

## EFFECT OF THE SYNTETIC IMMUNOMODULATOR ON PHAGOCYTOSIS FUNCTIONS

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### SUMMARY

The immune-modulators' group includes a compound named "AVR product"; which derives from ethanol-amine.

The study conducted on swine evaluated its action on the phagocytosis function. Two animal batches were used – control lot (M) and experimental lot (E) to which AVR was administered. The average weight of the animals was 20 kilos. AVR was administered for 45 days; on a 45 mg/kg bodyweight dose.

Evaluation of phagocytosis was carried out into 2 phases: at 30 and 45 days after the first inoculation of the product. The separation of the neutrophils polymorphonuclear phagocytes was accomplished by using the Percoll medium. The neutrophils population was evaluated in terms of movement capacity; endocytosis and the bactericide activity.

The Boyden technique of migration into a filtering layer was used in order to evaluate the movement capacity. The endocytosis was tested by applying the carbon particle integration test. The bactericide activity was reported as opposed to a standardized strain of *Staphylococcus aureus*.

The values obtained show a stimulation of the endocytosis capacity and bactericide activity on the animals which received AVR as opposed to those which haven't.

The values of cell migration and cell digestion in the control (without AVR) /experimental lots (with AVR)

| Parameters     | Control lot (M) |         |         | Experimental lot (E) |         |         |
|----------------|-----------------|---------|---------|----------------------|---------|---------|
|                | Initial         | 30 days | 45 days | Initial              | 30 days | 45 days |
| Cell migration | 125;50          | 105;00  | 92;00   | 122;10               | 138;10  | 128;15  |
| Cell digestion | 53;80           | 68;40   | 71;00   | 48;50                | 79;00   | 88;20   |

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