**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 S3** *Simmental: 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 | 65 - 125 | 125 - 185 | 185 - 245 | > 245 |
| Total protein, g/L |  |  |  |  |  |
| -        Parity 1 | 71.5-79.7 | 69.0-74.5 | 67.6-75.9 | 71.3-76.3 | 72.0-77.2 |
| -        Parity 2 | 69.0-75.0 | 71.3-78.0 | 70.0-77.4 | 75.2-83.5 | 70.4-76.4 |
| -        Parity 3 | 73.3-81.7 | 68.8-81.7 | 71.0-78.0 | 66.3-76.8 | 74.8-87.7 |
| -        Parity ≥4 | 72.2-79.9 | 76.3-81.8 | 71.4-77.4 | 71.3-78.9 | 73.5-78.8 |
| Albumin, g/L |  |  |  |  |  |
| -        Parity 1 | 27.4-30.4 | 30.0-32.0 | 29.5-32.5 | 30.4-32.2 | 30.1-32.0 |
| -        Parity 2 | 31.0-33.2 | 30.6-33.1 | 29.5-32.2 | 28.0-31.4 | 30.8-33.0 |
| -        Parity 3 | 30.6-33.6 | 30.2-35.0 | 29.4-31.9 | 28.1-32.0 | 26.6-33.3 |
| -        Parity ≥4 | 29.6-32.7 | 29.4-31.4 | 30.5-32.6 | 29.9-32.8 | 30.5-32.4 |
| Globulin, g/L |  |  |  |  |  |
| -        Parity 1 | 42.5-51.0 | 38.0-43.6 | 36.6-45.0 | 39.9-45.0 | 41.0-46.2 |
| -        Parity 2 | 36.8-43.0 | 39.3-46.2 | 39.2-46.7 | 41.7-51.2 | 38.4-44.7 |
| -        Parity 3 | 41.0-49.6 | 36.1-49.4 | 40.4-47.6 | 36.1-46.9 | 47.7-60.9 |
| -        Parity ≥4 | 38.8-47.4 | 45.8-51.5 | 39.9-46.0 | 40.0-47.8 | 42.0-47.5 |
| Albumin:globulin |  |  |  |  |  |
| -        Parity 1 | 0.54-0.71 | 0.71-0.83 | 0.69-0.86 | 0.69-0.79 | 0.67-0.77 |
| -        Parity 2 | 0.75-0.88 | 0.68-0.82 | 0.67-0.82 | 0.56-0.75 | 0.72-0.85 |
| -        Parity 3 | 0.63-0.80 | 0.63-0.90 | 0.64-0.78 | 0.64-0.85 | 0.38-0.65 |
| -        Parity ≥4 | 0.64-0.82 | 0.58-0.69 | 0.68-0.80 | 0.66-0.82 | 0.67-0.78 |

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