

Equine Endogenous ACTH assay protocol

Indications

- Screening test for Pituitary Pars Intermedia Dysfunction (PPID; commonly referred to as Equine Cushing's Disease).
- Monitoring equine patients receiving treatment with pergolide. Monitoring for improvement in clinical signs is also strongly recommended with the endogenous ACTH concentrations interpreted in light of the whole clinical picture.

Protocol

- Have a pre-frozen freezer pack ready to use. (Obtain a freezer pack on [idexx.co.uk/supplies](https://www.idexx.co.uk/supplies))
- Collect at least 2 ml of blood into an EDTA tube at any time of the day and keep the sample cool (fridge or ice packs) at all times.
- Centrifuge the sample within 8 hours of collection, harvesting at least 1 ml of EDTA plasma and transferring the plasma into a sterile plain tube. Then freeze the sample.
- Submit the sample in the special freezer pack such that it will be received by any of our reference laboratories within 24 hours. During transportation, it is anticipated that the sample will defrost but remain chilled.

Notes

- Where a pony or horse (typically > 15 years old), shows clinical signs compatible with PPID, an endogenous adrenocorticotropin hormone (ACTH) concentration is typically performed as a screening test.
- Seasonally adjusted reference intervals for interpretation throughout the year.
- If generalized hypertrichosis is present, performing an endogenous ACTH concentration may not be necessary, and immediate implementation of treatment should be considered.
- Where the pre-test probability of PPID is low (younger pony or horse, without classical clinical signs of PPID) then an elevated result could be a false positive result, due to seasonality or other non-PPID cause and should be correlated with the whole clinical picture. Dynamic testing with a TRH stimulation test should then be considered.
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Further Reading

Equine Endocrinology Group 2021 PPID: <http://sites.tufts.edu/equineendogroup>.

