|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Antimicrobial product** | **Amount (mg)** | **Administration route†** | **Antimicrobial ingredient** | **Class** |
| Betamox LA  | 6,000  | Parenteral other  |  Amoxycillin  |  Aminopenicillins  |
| Bivatop® 200  | 10,000  | LCT par  |  Oxytetracycline  |  Tetracyclines  |
| Bomacure  | 750,000  | Parenteral other  |  Cephapirin  |  First-generation cephalosporins  |
| Mastalone® | 49.19 |  Parenteral other  |  Oxytetracycline, oleandomycin, neomycin  |  Multiple classes  |
| Penethaject  | 43,329  | Parenteral other  |  Penethamate  |  Penicillins  |
| Tylo 200  | 5,000 |  Parenteral other  |  Tylosin  |  Macrolides  |
| Vibrostrep™ | 50,000  | Parenteral other  |  Streptomycin  |  Aminoglycosides  |
| Orbenin DC  | 84,000  | DCT  |  Cloxacillin  |  Penicillins |
| Intracillin® 1000 Milking Cow  | 1,000  | Parenteral other  |  Procaine penicillin G  |  Penicillins  |
| Penclox 1200™ | 72,000 | Parenteral other  |  Penicillin G and cloxacillin  |  Penicillins  |
| Excede LA  | 10,600  | LCT par  |  Ceftiofur  |  Third-generation cephalosporins  |
| Intracillin® 300  | 121,800  | Other  |  Procaine penicillin G  |  Penicillins  |
| Marbocyl 10%  | 8,300  | Other  |  Marbofloxacin  |  Quinolones  |
| Phoenix Pharmacillin 300  | 255,000  | Other  |  Procaine penicillin G  |  Penicillins  |
| **Total** | 1,417,078.19  |   |   |   |

**Table S8:** Antimicrobial use on Dairy 4

**Amount (mg) of antimicrobial products used on Dairy 4 during the study period**

†: DCT, dry cow therapy; LCT par, lactating cow therapy parenteral

**Amount (mg) of antimicrobial per class used on Dairy 4**

|  |  |  |  |
| --- | --- | --- | --- |
| **Class** | **Amount (mg)** | **PCU†** | **% of total** |
|  Aminoglycoside  | 50,000  | 0.19  | 3.53  |
|  Aminopenicillin  | 6,000  | 0.02  | 0.42  |
|  First-generation cephalosporin  | 750,000  | 2.83  | 52.93  |
|  Third-generation cephalosporin  | 10,600  | 0.04  | 0.75  |
|  Penicillin  | 577,129  | 2.18  | 40.73  |
|  Quinolone  | 8,300  | 0.03  | 0.59  |
|  Tetracycline  | 10,000  | 0.04  | 0.71  |
|  Multiple classes  | 49.19  | 0.00  | 0.00  |
|  Macrolide  | 5,000  | 0.02  | 0.35  |
| Total | 1,417,078.19 | 5.36  | 100.00  |

†: PCU, Population correction unit

**Antimicrobial use per month on Dairy 4**

|  |  |  |
| --- | --- | --- |
| **Date** | **Amount (mg)** | **PCU†** |
|  November 2018  | 57,399  | 0.22  |
|  December 2018  | 2,400  | 0.01  |
|  January 2019  | 44,100  | 0.17  |
|  February 2019  | 13,800  | 0.05  |
|  March 2019  | 11,200  | 0.04  |
|  April 2019  | 42,000  | 0.16  |
|  May 2019  | 32,000  | 0.12  |
|  June 2019  | 57,000  | 0.22  |
|  July 2019  | 149,800  | 0.57  |
|  August 2019  | 66,200  | 0.25  |
|  September 2019  | 804,447.19  | 3.04  |
|  October 2019  | 56,000  | 0.21  |
|  November 2019  | 58,632  | 0.22  |
|  December 2019  | 22,100  | 0.08  |
| **Total** | 1,417,078.19  | 5.36 |

†: PCU, Population correction unit