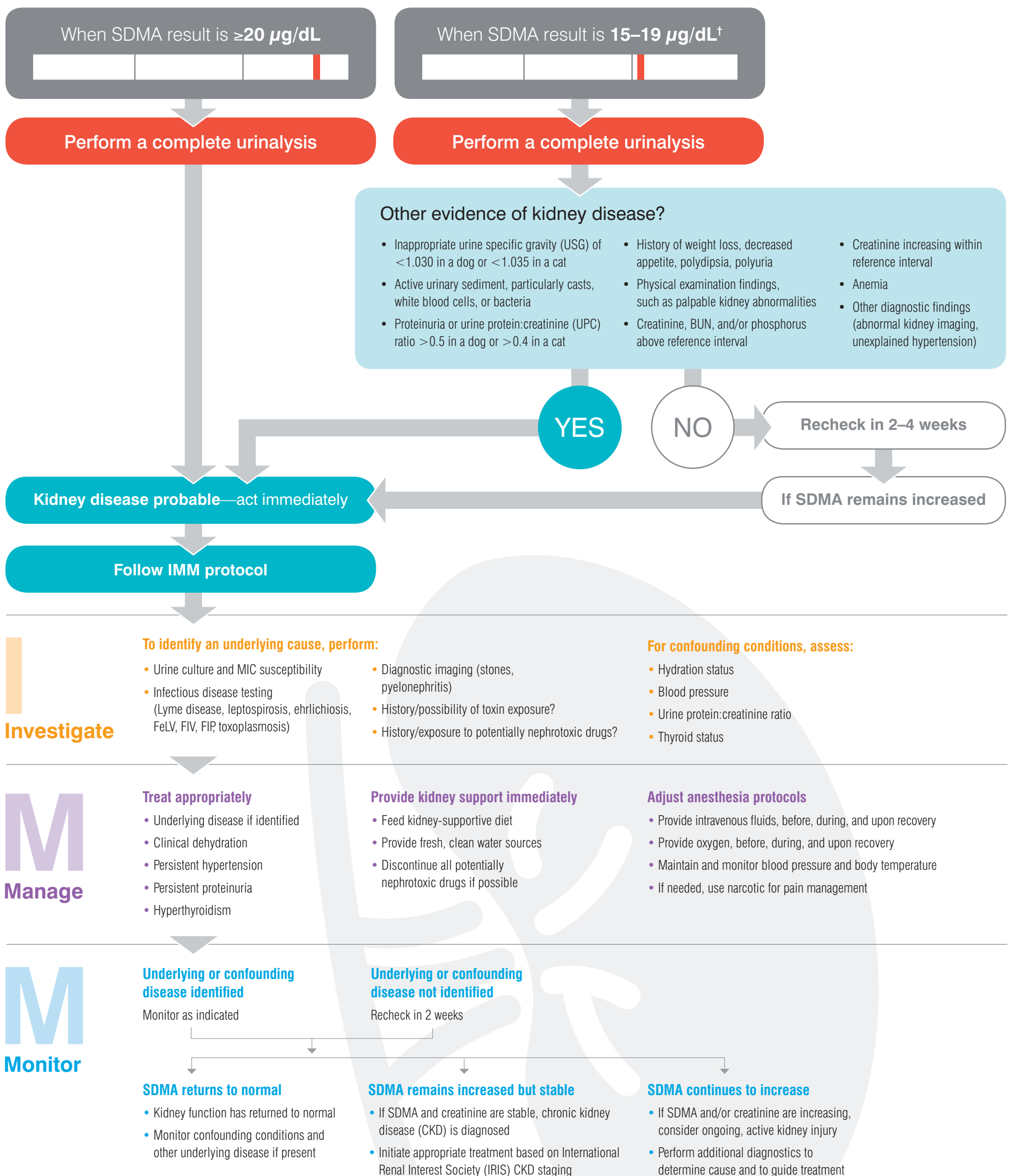# IDEXX SDMA® Test Algorithm

SDMA can increase with both active or acute kidney injury, as well as chronic kidney disease.

Take action when SDMA* results are increased. Follow this algorithm to determine if kidney disease is probable and what steps you should take to investigate, manage, and monitor the disease.

When SDMA result is ≥20 µg/dL

When SDMA result is 15–19 µg/dL†

Perform a complete urinalysis

Perform a complete urinalysis

Other evidence of kidney disease?

- Inappropriate urine specific gravity (USG) of <1.030 in a dog or <1.035 in a cat
- Active urinary sediment, particularly casts, white blood cells, or bacteria
- Proteinuria or urine protein:creatinine (UPC) ratio >0.5 in a dog or >0.4 in a cat

- History of weight loss, decreased appetite, polydipsia, polyuria
- Physical examination findings, such as palpable kidney abnormalities
- Creatinine, BUN, and/or phosphorus above reference interval

- Creatinine increasing within reference interval
- Anemia
- Other diagnostic findings (abnormal kidney imaging, unexplained hypertension)

YES   **NO** → **Recheck in 2–4 weeks**

If SDMA remains increased

Kidney disease probable—act immediately

Follow IMM protocol

I — Investigate

To identify an underlying cause, perform:
- Urine culture and MIC susceptibility
- Infectious disease testing (Lyme disease, leptospirosis, ehrlichiosis, FeLV, FIV, FIP, toxoplasmosis)

- Diagnostic imaging (stones, pyelonephritis)
- History/possibility of toxin exposure?
- History/exposure to potentially nephrotoxic drugs?

For confounding conditions, assess:
- Hydration status
- Blood pressure
- Urine protein:creatinine ratio
- Thyroid status

M — Manage

Treat appropriately
- Underlying disease if identified
- Clinical dehydration
- Persistent hypertension
- Persistent proteinuria
- Hyperthyroidism

Provide kidney support immediately
- Feed kidney-supportive diet
- Provide fresh, clean water sources
- Discontinue all potentially nephrotoxic drugs if possible

Adjust anesthesia protocols
- Provide intravenous fluids, before, during, and upon recovery
- Provide oxygen, before, during, and upon recovery
- Maintain and monitor blood pressure and body temperature
- If needed, use narcotic for pain management

M — Monitor

Underlying or confounding disease identified

Monitor as indicated

Underlying or confounding disease not identified

Recheck in 2 weeks

SDMA returns to normal
- Kidney function has returned to normal
- Monitor confounding conditions and other underlying disease if present

SDMA remains increased but stable
- If SDMA and creatinine are stable, chronic kidney disease (CKD) is diagnosed
- Initiate appropriate treatment based on International Renal Interest Society (IRIS) CKD staging

SDMA continues to increase
- If SDMA and/or creatinine are increasing, consider ongoing, active kidney injury
- Perform additional diagnostics to determine cause and to guide treatment

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The IDEXX SDMA Test is more reliable than creatinine.
SDMA increases earlier than creatinine in dogs and cats as kidney function decreases. And unlike creatinine, SDMA is not impacted by muscle mass.‡

For questions regarding IDEXX SDMA Test results, please contact our Customer Support Team at **1-888-433-9987**.

*Symmetric dimethylarginine.

†SDMA reference interval for cats, kittens, and adult dogs is 0–14 µg/dL. In puppies, the SDMA reference interval is 0–16 µg/dL. Read the full report at **IDEXX.com/sdmapeds**.

‡ To see the proof and a complete list of references, visit idexx.com/sdma.

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