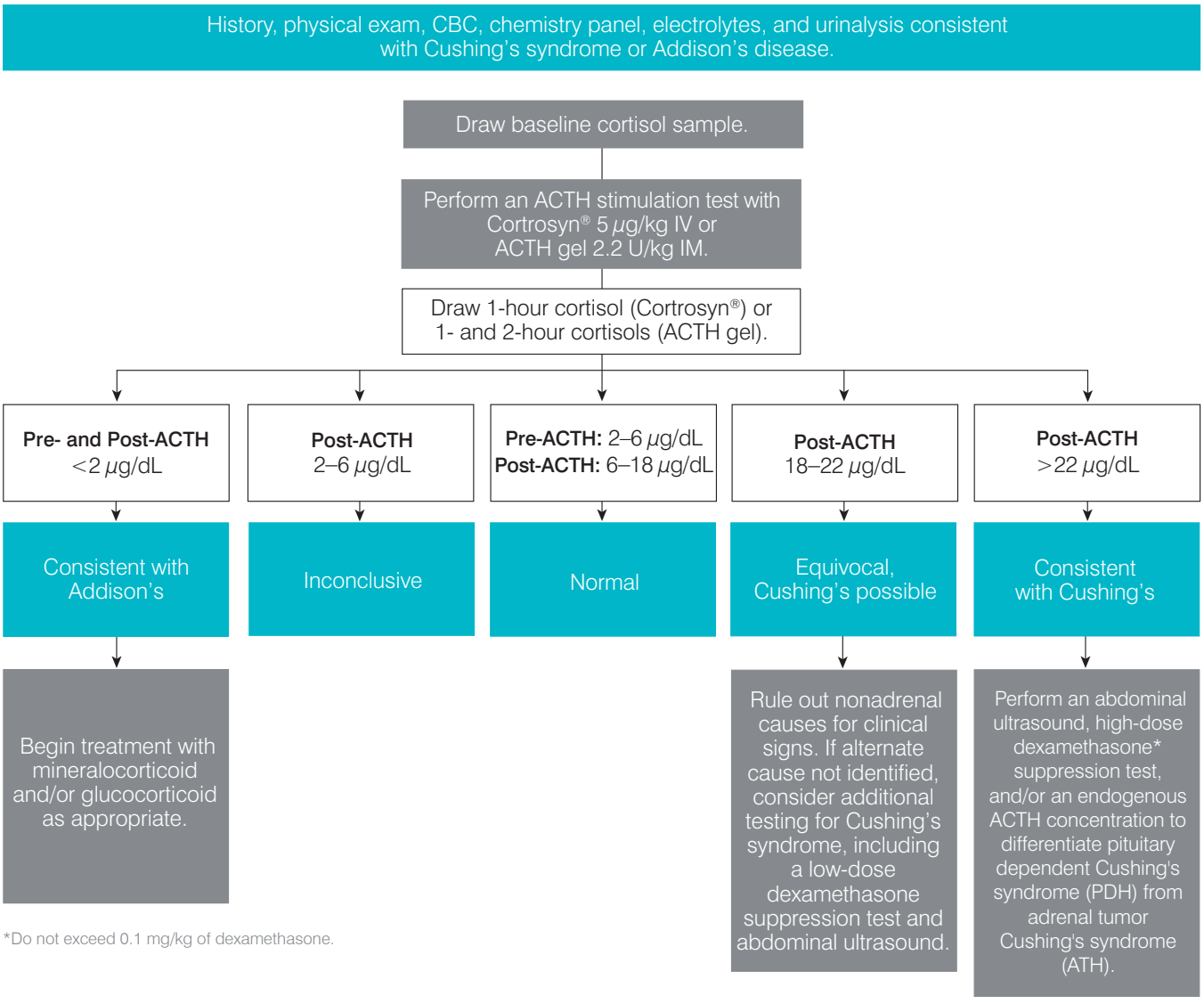
Diagnosing and treating cases of suspected canine Cushing's syndrome or Addison's disease

PLEASE NOTE: Administration of exogenous steroids or stress related to concurrent illness may affect the results and interpretation of ACTH stimulation test and dexamethasone suppression test.
For patient-specific interpretations provided through IDEXX DecisionIQ™, please view your results in VetConnect® PLUS.

Diagnose

ACTH stimulation test

Diagnostic protocol for cases of suspected canine hyperadrenocorticism (Cushing's syndrome) or hypoadrenocorticism (Addison's disease)



*Do not exceed 0.1 mg/kg of dexamethasone.

Diagnose

Low-dose dexamethasone suppression protocol

For cases of suspected Cushing's syndrome

History, physical exam, CBC, chemistry panel, electrolytes, and urinalysis consistent with Cushing's syndrome.

Draw baseline cortisol sample.

Perform a low-dose dexamethasone suppression test with 0.01 mg/kg of dexamethasone IV.

Draw and run 4-hour cortisol.

Draw and run 8-hour cortisol.

4 hours	8 hours
<1 µg/dL	<1 µg/dL
1–1.5 µg/dL and <50% of baseline	<1 µg/dL
<1 µg/dL	1–1.5 µg/dL and <50% of baseline
1–1.5 µg/dL and <50% of baseline	1–1.5 µg/dL and <50% of baseline

Does not support a diagnosis of Cushing's

Rule out nonadrenal causes for clinical signs.

4 hours	8 hours
Any number	>1.5 µg/dL and <50% of baseline
<1 µg/dL	>1.5 µg/dL and ≥50% of baseline
≥1 µg/dL and <50% of baseline	>1.5 µg/dL and ≥50% of baseline

Supports a diagnosis of PDH

Treatment may be considered.

4 hours	8 hours
≥1 µg/dL and ≥50% of baseline	>1.5 µg/dL and ≥50% of baseline

Supports a diagnosis of Cushing's and does not differentiate PDH and ATH

Perform either an abdominal ultrasound, high-dose dexamethasone* suppression test, and/or an endogenous ACTH concentration to differentiate PDH from ATH.

4 hours	8 hours
1–1.5 µg/dL and ≥50% of baseline	<1 µg/dL
>1.5 µg/dL	<1 µg/dL
1–1.5 µg/dL and ≥50% of baseline	1–1.5 µg/dL and <50% of baseline
>1.5 µg/dL	1–1.5 µg/dL and <50% of baseline
<1 µg/dL	1–1.5 µg/dL and ≥50% of baseline
1–1.5 µg/dL and <50% of baseline	1–1.5 µg/dL and ≥50% of baseline
1–1.5 µg/dL and ≥50% of baseline	1–1.5 µg/dL and ≥50% of baseline
>1.5 µg/dL	1–1.5 µg/dL and ≥50% of baseline

Inconclusive

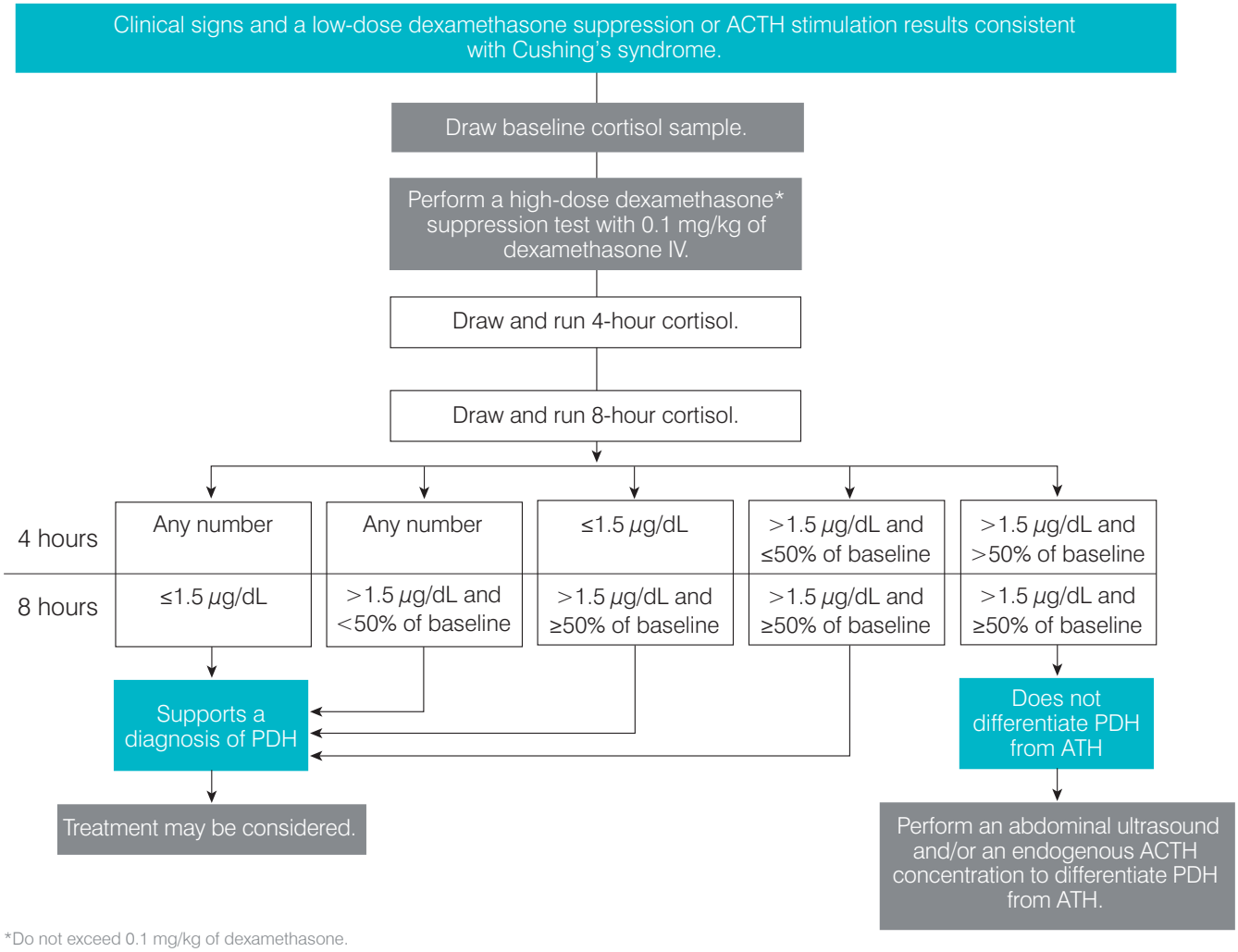
Rule out nonadrenal causes for clinical signs. If alternate cause not identified, consider additional testing for Cushing's, including an ACTH stimulation test and abdominal ultrasound.

*Do not exceed 0.1 mg/kg of dexamethasone.

Diagnose

High-dose dexamethasone suppression protocol

For determination of pituitary-dependent versus adrenal tumor Cushing's syndrome

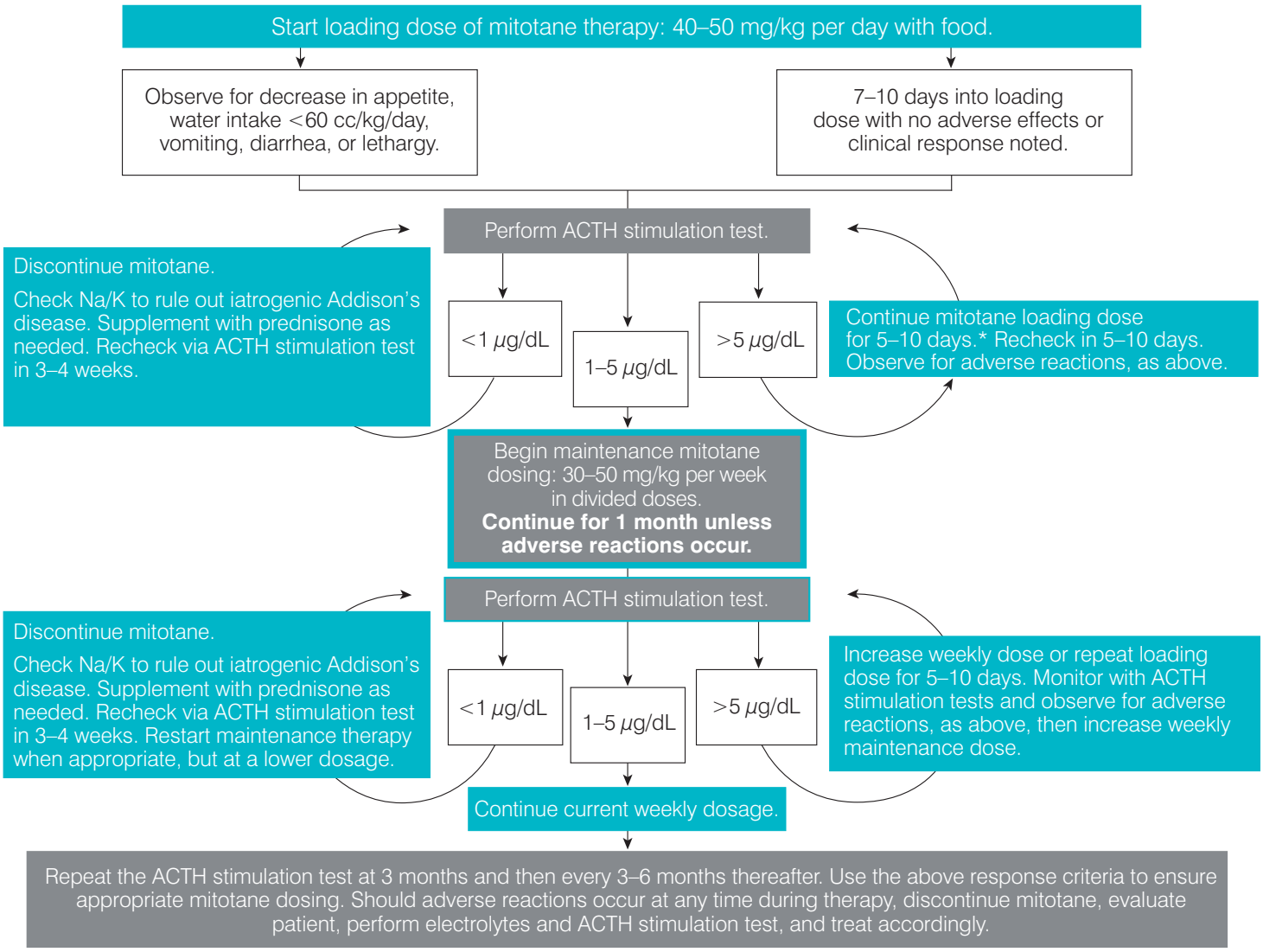


*Do not exceed 0.1 mg/kg of dexamethasone.

Treat

Mitotane (Lysodren®) dosing and monitoring

Treatment of pituitary dependent Cushing's syndrome

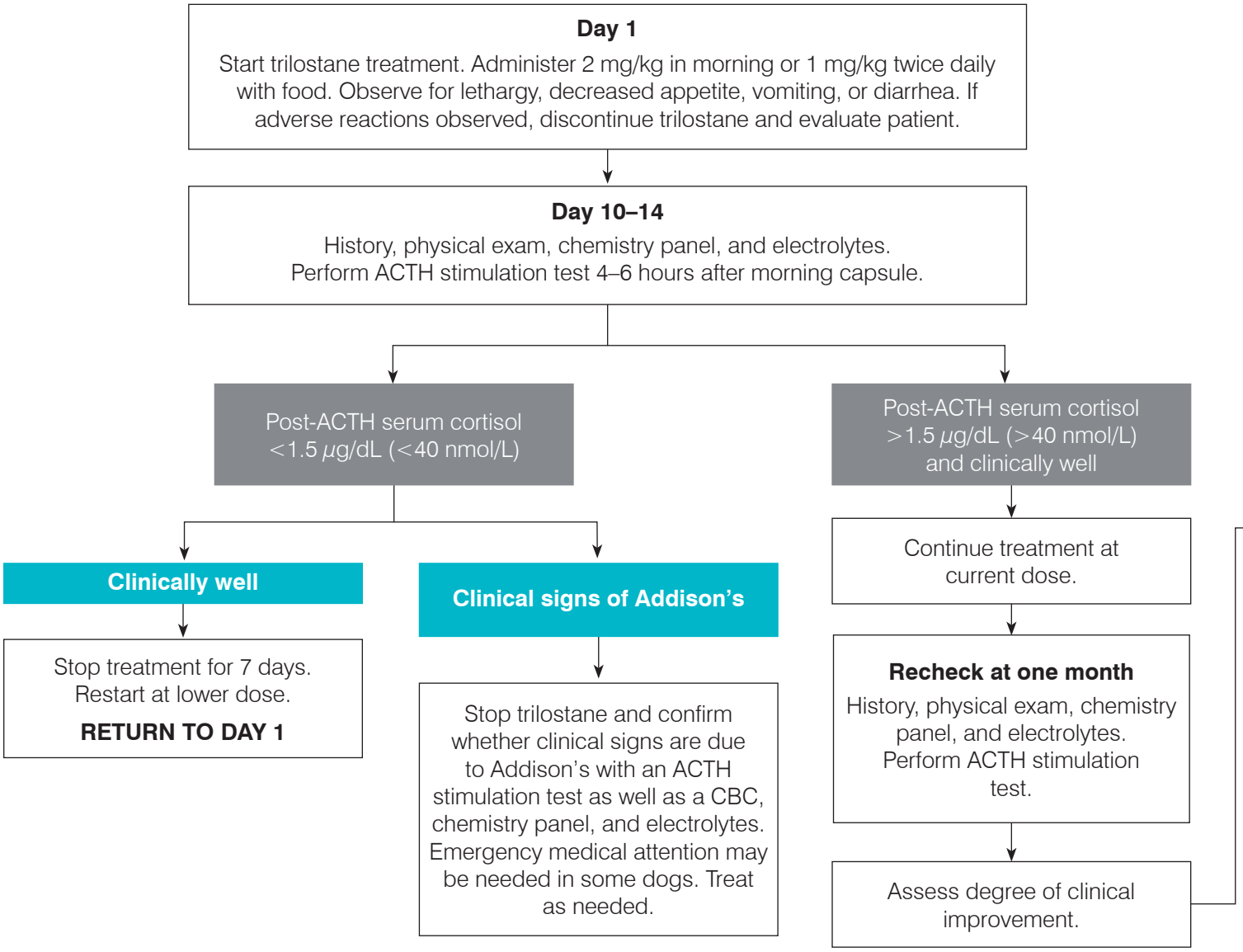


*If ACTH stimulation is still >5 μg/dL after initial 5–10 days of additional loading, continue loading dose for an additional 5–10 days, observing for adverse reactions.

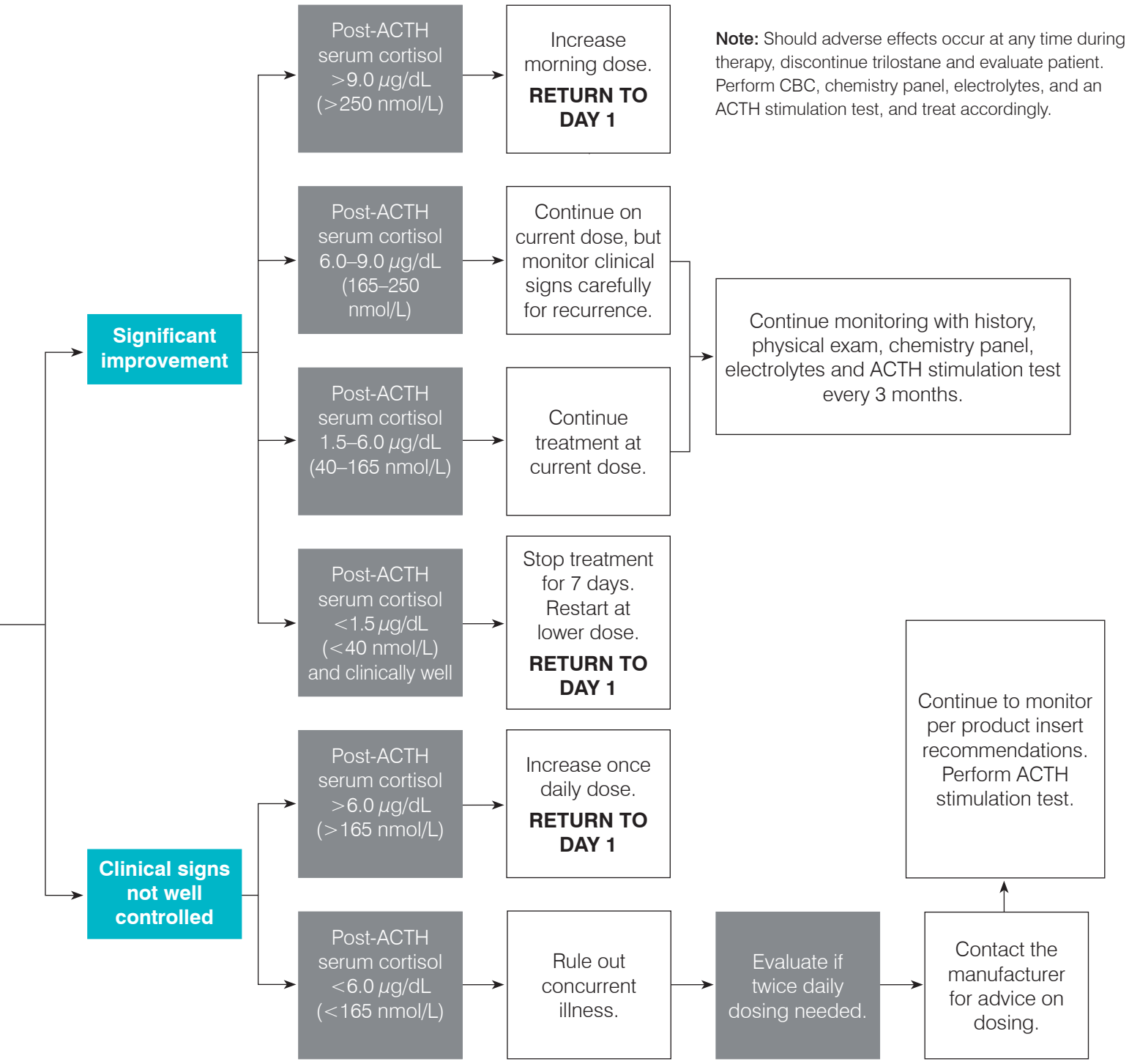
Treat

Trilostane (Vetoryl®) dosing and monitoring*

Treatment of Cushing's syndrome



*Modified from "Treatment and Monitoring of Hyperadrenocorticism" flowchart published by Dechra Ltd., 2019.



Note: Should adverse effects occur at any time during therapy, discontinue trilostane and evaluate patient. Perform CBC, chemistry panel, electrolytes, and an ACTH stimulation test, and treat accordingly.