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Conference Poster

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Glucocorticoid and progestogen profiling in bovine skimmed milk, saliva and plasma using ultra-performance liquid chromatography high resolution mass spectrometry (UHPLC-HR-MS)

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Introduction

Glucocorticoids and progestogens are classified as endogenous steroid hormones. The role of cortisol (F) and progesterone (P4) during the estrous cycle and parturition is well established. Both F and P4 are metabolized during phase I metabolism into various biologically active steroids, some of which act as neurosteroids. In the past, steroids have been mainly assessed using immunoassays. This technique is easy to apply but allows to determine only one analyte at a time and is susceptible to issues of specificity. Increasingly sensitive mass spectrometry (MS) based techniques allow the selective analysis of multiple steroids in parallel and have evolved as the gold standard in steroid analysis [1].

Experimental Design

Steroid profiling in bovine milk post-partum

Steroid profiling across the bovine estrous cycle

Steroid profiling in 3 matrices

References