

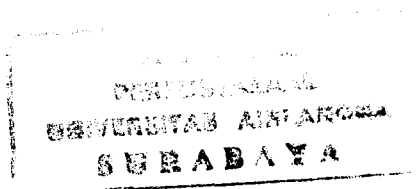
**LEUKOCYTE DIFFERENTIAL COUNT OF LONG-TAILED  
MACAQUES (*Macaca fascicularis*) EXPERIMENTALLY  
INFECTED WITH POLIOVIRUS**

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**ABSTRACT**

This research intended to know the effect of injected poliovirus against long-tailed monkeys' leukocyte differential count and whether there is any significant difference in the impact between OPV2 vaccine and WHO Reference poliovirus. This research was led at the Biosafety Level 3 (BSL 3) and Biosafety Level 2 (BSL 2) Laboratories of Avian Influenza Research Center (AIRC) at Universitas Airlangga. The materials utilized as a part of this research are particular pathogen free (SPF) male or female long-tailed monkeys (*Macaca fascicularis*) with age around 2-3 years, Oral Poliovirus Vaccine 2 (OPV 2), WHO Reference poliovirus, ketamine and xylazine for anesthesia. The 28 unisex monkeys will be adjusted for 4 to 5 days in BSL 3 research center before the treatment. They were haphazardly divided into two sorts of treatment, OPV2 vaccine and WHO poliovirus, with 14 replications each. The monkeys will be injected with (OPV2 vaccine and WHO Reference poliovirus) and observed for 21 days. The macaques received 0.1 ml of poliovirus formulation. Their blood was gathered for pre-treatment and post-treatment hematologic information by means of femoral vein. Both treatment brought in increasing of leukocyte, lymphocyte but not significantly difference ( $p > 0.005$ ) whereas monocyte and granulocyte count change significantly difference ( $p < 0.005$ ) between pre-treatment and post-treatment data, but no significant difference revealed between the overall of OPV2 and WHO Reference attenuated poliovirus. The increase of leukocyte differential count is still in normal range

**Keywords:** Leukocyte Differential Count, Lymphocyte, Monocyte, Granulocyte Poliovirus, *Macaca fascicularis*



## ACKNOWLEDGMENT

Praise and thank to Allah SWT, the merciful, without whose permission this thesis entitled **Leukocyte Differential Count in Long Tailed Monkey (*Macaca fascicularis*) Experimentally Infected with Poliovirus** wouldnt finished.

On this occasion I would like to thank to Prof. Dr Pudji Srianto, drh., M.Kes as the Dean of Veterinary Medicine Faculty of Airlangga University for the opportunity to take up education for me in Veterinary Medicine Faculty of Airlangga University, especially in International Class of 2013

I would like to thank my trustee lecturer Dr. Hani Plumeriastuti, M.Kes., Drhthe supervisor committees, namely Prof. C. A. Nidom, drh., MS. as primary supervisor and Prof. Dr. Setiawan Koesdarto, drh., M.Sc., as secondary supervisor, for the unlimited advice, guidance and for always cooling down me until the completion of this thesis.

I would like to thank the assessment committees, namely Dr. Kadek Rachmawati, drh., M.Kes. as chairman, Dr. Kuncoro Puguh, drh., M.Kes. as secretary and Retno Sri Wahyuni, drh., M.S. as member, for their willingness to examine and provide suggestions for completion of this thesis.

I would sincerely like to Avian Influenza Research Center which has been help me by providing all the material and equipment that I need during my research in BSL 2 and BSL 3 in Tropical Disease Center. My endless gratitude for Irene Normalina, S.Pi., M.ked as my supervisor in AIRC for her help and advice

when i was in AIRC. Also special thanks to all of the staff and member of AIRC who I can mention one by one who always accompany and helping me in AIRC.

I would like to say my special thanks to beloved parents AIPTU Marmanto and Sri Sundari, SIP., for their endlesspray, advice, support and encouragement throughout my study and also my late sister Esthi Octovia Wara Hapsari, drh., (Almarhumah) for her spiri, kindness, great inspiration so I can through this, and last but not least to my Grandmother who always give me her unlimited pray and love.

I would like to say my special thanks to my Polio research fellow Malika, Naura, and Agastya that always helping as we conducted this research. My endless gratitude for my forever best friend Afra Azizah, and all of my best friends in international class of 2013 that looks like a vitamins for meIndri Rahmadewanti, Niluh Selly, Anggun Thursina, Mesia Mahardika, Vanna Lidya, Dina Novvitasari, Jessica Kabaan, Reza Indra, Citrasari Henra, Tuti Widawati, Ricadonna Raisa, Nicole Ngand many other that I couldn't said one by one also all the fellow of year 2013 in FKH Unair, thank you for encouragement, support, pray, togetherness and became a new family in my life.

I hope this thesis can be a reference for further medical conservation study and establish new trends for choosing thesis topic among veterinary students especially in veterinary public health field. I know making this thesis is not easy. There are too many obstacles but I believe this is an advance process of my life to make me stronger than before and after through it all,

now I realize that animals and human are created by God as the completion for each other to make a good mutualism life so we should respect what God has been given to us.

Surabaya, May 2017

Author