Swiss Equestrian Federation

FEI Eventing Risk Management Seminar

Marius Marro (NSO)
Dominik Burger (NF Representative)

24 January 2021
"Last ticket for Olympics 2020" for Switzerland...
Institut Equestre National Avenches
Concept de protection du centre d’entraînement

1. Généralités
- Directives sanitaires/épidémiologiques de l’Office fédéral de la santé publique (OFSP).
- Concept de protection pour une stratégie de sortie progressive pour le sport équestre du 30 avril, émis par le FSSE.
- Toute personne présentant des symptômes de maladie n’est pas autorisée à se rendre sur le centre d’entraînement de l’IENA.

2. Réservation
6 Competitive Trainings 3* et 4* = Masterclass

10-12/07/2020
31/07-02/08/2020
21-23/08/2020
11-13/09/2020
(09-11/10/2020)
(30/10-01/11/2020)
Scientific study Masterclass 2020

Standardized study on 37 horses 3 times with an interval of 3 weeks and varying meteorological conditions
Scientific study of the Swiss Institute of Equine Medicine

University of Berne
Masterclass

Standardized program and conditions 3 times:

37 Elite Eventing horses (3*/4*):

• D1: Vet Check/ Dressage / Show jumping first round
• D2: Cross Country
• D3: Vet Check/ Show jumping second round
Dressage
Show Jumping 2x
4*

2850 m
570 m/min
5 min
18 numbers
26 efforts
black
Cross Country
Cross Country

→ Christian Aschard
Cross Country
Michael JUNG
fischerChipmunk FRH

20.00 1:45.8
Scientific study: Examinations

Consent of owner/ rider
1 Questionaire per horse

Vet Inspections with Equigait
- Thursday evening
- Sunday morning
Case: 20200820  Date: 20200820T135342

Poll + Withers

poll + withers

24.0mm

Poll  22R 1R 29R 72
Wither 0/106 10/64 0/106 80

Sacrum

8.7mm

Pelvis 1L 1R 7L 6L 73
HHD 14L 1L 11

LTC

EQUIGAIT

RTC

Trial Numbers: 60 61 62 63
Number of Strides: 28
Average Stride Time: 656 ms
Heart rate and Electrocardiogram

Equimetre Vet (Arioneo)
Thermography eyes/ hindquarters

FLIR E 53
Motion analysis incl. fences

Alogo Move Pro
Video incl. Ethogram
Subjective Evaluation

Rider
Eventing experts
Blood collection and rectal temperature

Lactate Status
Biochimie incl. SAA, CPK, GOT
Scientific and practical questions

Does fatigue and thermoregulation affect jumping results after the cross-country phase of an eventing competition? Jumping performance has so far been based on obstacle and time faults. Recently emerged technology allows the investigation of ground reaction forces and flight curves by accelerometer.

Does the subjective impression of the rider and experts after cross-country correlate with biomechanical and physiological findings?

Are the dressage and show jumping results associated with an increased in eye temperature (eye thermograph) just prior to entering and leaving the arena? Is the eye or hind-quarter temperature better correlated to the actual core temperature than rectal temperature?

How is thermoregulation (rectal temperature, eye/hind-quarter temperature), ground firmness (penetrometer), and stress (eye temperature) linked to other physiological parameters during repeated eventing trainings under different meteorological conditions?

Does heart rate variability and the electrocardiogram vary with the stage of competitive training in horses? Are similar cardiac rates and rhythms obtained in repeated competitive trainings? Are arrhythmias associated with risks during the cross-country portion of eventing?

In a further step, depending on obtained results: Is gene expression associated with performance results?
Ongoing data analysis....
Future

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without spectators...
FEI confirms Jumping & Dressage European Championships 2021 in Germany

© 21 October 2020

→ Re-Opening Bid for Eventing...
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Thank you!