

Titer and Vaccination Explanations – PLEASE READ CAREFULLY (it'll save you time/\$\$)

Serum titers are blood tests that measure whether or not you are immune to a given disease(s). More specifically a **quantitative serum titer** is a titer with a numerical value indicating your actual degree of immunity to a disease(s). The clinical sites you may visit or be working at require documented proof of immunity in the form of quantitative titers – simply getting the vaccination is not enough. Therefore when titers are drawn **they must be quantitative titers**, and you must provide copies of the official laboratory printouts **containing the numerical values** for Mumps, Measles, Rubella, Varicella, and Hep B immunity (see examples of a sample lab result on the following page).

IMPORTANT THINGS TO BE AWARE OF/PITFALLS TO AVOID:

1. **If you don't have a record of the previous vaccinations you've received, get your titers drawn first.**
 - Why? Measure your immunity level before getting vaccinated to boost it. Your titers might indicate a high immunity to a specific disease, in which case you won't need to get vaccinated for that disease.
2. **Please get the exact type of titers we have asked you to.**
 - 3 Common Mistakes Students Make:
 - Quantitative vs. Qualitative titers – quantitative have a numerical value, qualitative simply indicates “immune vs. non-immune” (with no numerical value.) **Be sure to get quantitative titers. If you don't get quantitative titers, we will ask you to get them redone.**
 - IgG vs. IgM titers – **you need IgG titers; DO NOT** get labs for IgM
 - Hbs AB IgG vs. Hbs AG IgG titers (for Hep B) – **you need Hep B AB (antibody) titers, NOT** Hep B AG (antigen) titers.
3. **If the titer for a specific disease shows that you're not immune, you need to get vaccinated or re-vaccinated (also known as getting a booster).**
 - Note: This is where previous vaccination records are helpful. Vaccinations for different diseases have different timelines and numbers of shots needed (ex. Varicella – 2 shot series 4-6 weeks apart vs. Hep B – 3 shot series over 6 months). If a specific titer indicates non-immunity, then your physician (or the Student Health Clinic) can direct you on the next steps for vaccination.
4. **Once vaccinated, titers should not be drawn until 6-8 weeks after the vaccination.**
 - Why? If drawn too soon afterwards, the titers will indicate non-immunity as the vaccine will still be in your system. Don't make the mistake of getting a titer drawn prematurely in order to meet the deadline. Please contact us if this is your situation so that we can work with you.

WHAT TO DO IF ANY OF YOUR QUANTITATIVE TITERS COME BACK NON-IMMUNE:

1. Consult your physician about your vaccination history – how many immunizations have you already received for the disease(s)?
2. If you haven't already had it, start the vaccination series for the non-immune disease. If you're part way through the vaccination series, complete it.
3. If you've completed the series, you will need to get an additional immunizations for that disease.
4. After completing the series, or getting the booster, wait 6 weeks and then get a follow-up titer. DO NOT GET THE TITER TOO EARLY OR IT WILL COME BACK NON-IMMUNE.

WHAT TO DO IF YOUR FOLLOW-UP TITER STILL COMES BACK NON-IMMUNE

If you have received all the immunizations possible (by completing the series and getting boosters), you may not convert to immunity. At this point, it's okay. We will need all documentation indicating your non-immunity to the disease(s), and you will need to complete the Hep B Nonresponder form.

Lab Order

SAMPLE TITER LAB RESULTS

Order Complete

NANCY NURSING
STUDENT

MRN:

DOB:

[NKA]

LIS Patient ID:

ID Type: MRN

Age at Time of Collection:

Location:

Chart ID:

ICChart Order Number:

Order Date:

LIS Order Number:

Ordering Clinician:

Copy to Clinician(s):

Patient Comments:

Order Comments:

Test Name	Result	Units	Ref. Range	Collected Date/Time	Location*
RUBELLA IMMUNE STATUS	3.41	EIA value			EN

EIA VALUE

EXPLANATION OF TEST RESULTS

< 0.91

NEGATIVE - NO RUBELLA IGG ANTIBODY
DETECTED.

0.91 - 1.09

EQUIVOCAL

> OR = 1.10

POSITIVE - RUBELLA IGG ANTIBODY DETECTED.

THE PRESENCE OF RUBELLA IGG ANTIBODY SUGGESTS IMMUNIZATION
OR PAST OR CURRENT INFECTION WITH RUBELLA VIRUS.

MEASLES IGG AB (RUBEOLA)	3.75	EIA value
--------------------------	------	-----------

EIA VALUE

EXPLANATION OF TEST RESULTS

< OR = 0.90

NEGATIVE - NO RUBEOLA (MEASLES) IGG
ANTIBODY DETECTED

0.91 - 1.09

EQUIVOCAL

> OR = 1.10

POSITIVE - RUBEOLA (MEASLES) IGG
ANTIBODY DETECTED

POSITIVE RESULTS SUGGEST RECENT OR PREVIOUS INFECTION
WITH MEASLES (RUBEOLA) VIRUS AND IMPLY IMMUNITY.
PATIENTS EXHIBITING EQUIVOCAL RESULTS SHOULD BE
RETESTED IN ONE MONTH, IF CLINICALLY INDICATED.

Result = immune

Notice the Range
is listed by which
results are determined

VARICELLA-ZOSTER VIRUS IGG AB	1.69	EIA value
-------------------------------	------	-----------

EIA VALUE

EXPLANATION OF RESULTS

< OR = 0.90

NEGATIVE - NO VZV IGG ANTIBODY DETECTED

0.91 - 1.09

EQUIVOCAL

> OR = 1.10

POSITIVE - VZV IGG ANTIBODY DETECTED

A POSITIVE RESULT INDICATES THAT THE PATIENT
HAS ANTIBODY TO VZV. IT DOES NOT DIFFERENTIATE
BETWEEN AN ACTIVE OR PAST INFECTION. THE CLINICAL
DIAGNOSIS MUST BE INTERPRETED IN CONJUNCTION WITH
THE CLINICAL SIGNS AND SYMPTOMS OF THE PATIENT.

THE PRESENCE OF IGG VZV ANTIBODY IS CONSISTENT
WITH IMMUNITY.

HEPATITIS B SURFACE ANTIBODY (QUANT)	584	miU/mL
--------------------------------------	-----	--------

PATIENT HAS IMMUNITY TO HEPATITIS B VIRUS.

MUMPS VIRUS IGG AB BY EIA, SERUM	2.90	EIA value
----------------------------------	------	-----------

EIA VALUE

EXPLANATION OF TEST RESULTS

< OR = 0.90

NEGATIVE - NO MUMPS IGG ANTIBODY DETECTED

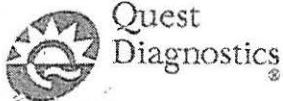
0.91 - 1.09

EQUIVOCAL

> OR = 1.10

POSITIVE - MUMPS IGG ANTIBODY DETECTED

A POSITIVE RESULT INDICATES THAT THE PATIENT HAS ANTIBODY



Non-Immune Sample Titer

PATIENT INFORMATION

REPORT STATUS **Final**

QUEST DIAGNOSTICS INCORPORATED

ORDERING PHYSICIAN

REPORTED: 18:39
COLLECTED: 14:14DOB:
GENDER:
ID:

Age:

NAKAMURA, FRED A

Test Name	In Range	Out of Range	Reference Range	Lab
VARICELLA-ZOSTER VIRUS IGG AB	1.75		EIA value	EN

EIA VALUE

EXPLANATION OF RESULTS

< OR = 0.90 NEGATIVE - NO VZV IGG ANTIBODY DETECTED
0.91 - 1.09 EQUIVOCAL
> OR = 1.10 POSITIVE - VZV IGG ANTIBODY DETECTED

A POSITIVE RESULT INDICATES THAT THE PATIENT HAS ANTIBODY TO VZV. IT DOES NOT DIFFERENTIATE BETWEEN AN ACTIVE OR PAST INFECTION. THE CLINICAL DIAGNOSIS MUST BE INTERPRETED IN CONJUNCTION WITH THE CLINICAL SIGNS AND SYMPTOMS OF THE PATIENT.

THE PRESENCE OF IGG VZV ANTIBODY IS CONSISTENT WITH IMMUNITY.

MEASLES IGG AB (RUBEOLA)

< OR = 0.90

EIA value

EN

EIA VALUE

EXPLANATION OF TEST RESULTS

< OR = 0.90 NEGATIVE - NO RUBEOLA (MEASLES) IGG ANTIBODY DETECTED
0.91 - 1.09 EQUIVOCAL
> OR = 1.10 POSITIVE - RUBEOLA (MEASLES) IGG ANTIBODY DETECTED

POSITIVE RESULTS SUGGEST RECENT OR PREVIOUS INFECTION WITH MEASLES (RUBEOLA) VIRUS AND IMPLY IMMUNITY. PATIENTS EXHIBITING EQUIVOCAL RESULTS SHOULD BE RETESTED IN ONE MONTH, IF CLINICALLY INDICATED.

Result indicates
Not immune to
Measles

Performing Laboratory Information:

EN Quest Diagnostics-East Hills 3401 Fallbrook Ave West Hills CA 91364 Laboratory Director: Lee H Wilborne M.D.
EZ Quest Diagnostics-Nichols Institute-San Juan Capistrano 33409 Ortega Hwy San Juan Capistrano CA 92675
Laboratory Director: Jan Nakamoto MD, PhD