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## Accuracy of a diagnostic model based on serum biochemical parameters in detecting cows at an increased risk of chronic fascioliasis

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### Highlights:

- chronic fascioliasis was confirmed or ruled out in 203 dairy cows
- serum biochemical parameters indicative of chronic fascioliasis were identified
- multivariable models based on selected biochemical parameters were developed
- model based on GLDH, globulin, urea and selenium proved highly accurate (AUC of 92.6%)
- this model allows selection of cows at high risk of chronic fascioliasis with no extra costs

### Abstract

In adult cattle *Fasciola hepatica* infection usually follows a chronic subclinical course, and reduces both the milk yield and milk quality, resulting in considerable financial losses. Effective control of the disease is based on reliable identification of asymptotically infected individuals, which now requires special parasitological or serological diagnostic tests. It is also known that *F. hepatica* infection induces alterations in some serum biochemical parameters. Therefore, the study was

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