



# ABAXIS VETSCAN UA: Consistent, rapid urine analysis

Urinalysis provides us with information on the physical and chemical properties of urine. It is a valuable test in both healthy and sick animals and should be included in any comprehensive evaluation of a pet's health. Urinalysis is routinely used not only to assess the health of the kidneys and urinary system, but also to reveal problems in other organ systems.

## A thorough urinalysis includes:

1. Assessing of the appearance of the urine
2. Measuring the density of the urine
3. Measuring the chemical properties of urine
4. Examination of urine sediment

The VETSCAN UA and its UA14 profile can help you perform consistent and rapid chemical urine analysis and provide you with unique measures such as microalbumin and urine protein/creatinine ratio.

### MICROALBUMIN:

- ✓ Most sensitive indicator of protein loss in the urine<sup>1</sup>
- ✓ Three or more elevations that cannot be attributed to a post-renal cause, assessed at 2 week intervals, are evidence of persistent renal proteinuria<sup>2</sup>
- ✓ Microalbumin levels can rise before creatinine, SDMA, or UPC increases or USG decreases

#### Especially beneficial for:

- ✓ Screening for senior pets
  - Dogs more than 6 years old
  - Cats more than 8 years old
- ✓ Pets at risk of early renal disease (hereditary disease)
- ✓ Chronic illness that may be complicated by kidney damage or disease

### URINE PROTEIN/CREATININE (UPC) RATIO:

- ✓ Is not affected by change in urine volume or concentration
- ✓ To confirm and/or stage proteinuria caused by renal disease
- ✓ Must be evaluated in the presence of an inactive urine sediment (no inflammation/infection)
- ✓ Quick, cost-effective patient-side results

#### Especially beneficial for:

- ✓ Evaluation and prognosis of acute and chronic renal disease
- ✓ Monitoring treatment
- ✓ Screening geriatric patients for renal disease
- ✓ Chronic illness that may be complicated by kidney damage or disease



# TECH UPDATE

## OCCULT BLOOD

Indicates presence of haematuria, haemoglobinuria or myoglobinuria. Any positive reaction should be interpreted in conjunction with a urine sediment analysis.

## GLUCOSE

Detectable glucosuria is abnormal and should be interpreted in conjunction with blood glucose level.

Useful for monitoring insulin therapy and animals with PU/PD/pets with diabetes.

## KETONES

Ketonuria is detected when there is excessive fat degradation or impaired use of carbohydrates. Useful to diagnose or monitor pets with diabetes mellitus, anorexia or pregnancy.

## BILIRUBIN

Bilirubinuria may precede clinical identification of jaundice or hyperbilirubinaemia and therefore may serve as an early indicator of disease.

Significant regenerative anaemia may indicate that bilirubinuria is caused by haemolysis.

If no anaemia is present, especially if accompanied by elevated serum alkaline phosphatase and GGT, bilirubinuria may be caused by hepatobiliary disease.

Sepsis can decrease bilirubin uptake and cause bilirubinuria.

## pH

pH may change with diet or presence of infection.

Can be used for the estimation of acid-base status, the prediction of urolith formation, and for monitoring therapy for uroliths.

## PROTEIN

Urine should be free of protein. The potential loss of protein into the urine should be investigated in any hypoproteinaemic animal.

Proteinuria should be interpreted in conjunction with USG and sediment analysis: the presence of protein in poorly concentrated urine is clinically-significant – or assess UPC.

Persistent proteinuria found on screening tests should be confirmed with a UPC.

Supporting you across the continuum of care



PREVENT



DETECT



TREAT

### References:

1. Chew, Dennis J., Urinalysis Revisited- proceedings from VMX, 2018 2. Lees GE, Brown SA, Elliott J, Grauer GE, Vaden SL. Assessment and management of proteinuria in dogs and cats: 2004 ACVIM Forum Consensus Statement (small animal). *J Vet Intern Med* 2005; 19:377-85.