**Variation in blood serum proteins and association with somatic cell count in dairy cattle from multi-breed herds**

T. Bobbo, E. Fiore, M. Gianesella, M. Morgante, L. Gallo, P.L. Ruegg, G. Bittante and A. Cecchinato

**Supplementary Table S4** *Local breeds (Rendena and Alpine Grey): reference intervals (*95% Confidence Intervals) *of blood concentration of total protein, albumin and globulin, and of albumin:globulin ratio, according to parity and days in milk*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Item | Days in milk, d | | | | |
| 5 - 65 | 6 - 125 | 126 - 185 | 186 - 245 | > 246 |
| Total protein, g/L |  |  |  |  |  |
| -        Parity 1 | 62.5-73.4 | 68.5-73.3 | 67.8-72.5 | 68.4-73.2 | 64.2-72.6 |
| -        Parity 2 | 66.5-77.1 | 66.0-73.8 | 67.2-75.4 | 68.6-73.8 | 64.3-73.5 |
| -        Parity 3 | 70.6-81.2 | 67.2-80.0 | 71.7-76.6 | 71.6-78.0 | 72.3-78.7 |
| -        Parity ≥4 | 71.2-79.5 | 69.1-75.3 | 73.7-81.3 | 70.7-75.8 | 70.1-76.9 |
| Albumin, g/L |  |  |  |  |  |
| -        Parity 1 | 26.6-30.6 | 30.7-32.5 | 30.9-32.6 | 31.0-32.8 | 29.4-32.2 |
| -        Parity 2 | 28.6-32.5 | 29.5-32.2 | 29.5-32.5 | 30.0-31.9 | 28.2-31.5 |
| -        Parity 3 | 30.3-34.1 | 28.2-32.9 | 30.6-32.4 | 30.7-33.0 | 30.3-32.7 |
| -        Parity ≥4 | 26.6-29.4 | 30.3-32.6 | 30.6-33.4 | 30.3-32.2 | 29.6-32.1 |
| Globulin, g/L |  |  |  |  |  |
| -        Parity 1 | 33.7-44.8 | 37.0-41.8 | 36.0-40.8 | 36.5-41.4 | 32.9-40.7 |
| -        Parity 2 | 35.9-46.8 | 34.5-41.9 | 36.0-44.5 | 37.7-43.0 | 34.3-43.7 |
| -        Parity 3 | 38.3-49.1 | 35.9-49.1 | 40.2-45.2 | 39.8-46.3 | 40.8-47.3 |
| -        Parity ≥4 | 42.4-50.9 | 37.4-43.8 | 41.7-49.4 | 39.5-44.7 | 39.1-46.0 |
| Albumin:globulin |  |  |  |  |  |
| -        Parity 1 | 0.63-0.85 | 0.76-0.86 | 0.79-0.88 | 0.78-0.87 | 0.79-0.94 |
| -        Parity 2 | 0.66-0.88 | 0.75-0.89 | 0.70-0.87 | 0.73-0.83 | 0.67-0.86 |
| -        Parity 3 | 0.63-0.85 | 0.60-0.87 | 0.70-0.80 | 0.68-0.82 | 0.66-0.79 |
| -        Parity ≥4 | 0.55-0.72 | 0.72-0.84 | 0.63-0.79 | 0.70-0.81 | 0.66-0.80 |

195% Confidence Intervals obtained fitting a model which considered the three-way interaction breed × days in milk × parity.