SensiVida Intradermal Allergy Test
=> Animals

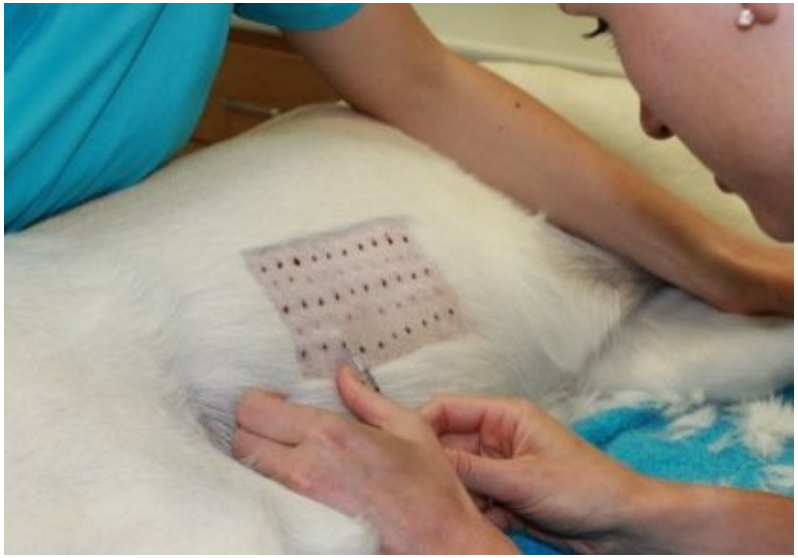
Allergy Test for Pets/Dogs

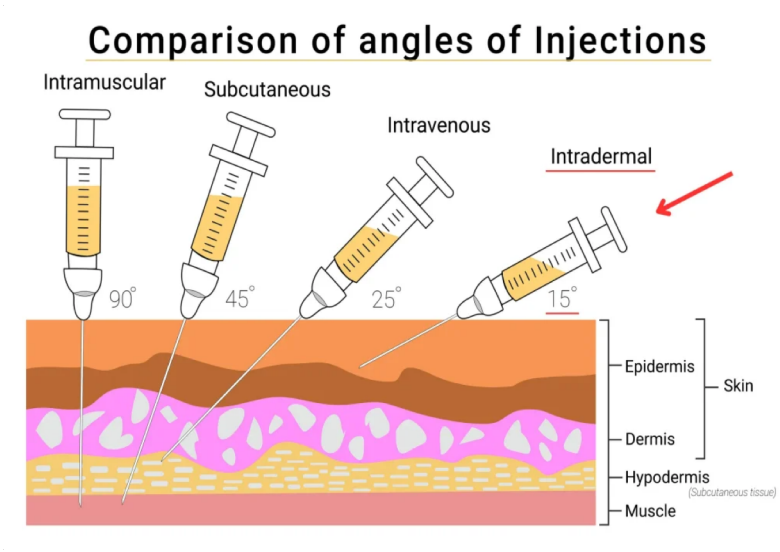
- Allergy tests for animals/pets are done predominantly using **Intradermal Allergy Tests**
  - **Gold standard for diagnosing pet allergies**
  - Most reliable method for environmental allergies
  - Most sensitive
  - Most accurate
  - Most consistent results
  - Widely used by veterinarians
  - Tests performed under sedation

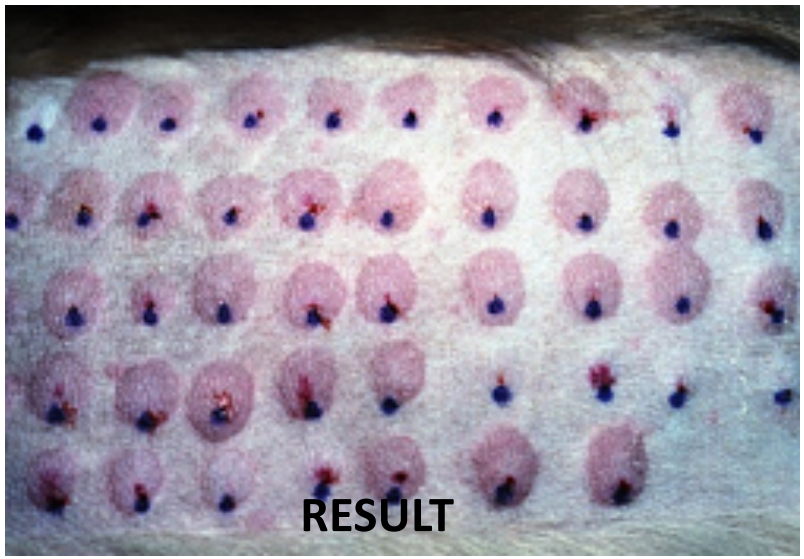
Intradermal Allergy Test

- Animal is sedated to avoid pain and stress
- Patch of hair is shaved side of chest
- Marks are placed ~2.5cm to locate each allergen
- Allergens are injected into skin
- ~20 minutes after injections, sites are examined for large wheals and erythema (redness)
- Intensities of reactions are compared to negative control (saline) and positive control (histamine)
- Positive/negative reactions are documented

Intradermal Allergy Test- Canine







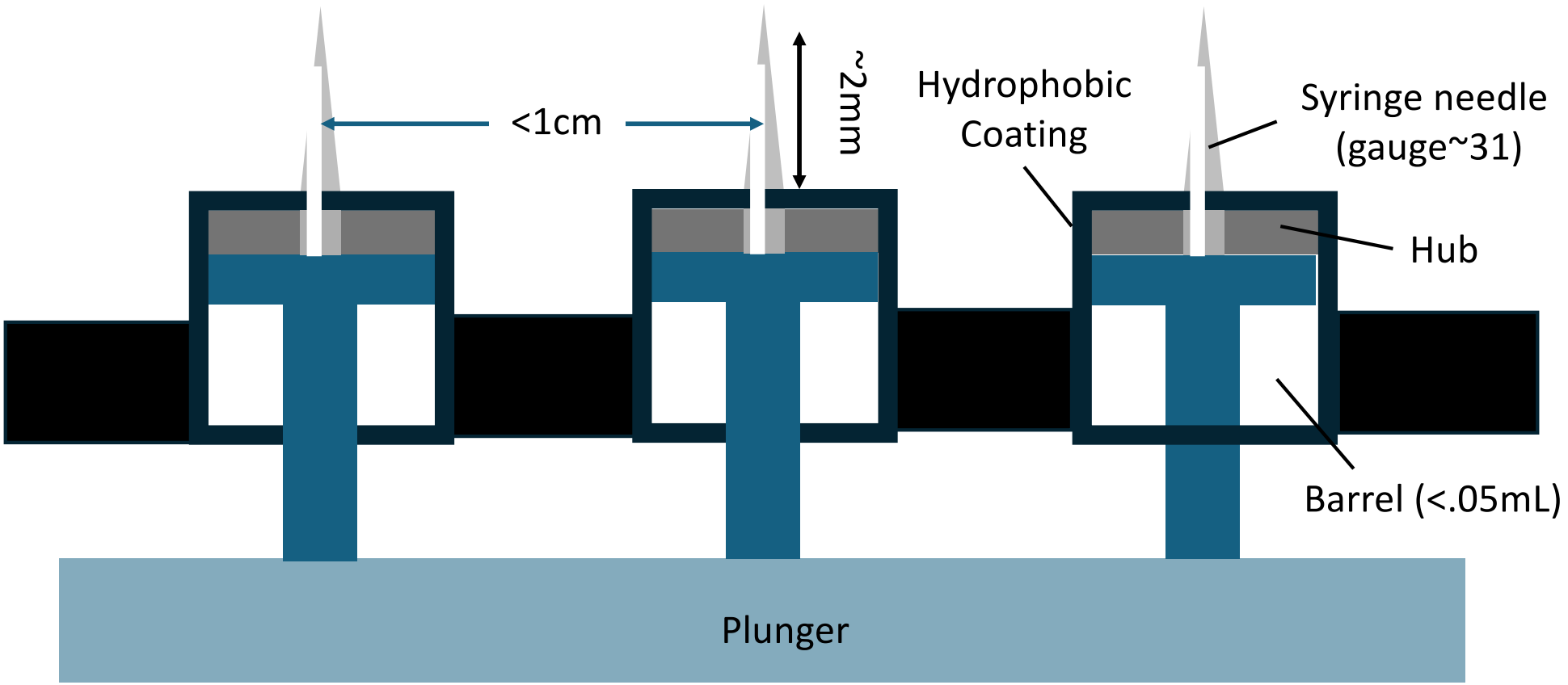
Intradermal Allergy Test (IDT) vs Skin Prick Test (SPT): Animals

- IDT is more sensitive – allergen is injected under shaved skin to activate mast cells directly
  - Higher sensitivity
  - Greater accuracy
  - Less false negatives
  - **Gold standard for pets/animals**
- Skin Prick Test (SensiVida's test) of shaved animal skin surface is less reliable than IDT
  - Inconsistent results
  - More difficult to read/diagnose
  - More false negatives
  - May be used by veterinarians as an initial screening
    - For accurate results IDT is typically used

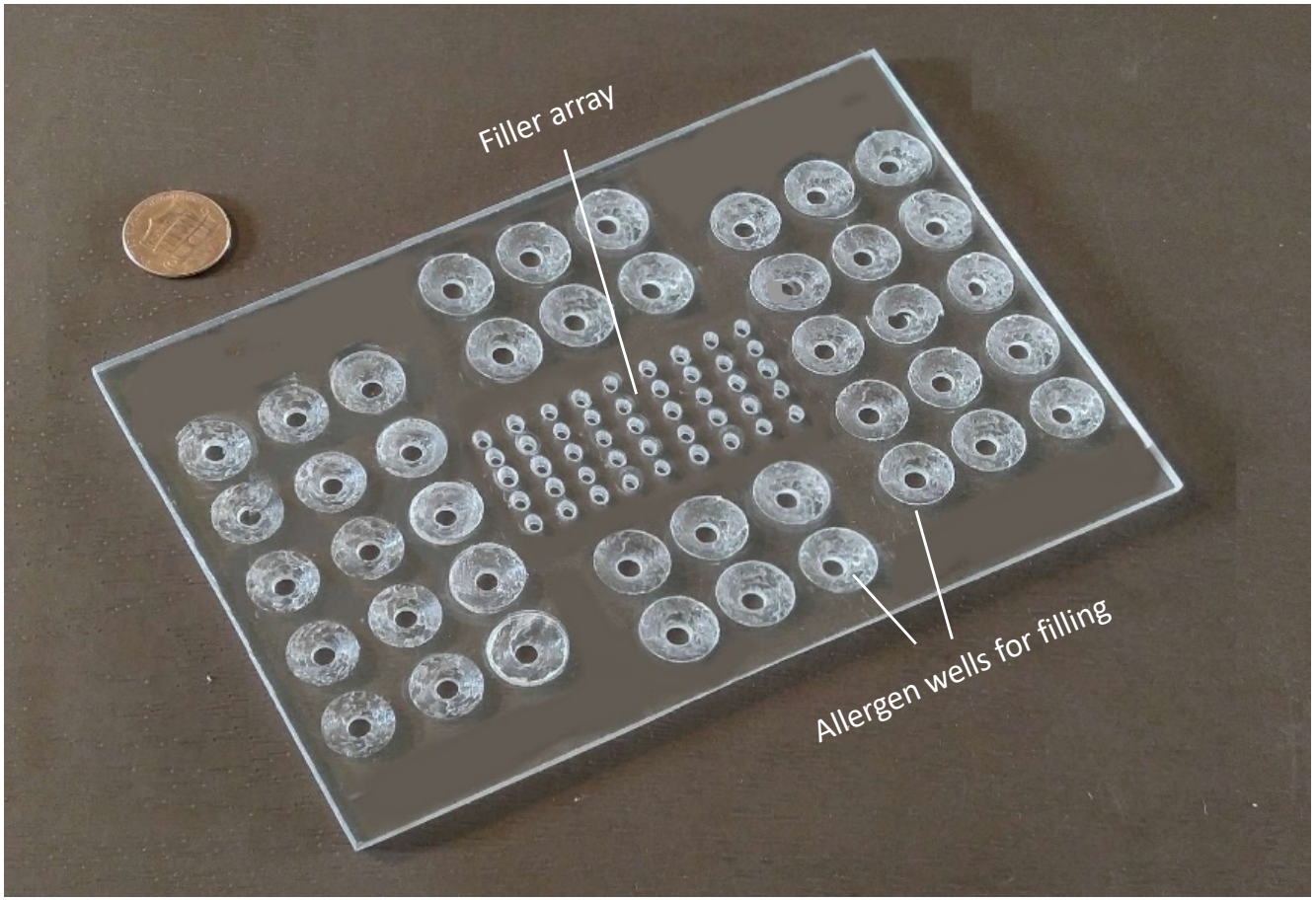
NEW CONCEPT

- Array of injectable syringe needles is loaded with allergens
- Uses allergen loading approach and “planar allergen filler concept” covered by patent US 11931537
- Uses novel syringe array system that can dose animals with multiple allergens intradermally
- Uses digital means to capture and analyze images of intradermal wheal reactions covered by patent US 10244981B2

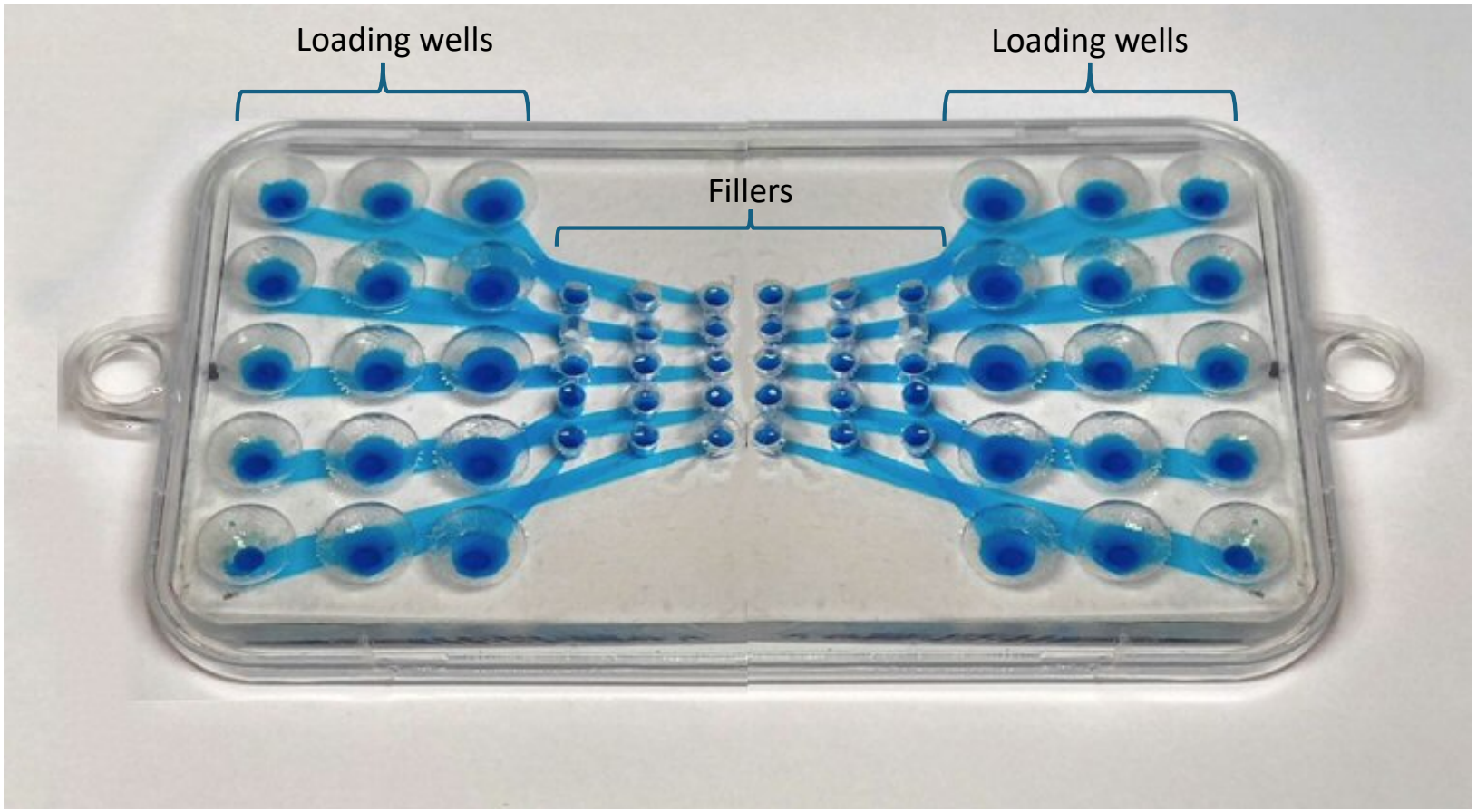
Intradermal Multiple Syringe Concept



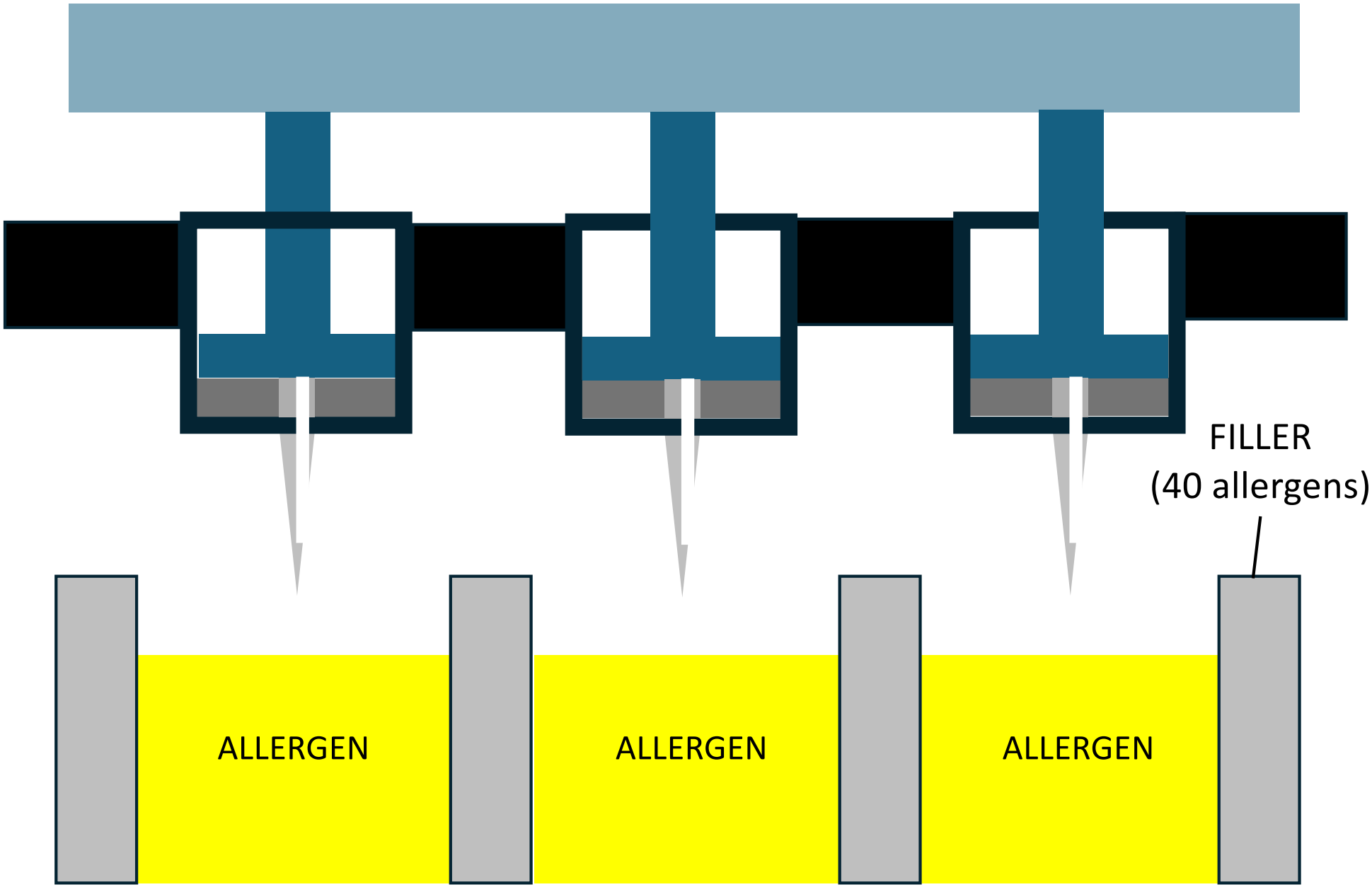
Planar Allergen Filler Concept



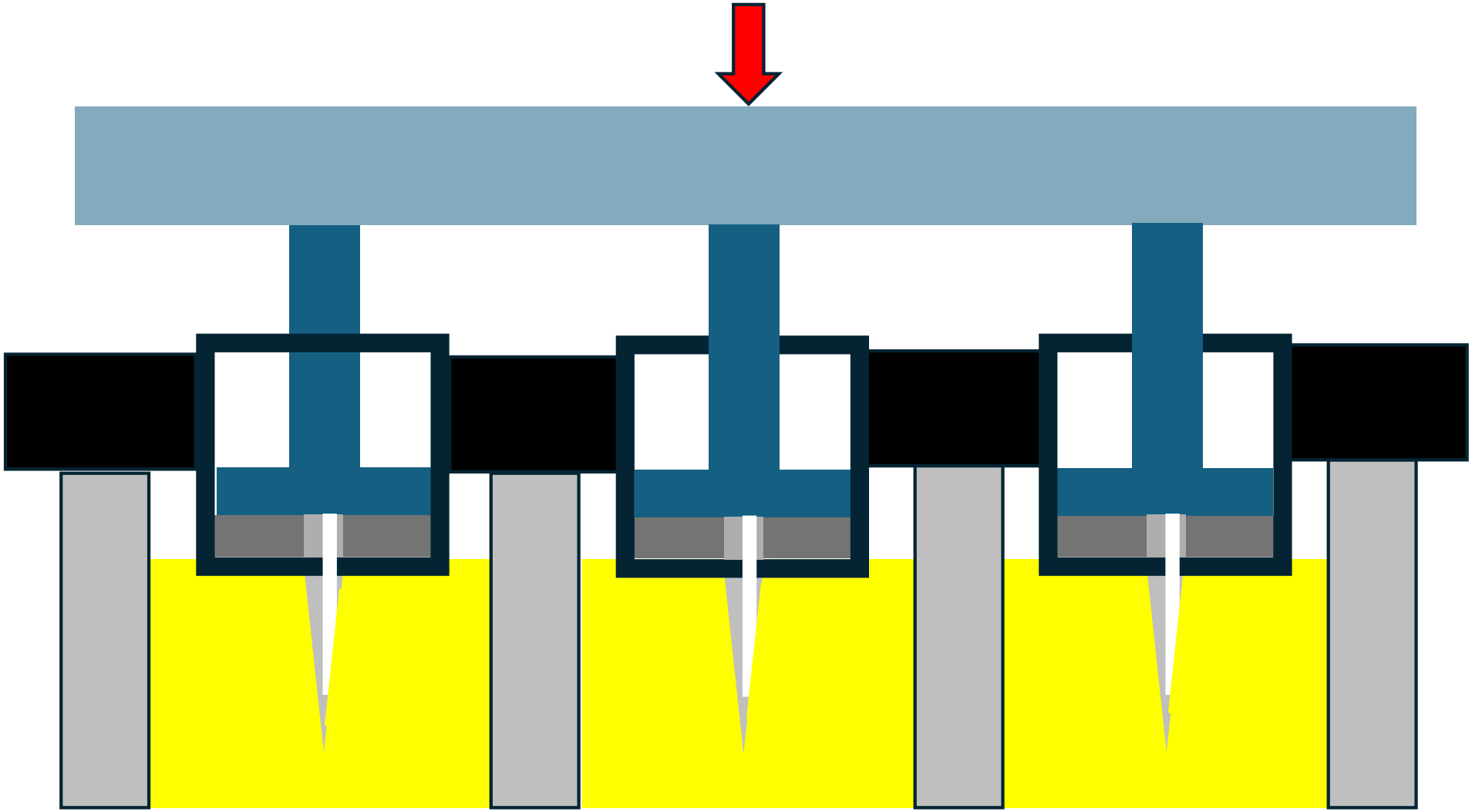
Allergen Filler



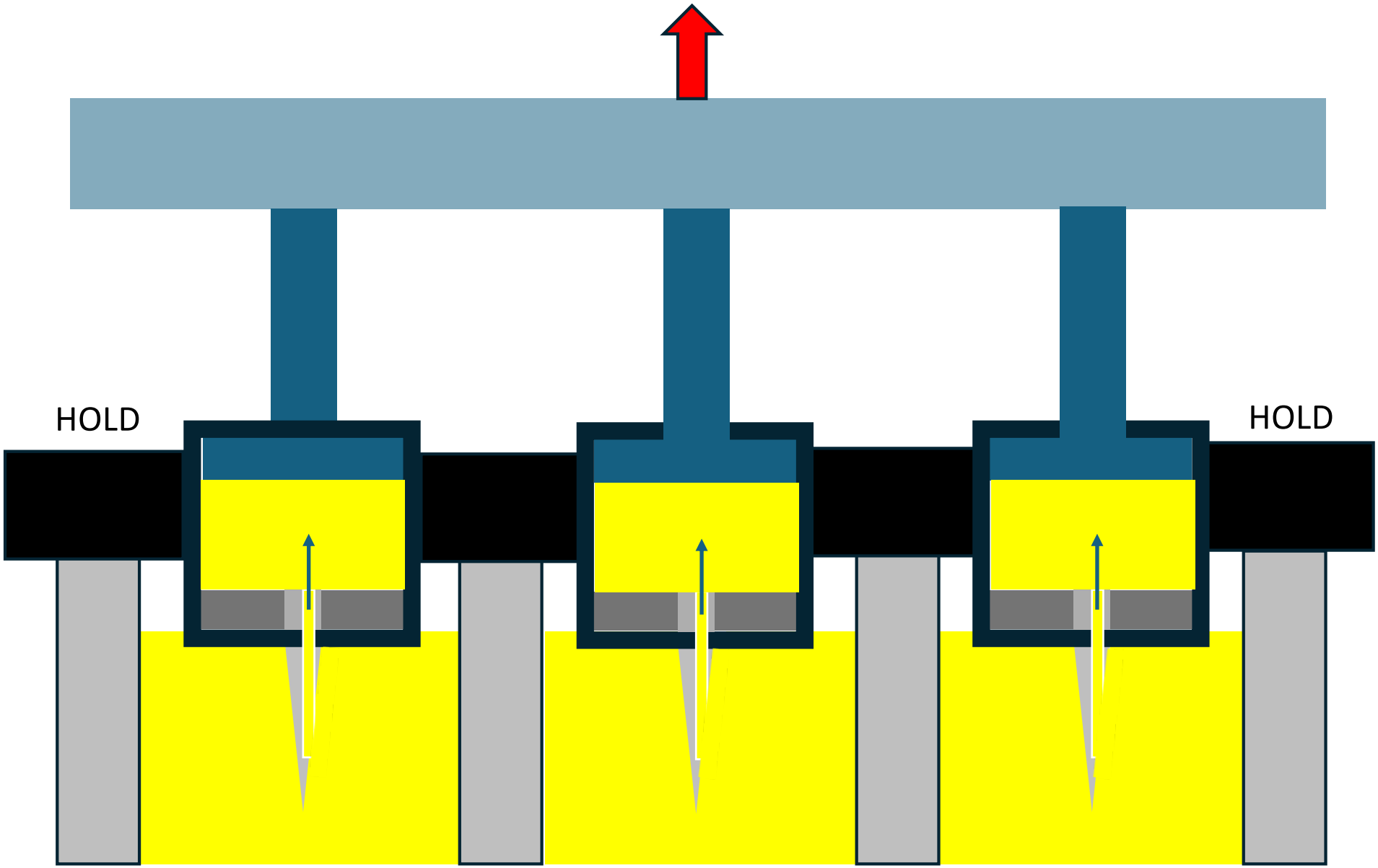
Intradermal Multiple Syringe System



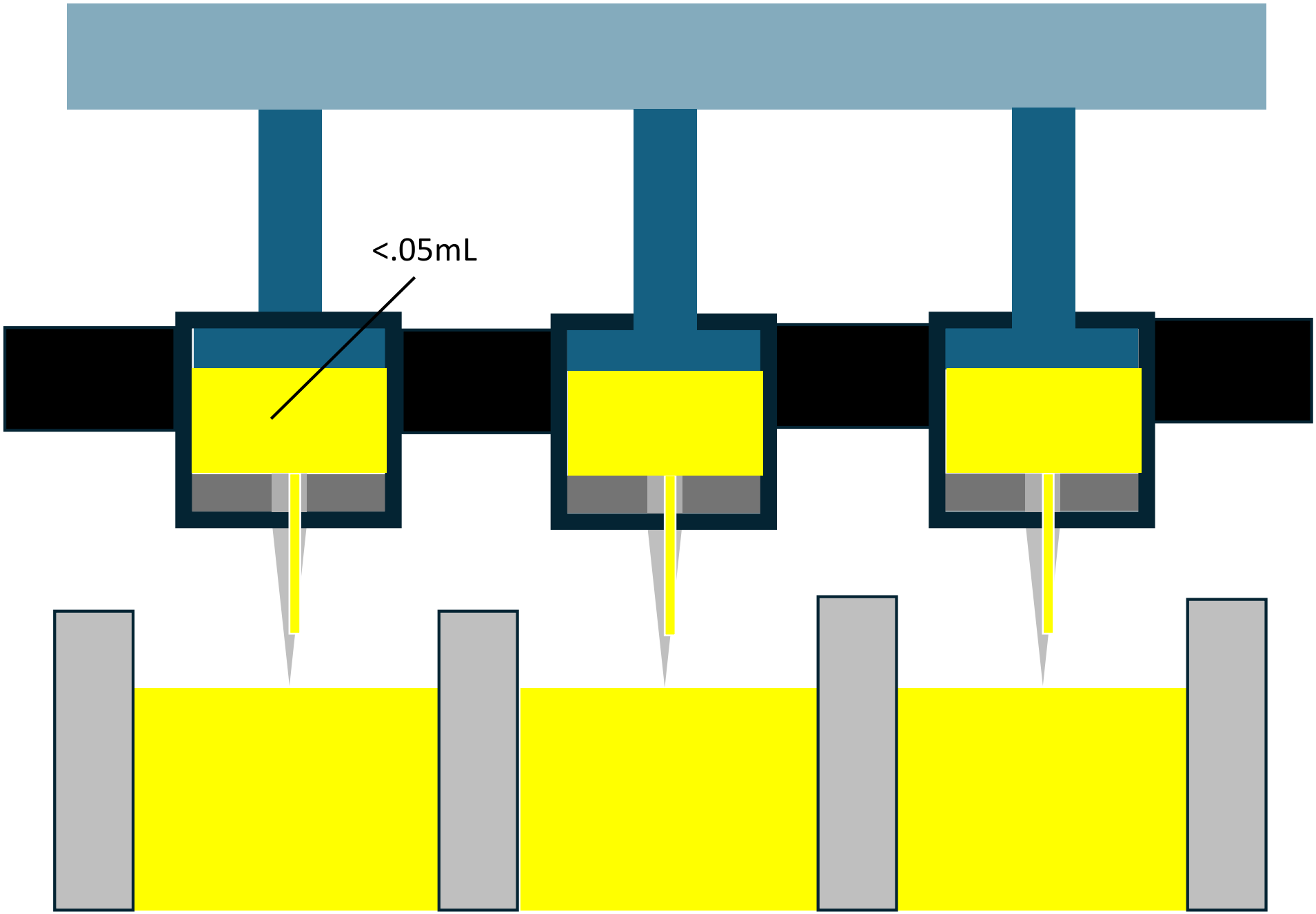
Intradermal Multiple Syringe Filling Process



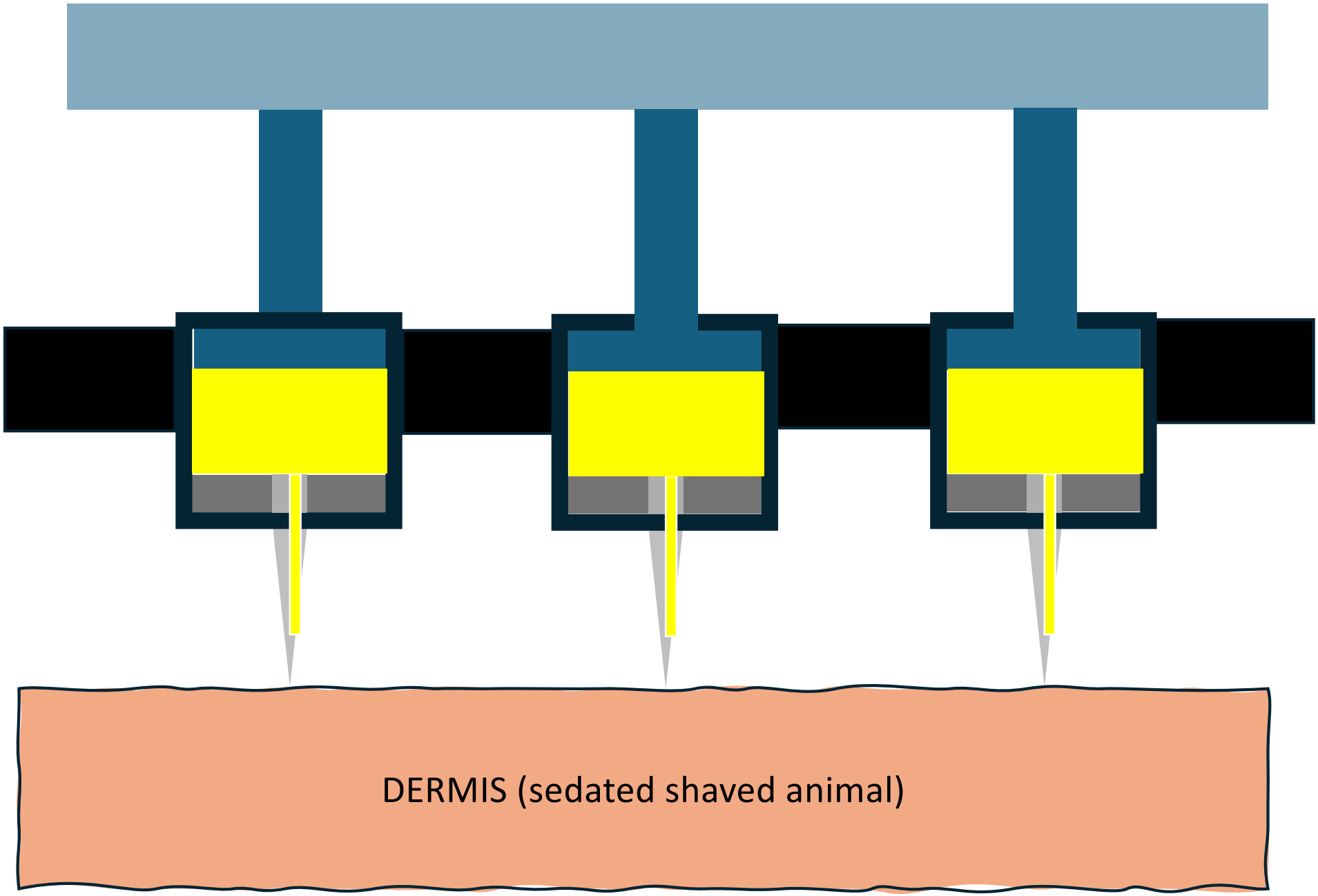
Intradermal Multiple Syringe Filling Process



Filled Intradermal Multiple Syringes



Intradermal Syringe Dosing Process



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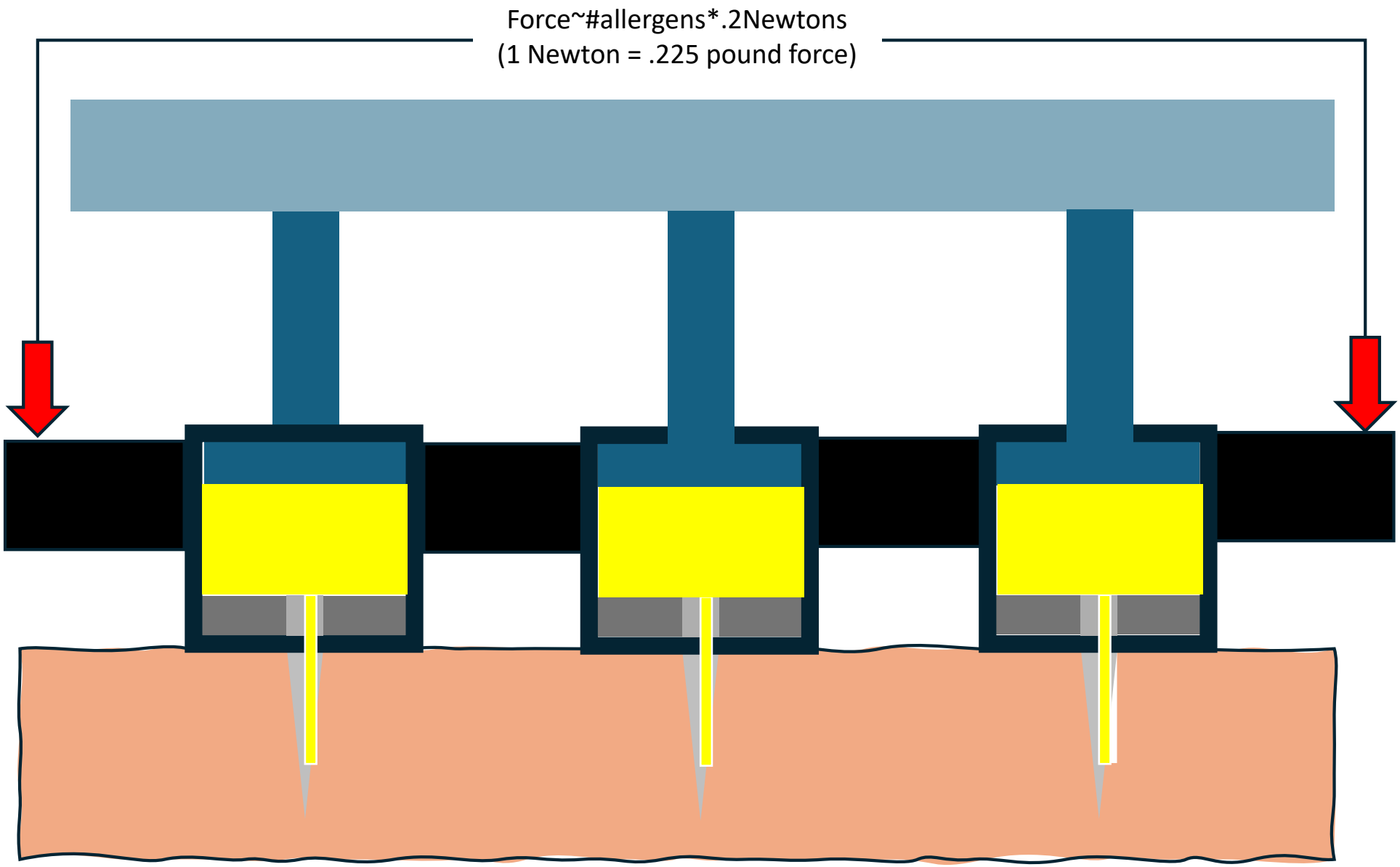

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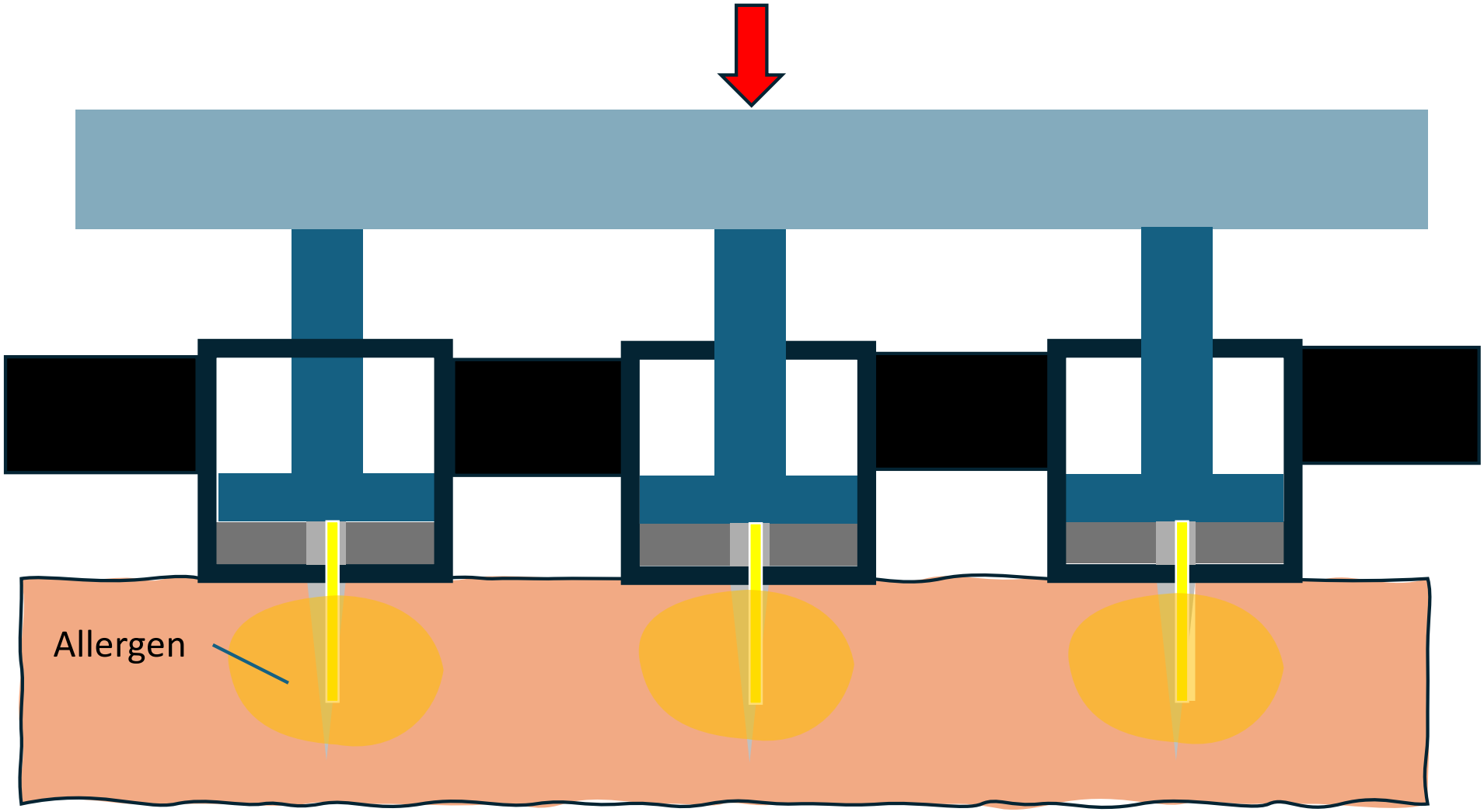
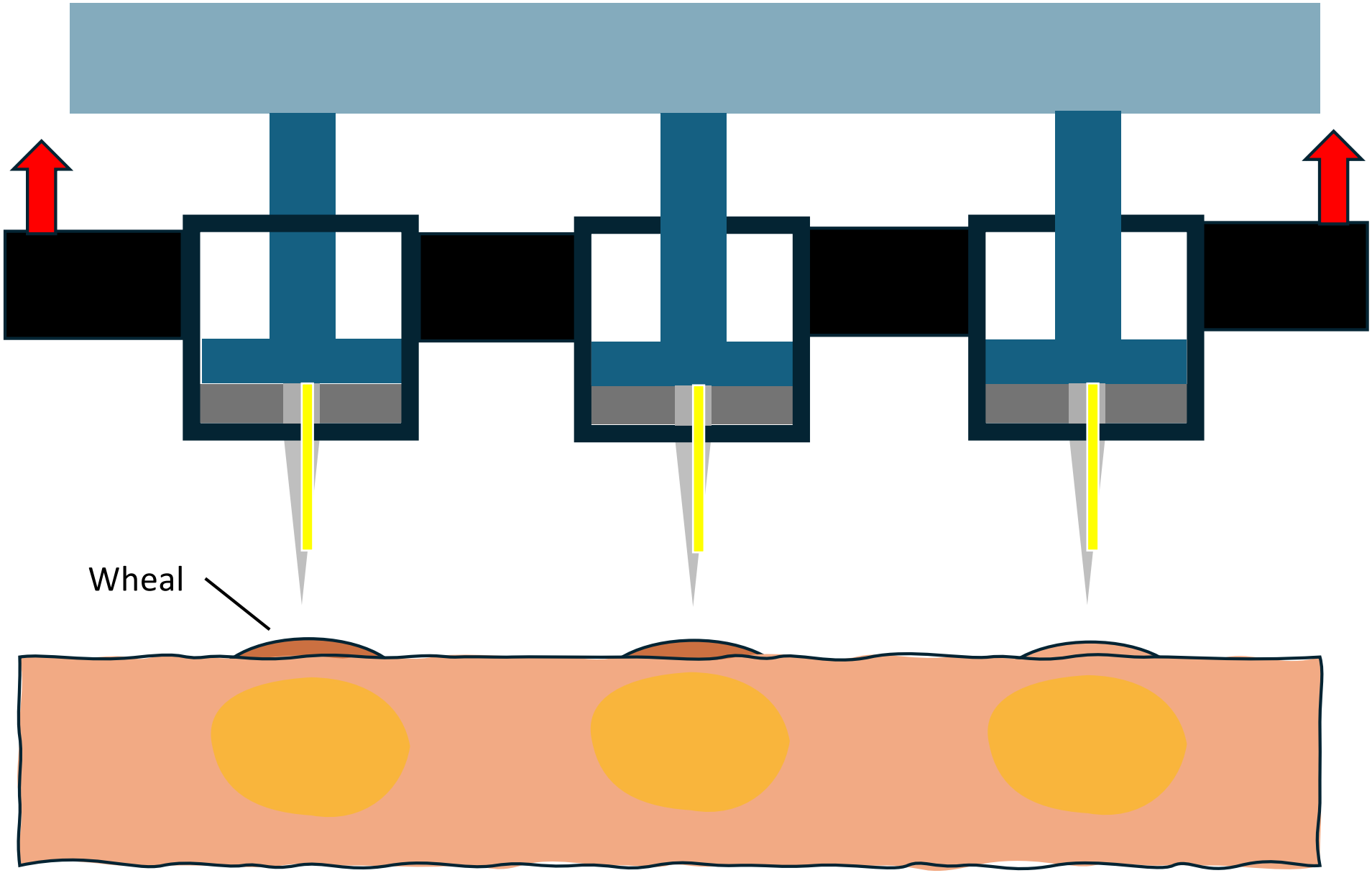
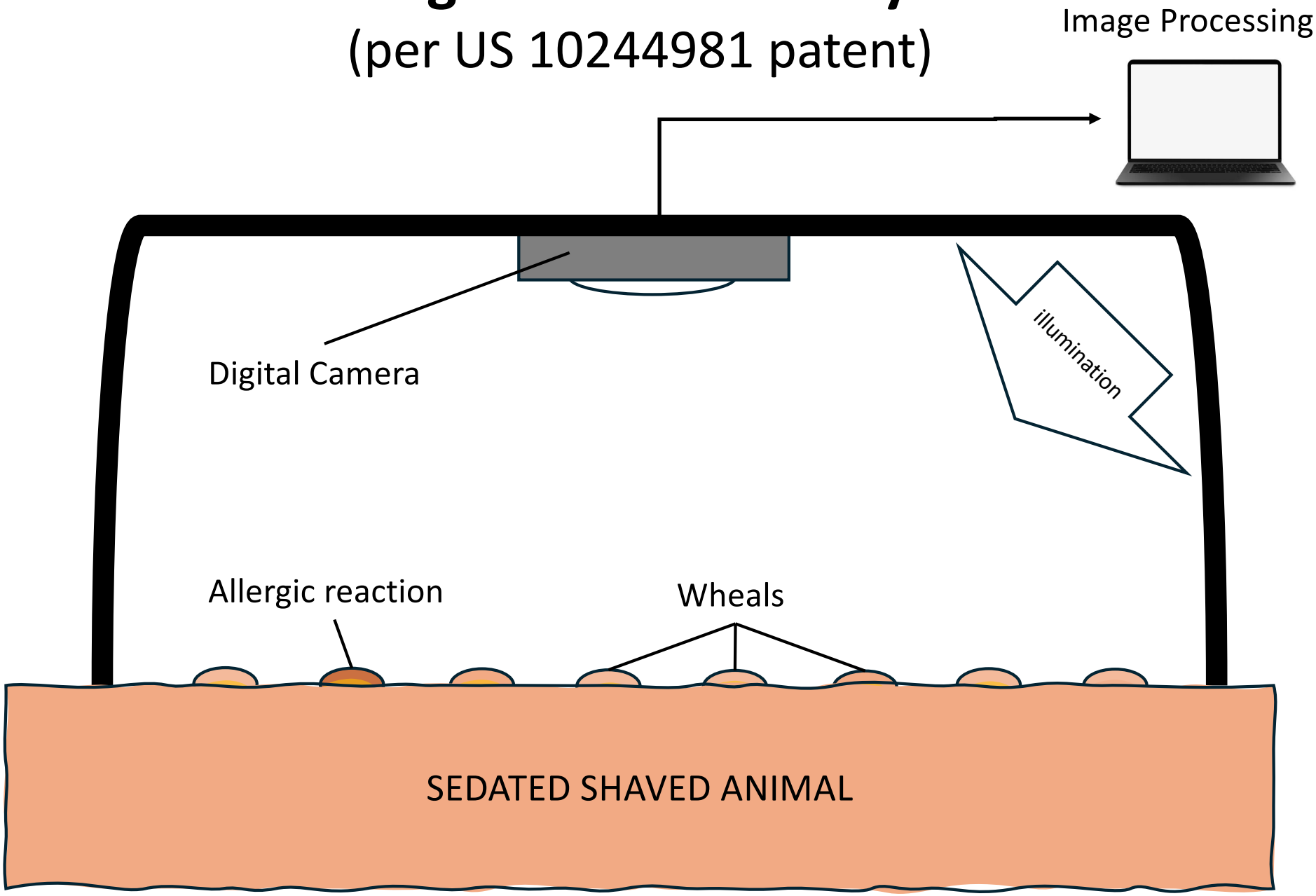


Intradermal Syringe Dosing Process



Allergic Reaction Analysis

(per US 10244981 patent)



Syringe Spacing and Allergen Dose

- As a result of using digital means to capture and analyze images (covered by patent US 10244981B2), smaller doses and closer spacings between syringes are achieved
- Allergen amounts less than .05mL, commonly used in today's intradermal test, are possible
- As a result, spacings between allergen sites less than 2 cm are possible (e.g. 1cm)
- Reduced test area for animals ¼ or less are possible

Multiple Syringe Prototype