and a systemic, often-fetal disease in dogs. So far, no cell lines have been adopted for routine titration of fresh tissues from CDV-infected animals. In this study, new cell line-Vero-DST cells had been used for isolation, titration of CDV.

Fresh samples of lymph node, lung and cerebrum taken post mortem from dogs No.1, 2 and 3 yielded canine distemper virus (CDV) strains 007Lm, 009L and 011C, respectively. They were titrated on Vero cells stably expressing canine signalling lymphocyte activation molecule (SLAM; Vero-DST cells). Growth curves of the three strains produced by titration of the released virus and cell-associated virus at various time points. All three isolates, especially 007Lm, grew well on Vero-DST cells. The titres of cell-associated virus of two strains (009L and 011C) were clearly lower than those of virus released into the culture supernate. The molecular and phylogenetic analyses of H and P gene reveal that the nucleotide and amino acid sequences of the genes of strain 007Lm after isolation in Vero-DST are identical to those of the origin virus from fresh tissue and strain 007Lm joins to the cluster of Asia 2 group of CDV strains that is distinct to the known clusters. The results indicate that 1) Vero-DST cells are not only useful for primary isolation but also efficient for titrating virus from fresh tissues and for the study of growth profiles of recent CDV isolates. 2) Strain 007Lm isolated from the vaccinated dog belongs to the cluster that is far from the vaccine strains in the phylogenetic trees of H and P genes.

## [ Session II ] #8

The Relationship Between AgNORs and PCNA Indices, Melan A
Protein Expression, Histopathological Appearances and Clinical Factors as
Prognostic Factor for Canine Oral Melanoma

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The purpose of this research is to evaluate the relationship between histopathological appearances and clinical data, Argyrophilic Nucleolar Organizer (AgNORS) and Proliferative Cell Nuclear Antigen (PCNA) indices and Melan A protein expression in canine oral melanoma. A retrospective study was performed on biopsy specimens of 67 dogs submitted from the year 2000 to 2003 of the Department of Pathology, Faculty of Veterinary Science, Chulalongkorn University. Our results showed that average AgNORs index did not have significant differences with histopathological characteristics and Masson-Fontana Silver (MFS) stain but AgNORs index showed significant differences with histological grading and tumor diameter size (p < 0.05).

The average PCNA index did not have significant differences with histopathological characteristics and grading and MFS stain but have significant differences with sex of affected dogs and tumor diameter size (p<0.05). Therefore AgNORs and PCNA indices might be able to be used as a prognostic factor for oral melanoma in dogs Our results revealed Melan expression was detected in malignant melanoma 50,77%(33/65). The results did not have significant differences between Melan A protein expression and histopathological classification, clinical data, average AgNORs and PCNA indices. Melan A expression could be a useful marker for melanocytic derivation diagnosis in dogs The study indicated that the expression of Melan A protein in combination with AgNORs and PCNA indices could be used to provide the prognosis of oral melanoma in dogs.

**Key words:** Canine oral melanoma, AgNORs index, PCNA index

## [ Session II ] #9

## A Case of Lung Filariosis and Lymphoma In A Sumatran Tiger (Panthera tigris sumatrae)\*

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A case of lung Filariosis and lymphoma in a Sumatran tiger (Panthera tigris sumatrae) was investigated. The tiger was captured from the National Park in Sumatra Island. She was about 4 year-old with the body weight of 73 kg. The tiger was received medical treatment for improving the condition. but when the standard anesthesia performed she died with no clinical problem detected. The necropsy was performed by the veterinary health officer in the field The organs were sent to the Division of Veterinary Pathology, Department of Veterinary Clinic, Reproduction & Pathology, Faculty Medicine, Veterinary Bogor Agricultural University (IPB) and processed for the routine histopathological observation. Unfortunately, the gross finding report was not sent to our laboratory, therefore we do not have any information of the gross findings.

Histopathologically, there were an emphysema, congestion, haemorrhages oedema in the lung. Cysts of worm parasites were common found in all part of the lung. Rectangular microscopic mass with brown in the middle and red in the periphery were common found inside the blood vessel as well as in the alveoli. These materials were PAS negative. In some part of the lung there were an accumulation of lymphoid tumor cells, small and uniform in size. Congestion and cell degeneration to necrotic also detected in the liver. rectangular microscopic mass similar as found in the lung was also noticed in some part of the liver. In the kidney, there were