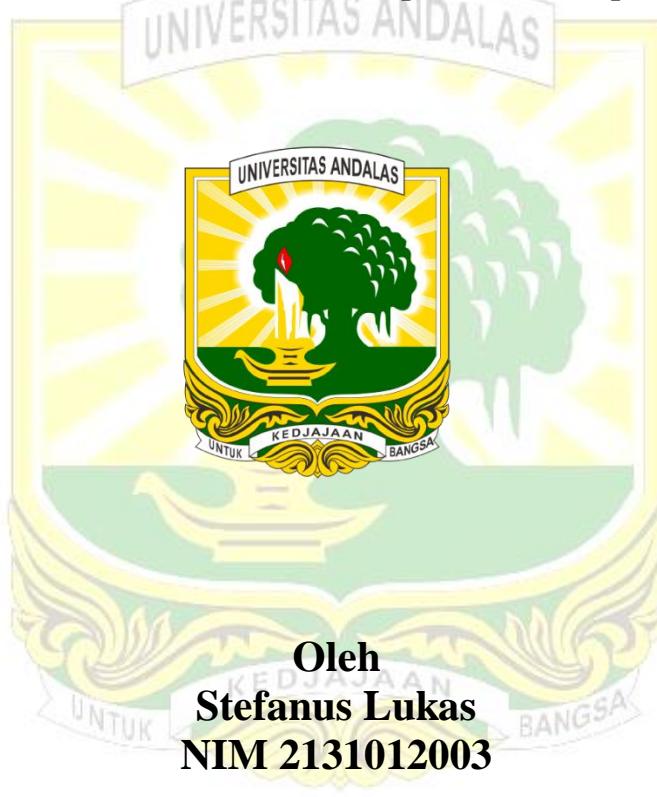**DISERTASI**

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DAN PAPARAN PASCA VAKSINASI COVID-19
ASTRAZENECA DI SENTRAL VAKSIN
UTA 45 JAKARTA**

**Suatu Penelitian Observasional Retrospektif dan Prospektif Kohort**

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# ABSTRAK
## Kajian Hubungan Titer Antibodi SARS-CoV-2 dengan KIPI
## dan Paparan Pasca Vaksinasi Covid-19 AstraZeneca
## di Sentral Vaksin UTA 45 Jakarta

**Stefanus Lukas**

Pandemi yang disebabkan oleh virus corona baru, SARS-CoV-2, telah menjadi salah satu tantangan kesehatan terbesar yang dihadapi di seluruh dunia, dan lebih dari 700 ribu kematian hingga 6 Agustus 2020 di seluruh dunia.  Pandemi Covid-19 ini telah berubah menjadi salah satu masalah kesehatan masyarakat.  Dengan pemberian vaksin AstraZeneca ini diharapkan sistem imun dapat segera meningkat sehingga timbul antibodi selain itu terjadi efek samping dari vaksin disebut Kejadian Ikutan Pasca Imunisasi (KIPI). Penelitian ini  bertujuan Mengkaji hubungan titer antibodi anti-SARS-CoV-2 dengan *Paparan Covid-19* pasca vaksinasi AstraZeneca di Sentral Vaksin UTA 45 Jakarta Metode yang digunakan observasional retrospektif dan prospektif kohort.(n=102). Hasil penelitian ditemukan nilai rujukan antibodi 1 terdapat 36,3% reaktif, antibodi 2 terdapat 100% reaktif, pada saat antibodi 2 terjadi kenaikan rata-rata peserta vaksinasi sebesar 119 U/mL. Adanya hubungan antibodi 2 dengan sosiodemografi umur dan berolahraga, KIPI 1, 2 pada reaksi sistemik dan BMI  (*P value* <0.05). Ditemukan pada KIPI 2  reaksi lokal yang tidak bergejala  terjadi kenaikan 4/5 kali, reaksi sistemik 1/3 kali dan reaksi berat 1/50 kali, sedangkan pada bergejala tiga pada reaksi lokal terjadi penurunan 2 kali, reaksi sistemik1/2 kali, reaksi berat 0 (nol). Titer antibodi 2 ada hubungan dengan sosiodemografi komorbit, merokok dan minum alkohol (*P value* <0.05) sebagai peserta vaksin terpapar Covid-19. Peserta vaksinasi yang telah divaksinasi AstraZeneca dosis lengkap  ada yang terpapar Covid-19 sebanyak 41 orang (40,2%) di rawat di rumah (isoman) 100%. Kesimpulan menemukan pemberian vaksinasi dosis lengkap AstraZeneca meningkatkan antibodi anti-SARS-CoV-2 menjadi reaktif , secara kuantitatif meningkatkan titer antibodi anti SARS CoV-2 sebesar 119 U/mL, dan ada hubungan dengan KIPI reaksi sitemik.Pada KIPI 2 terjadi peningkatan pada yang tidak bergela, sedangkan  pada yang bergejala terjadi penurunan. Pada peserta yang memiliki  komorbiditas, kebiasaan merokok dan minum alkohol memudahkan terpapar Covid-19 tetapi ringan hanya di rawat di rumah (isoman).

Kata kunci **:** Covid-19, Vaksin AstraZeneca, Antibodi, *Paparan* Covid -19

# ABSTRACT
## Study of the relationship between Antibody SARS-CoV-2 Titer with AEFI and Exposed after Astrazeneca Vaccination Covid-19 at the UTA 45 Jakarta vaccine center

**Stefanus Lukas**

The pandemic caused by the new coronavirus, SARS-CoV-2, has become one of the greatest health challenges faced worldwide, and has resulted in more than 700 thousand deaths as of August 6, 2020 worldwide. The Covid-19 pandemic has turned into one of the public health problems in human history. One effort to suppress the Covid-19 pandemic is by administering mass vaccines to all elements of society. By administering the AstraZeneca vaccine, it is hoped that the immune system can immediately improve so that antibodies arise, in addition to side effects from the vaccine called Adverse Events Following Immunisation (AEFI). This study aims examining the relationship between anti-SARS-CoV-2 antibody titers and clinical outcomes after AstraZeneca vaccination at the UTA 45 Jakarta Vaccine Center.

The method used is Retrospective and Prospective Observational Cohort (n=102). The results of the study found that the reference value for antibody 1 was 36.3% reactive, antibody 2 was 100% reactive, when antibody 2 occurred, the average increase in vaccination participants was 119 U/mL. There was a relationship between antibody 2 and sociodemographic age and exercise, AEFI 1, 2 on systemic reactions and BMI (P value <0.05). It was found that in AEFI 2 local reactions which were asymptomatic increased 4/5 times, systemic reactions 1/3 times and severe reactions 1/50 times, while in symptomatic three local reactions decreased 2 times, systemic reactions 1/2 times, severe reactions 0 (zero). Antibody titer 2 was related to comorbid sociodemographics, smoking and drinking alcohol (P value <0.05) as vaccine participants were exposed (clinical outcome). Vaccination participants who had received the full dose of AstraZeneca were exposed (clinical outcome) to Covid-19, as many as 41 people (40.2%) were treated at home (isoman) 100%.

The conclusion found that giving a complete dose of AstraZeneca vaccination increased anti-SARS CoV-2 antibodies to become reactive, quantitatively increased the anti-SARS CoV-2 antibody titer by 119 U/mL, and there was a relationship with AEFI of systemic reactions. In AEFI 2 there was an increase in those who were not symptomatic. , while for those with symptoms there was a decrease. For participants who have comorbidities, the habit of smoking and drinking alcohol makes exposure to Covid-19 easier but only mild when treated at home (isoman).

Keywords  : Covid-19, AstraZeneca vaccine, Antibody, AEFI, infected by SARS
              CoV-2