

Rapid Plasma Reagin (RPR) for Syphilis

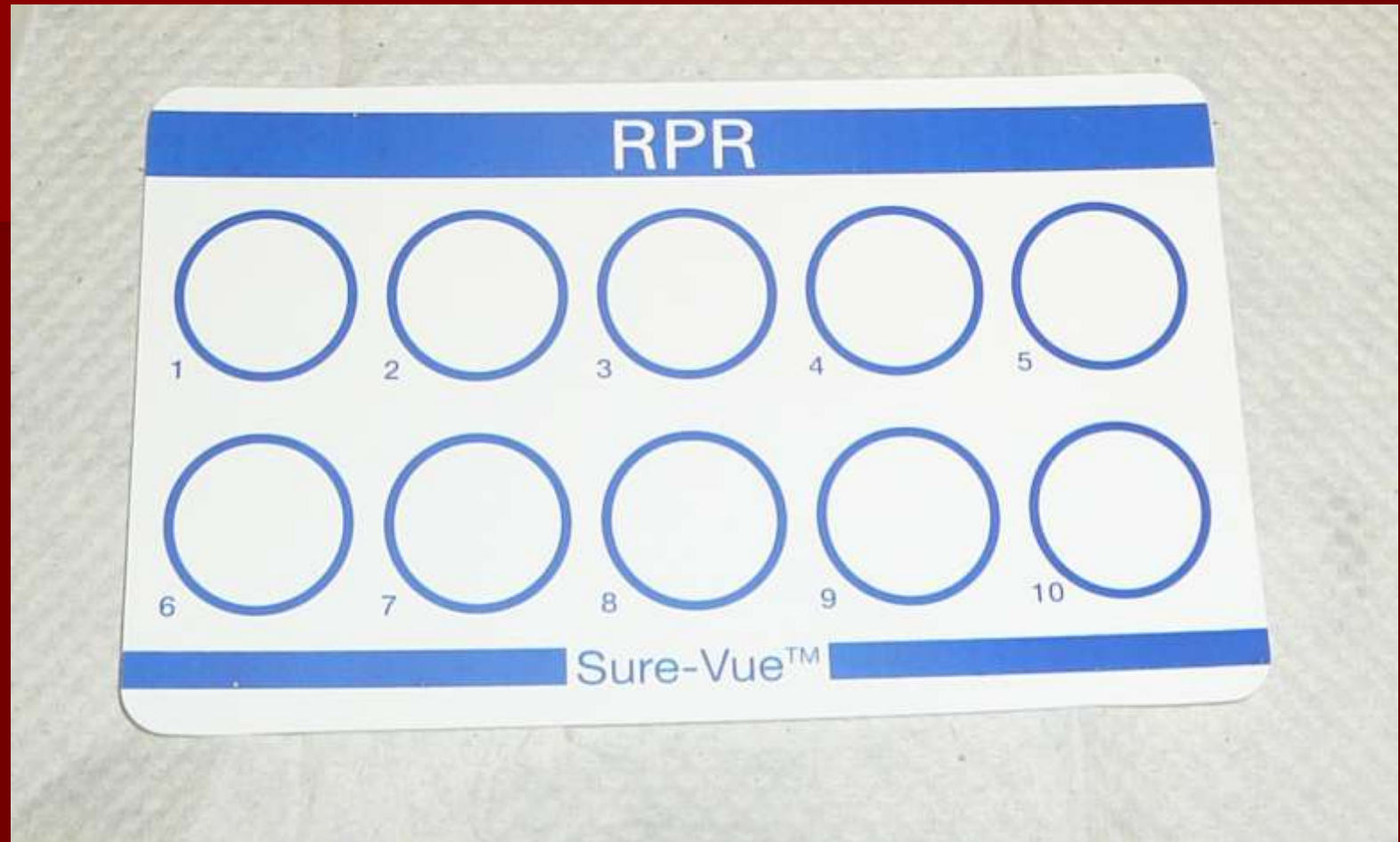
Lab 9

Part 1

Materials

Cardiolipin Antigen suspension





RPR Test Card



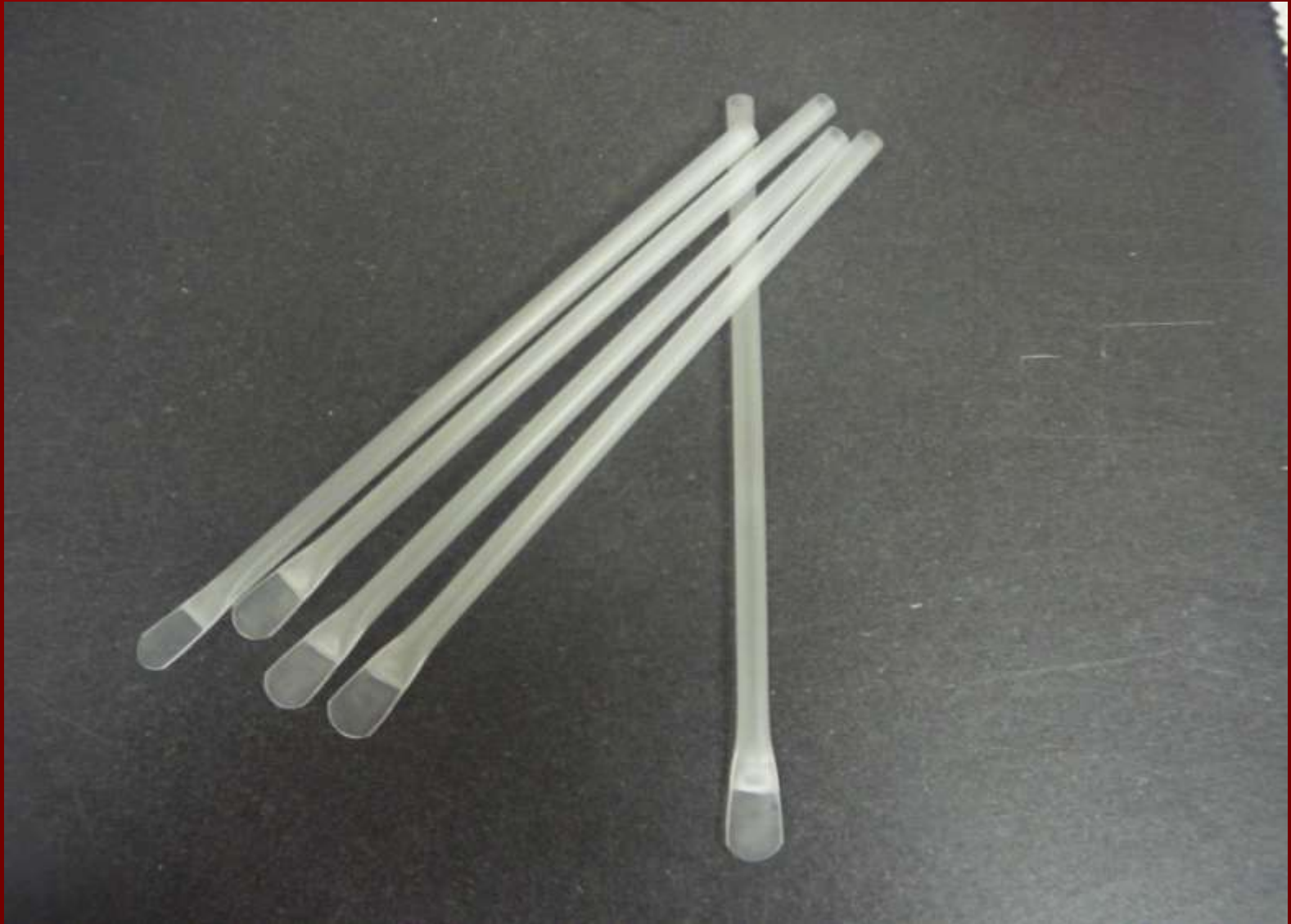
RPR Dispensing Bottle



Rotater



Timer



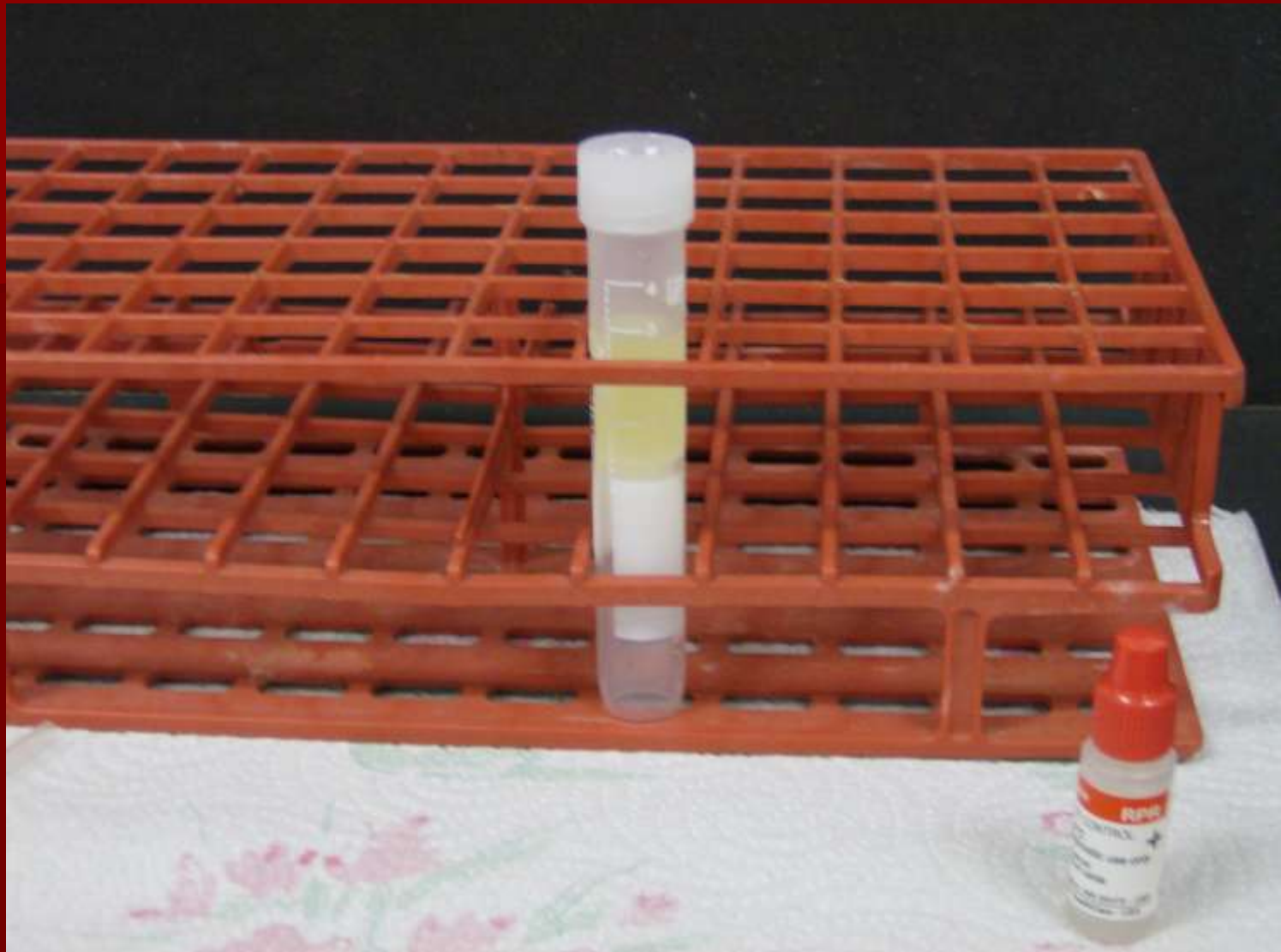
Dispenstirs



Work Mat (Paper Towel)



Test Tube Rack



Serum



Lab Coat



Disinfecting wipes



Biohazard container



Reactive control



Weakly reactive

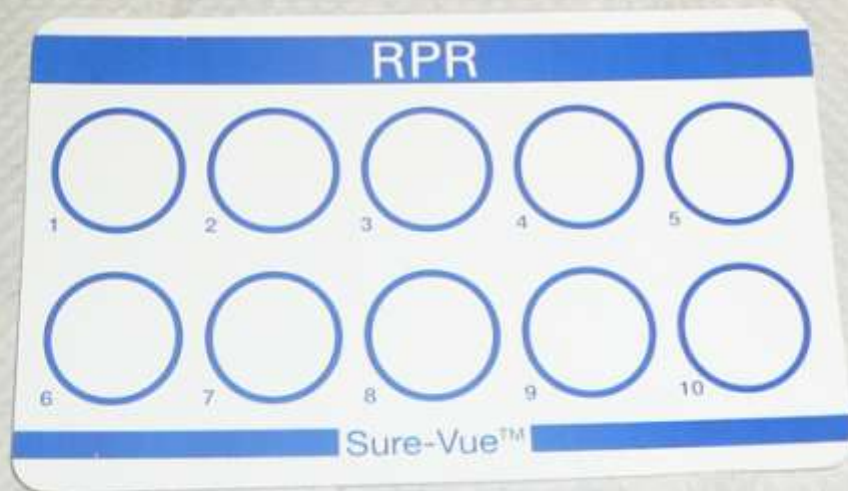


Non reactive controls.

Procedure

Make sure to observe the reactive, weakly reactive and non reactive controls.

This is what your lab set up
should look like.



Label your RPR test card like this. R is for the reactive control, WR is for the weakly active control, NR is for the Non Reactive control, and PX is for the patient's serum.

RPR

R



1

WR



2

NR



3

PX



4

**Place one free falling drop
of the Reactive Control
in the circle you labeled
R on your RPR test card.**



**Place one free falling drop
of the Weakly Reactive
Control in the circle you
labeled WR on your RPR
test card.**



MINISTRI

ACTIVE CONTROL
to 8°C
diagnostic use only
human serum
sodium azide
Lancaster, MA 02477

Vue™
ACTIVE CONTROL
to 8°C
diagnostic use only
human serum
sodium azide
Lancaster, MA 02477

VOL. 1 ml
LOT 1-0804
30APR06



**Place one free falling drop
of the Non Reactive
Control in the circle you
labeled NR on your RPR
test card.**



ISTRY

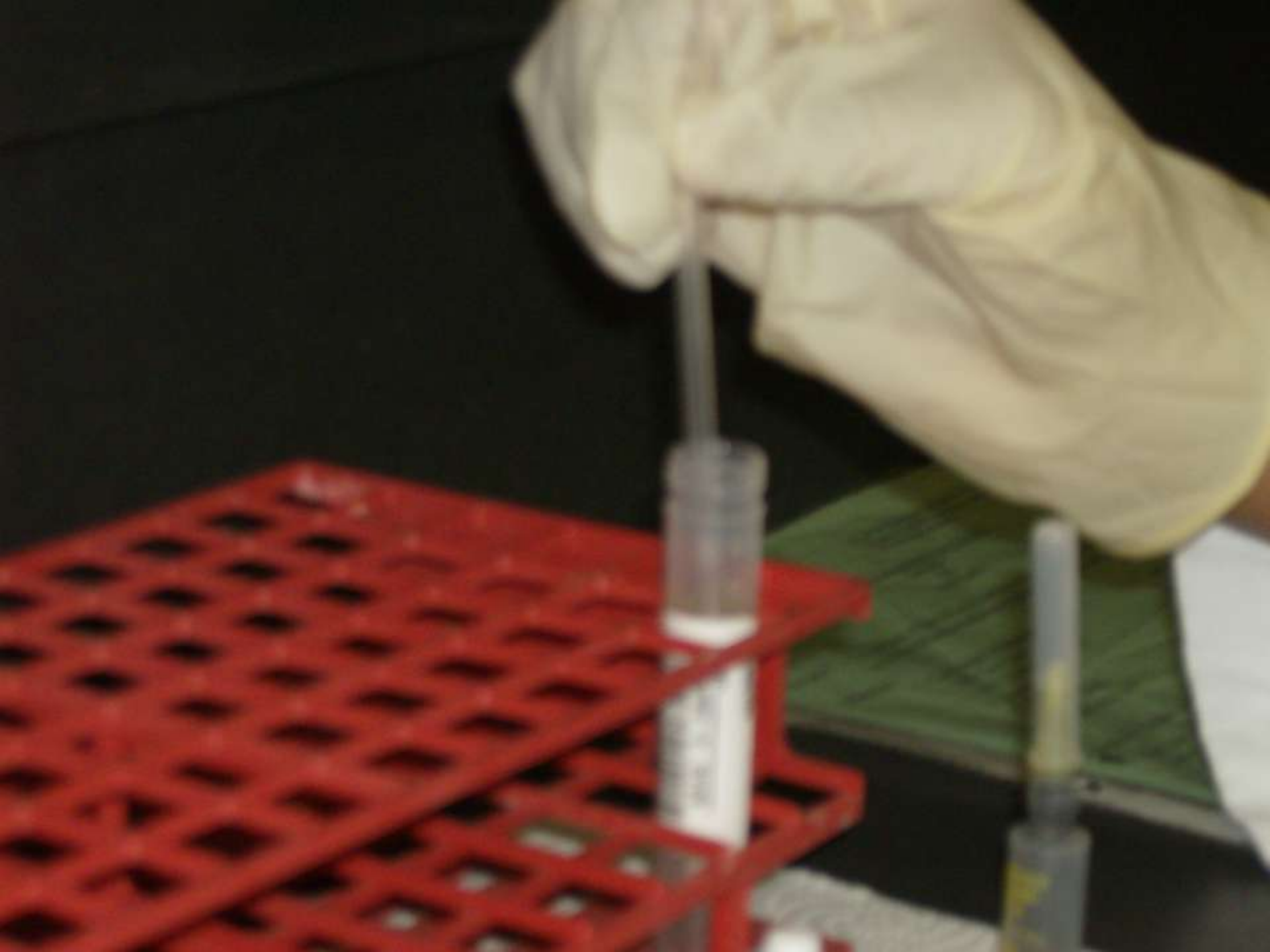
Pre-Vue™
REACTIVE CONTROL
2 to 8°C
diagnostic
Human serum
0.1% sodium azide
Lexington, MA
Fisher Healthcare

Pre-Vue™
REACTIVE CONTROL
2 to 8°C
diagnostic
Human serum
0.1% sodium azide
Lexington, MA
Fisher Healthcare

RPR
1 ml
LOT
VOL.
USA

RPR

**To use the dispenstir,
squeeze the top side
with the paddle up.**



**Release the top of the
dispensator in order to place
one drop of serum onto the
RPR test card.**



ID 6083-2 SV05

HYDROGEN
PEROXIDE
10% (v/v)
100 mL
21201

RPR
CONTROL
10% (v/v)
100 mL
21201

RPR
CONTROL
10% (v/v)
100 mL
21201

RPR

Turn the dispenser to the opposite end, and stir serum covering the circle completely.



Gently mix Antigen suspension and then drop 3 drops of Antigen on the outside of the circle. Place one drop of antigen in the center of your serum. While still applying pressure to the bottle, draw up the 3 extra drops.



Place card on rotator.



**Leave the RPR test card
on the rotator for 8
minutes at 100 rpm's**



**After 8 minutes, observe
a tail for a non reactive
result or agglutinations
or a reactive result.**



**Replace and dispose of all
supplies and equipment
according to instructor**





**Disinfect work area and
any other item that may
be contaminated with
body fluids.**

What are the Normal Ranges?

A non-reactive result normal.
However, false-negatives may occur in persons with early- and late-stage syphilis. A **treponemal** may be needed before ruling out syphilis.

Serologic Agglutination Test Lab

Lab 9

Part 2

Purpose:

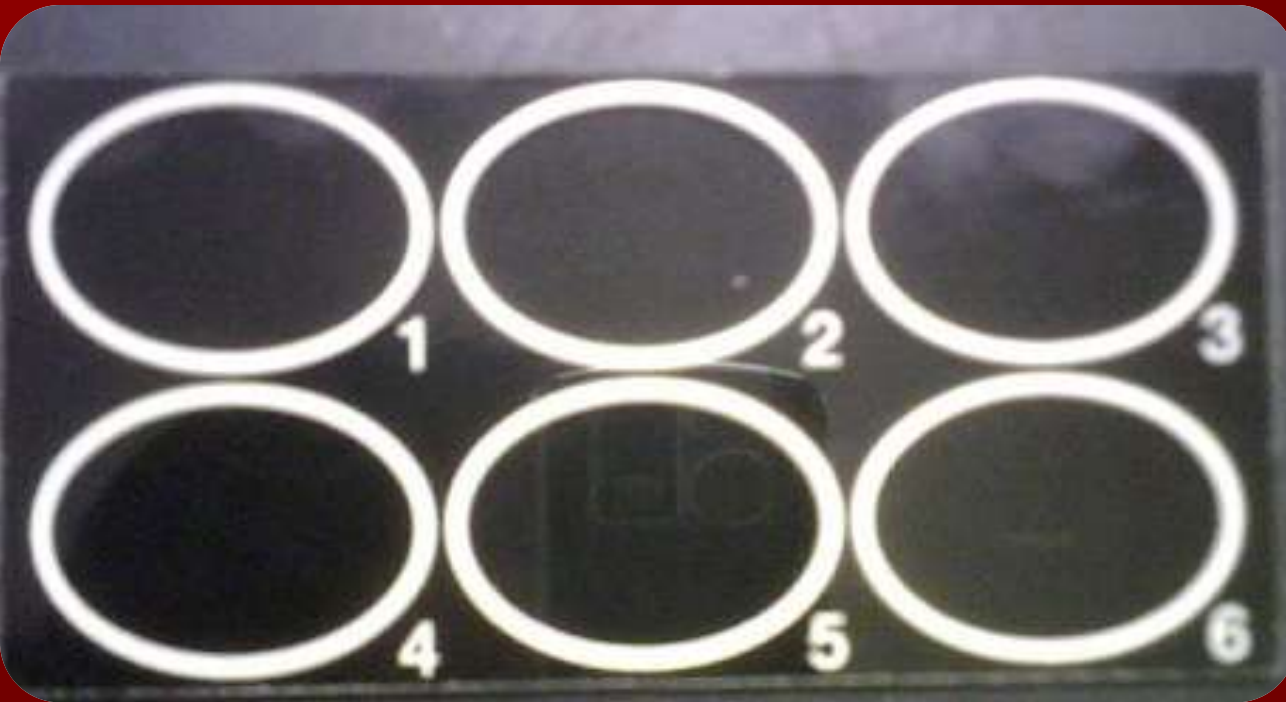
- The purpose of the serology tests are to learn to conduct test to detect diseases such as mononucleosis, rheumatoid arthritis, chronic discoid lupus, and chronic liver disease and dermatomyositis.

MATERIALS for Serology Test



**SERUM
SAMPLE**

AGGLUTINATION CARD





APPLICATOR STICKS





ANTIGEN LATEX SUSPENSION



PLASTIC DISPENSER OR PIPETTE WITH TIPS





WORK MAT



LABORATORY COAT



DISINFECTING WIPES



BIOHAZARD CONTAINER



ROTATOR



5 DIFFERENT TESTS!

SURE-VUE ASO



SURE-VUE CRP



Sure-Vue™ CRP

50 Tests

Cat. No. 23-038001

Rapid test for the qualitative and semiquantitative determination of C-REACTIVE PROTEIN in serum by agglutination of latex particles on slide. Measurement of C-reactive protein aids in evaluation of the amount of injury to body tissues.

Store at 2 to 8° C.

For IN VITRO diagnostic use only.

Contains human source material.

Review enclosed insert prior to use.

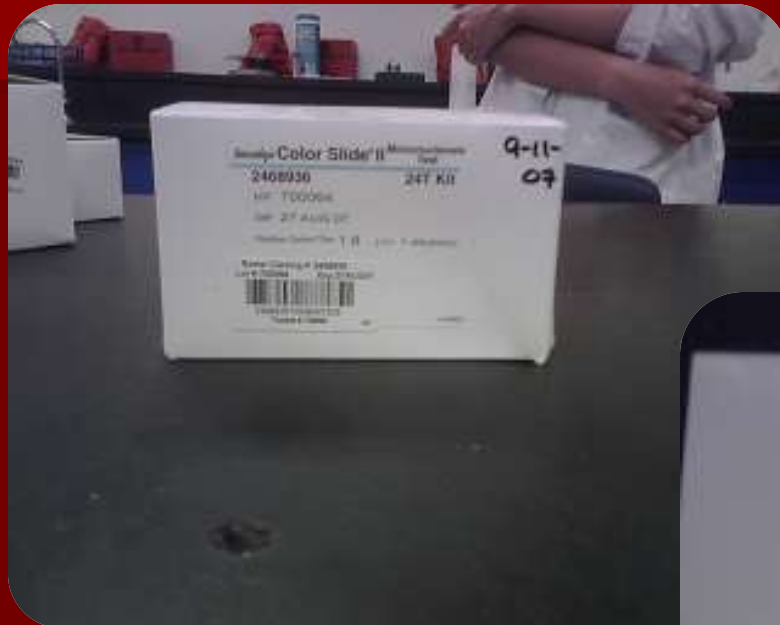
SERADYN SERATEST SLE



SURE-VUE RF (rheumatoid factor)



MONONUCLEOSIS TEST



PROCEDURE

SURE-VUE TEST

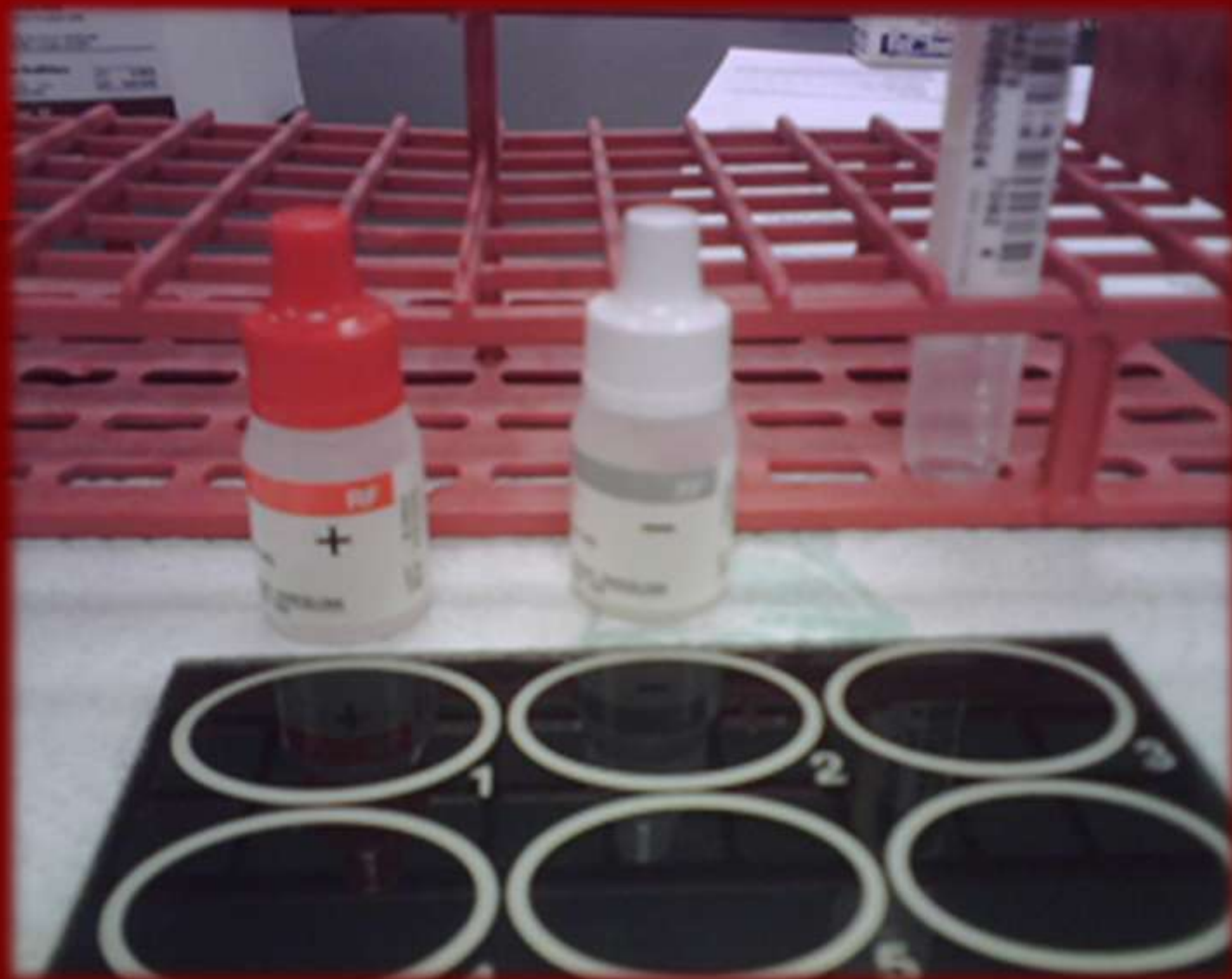
ASO, CRP, SLE, RF

FOR SURE-VUE TEST:



Each Sure-VUE test contains:

- A latex reagent, a positive control, and a negative control.



Step One:

- Allow reagents and samples to reach room temperature (20 to 30 degrees Celsius)



Step two:

- Gentle shake the reagent vial to disperse and suspend the latex particles in the buffer solution.
- *Vigorous shake should be avoided!*







NOTE:

- Whatever the procedure says to do for the patient, you do so for the control as well.



STEP THREE

- Place 50uL of the serum onto one section of the disposable slide.
- When doing so, place solution with a **VERTICAL FREEFALLING DROP!**



So you also:

**Do so for the negative
control**



FOR SERUM:

Apply pressure to pipette to
get serum.



**APPLY VERTICAL FREEFALLING
DROP**



**Dispose remaining serum in
container.**



STEP FOUR:

- Place one drop of reagent next to the drop of serum.
- For each of the circles!



- Place drop on the negative circle



- Place drop on the Px circle



STEP FIVE:

Mix both drops with a stirrer covering the whole surface of the slide section.



- Mix the negative control



- Mix the patient control



STEP SIX:

- Dispose of applicator sticks, etc. in biohazard sharps container.





STEP SEVEN:

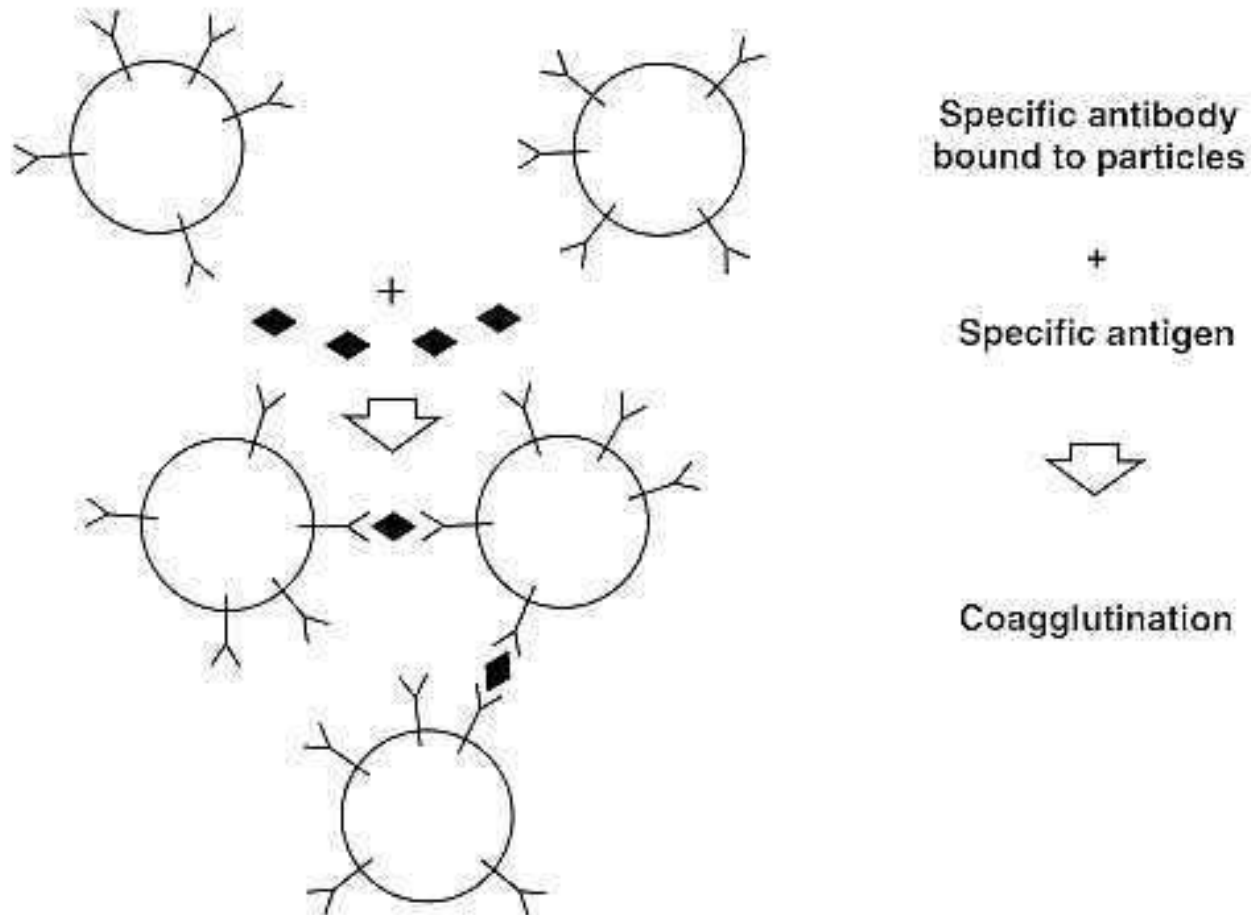
- Gently rotate the slide for 2 minutes manually or on a rotary shaker set at 80-100rpm.



WHILE on ROTATOR

- The clinical significance of the test . . .
- Principle: in the patient serum, you are looking for a negative result. You are using latex in your reagent in order to see the test reaction.
- Negative vs. positive result. A positive result is a “clumped” liquid while the negative result is “non-clumped”. From your controls you will determine your results.

**MICROSCOPIC antigens are coated
with latex, to be seen ->
agglutination of latex**



STEP EIGHT:

- Look for the presence or absence of agglutination after the aforementioned period of time.



STEP NINE:

- To disinfect test card, spray Lysol on card, rub for a minutes, then rinse, and dry.



- Rinse card



- Wipe card



INTERPRETATION OF RESULTS

MONONUCLEOSIS TEST

Materials contained in box:

- Reagent A; Guinea Pig Kidney Antigen
- Reagent B; Preserved Horse Erythrocytes
- Positive control: Human Serum
- Negative Control: Human Serum
- Color Slide II Mononucleosis Test cards
- Pipettes
- Bottle droppers
- Seradyn color slide II guide

■ EACH MONONUCLEOSIS
TEST CONTAINS:



BEFORE:

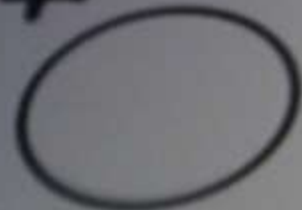
- Bring all liquid reagents to room temperature before using.
- Replace caps on Reagent A and Reagent B with bottle droppers provided.

BEFORE:

- Label circle 1 +, circle 2 -, and circle 3 Px (patient)

Seradyn Color Slide® II Mononucleosis Test

+



remel

-



remel

Rx



remel

NOTE:

- How to use pipettes: Squeeze bulb of transfer pipette and insert into sample. Release pressure to draw serum, plasma, or whole blood into pipette channel. To dispense one drop of sample gently squeeze the pipette while holding it vertically over the test card. Use a separate pipette for each sample. When handling pipettes, avoid touching tip.

For mono-test:



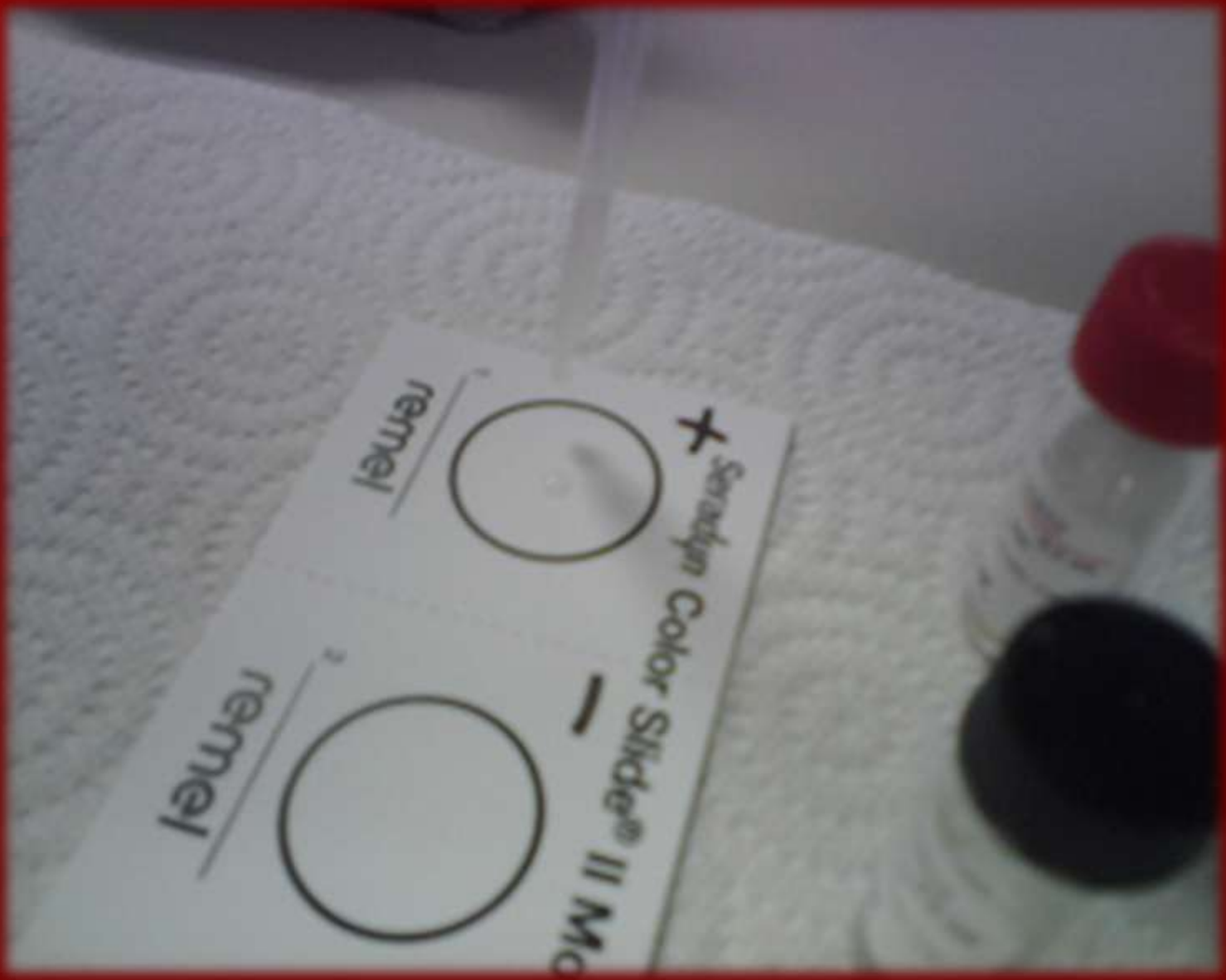
STEP ONE:

- Gentle shake Reagent A vial and add one drop to the left side of the test circle on the Seradyn Color Slide II Test Card.



Do so for all test circles:

- Place drop in the left side of the positive test circle



- Place drop on the left side of the negative test circle



- Place drop on the left side of the Px circle



STEP TWO:

- Invert Reagent B vial several times to mix. Add one drop of Reagent B to the right side of the test circle.

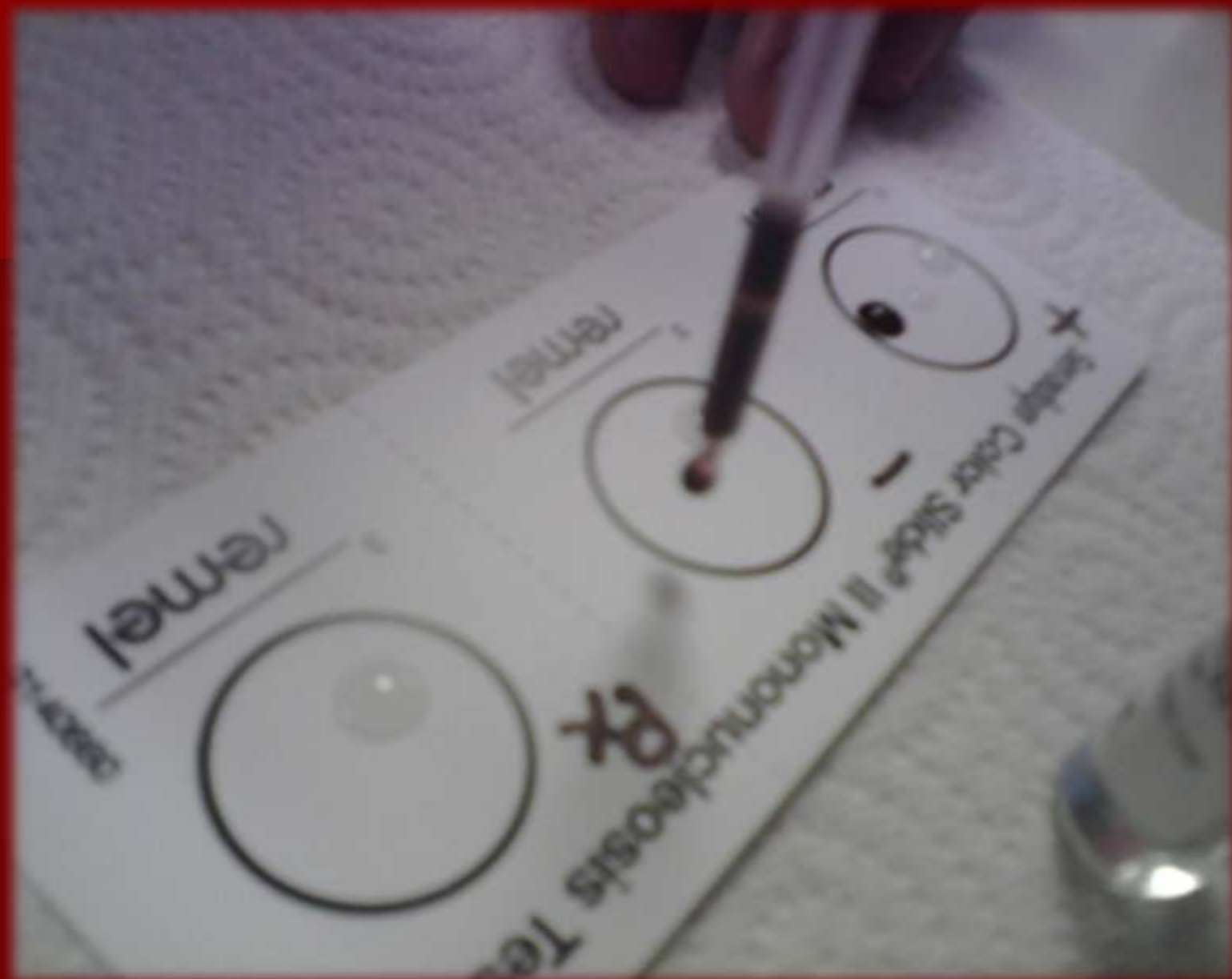


**DO SO FOR ALL TEST
CIRCLES:**

- Place drop on the positive test circle



- Place drop on the negative test circle



- Place drop on the Px test circle



STEP THREE:

- Using a pipette provided, add one drop of patient's serum or plasma, to Reagent A on left side of the test circle.



Phenolphthalein Test

Rx



Well 1



Well 2



Well 3

(Control)

DO SO FOR ALL TEST CIRCLES!

- And then dispose of remaining serum into serum sample tube.



STEP FOUR:

- Invert pipette and use the “paddle” portion to THOROUGHLY mix (10 to 15 circular strokes) Reagent A (clear liquid) and sample (patient or control). Then gradually mix this solution into Reagent B (reddish brown liquid) while covering the entire test circle.

Seradyn Color Slide



mei

ney

Senecio Color Slide



mei

—



remm

STEP FIVE:

- Rock card SLOWLY and GENTLY for one minute (approximately 13-16 rocks per minute)

STEP SIX:

- READ RESULTS IMMEDIATELY!

What are the Normal Ranges?

A non-reactive result normal for RPR
However, false-negatives may occur in persons with early- and late-stage syphilis. A **treponemal** may be needed before ruling out syphilis.

Negative is normal for serology test

Conclusions

Write a sentence stating if your results were normal or abnormal. If abnormal, state the disease associated with your findings

Clinical Significance

Write a sentence stating the disease and/or conditions associated with the RPR And serology test.

Questions...