Project A: Serological and Clinical Proof of Freedom of Equine Infectious Anemia (EIA) in Imported and Domestic Horses in Switzerland

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Key words
Equine Infectious Anemia (EIA); horse; ELISA; disease awareness; freedom from disease

Aim of the study
Switzerland has not reported any case of Equine Infectious Anemia (EIA) since 1991. However, several risk factors for the introduction of the virus are present: cases of EIA in Europe and specifically in neighboring countries; inapparent infections in imported horses; testing for EIA prior to importation to Switzerland is not required anymore; illegal movement of horses; temporary stays; poor disease awareness among owners and veterinarians. Therefore the aim of this study was to provide evidence of freedom of EIA in imported and domestic horses in Switzerland.

Material and methods
Serum samples from 434 horses which had been imported since 2003 as well as from 232 domestic horses over fifteen years of age (as elderly horses are at a greater risk of having been infected) were analysed using a commercially available ELISA test.

Results and significance
Every sample turned out to be seronegative, which corresponds to a 95% confidence interval for a detection limit of 0.5% for the seroprevalence. Given that none of the examined samples were seropositive, we can assume that Switzerland is free of EIA. Nevertheless, the above-stated riskfactors for an introduction of EIA into Switzerland remain. Therefore all stakeholders must be (made) aware of these risks, take measures to prevent a possible emergence of the diseases, and be prepared in case of an outbreak.

Publications, posters and presentations (Formatvorlage Überschrift 2)
Kaiser, A. (2009) Serologischer und klinischer Nachweis der Freiheit von Equiner Infektiöser Anämie (EIA) in importierten und einheimischen Pferden in der Schweiz. Dissertation, Veterinärmedizinische Fakultät, Universität Bern.

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