



SELEZIONE PUBBLICA, PER TITOLI ED ESAMI, A N. 1 POSTO DI CATEGORIA D - AREA TECNICA, TECNICO-SCIENTIFICA ED ELABORAZIONE DATI, CON RAPPORTO DI LAVORO SUBORDINATO A TEMPO DETERMINATO PRESSO IL DIPARTIMENTO DI SCIENZE BIOMEDICHE PER LA SALUTE - CODICE 22277

La Commissione giudicatrice del concorso, nominata con Determina Direttoriale n. 6336 del 20/04/2023 e composta da:

Prof. Massimiliano Marco Corsi Romanelli	Presidente
Prof.ssa Serena Delbue	Componente
Dott.ssa Emanuela Matteucci	Componente
Dott.ssa Francesca Marina Centrone	Segretaria

comunica i quesiti relativi alla prova orale:

BUSTA N.1

Proteina Spike e ruolo nella diagnostica virologica di Sars-Cov-2

La candidata legga e traduca il seguente brano:

In this work, we have analyzed the immune response to three doses of the PfizerBiontech BNT162b2 vaccination in a large cohort of healthcare workers from an Academic Hospital in Northern Italy. The vaccination immunogenicity was evaluated by dosing antiTrimericS IgG titer, which was further studied in relation to SARS-CoV-2 infection status, age, and sex. Anti-TrimericS IgG levels are known to correlate with the neutralization titer, thus reflecting in vivo protection against SARS-CoV-2 infection and/or symptomatic disease [24-29]. Infection status was assessed serologically at the beginning and at the end of the observation period, determining the IgG seropositivity to the SARS-CoV-2 anti-N protein, and on the basis of the reported positive swabs. Indeed, it is known that anti-N IgG positivity correlates with natural exposure to SARS-CoV-2; hence, it is considered a good indicator of previous infections [30,31]. Recent findings have demonstrated that the seroreversion of anti-N antibodies occurs at a minimum of 7-8 months after seroconversion, which typically takes place 14-21 days after SARS-CoV-2 infection [32-37]. A serological assessment of previous SARS-CoV-2 infections in vaccinated individuals is crucial to identify pauciant asymptomatic subjects that never received a diagnosis via a molecular or antigenic swab test.

BUSTA N.2

La famiglia dei Coronavirus e le sue sottofamiglie

La candidata legga e traduca il seguente brano:

In this work, we have analyzed the immune response to three doses of the PfizerBiontech BNT162b2 vaccination in a large cohort of healthcare workers from an Academic Hospital in Northern Italy. The vaccination immunogenicity was evaluated by dosing antiTrimericS IgG titer, which was further studied in relation to SARS-CoV-2 infection status, age, and sex. Anti-TrimericS IgG levels are known to correlate with the neutralization titer, thus reflecting in vivo protection against SARS-CoV-2 infection and/or symptomatic disease [24-29]. Infection status was assessed serologically at the beginning and at the end of the observation period, determining the IgG seropositivity to the SARS-CoV-2 anti-N protein, and on the basis of the reported positive swabs. Indeed, it is known that anti-N IgG positivity correlates with natural exposure to SARS-CoV-2; hence, it is considered a good indicator of previous infections [30,31]. Recent findings have demonstrated that the seroreversion of anti-N antibodies occurs at a minimum of 7-8 months after seroconversion, which typically takes place 14-21 days after SARS-CoV-2 infection [32-37]. A



serological assessment of previous SARS-CoV-2 infections in vaccinated individuals is crucial to identify pauciand asymptomatic subjects that never received a diagnosis via a molecular or antigenic swab test.

BUSTA N.3

Metodi diagnostici usati per la rilevazione del Virus influenzale nei campioni biologici umani

La candidata legga e traduca il seguente brano:

In this work, we have analyzed the immune response to three doses of the PfizerBiontech BNT162b2 vaccination in a large cohort of healthcare workers from an Academic Hospital in Northern Italy. The vaccination immunogenicity was evaluated by dosing antiTrimericS IgG titer, which was further studied in relation to SARS-CoV-2 infection status, age, and sex. Anti-TrimericS IgG levels are known to correlate with the neutralization titer, thus reflecting in vivo protection against SARS-CoV-2 infection and/or symptomatic disease [24-29]. Infection status was assessed serologically at the beginning and at the end of the observation period, determining the IgG seropositivity to the SARS-CoV-2 anti-N protein, and on the basis of the reported positive swabs. Indeed, it is known that anti-N IgG positivity correlates with natural exposure to SARS-CoV-2; hence, it is considered a good indicator of previous infections [30,31]. Recent findings have demonstrated that the seroreversion of anti-N antibodies occurs at a minimum of 7-8 months after seroconversion, which typically takes place 14-21 days after SARS-CoV-2 infection [32-37]. A serological assessment of previous SARS-CoV-2 infections in vaccinated individuals is crucial to identify pauciand asymptomatic subjects that never received a diagnosis via a molecular or antigenic swab test.

Milano, 16 giugno 2023

La Commissione

Prof. Massimiliano Marco Corsi Romanelli - Presidente

Prof.ssa Serena Delbue - Componente

Dott.ssa Emanuela Matteucci - Componente

Dott.ssa Francesca Marina Centrone - Segretaria