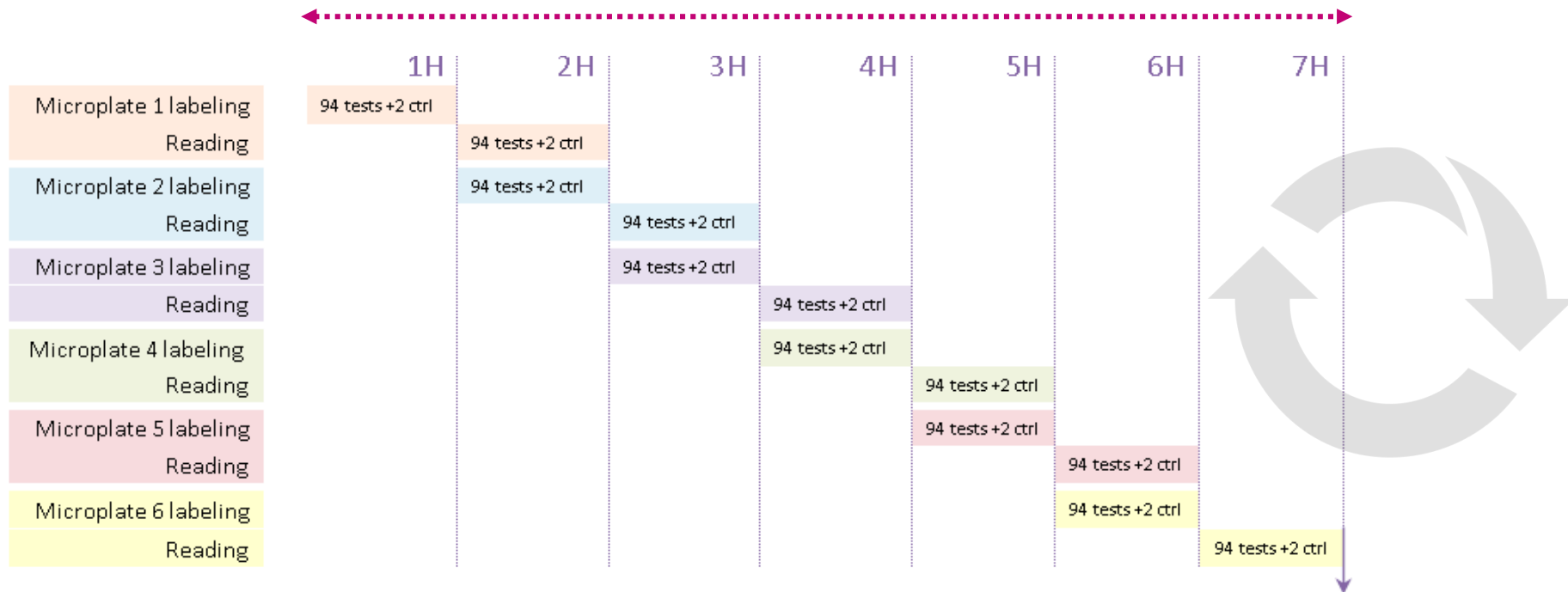
+ automatic reading using BD Accuri C6 PLUS®





METIS adapts to the lab's testing throughput and can be scaled-up

564 tests in one shift



# A large panel of validated SOP



## FOOD and BEVERAGES

Raw milk, whole milk, semi-skimmed / skimmed milk, delactosed, concentrate milk

Infant formula

Chocolate or flavoured milk (vanilla, strawberry, banana...)

Soya and vegetable drinks (rice, almond, oats...)

Dairy cream, vegetable cream

Yoghurt

Soups and high-protein content drinks (diet or medical)

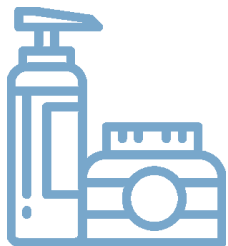
Water, flavoured water and diluted fruit juices

Fruit juices with or without pulp

Carbonated beverages

Prepared baby-foods, baby-soups, compotes

Cakes, sweet-bread rolls, milk bread



## COSMETIC – Personal Care Products

Moisturing cream, anti-aging cream, solar cream, scrub, ...

Make-up : foundation, lipstick, mascara, khôl, powder, ...

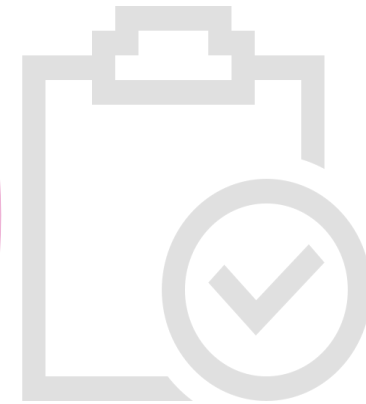
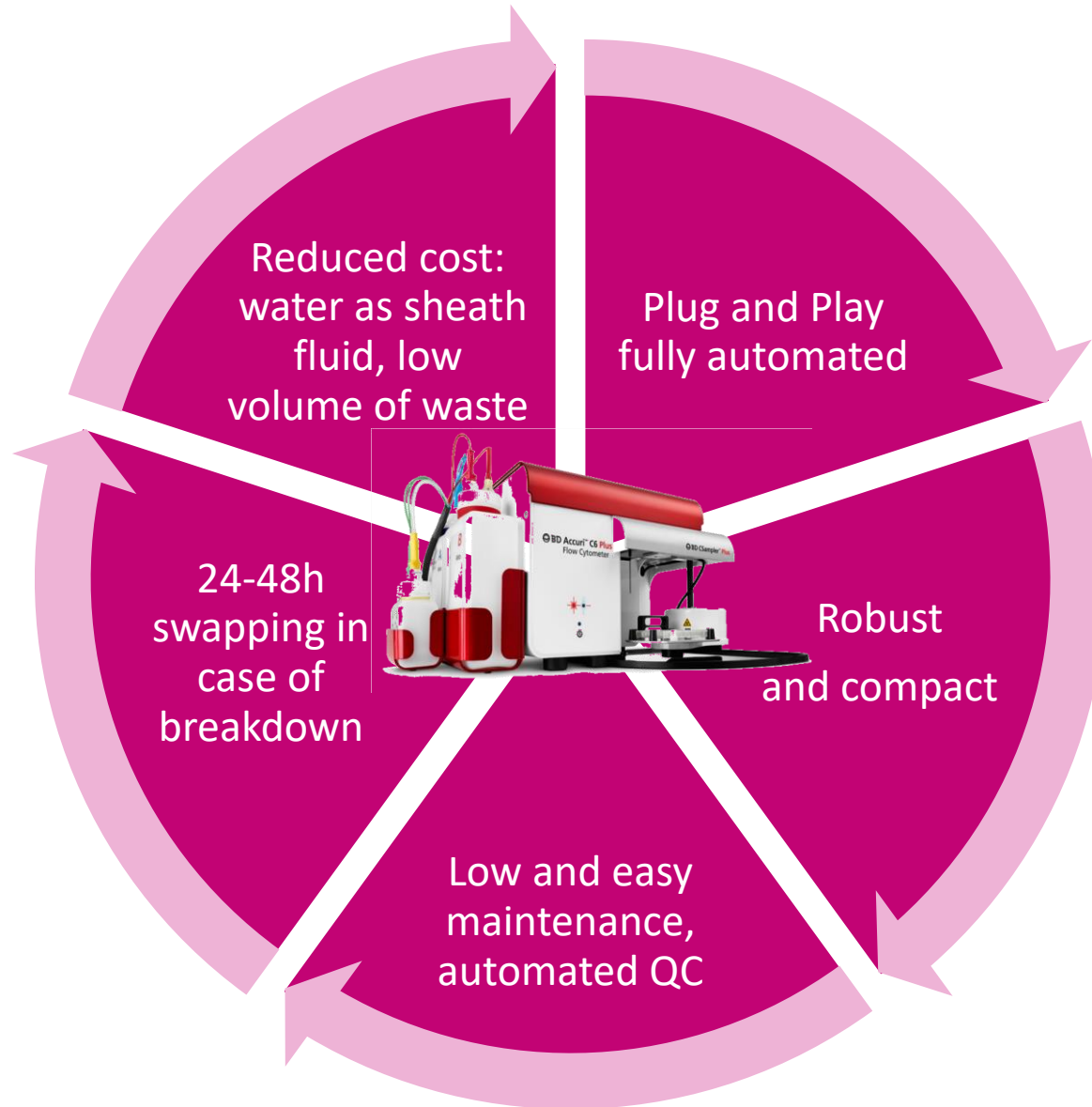
Shampoo, after-shampoo, hair mask, tooth paste, dental bath, ...

Oil, micellar solution, make-up removing solution, cleansing gel, ...

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# Reliable and user-friendly cytometer

**BD Accuri  
C6 PLUS<sup>®</sup>**



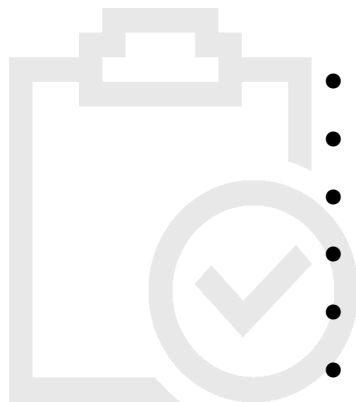
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# Reliable team and know how

Over  
15 years  
experience

R&I  
lab

Application  
engineers



- Validation studies
- Validation supports : IQ / OQ / PQ
- Detailed technical documentation : SOP/user's guide
- On-site training
- Telephone and on-site technical support
- Swapping of the flow cytometer in 24-48h

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# Metis key customers

## Dairy

SODIAAL



## Bakery



## Food & Beverage

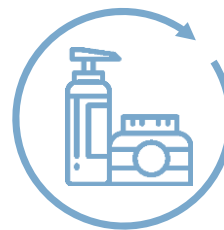
## Beverage



## Baby-food



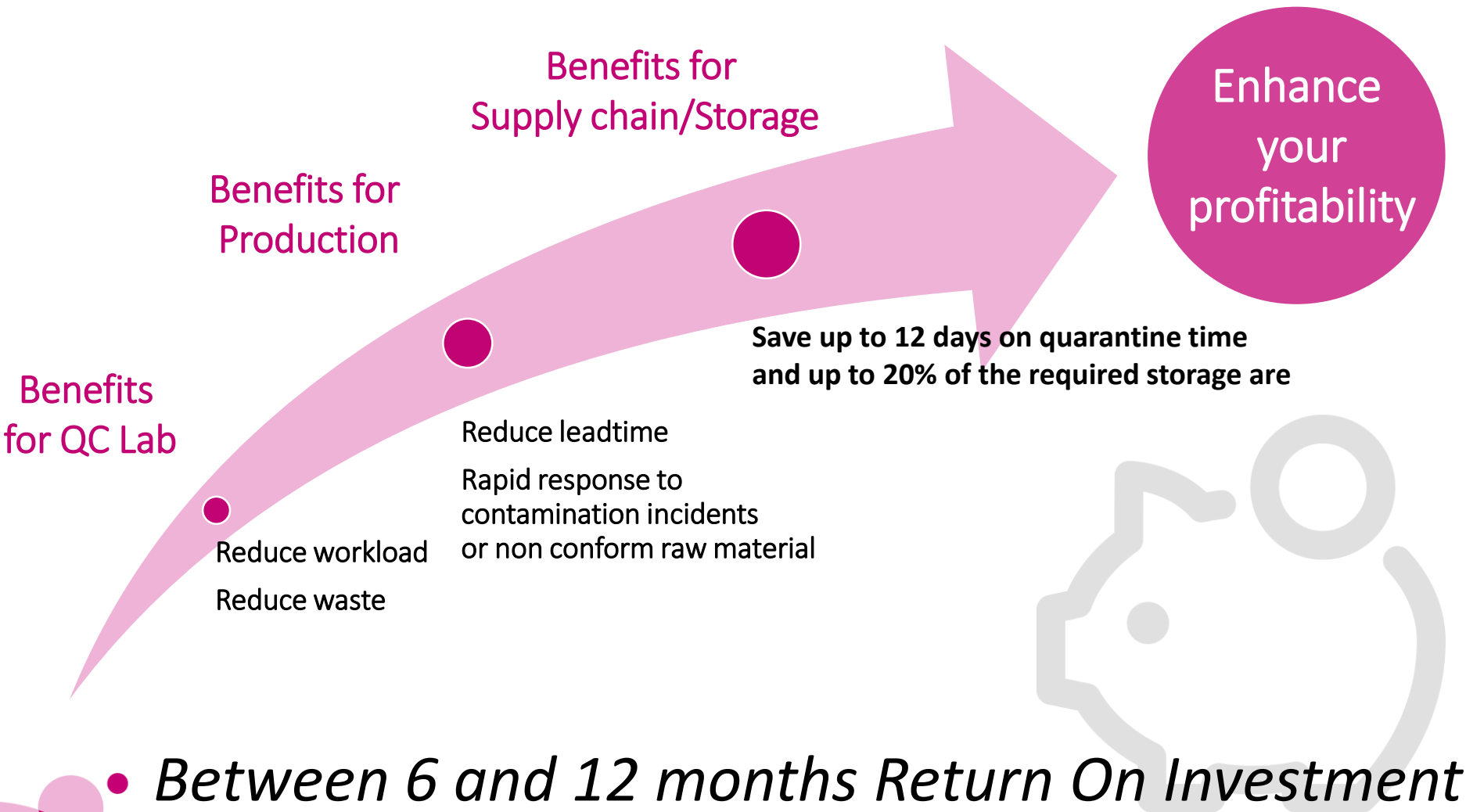
## Cosmetic



centrapharma



# Save time and money

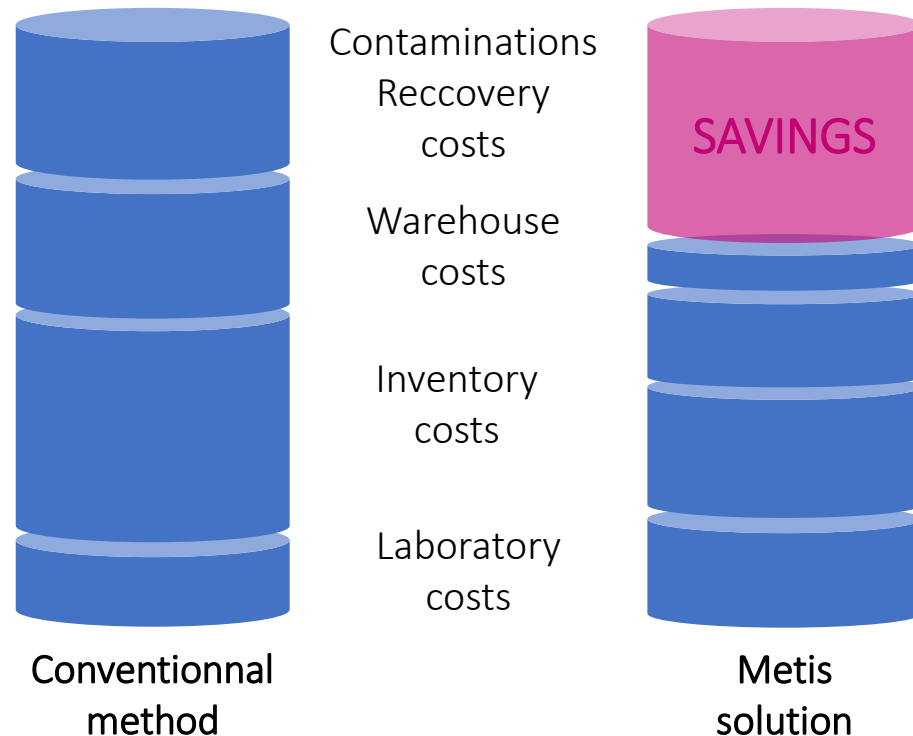


*Between 6 and 12 months Return On Investment*

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## Metis technology provides

- An ultra rapid microbial testing solution easy to implement
- A unique combination of speed with sensitivity
- Reach your objectives of profitability and quality together



Grazie mille



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**Stéphane GAVOILLE**

**International Sales and Marketing Director**

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sgavoille@indicia.fr

*www.indicia.fr*

**Laetitia DA COSTA**

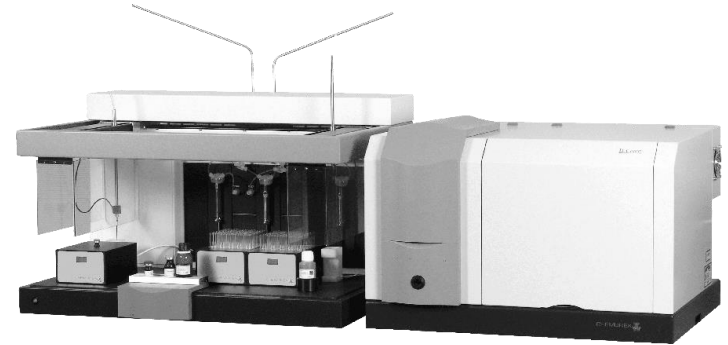
**Export Application Engineer**

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ldacosta@indicia.fr



# Metis vs. Biomerieux Chemunex


- No multiparametric detection
  - + /- results but NO discrimination between microorganisms types
- Instrument reliability :
  - Frequent loss of laser alignment
  - complex microfluidic
- Important volumes of sheath fluid and waste to discard
- Weaked flexibility
  - Automated labeling and reading by the same device
  - Testing only per batch of 25 or 50 samples in tubes : loss of reagents
  - Max 300 samples / day
- Expensive after sale services
  - Expensive maintenance contracts (<10 k€)
  - “On-site intervention of service engineer” needed to repair





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PRODUCTION



Indicia Production – ZA La Parlière 69610 St Genis L'Argentière - FRANCE – +33 (0)4 74 72 36 10

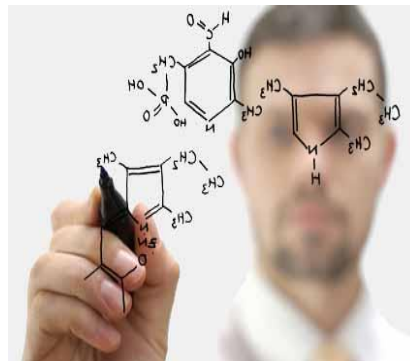
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## Spécialiste du contrôle de stérilité

- ❑ *Fabricant de milieux et de produits stériles*
- ❑ *Produits et méthodes pour le contrôle de stérilité*



**Développement**



**Formulation**

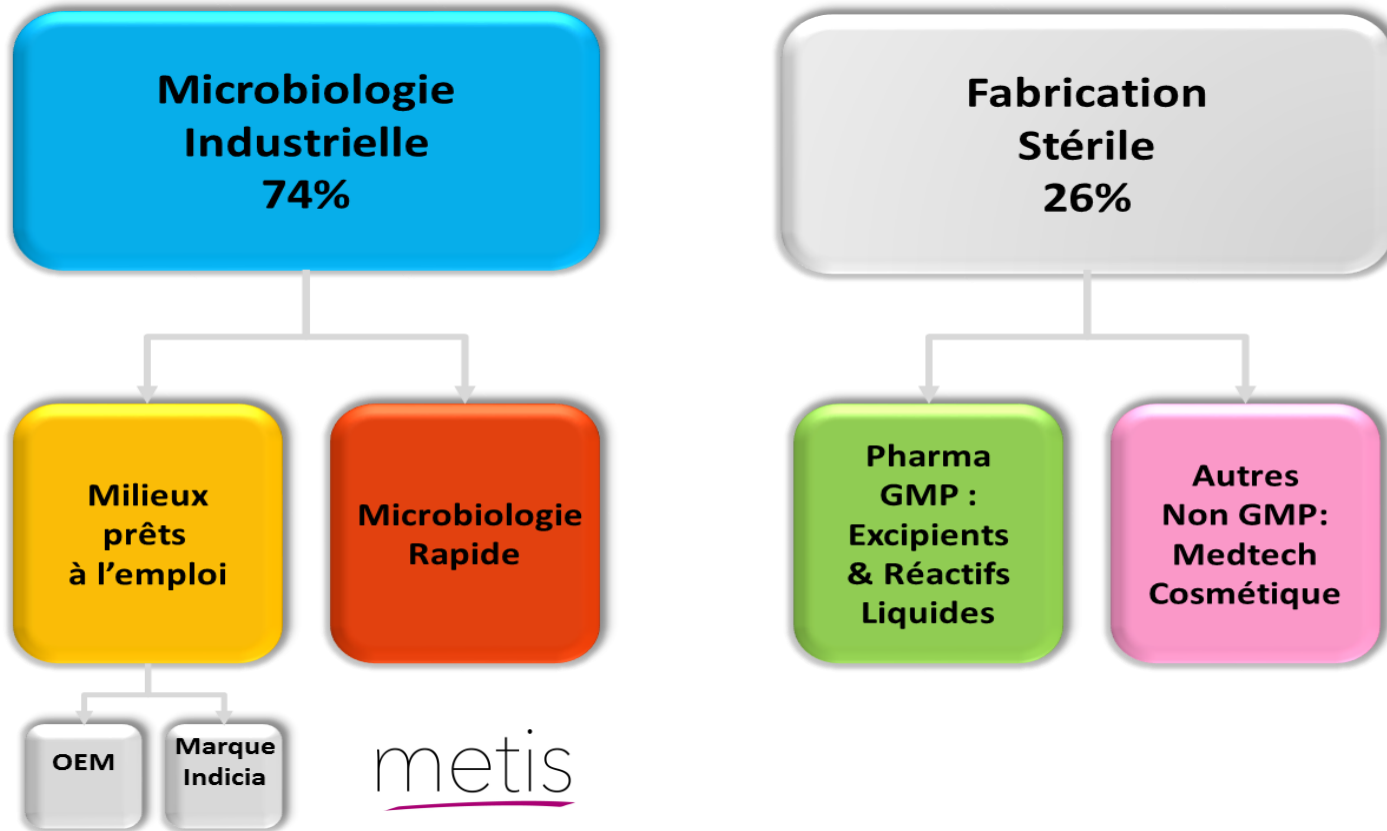


**Fabrication**



**Contrôle**

# A propos d'Indicia



# A propos d'Indicia

- ✓ Création 1998
- ✓ 3 sites St Genis L'Argentière (Lyon)  
Taden (Dinan)  
Panazol (Limoges)
- ✓ Staff 60 personnes
- ✓ CA 2018 8,4 M€ (+13%)
- ✓ Business Model Contract Manufacturing Organisation
- ✓ Savoir-Faire Fabrication GMP de liquides stériles  
Microbiologie rapide en cytométrie
- ✓ Clients Pharma/biotech, IAA, Cosmétique

