

Scientific Director: Dr. Arturo Sommariva

# Analysis of SALVALAT product test data (2022-2023)

Tests were conducted in the following regions of Italy:

 Malagnino (CR) – Province of Cremona, Lombardy Region Application Date: October 25, 2023 Control Dates: October 2, 2022; December 2, 2022; January 2, 2023; February 2, 2023

| No. | Cells | 1st Control | 2nd Control | 3rd Control |
|-----|-------|-------------|-------------|-------------|
| 84  | 1116  | 481         | 129         | 73          |
| 21  | 3566  | 20          | 875         | 321         |
| 309 | 677   | 83          | 55          | 71          |
| 30  | 1014  | 97          | 97          | 14          |

2. Revello (CN) – Province of Cuneo, Piedmont Region Application Date: October 20, 2022

| No. | Cells | 1st Control | 2nd Control |
|-----|-------|-------------|-------------|
| 839 | 1909  | 150         | 160         |
| 751 | 1500  | 531         | 320         |
| 829 | 1377  | 86          | 90          |

 Rodigo (MN) – Province of Mantua, Lombardy Region Application Date: October 18, 2022 Control Dates: October 7, 2022; November 5, 2022; December 5, 2022; January 4, 2023

| No. | Cells | 1st Control | 2nd Control | 3rd Control |
|-----|-------|-------------|-------------|-------------|
| 825 | 3156  | 822         | 1425        | 28          |
| 459 | 3659  | 31          | 155         | 53          |
| 662 | 2129  | 802         | 317         | 171         |
| 673 | 2900  | 224         | 230         | dry period  |
| 730 | 3372  | 768         | 416         | 326         |
| 782 | 3154  | 786         | 623         | 97          |

## 4. Carpenedolo (BS) – Province of Brescia, Lombardy Region Application Date: October 13, 2022

| No. | Cells | 1st Control | 2nd Control | 3rd Control |
|-----|-------|-------------|-------------|-------------|
| 16  | 2015  | 236         | 138         | 84          |
| 148 | 4683  | 963         | 56          | 121         |

Trading Office: 68 Craven Park Road London N15 6AB

Web Site: www.clusternanotech.com

BANK HSBC IBAN GB20MIDL40051573566556 BIC MIDLGB22

VAT Number GB140901153 (EORI) Number – GB140901153000

e-mail: info@clusternanotech.com



#### Clusternanotech LTD Nanostructured materials science Office 4, 21 Knightsbridge - SW1X 7LY London UK Company n.07961030 Capital Share: 9.080.193,00 € paid

Scientific Director: Dr. Arturo Sommariva

| 291 | 3500 | 743 | dry period | -    |
|-----|------|-----|------------|------|
| 329 | 5100 | 955 | 920        | 1114 |

# Spineda (CR) – Province of Cremona, Lombardy Region Application Date: November 15, 2022

| No. | Cells | 2nd Control |
|-----|-------|-------------|
| 57  | 868   | 417         |
| 884 | 1200  | 50          |
| 892 | 1018  | dry period  |
| 984 | 1905  | 103         |

## Testing of SALVALAT Product on Dairy Farms in Italy

The testing of the SALVALAT product was conducted across various dairy farms in Italy to evaluate its effectiveness in reducing somatic cell count (SCC) levels in milk. High SCC levels in milk are a key indicator of subclinical or clinical mastitis in cows, negatively affecting milk quality and animal productivity.

#### Objective of the Study

To prevent mastitis, which often arises from bacterial infections.

To assess the antibacterial properties of SALVALAT and its ability to act as a barrier preventing pathogen penetration through the teat canal.

#### Testing Methodology

Cows diagnosed with subclinical mastitis were selected based on SCC analysis and the California Mastitis Test (CMT).

SALVALAT was introduced through a sterile catheter into the teat canal of each infected quarter of the udder. The product was administered slowly to ensure even distribution, reaching the udder cistern and milk ducts.

#### **Control Measurements**

Regular testing of SCC levels, as they correlate with udder inflammation and infection.

Observation of inflammation signs such as swelling, redness (hyperemia), and changes in milk consistency.

Measurements were conducted on predetermined dates post-application to evaluate both short-term and long-term effects.

#### Test Results

A significant decrease in SCC was observed in most animals throughout the testing period, confirming the anti-inflammatory properties of SALVALAT and its ability to limit bacterial growth.

Chronic mastitis cases or physiologically aging animals maintained high SCC levels, indicating the need for a more comprehensive approach to treatment and prevention.

Trading Office: 68 Craven Park Road London N15 6AB

e-mail: info@clusternanotech.com

BANK HSBC IBAN GB20MIDL40051573566556 BIC MIDLGB22 VAT Number GB140901153 (EORI) Number – GB140901153000

Web Site: www.clusternanotech.com



Clusternanotech LTD Nanostructured materials science Office 4, 21 Knightsbridge - SW1X 7LY London UK Company n.07961030 Capital Share: 9.080.193,00 € paid

Scientific Director: Dr. Arturo Sommariva

During the "dry period," some cows did not complete the full testing cycle due to lactation physiology.

#### Conclusion

SALVALAT demonstrates high efficacy as part of a mastitis prevention programme due to its antibacterial properties, which ensure a reduction in infection pressure. Barrier function, protecting the nipple canal from external pathogens. Chemical stability, preventing the active substances from entering the milk.

#### Recommendations

The product is recommended for use in udder health management programmes, especially during lactation, in conjunction with regular monitoring of somatic cell levels and hygiene measures.

BANK HSBC IBAN GB20MIDL40051573566556 BIC MIDLGB22 VAT Number GB140901153 (EORI) Number – GB140901153000

e-mail: info@clusternanotech.com