S10(T)-OP-11 **Applications for comprehensive support of improving health and welfare in dairy cattle** <u>Kathrin F. Stock</u>, Katharina May, Johannes Heise Genetic evaluation, IT Solutions for Animal Production (vit), Verden (Aller), Germany

Documentation and control of health and welfare in dairy herds have worldwide increased in importance. Given the great demand, several tools for farmers are today allowing the recording of veterinary diagnoses, findings from claw trimming and other health-related observations, so on-farm data collection on dairy health has technically become much easier than several years before. Furthermore, the ICAR Central health key, appendix of the guidelines for direct health traits, and the ICAR Claw health key and atlas are providing the basis for standardized data collection which is crucial for implementing monitoring concepts and improvement programs across farms. Among the animal-based welfare indicators, health aspects are playing a key role, implying further motivation to extend and strengthen the data basis on animal health and develop applications supporting health management and improvement. However, the often limited amount of historical data and difficulties of ensuring completeness and high quality of data across farms and over time are major challenges. Additional consideration of data which is broadly available through long-established recording routines, such as specific disposal reasons of cows, can therefore be valuable for both management and breeding. Comparative statistical analyses were performed to highlight similarities and peculiarities of distribution patterns of data which were from different sources of information and related to animal health and welfare. The study was based on data from the national genetic evaluation in German Holstein dairy cattle and included more than 1.7 millions of lactation records from almost 2.700 farms for direct health traits. Milk performance records and information on disposal of cows was used as complementary data set