

Dedicated Analytical Solutions

CATCH THE NEXT BIG WAVE IN MILK TESTING

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CombiFoss™ 7

FOSS 

Dedicated Analytical Solutions

CombiFoss™ 7



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CONTENTS

- ▶ The next CombiFoss™ 7 wave
- ▶ Differential SCC for better mastitis management
- ▶ More results at less cost with 7th generation CombiFoss technology
- ▶ Higher proficiency and less man hours with the latest in instrument management software
- ▶ Grow your business

Dedicated Analytical Solutions

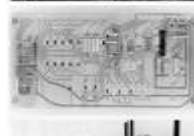
MILK TESTING THROUGHOUT 60 YEARS INNOVATION



1950s



1960s



1970s



1980s



1990s



2000s



2016

FOSS

WE CAN GO HIGHER

Our goal is to help you

- ▶ Give better support for dairy farmers in tackling mastitis, ketosis and other cattle diseases
- ▶ Keep down the cost per sample
- ▶ Improve proficiency in the laboratory



CATCH THE NEXT BIG WAVE

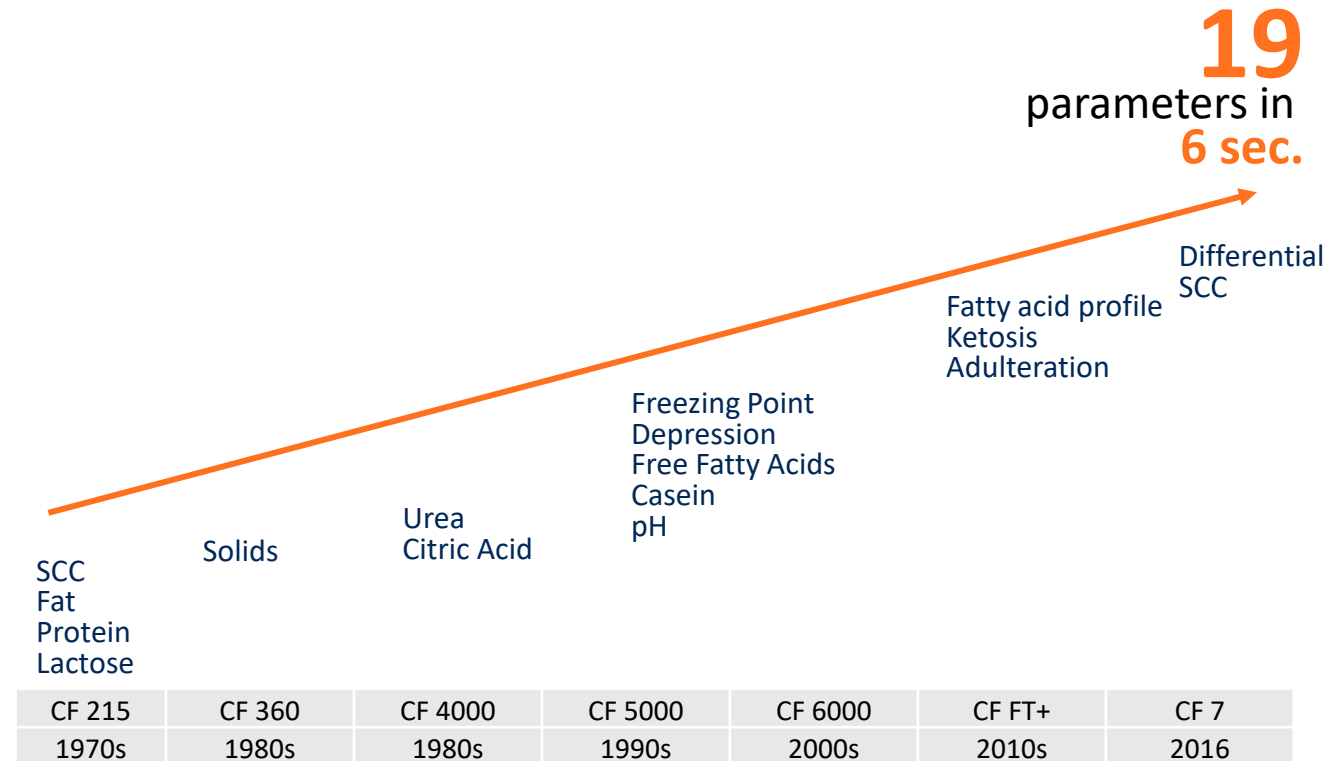


19 parameters in **6 seconds** from same sample, including differential somatic cell count

+ More results at less cost with **7th generation CombiFoss** technology

! **Higher proficiency** and **less man hours** with the latest in instrument management software

7TH GENERATION COMBIFOSS



7TH GENERATION COMBIFOSS

19 parameters in **6sec.**



- ✓ Citric Acid
- ✓ Urea
- ✓ Solids Non Fat
- ✓ Total Solids
- ✓ Lactose
- ✓ Casein
- ✓ Crude Protein
- ✓ True Protein
- ✓ Fat
- ✓ Diff. Somatic Cell Count
- ✓ Somatic Cell Count
- ✓ Adulteration
- ✓ BHB –Ketosis
- ✓ Acetone – Ketosis
- ✓ Fatty Acid Profile 2
- ✓ Fatty Acid profile 1
- ✓ PH
- ✓ FPD
- ✓ Free Fatty Acids

FACTS ABOUT MASTITIS

Multifactorial disease



€32 billion
annually*



Somatic cell counts (SCC)
and bacteriology
are standard***



Losses are due to
subclinical mastitis**



Major need for new
biomarkers***

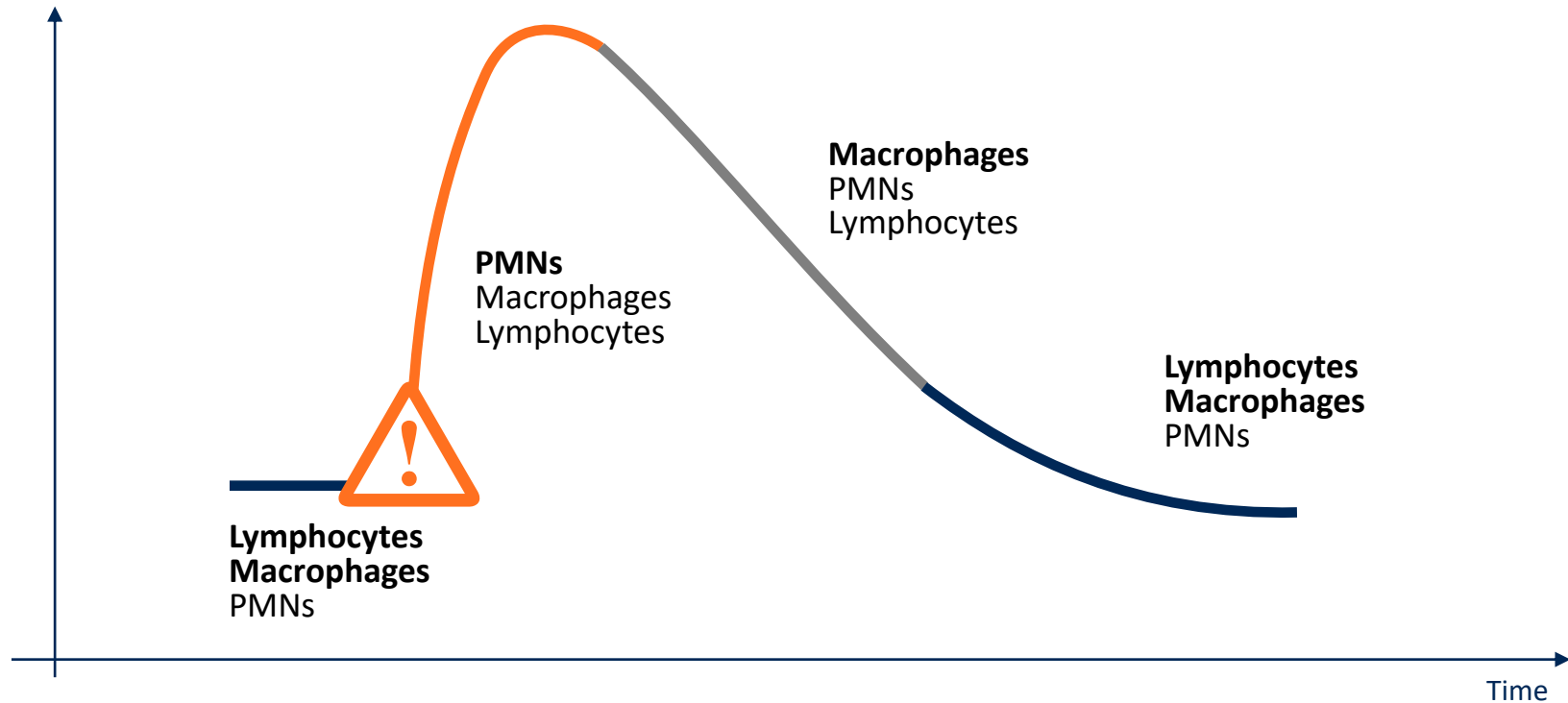
A NEW WAY TO FIGHT MASTITIS



- ▶ First high-throughput analyser for simultaneous differential SCC and total SCC
- ▶ Replacing tedious and costly separate mastitis analytical methods
- ▶ Opportunity to build new business by offering advanced mastitis management tools based on differential and total SCC

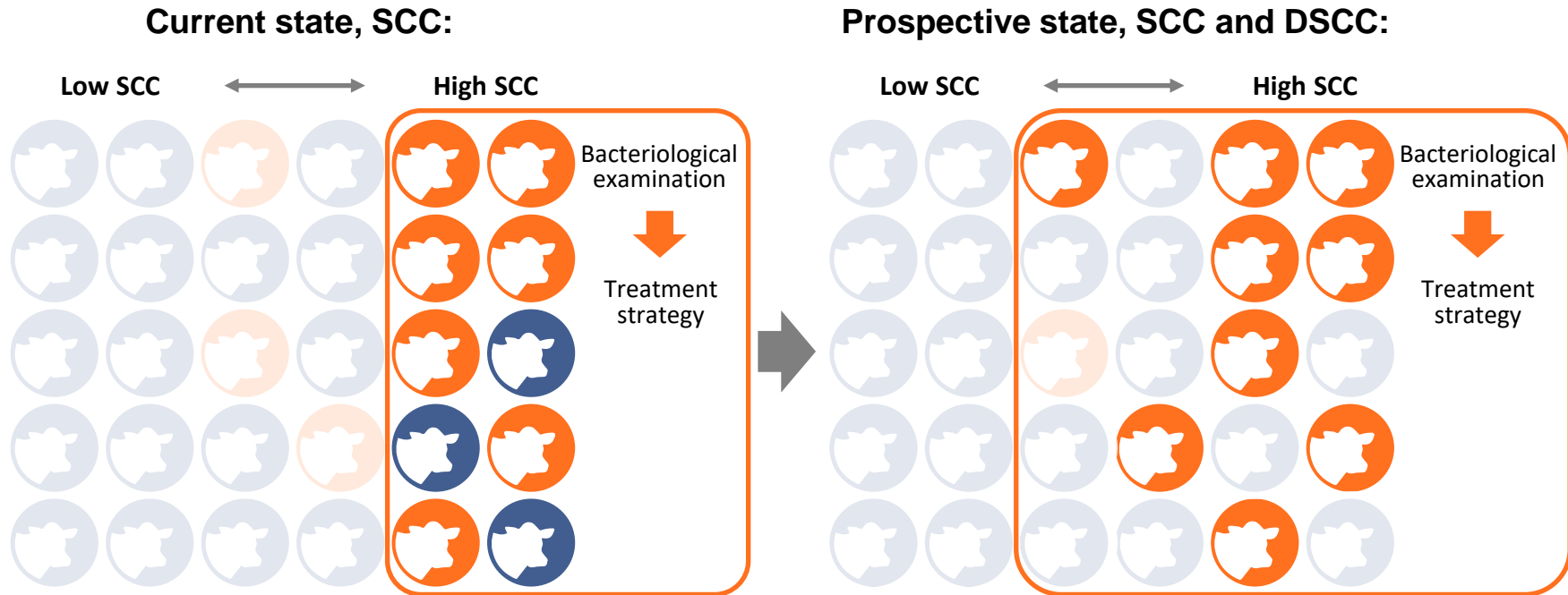
SCHEMATIC DIAGRAM OF AN IMMUNE REACTION IN THE MAMMARY GLAND

Somatic cell counts



ENHANCED TOOL FOR MASTITIS MONITORING

Targeted selection of suspicious cows



MORE FOSS INNOVATIONS

- ▶ Screening for ketosis
- ▶ Fatty acid profiling
- ▶ Untargeted screening for abnormalities, for example due to accidental adulteration with cleaning chemicals

MilkoScan™ 7RM

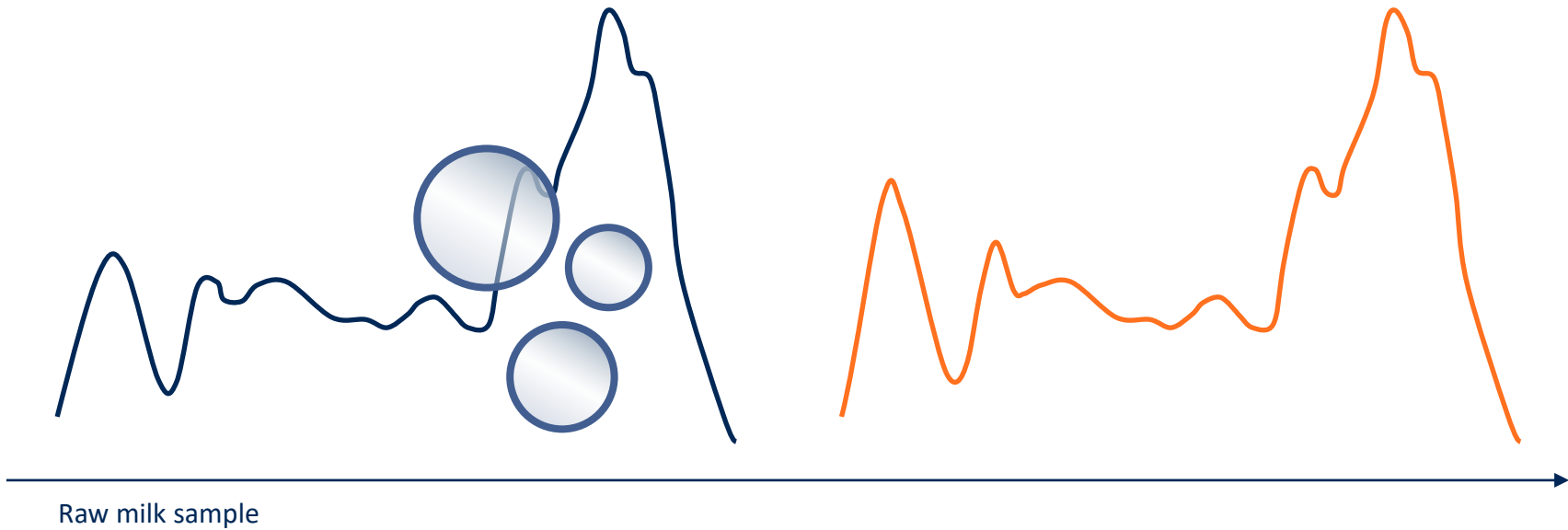
FOSS' COMMITMENT TESTING FOR MILK ADULTERATION

- ▶ FOSS started in the nineties with Infrared analysis to test for simple and known adulterants – such as tests that screen for added water
- ▶ As adulteration schemes became more complex, FOSS developed new tools for making screening models that test for unknown adulterants
- ▶ MilkoScan 7 offers Untargeted Raw Milk Screening model for abnormalities in the milk



NORMAL VS ABNORMAL MILK SPECTRUM

FTIR spectra from natural raw milk samples is a unique finger print of normal milk



Dedicated Analytical Solutions

7TH GENERATION MILKOSCAN TECHNOLOGY

- ▶ Superior performance at 600 samples per hour
- ▶ Optimized optics and flowsystem
- ▶ Increased signal/ noise ratio
- ▶ Improved repeatability for minor constituents
- ▶ 10 year warranty on diamond cuvette

MilkoScan™ 7RM

FOSS

IMPROVED OPTICS

- ▶ Optics optimized on the interferometer module increasing the signal/noise ratio
- ▶ Same high performance at all cadences improving repeatability for minor constituents



MilkoScan™ 7RM

7TH GENERATION FOSSOMATIC TECHNOLOGY

- ▶ Modular design for ease of cleaning and maintenance
- ▶ Improved working factor from 300 to 100 (Fossomatic™ 7)
- ▶ Option to choose manual or automatic reagent mixing
- ▶ Rinse liquid refill without instrument stop
- ▶ Easy to clean sample conveyor without need for compressed air
- ▶ New Foss Integrator NOVA software

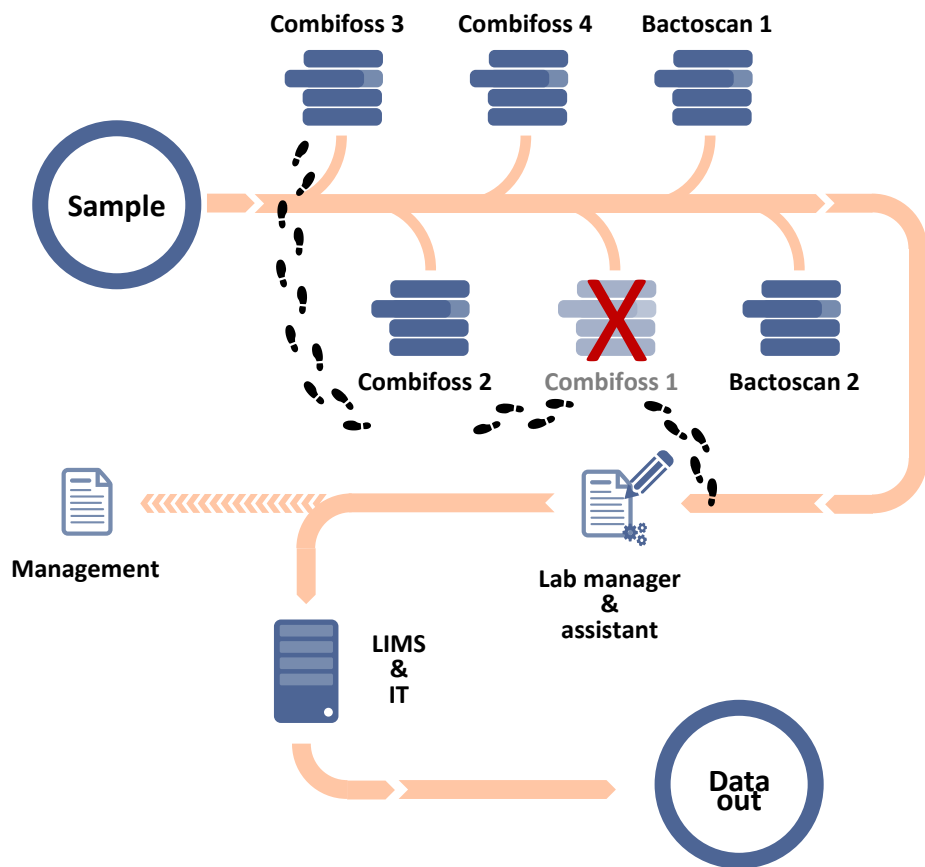
Fossomatic™ 7

FOSS

THE SMART WAY TO RUN YOUR COMBIFOSS

- ▶ Save your feet and save time by controlling multiple instruments from your desktop
- ▶ Avoid downtime by making upgrades and adjustments while instruments continue to run
- ▶ Perform operations in one go to reduce risk of human error and keep all data backed up in one place

EXAMPLE WALK AROUND



" Repeated operations and waiting time"



Change limit settings on 4 Combi instruments

15 minutes job a 4 Combifoss instruments

=

1 wasted instrument hour and 1 spent lab management hour



Follow up on check-samples and repeatability

A 10 minutes job at all 6 instruments

=

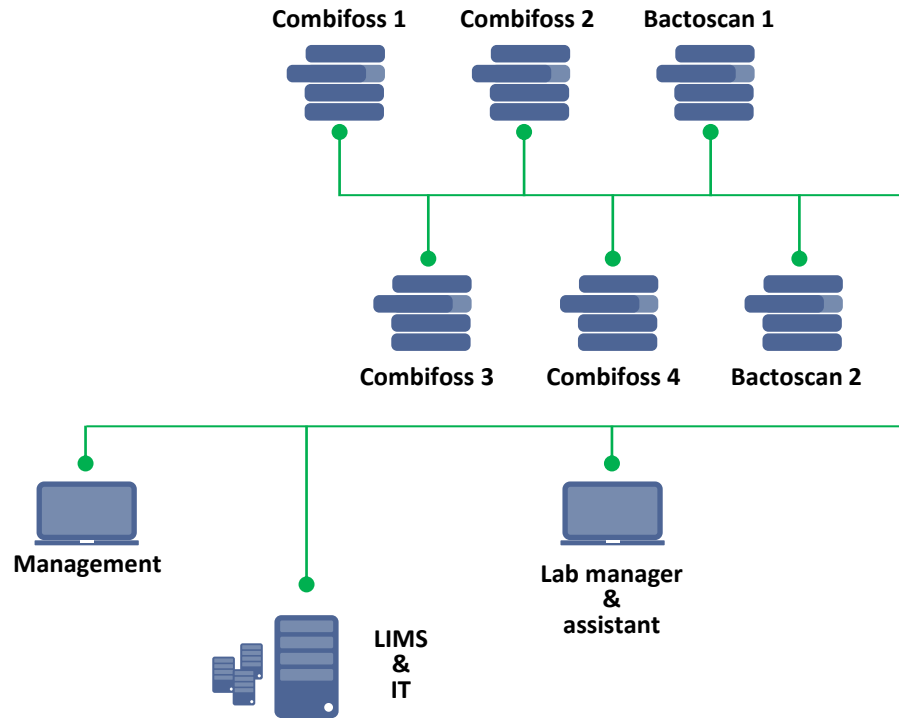
1 wasted instrument hour and 1 spent lab management hour

Total

2 hours lab manager time

2 hours instrument downtime

WITH MOSAIC SOFTWARE – SAVE YOUR FEET, SAVE TIME



**” Mosaic offers a new way
of operations”**



Operations done once from the desktop



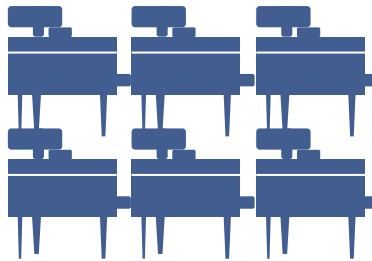
Less than 1 hour lab manager time



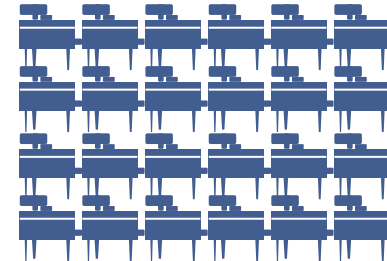
Zero instrument downtime

FOSS SUPPORTS YOU AS YOUR BUSINESS GROWS

- ▶ CombiFoss 7 is modular designed to meet your specific needs and can be expanded as your business evolves
- ▶ Offers flexible licenses for capacity and parameters



Today



Tomorrow

JOIN THE NEXT WAVE

19 parameters in **6 seconds** from same sample,
including differential somatic cell count

+ **More results** at **less cost** with 7th generation
CombiFoss technology

! **Higher proficiency** and **less man hours** with the
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Dedicated Analytical Solutions

Thank you



CombiFoss™ 7

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