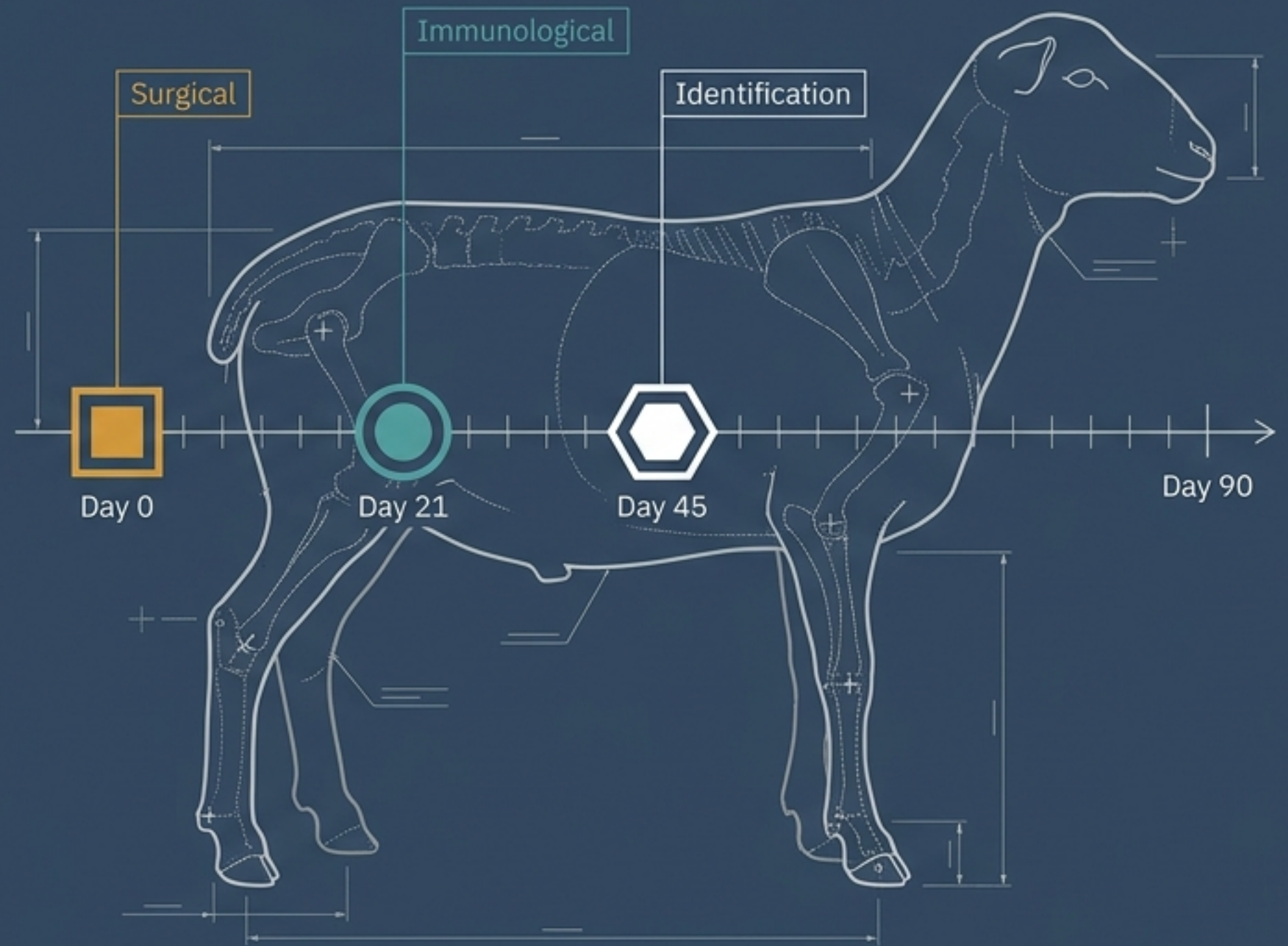


# The First-Weeks Procedural Stack

Castration architecture, pain management, identification mechanics, and the CDT interlock for Katahdin sheep.



# 1 Surgical & Pain

- AVMA Castration Guidelines
- Meloxicam
- Lidocaine

# 2 Immunological Gates

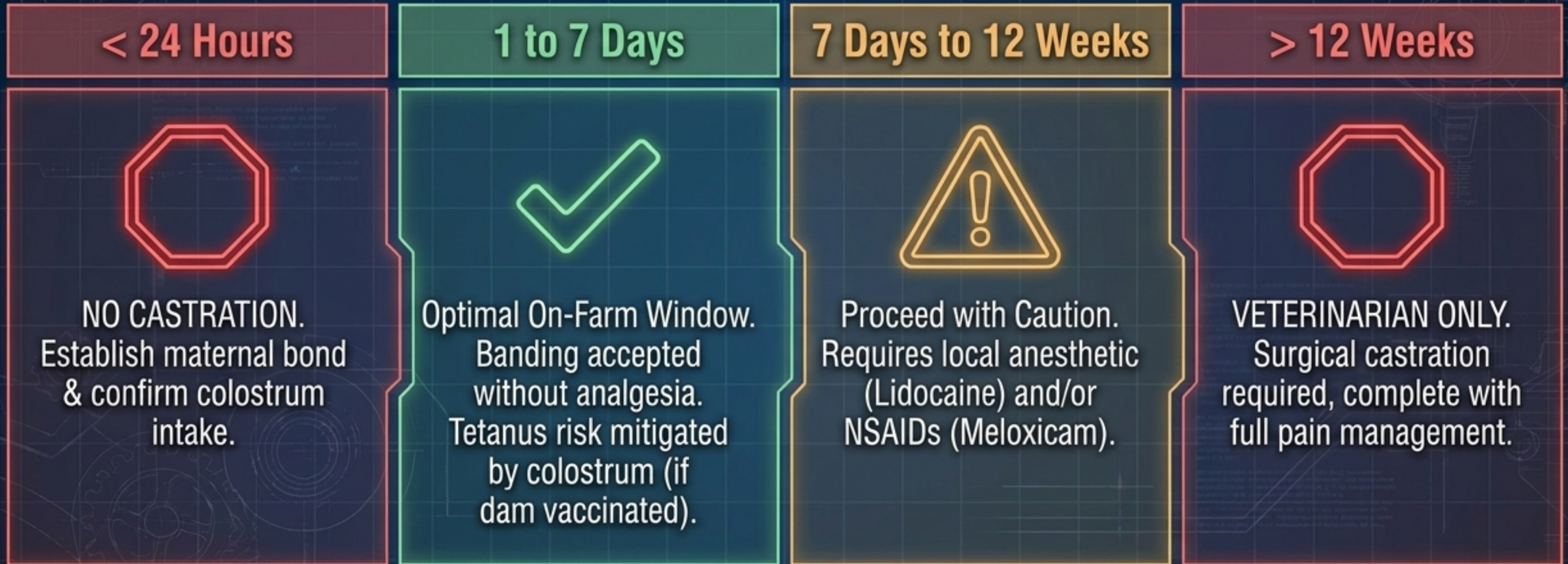
- CDT Timing
- Tetanus Prophylaxis
- Colostral Transfer

# 3 Regulatory ID


- USDA Scrapie
- KHSI Registry
- Tag Mechanics

None of these systems operate in isolation. Pain medication requires veterinary triads. Surgery requires immunological coverage. Tags require federal compliance.

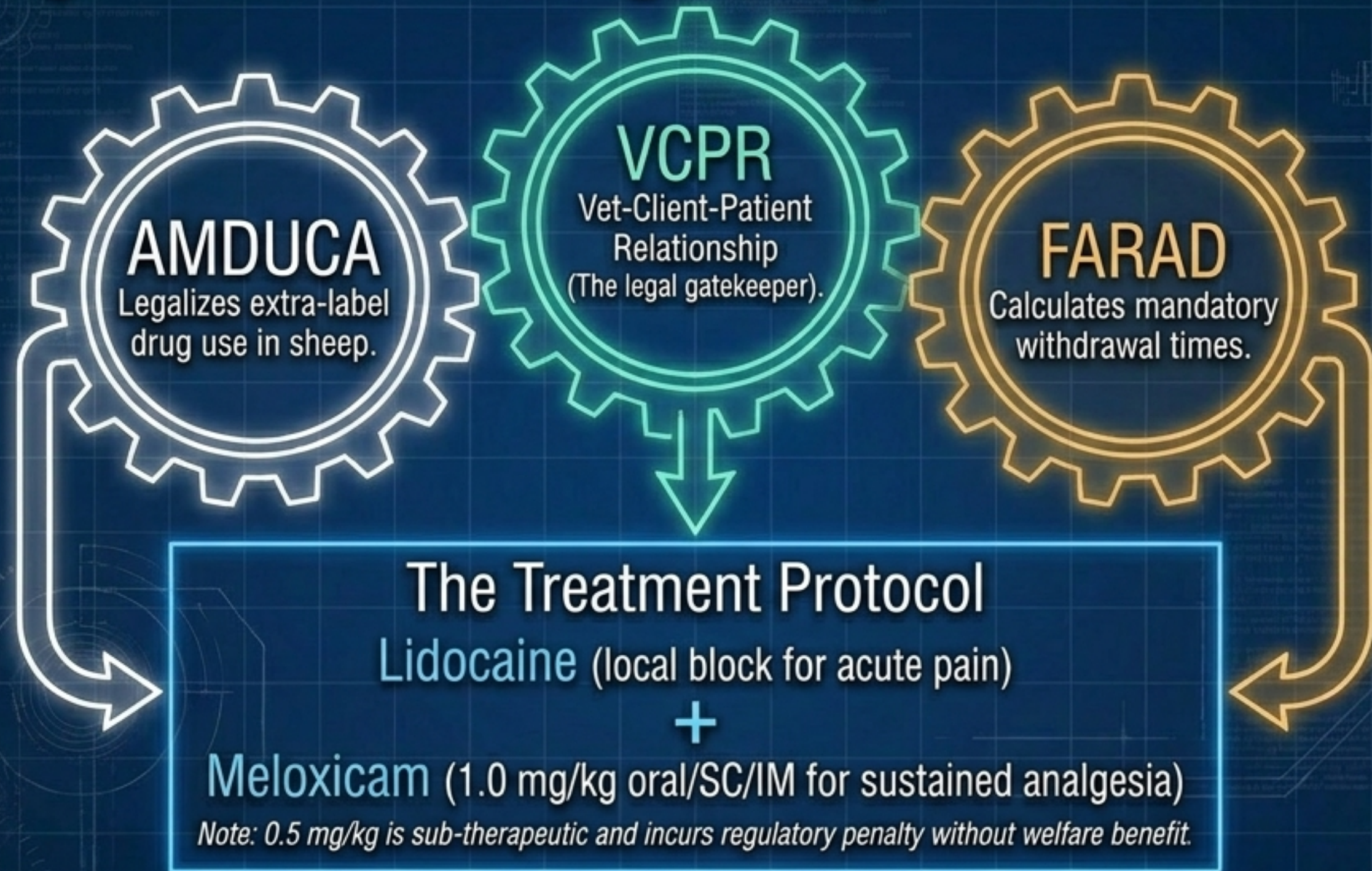
# The AVMA Stratified Castration Architecture



# Comparison Matrix: Castration Methods

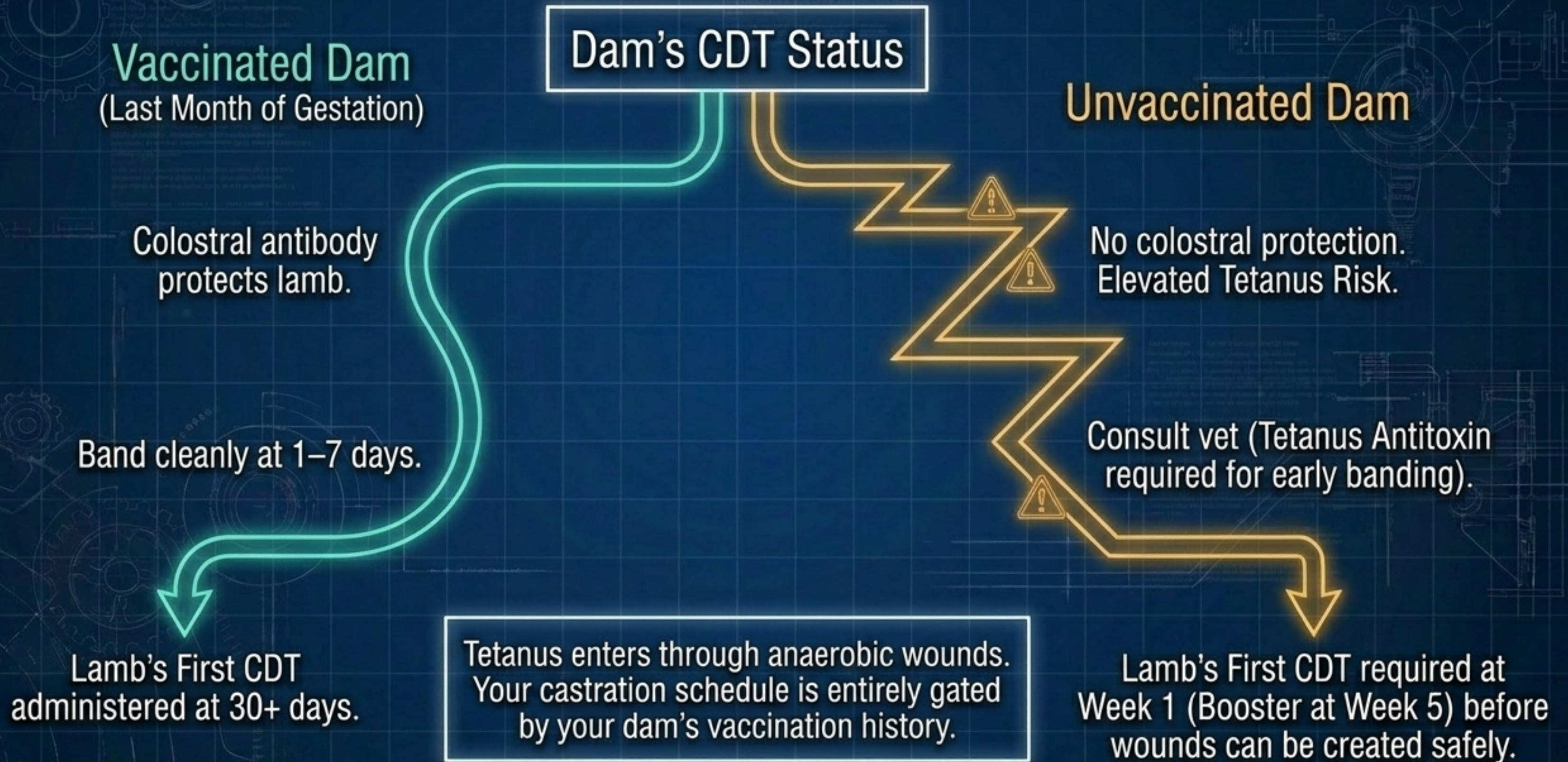
Banding (Elastrator)	Surgical (Scalpel/Emasculator)	Burdizzo (Emasculatome)
		
<ul style="list-style-type: none"><li>✓ Skill Level: Low</li><li>✓ Open Wound: No</li><li>⚠ Acute Pain: High (peaks in 1 hr)</li><li>⚠ Tetanus Risk: Elevated (anaerobic necrotic tissue)</li></ul>	<ul style="list-style-type: none"><li>⚠ Skill Level: Moderate</li><li>⚠ Open Wound: Yes (requires drainage)</li><li>⚠ Acute Pain: Moderate/High</li><li>⚠ Risk: Strict aseptic environment required</li></ul>	<ul style="list-style-type: none"><li>⚠ Skill Level: Operator dependent</li><li>✓ Open Wound: No</li><li>✓ Acute Pain: Low/Moderate</li><li>⚠ Risk: "Stag" outcome (incomplete crush leaves functional testicle)</li></ul>

# Pain Management & The Regulatory Triad



**10-Day FARAD Withdrawal:** Market lambs treated with meloxicam cannot enter the food chain for at least 10 days post-dose. Build this into the production calendar.

# The CDT-Tetanus Interlock



# The Wether vs. Intact Fork

## NSIP Data Pipeline



- Ram lambs require **Scrotal Circumference** measurement (150–240d).
- Requires **Ultrasound** scanning (90–180d).
- Castrating early permanently removes them from individual genetic evaluation.

## Premium Market Channel



- Ethnic buyers for the Eid al-Adha market pay premiums for intact 12–14 month males.

## The Synthesis: Defer the Decision

Run NSIP candidates intact through the 120-day weigh-in. Castration is a fallback for animals that fit neither the breeding nor the intact-male market.



# Ear Tag Mechanics & The Healing Reality

**49%**





of ear-tag wounds remained unhealed by weaning (8–11 weeks post-tagging).

**21%** present with pus at some point.

(Source: 2025 Scientific Reports)

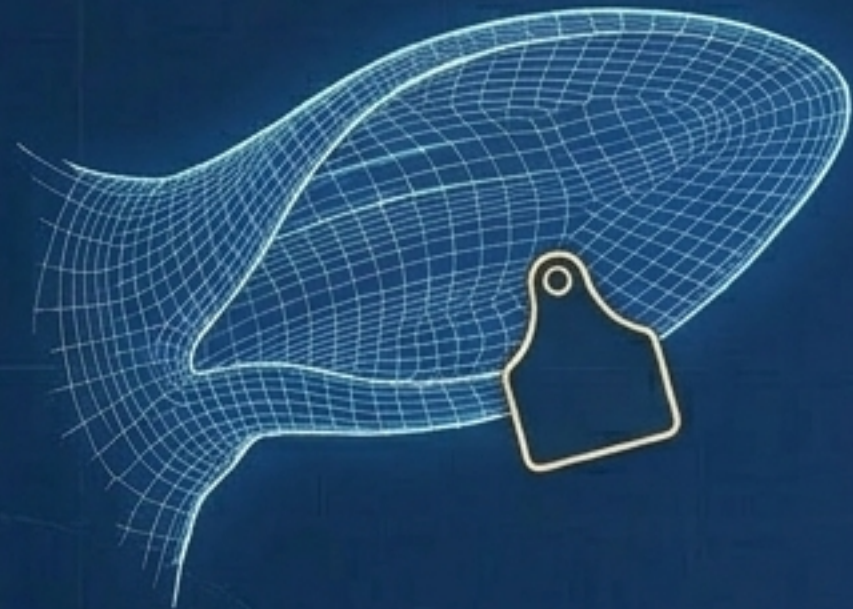
**Placement Zone:**  
Max 2 inches from the base. Avoids fence-tear leverage.

## Operational Rules

1. Tag early (smaller wound). 
2. Tag once (avoid re-piercing). 
3. Avoid peak fly season.  

# The Double-Tagging Strategy

## Phase 1: 24 to 72 hours



The biological tissue remains **constant** while the hardware swaps out.



## Phase 2: 30 to 60 days



- **Action:** Apply small management tag.
- **Result:** Creates the initial hole, provides immediate flock ID, creates minimal wound burden on the newborn.

- **Action:** Remove management tag and apply large official Scrapie/KHSI tag in the same hole.
- **Result:** The ear is thickened, lamb is stronger, and federal/registry compliance is achieved without creating a second wound.



# The Procedure Katahdin Owners Skip.

The KHSI breed standard explicitly does not require tail docking.  
Katahdins have a natural short-to-medium tail.

- ✓ Zero tail-docking pain management
- ✓ Zero tail-wound tetanus risk
- ✓ Zero fly-strike risk from docking necrosis

# Synthesis: The First 90-Days Procedure Calendar

