Chinese Society of Comparative Pathology

中華民國比較病理學會

第 87 次比較病理學研討會

心臟血管病理專題

主辦單位

Chinese Society of Comparative Pathology

中華民國比較病理學會

國立臺灣大學獸醫專業學院

中華民國 112 年 8 月 12 日(August 12, 2023)

SCHEDULE

87th MEETING OF COMPARATIVE PATHOLOGY

中華民國比較病理學會 第 87 次比較病理學研討會

心臟血管系統病理病例討論

時間：112 年 8 月 12 日（星期六）

地點：台北市立動物園行政大樓演講廳

電話：02-33663873

Time (時間)	Schedule (議程)		Moderator (主持)
8:30~9:10	Registration (報到)		
9:10~9:30	Opening Ceremony (致詞)		
9:30~10:30	專題演講	主講：林佑俊 三軍總醫院 細胞病理科主任 題目：心臟血管疾病與案例分享	張俊梁 理事長
10:30~11:00	Coffee Break（合照）		
11:00~12:00	專題演講	主講：陳冀寬 未來醫檢臨床病理科專科診所 總經理 題目：從人類病理到動物模式與醫材開發	張俊梁 理事長
12:00~13:00	午餐 及 第十屆第二次理監事會議		
13:00~13:30	Case 589	**Tsao, Wen-Tien (曹文恬), DVM, MS[1]; Jiang, Jia-Wei (江家瑋), DVM, MS[1]; Luo, I-Chi (羅怡琪), DVM, MS[1]** [1] HOPE Veterinary Pathology Diagnostic Center (霍普獸醫病理診斷中心)	張晏禎 秘書長
13:30~14:00	Case 590	**Shih, Chia-Wen (施洽雯), MD, MS [1]; Lai, Wei-Liang (賴韋良), MD[2]** [1] Department of Pathology, Lotung Poh-Ai Hospital (羅東博愛醫院病理科) [2] Department of Cardiovascular Surgery, Lotung Poh-Ai Hospital (羅東博愛醫院心臟血管外科)	
14:00~14:30	Coffee Break		
14:30~15:00	Case 591	**Yi-Jeng Peng (彭奕仁), MD, PhD[1]** [1] Department of Pathology, Tri-Service General Hospital (三軍總醫院), National Defense Medical Center (國防醫學院)	張晏禎 秘書長
15:00~15:30	Case 592	**Chen, Tzu-Yu (陳姿妤), DVM, MS[1]; Lee, Kan-Huang, DVM, MS[1]** [1] National Laboratory Animal Center(財團法人國家實驗研究院國家實驗動物中心)	
15:30~16:30	General Discussion (綜合討論)		張俊梁 理事長

目　　錄

Special Lecture I (專題演講一)

Cardiovascular Disease and Case Sharing

林佑俊 醫師

三軍總醫院病理部

Inflammatory disease:

Lymphocytic Myocarditis

Giant Cell Myocarditis

Eosinophilic (Loeffler) Myocarditis

Sarcoidosis, Heart

Acute Rheumatic Carditis

Toxoplasmosis, Heart

Chagas Disease, Heart

Congenital disease:

Arrhythmogenic Cardiomyopathy

Fatty acid metabolic disorder

Mitochondrial myopathy

Glycogen storage disease

Fabry disease, heart

Acquired disease:

Amyloidosis, heart

Hemochromatosis, heart

Catecholamine cardiomyopathy

Cocaine cardiotoxicity

Coronary arteries:

Atherosclerosis

Coronary artery dissection

Kawasaki disease

Special Lecture II (專題演講二)

從人類病理到動物模式與醫材開發-

一個糖尿病治癒方法的發現與體內植入性醫療器材的研發

陳冀寬 醫師

未來醫檢臨床病理科專科診所總經理

Pancreatic islet cell is key source of insulin, which regulates homeostasis of serum sugar. Islet cell transplantation for type I diabetics is a relatively effective choice to supply endogenous insulin. Transdifferentiation of pancreatic duct cells into functioning islet of Langerhans is a promising source of islet cells for transplantation. However, the application of transdifferentiated human pancreatic duct cells to restore blood glucose in vivo is questionable, in that they are insulin-positive only but not necessarily insulin-secretary cells. Understanding the mechanism of the cells with non-secretory insulin may improve the application of islet cell therapy.

Nesidioblastosis described a phenomenon of islets of Langerhans neoformation from pancreatic duct epithelium in people who receives Roux-en-Y gastric bypass for obesity control. Patient with nesidioblastosis will show persistent hyperinsulinemic hypoglycemia. These indicate an effective insulin-secretary function for these neo-formative Langerhans islets, which is a good model to study the mechanism of insulin secreting in pancreatic duct derived islet cells.

Nesidioblastosis can be generated by cellophane wrapping of the hamster pancreas, which is an animal model for studying this disease. I would like to share a preliminary experimental study on the eradication of diabetes by temporarily implanting a pressure controllable device at the outlet of the pancreas (i.e., the ampulla of Vata) in Lanyu pigs. The experimental animals were end-stage diabetic Lanyu pigs whose islet tissue was chemically removed.

Case Diagnosis

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（閱片網址：http://www.ivp.nchu.edu.tw/slidecenter.php?id=535）

Case No.	Presenter	Slide No.	Diagnosis
Case 589	曹文恬	22-956	Feline portosystemic shunt http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2212
Case 590	施洽雯	LP20-11312	Glandular cardiac myxoma, heart http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2209
Case 591	彭奕仁	2311654A	Fabry disease http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2214
Case 592	陳姿妤	210014	Atherosclerosis http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2210

Case Number: 589

Slide Number: 22-956

Slide View: http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2212

Tsao, Wen-Tien (曹文恬), Jiang, Jia-Wei (江家瑋), DVM, MS[1]; DVM, MS[1]; Luo, I-Chi (羅怡琪), DVM, MS[1]

[1]HOPE Veterinary Pathology Diagnostic Center (霍普獸醫病理診斷中心)

CASE HISTORY:

Signalment: A 2-year-old, female spayed, mix cat.
Hyperammonemia was diagnosed in local hospital, and transferred to Jong-Shing animal hospital for CT examination, surgery and liver biopsy.

CASE RESULTS:

Histopathologic findings:

There are multiple central vein, portal triad included, but the lobular structure is smaller and inapaprent. The portal triad contains many small arteriolar, and some hyperplastic arteriolar also discovered in liver parenchyma. Small amount of plasma cell and lymphocyte randomly aggregation is also discovered.

Pathological diagnosis:

Hepatic lobular hypoplasia and portal arteriolar hyperplasia, moderate, with mild chronic hepatitis, Rt. Medial liver lobe biopsy.

Differential diagnosis:

Primary portal vein hypoplasia

Discussion:

The liver is supplied with blood from two sources. The portal vein drains the digestive tract, pancreas, and spleen and provides 70% to 80% of the total afferent hepatic blood flow. The hepatic artery provides the remainder of hepatic blood flow. Blood leaves the liver via hepatic veins, which are very short, and enters the caudal vena cava.

Portosystemic shunt is an anomalous vessel(s) that directly connects the portal vein to systemic venous circulation, bypassing the liver. The lesions occur in dogs and cats, rarely pigs, foals, goats, calves. PSSs are broadly categorized as congenital or acquired, and as intrahepatic or extrahepatic.

Intrahepatic shunt mainly identified in large breed dogs, most commonly a persistent patent ductus venosus in the left hepatic division. While extrahepatic shunt is majority reported in small breed dogs and cats, most commonly are a direct shunt from portal vein or tributaries (gastric vein, splenic vein) to the caudal vena cava (portocaval shunt) or azygous vein (portoazygous shunt).

Most cases of PSS in cats are therefore congenital, but even these are recognized less commonly than in dogs. Congenital PSSs are usually single or, at most, double vessels and may be intrahepatic or extrahepatic.

Many different types of extrahepatic congenital PSS have been described in dogs and cats. The most common anatomical types are splenophrenic, splenoazygos, right gastrocaval, splenocaval, right gastrocaval with caudal loop, right gastrophrenic, left gastrophrenic, left gastroazygos, colonocaval and portocaval, whereas in cats the vast majority of ECPSS (92%) are spleno-caval, left gastro-phrenic and left gastro-caval.

The shunting vessel acts as a low-resistance pathway for some of the portal blood, bypassing the higher resistance intrahepatic portal vasculature. Portal pressure is therefore lower than normal in cats with congenital PSS, while acquired shunting is portal hypertension and therefore increased portal pressure.

Affected animals are typically stunted and frequently develop signs of hepatic encephalopathy, signs are variable and exacerbated by high protein diet. Depression, incoordination, coma and seizures, vomiting are observed in dogs and cats with hepatic encephalopathy. Cats typically present with a history of waxing and waning neurologic signs consistent with hepatic encephalopathy rather than a sudden acute HE crisis.

Persian and Himalayan cats were reported to be at increased risk for congenital PSS in a small case series, and another series noted that purebred cats in general were overrepresented. Most cases present before 2 years of age; many are younger than 1 year, but old cats with congenital PSSs are frequently recognized.

Clinical pathology consistent with decreased hepatic function: Elevated serum bile acids, hypoalbuminemia, hyperammonemia with formation of ammonium biurate crystals in alkaline urine, hypoglobulinemia, hypoglycemia, decreased BUN, hypocholesterolemia, +/- mild to moderate microcytic, normochromic, nonregenerative anemia.

The liver is small and may have a characteristic histologic appearance of small or absent portal veins within the portal tracts, reduplication of arterioles, and lobular atrophy. Microvesicular steatosis (lipidosis) and lipogranulomas can also be observed. Studies have shown that the histologic appearance of the liver is not a useful feature to assess prognosis in animals with congenital portosystemic shunts. The portal vein pressure is normal in congenital shunts, and ascites does not occur.

Differentiation from other congenital vascular anomalies and other vascular anomalies in the liver often requires clinical and imaging data.

The treatment is surgery and ligation of the shunt vessel, silk, cellophane, or ameroid constrictors are often used. The prognosis is good if the shunting vessel can be ligation. Cats should be managed

medically before surgery and for a period of about 2 months after surgery while the portal vasculature and liver mass recover.

A suspicion for congenital PSS can be gained from the history of recurrent neurologic signs combined with high fasting and/or postprandial bile acid or ammonia concentration in a young cat.

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https://www.vin.com/apputil/content/defaultadv1.aspx?id=5124404&pid=11343

Case Number: 590

Slide Number: LP20-11312

Slide View: http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2209

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[2] Department of Cardiovascular Surgery, Lotung Poh-Ai Hospital (羅東博愛醫院心臟血管外科)

CASE HISTORY:

Signalment: 25-year-old female.

Clinical History:

According to the statements of the patient and her family, this 25 years old female patient was quite well in the past. Left foot become pale after exercise since September of 2020, where lower extremity arteries CTA revealed short segmental high grade narrowing in the right tibial peroneal trunk; total occlusion of left popliteal artery and proximal tibial peroneal trunk, suspected occlusion in the left distal peroneal artery. Then, the echocardiography was performed and showed one large tumor in left atrium and suspect myxoma. The patient was transferred to the department of cardiovascular surgery for further evaluation. Under the impression: 1. one large tumor in left atrium, suspect myxoma. 2. feft leg peripheral arterial occlusive disease, she was admitted to ward for further management. Invasive cardiac surgery with tumor excision and repair for bilateral atrial wall and atrial septum were performed on 2020-10-14. Embolectomy of right peroneal artery and left tibial artery were also performed. The specimens were sent to the department of pathology for pathologic diagnosis. The specimen of left atrium submitted consisted of a myxoid tumor with partial endocardium and myocardium and measuring 4.3 x 4.0 x 2.8 cm. It was grayish-brown in color and soft in consistency.

Clinical Pathology:

BUN: 13 mg/dL (6-20 mg/dL), Creatinine: 0.6 mg/dL (0.5-1.1 mg/dL), Glucose: 158 mg/dL (70-100 mg/dL), Na: 144 mmol/L (135-145 mmol/L), K: 3.9 mmol/L (3.5-5.1 mmol/L), Ca: 8.7 mg/dL (8.6-10.2 mg/dL), AST (GOT): 59 U/L (5-40 U/L), ALT (GPT): 20 U/L (5-40 U/L), RBC: $4.72x10^6$/uL ($4.6-6.2x10^6$/uL), Hb: 13.5 gm/dL (12.0-16.0 gm/dL), Hct: 40.0 % (40-54%), Plt: 17.3 $x10^4$/dL ($15-40\ x10^4$/dL), WBC: $8.6\ x10^3$/uL ($4.5x10^3$-$11.0x10^3$/uL).

CASE RESULT:

Histopathologic Findings:

Histopathological examination revealed well defined tumor with prominent myxoid background

and contained moderate amount of stellate or spindle-shaped myxoma cells, eosinophilic cytoplasm, bubbly to fibrillar stroma with focal hemorrhage, fibrin and hemosiderin-laden macrophages. No significant nuclear atypia was noted. No significant mitotic figure was noted. No necrosis was noted. Areas of glandular structures were noted. The well-developed glandular structures were lined by a single layer of cuboidal to tall columnar cells, with the presence of scattered goblet cells, and surrounded by amorphous extracellular myxoid materials.

Immunohistochemistry:

Sections of tissue specimen were subjected for immunohistochemical evaluation. On immunohistochemical analysis, the glandular structures were positive for CK, CK7 and CEA, weak positive for calretinin, CK5/6, HBME1 and vimentin, and negative for CK20, CD34 and PAX8. The Ki67 index was less than 10%.

Differential diagnosis:

1. Metastatic adenocarcinoma in cardiac myxoma.
2. Adenocarcinoma arising within cardiac myxoma.
3. Glandular cardiac myxoma.

Diagnosis: Glandular cardiac myxoma.

Comments:

Cardiac myxomas are the commonest primary cardiac tumor constituting 50% to 85% of benign ones. Cardiac myxomas are rare and biologically benign but "functionally malignant". They can cause life-threatening embolic events. The reported prevalence of myxoma is 0.03% in the general population. Annual incidence of cardiac myxoma may be 0.5 to 1 case per million individuals. It usually occurs in the atria and especially the left atrium (75%). Glandular differentiation in myxomas is very rare. Ever since 1946, when Anderson and Dmytryk first described this change, fewer than fifty cases of glandular cardiac myxomas had been reported in the English literature.

Patients with myxoma tend to be younger (third to fifth decade) and more likely in female with a male-to-female ratio of 1:3. Patients with cardiac myxoma present with variable signs and symptoms ranging from an asymptomatic incidentally found lesion to shortness of breath, systemic embolization, syncope, or even death. These different presentations can be explained by the tumor hemodynamic impact dictated by its location and proximity to heart valves.

Grossly, the myxoma was grayish-brown in color, uncapsulated and broadbased without a pedicle. On the cut surface, the myxoma was gelatinous and semitransparent with partially hemorrhagic and cystic regions. Microscopically, the myxoma was composed predominantly of scattered stellate, spindle-shaped, or polygonal myxoma cells, with small endothelial vascular channels lying in a loose myxoid stroma.

Actually, glandular tissue is one of the different forms of tissues that can occur in cardiac myxomas, such as hematopoietic tissue, metaplastic bone, or thymic rests. Glandular differentiation, however,

is rare in cardiac myxomas and encountered in approximately 3% of all cardiac myxomas. Identifying glandular elements in a cardiac myxoma as an integral component of the tumor is of paramount significance due to the resemblance of such elements to gastrointestinal tract epithelium, being composed of acini lined by columnar cells and goblet cells capable of producing mucin. Not only that but also the immunohistochemistry of these acini is almost identical to gastrointestinal tract epithelium.

The locations of the glandular structures were reported at the base (90.2%), scattered (5.4%), central (2.4%) and the base of pedicle (2.4%). The distributions of the glandular structures were expressed as focal (40.4%), prominent (30.8%), scatter (21.2%), and widespread (7.7%). Development of the glandular structures were well-developed (83.3%), very poorly formed (3.3%), variable structures (6.7%) and pseudo-glands (6.7%). The well-developed glandular spaces were lined by a single layer of cuboidal to tall columnar cells, with the presence of scattered goblet cells, surrounded by amorphous extracellular myxoid materials. Basal membrane or cilia can be absent in the glands. Regular, columnar goblet cells indicate well-developed glandular structures. In addition to cells with intracellular lumina, there are some goblet or signet ring cells with bluish cytoplasmic mucin vacuoles. Secretory epithelium dispersed in a myxoid or mucinous stroma may lead to a misdiagnosis as a very well-differentiated mucin secreting adenocarcinoma. Mild focal nuclear atypia and occasional atypical mitosis were reported in 4% and 4% of myxomas respectively. Malignant transformation of glandular structures in a cardiac myxoma was observed in 3% cases.

The differential diagnosis included metastatic adenocarcinoma and adenocarcinoma arising within cardiac myxoma. No previous history of malignancy and no evidence of occult tumor was found by radiology such as CT scan of chest, abdomen, and pelvis. Metastatic adenocarcinoma in myxoma can be ruled out. The presence of typical myxoma cells in the background with the absence of necrosis, anaplastic features, mitosis, desmoplasia, and low mitotic index, favor a benign lesion, adenocarcinoma arising within myxoma can be ruled out. Acknowledging the difficulty of differentiating glandular elements in cardiac myxoma from metastasis as outlined above, with careful gross and microscopic examination of the lesion, with thorough clinical and radiological workup to exclude malignancy elsewhere, can help to distinguish glandular cardiac myxoma from malignancy.

The glandular epithelium has been histochemically and immunohistochemically identified a gastrointestinal or enteric nature of the epithelium showing immunoreactivity for PAN-CK and CK7, CEA, EMA, while being negative for CK20 and CDX2. Positivity to CEA is a characteristic of endodermal origin, indicating that the myxoma cells are of capacities of the endoderm cells. Pan-CK and CK7 were strongly positive along with EMA and CEA, whereas CK20 was negative in the glandular structures, indicating a possibility of entrapped foregut rest origin of cardiac myxoma. Myxoma cells were positive for calretinin in 75–100% of cases, but had variable positivity for vimentin, α1-antichymotrypsin, α1-antitrypsin, S100, SMA, desmin, synaptophysin, NSE and endothelial markers (CD31, CD34). P53 protein immunoreactivity could be an indicator for discrimination between neoplastic and reactive mesothelium. Generally, the regular glandular structures showed rare nuclear p53 staining. Ki-67 represents the proliferation rate, Berger et al. [8]

noted that the proliferation rate with Ki-67 was less than 10% in the benign glands of cardiac myxoma and Ki67 was more than 50% in the malignant glands of the adenocarcinoma and the systemic metastases.

Surgical intervention of cardiac myxoma is still adequate due to its benefit of curing the disease and prevent the critical complications such as pulmonary embolism and cerebrovascular accident.

Conclusion:

Glandular cardiac myxomas are very rare and morphologically characterised by base locations, focal distributions and well-developed structures in most cases with low proliferative and metastatic natures. They might derive from entrapped embryonal rests of a precursor cell toward epithelial and mesenchymal lineages. Differentiated glandular structures present in cardiac myxoma cells, other than in the thrombus, support the neoplastic origin of cardiac myxoma. Careful gross and microscopic examination of the cardiac myxoma, with thorough clinical and radiological workup to exclude malignancy elsewhere, can help to distinguish glandular cardiac myxoma from malignancy.

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Case Number: 591

Slide Number: 2311654A

Slide View: http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2214

Yi-Jen Peng (彭奕仁), MD, PhD

Department of Pathology, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan

CASE HISTORY:

A 58-year-old male suffered from intermittent chest discomfort, exertional dyspnea, and leg edema in recent months.

The patient was a sport athlete in high school and college. He noted he didn't sweat as much as his teammates. He felt intermittent episode of sport-related exertional dizziness and chest tightness after 30s year old, and unable to perform competitively. Hypertension was noted in recent years (blood pressures around 160/90 mm Hg) and prescribed by metoprolol and amlodipine regularly one year ago. Six months before admission he felt intermittent exertional dyspnea and angina. Enalapril was added to keep adequate blood pressure and Lasix for leg edema.

After admission, physical examination showed there was a left ventricular heave. Auscultation revealed splitting of the S2 heart sound, a grade 3/6 systolic murmur that could be heard throughout the precordium and did not change during the Valsalva maneuver, and a grade 2/6 holosystolic murmur at the apex that radiated to the axilla; there was no S3 heart sound. There was trace leg edema and mild chronic venous stasis. EKG showed left ventricular hypertrophy. Transthoracic echocardiogram revealed LV wall thickness (17 mm) and with normal ejection fraction, as well as a new found mild-to-moderate mitral regurgitation.

The patient underwent endomyocardial biopsy.

CASE RESULT:

Histopathological Findings:

The endomyocardial biopsy showed marked myocyte perinuclear vacuolization and displacement of contractile elements, as well as variable degree of interstitial fibrosis. The result of Periodic acid Schiff (PAS) stain is positive, and the intracytoplasmic vacuoles are resistant by PAS-diastase. The electronic microscopy revealed accumulation of vacuolation and myelin figures withing the myocyte cytoplasm. The genetic analysis revealed pathogenic mutation GLA c.640-801G>A, NM_000169.3, associated with Fabry disease, cardiac variant.

Pathological Diagnosis:

Hypertrophic cardiomyopathy due to Fabry disease

Differential diagnosis:

1. Amyloidosis
2. Mitochondrial myopathy
3. Glycogen storage disease
4. Fabry disease

Discussion:

Fabry disease is an inherited lysosomal storage disorder characterized by the presence of mutations in the GLA gene [1]. This gene encodes alpha-galactosidase A (α-GAL), an essential enzyme involved in the glycosphingolipid metabolic pathway. The aberrations in α-GAL function result in the accumulation of glycosphingolipid, particularly globotriaosylceramide (Gb3), within lysosomes [2]. The buildup of Gb3 disrupts cellular homeostasis and triggers a wide array of clinical manifestations.

Fabry disease is a rare disorder, with estimated prevalence rates ranging from 1 in 40,000 to 1 in 100,000 individuals [3]. It stands as the second most prevalent lysosomal storage disorder, second only to Gaucher disease [4]. The GLA gene, located on the Xq22.1 region of the X chromosome, consists of coding sequences responsible for α-GAL synthesis [5]. Fabry disease follows an X-linked recessive pattern of inheritance. As such, males, who possess only one X chromosome, are generally more severely affected by the disease if they carry one copy of the mutated GLA gene. In contrast, females, with two X chromosomes, will typically exhibit symptoms if they inherit two mutated copies of the GLA gene. Notably, most heterozygous females may also be affected, although usually at a later age and with milder symptoms compared to males [5].

The symptoms of Fabry disease typically begin in childhood or adolescence. The clinical presentation of Fabry disease is highly heterogeneous and largely dependent on the site of Gb3 accumulation. Affected individuals may exhibit a spectrum of symptoms, including but not limited to neuropathic pain, renal impairment, cardiovascular complications, ocular abnormalities, and skin manifestations . Cardiovascular manifestations of Fabry disease include left ventricular hypertrophy, aortic and mitral regurgitation, conduction defects, coronary artery disease, hypertension, and aortic root dilation [6].

In males with suspected Fabry disease, the diagnosis is generally confirmed by measurement of leukocyte α-GAL activity. However, this assay will identify less than 50 percent of female heterozygotes. In females with suspected Fabry disease (and males with marginal levels of α-GAL activity), genetic testing is recommended [7].

Endomyocardial biopsy is generally not required but can be helpful in confirming that left ventricular hypertrophy is associated with glycosphingolipid deposition if the diagnosis is uncertain. Histologic findings include perinuclear vacuoles that stain with periodic acid-Schiff stain and

Sudan-Black. Electron microscopy reveals myelin bodies that are single membrane bound vesicles containing concentric lamellar figures [8]. Arterial endothelial and smooth muscle cells and interstitial capillary endothelial cells also contain glycosphingolipid deposits.

There is no cure for Fabry disease, but there are treatments that can help to manage the symptoms. These treatments include enzyme replacement therapy, which replaces the missing or deficient α-GAL enzyme, and symptomatic treatment, which addresses the specific symptoms of the disease [9].

The prognosis for people with Fabry disease varies depending on the severity of the disease. With treatment, most people with Fabry disease can live a normal lifespan [10]. However, some people with the disease may develop complications, such as kidney failure or heart disease, that can shorten their lifespan [11].

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Case Number: 592

Slide Number: 210014

Slide View: http://www.ivp.nchu.edu.tw/ivp_slide_view.php?id=2210

Chen, Tzu-Yu (陳姿妤), DVM, MS[1]; Lee, Kan-Huang, DVM, MS[1]

[1] National Laboratory Animal Center, National Applied Research Laboratories (財團法人國家實驗研究院國家實驗動物中心)

CASE HISTORY:

Signalment: 40-week-old male, *Apoe*^{em1Narl} KO on C57BL/6JNarl genetic background.
The mouse was submitted for health monitoring.

Gross Findings:

The mouse was well-conditioned. No gross lesions were noted from gross examination.

Laboratory Results:

TC: 1219.3 mg/dL (119 ± 16 mg/dL), HDL: 62.7 mg/dL (84 ± 9 mg/dL), LDL: 725.9 mg/dL (3.2 ± 0.6 mg/dL), TG 193.5 mg/dL (143 ± 43 mg/dL), AST: 67.7 U/L (85.09 ± 22.78 U/L), ALT 34.8 U/L (30.80 ± 4.34 U/L).

CASE RESULT:

Histopathological Findings:

Microscopic examination the aorta revealed plump foam cell deposits and plaque within the section of aortic sinus. The focally-extensive area of the endothelium appeare to be elevated off the tunica media by an accumulation of eosinophilic, and foamy cells which occupies the subendothelial space between the tunica intime and the media. These advanced plaques also contain significant amounts of connective tissues and cholesterol clefts. This ApoE knockout mouse had mile to moderate atherosclerotic lesions in aortic root, thoracic aorta and its main branch points, abdominal aorta and the renal artery branch points. Several vascular lesions were mild to moderate in severity and consisted of intimal plaques, adventitial fibrosis, and occasional inflammatory foci of the vascular wall. Severe lesions with vascular occlusion, or thrombus formation and coronary artery lesions were not seen in this case. No additional model-specific histological lesion was observed.

Histochemical stain:

1. Masson's trichrome: The heart was examined for the atherosclerotic fibrosis in the aortic root by Masson's trichrome (positive for collagen).
2. Von Kossa stain: Atherosclerotic lesions with focal calcification as demonstrated by Von Kossa

staining.

Pathological Diagnosis:
Atherosclerosis, segmental, moderate.

Differential diagnosis:
Arteritis/Spontaneous polyarteritis of rodents

Discussion:

Atherosclerosis-prone apolipoprotein E-deficient mice display poor lipoprotein clearance with subsequent accumulation of cholesterol ester-enriched particles in the blood, which promote the development of atherosclerotic plaques. Apolipoprotein E-deficient mice, since their introduction in the early 1990s, have proved to be a very popular model for studying spontaneous hypercholesterolemia and the subsequent development of atherosclerotic lesions [1]. NLAC used CRISPR/Cas9 technology to generate ApoE knockout mouse C57BL/6-Apoe^{em1Narl}/Narl, and validated its phenotypes including high serum cholesterol and atherosclerosis. ApoE knockout mouse can be used to determine the efficacy of dietary or drug interventions in retarding plague development in the aortic root and support research areas including cholesterol/lipid metabolism, atherosclerosis, and neurobiology.

Despite greater cholesterol ingestion and synthesis, rapid murine hepatic LDL clearance results in a total serum cholesterol level of approximately 85 mg/dL, mostly carried as high-density lipoproteins (HDL), a lipid profile significantly different from that of humans. Because normal mice do not develop atherosclerosis unless challenged for long periods with Western type diets, developing useful mouse models of atherosclerosis required the disruption of a critical antiatherogenic gene product involved in cholesterol metabolism [5].

One of the most evident difference between mice and humans resides in the lipoproteins metabolism. Mice are considered as a HDL models since most of the cholesterol in transported in HDL particles, and not in LDL as in humans [9].

Fatty streaks were first observed in the proximal aorta of a chow-few, 3-month-old mouse. On this diet, as early as 8 weeks of age, foam cell lesions were observed by light microscopy in our study. Intermediate lesions containing foam cells and smooth muscle cells were seen at 15 weeks, and fibrous plaques at 20 weeks of age. A Western diet accelerated the process. Histological and morphometric analysis of plaque progression revealed an increase in complexity as well as in lesion size with age [5, 8].

During the early stages of lesion formation, lipid-filled macrophages appear in the subendothelium, and accumulate leading to fatty streaks. Monocytes attachment to endothelial cells are noticed from 8 weeks of age, and after 8 weeks foam cells lesion development are detectable. After 16-20 weeks, intermediate lesions are present extracellular matrix, inflammation and fibrous

cap. In more advanced lesions, plaques reveal cholesterol clefts and calcification with time. Lesion distribution in ApoE$^{-/-}$ mice are similar to humans, with a predominance in the aortic root, carotid artery, and aortic branches. Currently the mouse is the most frequently employed species for atherosclerosis studies. The primary advantages of the mouse for the study of atherogenesis and its complications rests upon its relative low cost of purchase and maintenance, ease of breeding, ease of genetic manipulation, and the ability to monitor atherosclerosis in a reasonable time frame [2]. Moreover, plaque rupture with a superimposed occlusive thrombus, the most common complication of human atherosclerosis, is rarely observed in mouse models of atherosclerosis.

ApoE deficient mouse model have provided tremendous insight into atherogenesis, but even they do not perfectly recapitulate the human disease, as they lack coronary stenosis and plaque instability. Mice show only minor plaque development in the coronary and carotid arteries, which are the main sites of atherosclerotic plaque development in human. However, non-human primates are expensive to maintain, they develop the disease over a long time, there is a high risk of infections, and they have high ethical hurdles. Alternative animal models should be cheaper, easier to handle and reproduce the human disease as good as possible. Moreover, they should be appropriate to perform genetic, pharmacological and interventional studies [7, 10].

Each of the current animal models has its advantages and limitations. A great challenge was the development of an animal model of spontaneous plaque rupture with human-like endpoints such as myocardial infarction, stroke and sudden death. Recently a model of consistent, spontaneous atherosclerotic plaque ruptures in mice has been described. These features are present in ApoE$^{-/-}$ Fbn1$^{C1039G+/-}$ mice, which can be used as validated model in preclinical studies to evaluate novel plaque-stabilizing therapies [10].

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中華民國比較病理學會章程

第一章　總則

第一條　本會定名為中華民國比較病理學會，英文名稱為 Chinese Society of Comparative Pathology (CSCP) (以下簡稱本會)。

第二條　本會依內政部人民團體法設立，為非營利目的之社會團體，以結合人類醫學與動物醫學資源，提倡比較病理學之研究與發展，交換研究教學心得，聯絡會員友誼及促進國際間比較醫學之交流為宗旨。

第三條　本會以全國行政區域為組織區域，會址設於主管機關所在地區，並得報經主管機關核准設主分支機構。前項分支機構組織簡則由理事會擬訂，報請主管機關核准後行之。會址及分支機構之地址於設置及變更時應報請主管機關核備。

第四條　本會之任務如左：

一、　提倡比較病理學之研究與發展。

二、　舉辦學術演講會、研討會及相關訓練課程。

三、　建立國內比較醫學相關資料庫。

四、　發行比較病理學相關刊物。

五、　促進國內、外比較醫學之交流。

六、　其他有關比較病埋學術發展之事項。

第五條　本會之主管機關為內政部。目的事業主管機關依章程所訂之宗旨與任務，主要為行政院衛生署及農業委員會，其目的事業應受各該事業主管機關之指導與監督。

第二章　會員

第六條　本會會員申請資格如下：

一、　一般會員：贊同本會宗旨，年滿二十歲，具有國內外大專院校(或同等學歷)生命科學及其它相關科系畢業資格或高職畢業從事生命科學相關工作滿兩年者。

二、　學生會員：贊同本會宗旨，在國內、外大專院校生命科學或其它相關科系肄業者 (檢附學生身份證明)。

三、　贊助會員：贊助本會工作之團體或個人。

四、　榮譽會員：凡對比較病理學術或會務之推展有特殊貢獻，經理事會提名並經會員大會通過者。

前項一、二、三項會員申請時應填具入會申請書，經一般會員二人之推薦，經理事會通過，並繳納會費。學生會員身份改變成一般會員時，得再補繳一般會員入會費之差額後，即成為一般會員，榮譽會員免繳入會費與常年會費。

第七條　一般會員有表決權、選舉權、被選舉與罷免權，每一會員為一權。贊助會員、學生會員與榮譽會員無前項權利。

第八條　會員有遵守本會章程、決議及繳納會費之義務。

第九條　會員有違反法令、章程或不遵守會員大會決議時，得經理事會決議，予以警告或停權處分，其危害團體情節重大者，得經會員大會決議予以除名。

第十條　會員喪失會員資格或經會員大會決議除名者，即為出會。

第十一條　會員得以書面敘明理由向本會聲明退會。但入會費與當年所應繳納的常年會費不得申請退費。

第三章　組織及職員

第十二條　本會以會員大會為最高權力機構。

第十三條　會員大會之職權如下：

一、　訂定與變更章程。

二、　選舉及罷免理事、監事。

三、　議決入會費、常年會費、事業費及會員捐款之方式。

四、　議決年度工作計畫、報告、預算及決算。

五、　議決會員之除名處置。

六、　議決財產之處分。

七、　議決本會之解散。

八、　議決與會員權利義務有關之其他重大事項。

前項第八款重大事項之範圍由理事會訂定之。

第十四條　本會置理事十五人，監事五人，由會員選舉之，分別成立理事會、監事會。

選舉前項理事、監事時，依計票情形得同時選出候補理事五人，候補監事一人，遇理事或監事出缺時，分別依序遞補之。

本屆理事會得提出下屆理事及監事候選人參考名單。

第十五條　理事會之職權如下：

一、　審定會員之資格。

二、　選舉及罷免常務理事及理事長。

三、　議決理事、常務理事及理事長之辭職。

四、　聘免工作人員。

五、　擬訂年度工作計畫、報告、預算及決算。

六、　其他應執行事項。

第十六條　理監事置常務理事五人，由理事互選之，並由理事就常務理事中選舉一人為理事長。

理事長對內綜理監督會議，對外代表本會，並擔任會員大會、理事會主席。

理事長因事不能執行職務時，應指定常務理事一人代理之，未指定或不能指定時，由常務理事互推一人代理之。

理事長或常務理事出缺時，應於一個月內補選之。

第十七條　監事會之職權如左：

一、監察理事會工作之執行。

二、審核年度決算。

三、選舉及罷免常務監事。

四、議決監事及常務監事之辭職。

五、其他應監察事項。

第十八條　監事會置常務監事一人，由監事互選之，監察日常會務，並擔任監事會主席。

常務監事因事不能執行職務時，應指定監事一人代理之，未指定或不能指定時，由監事互推一人代理之。監事會主席（常務監事）出缺時，應於一個月內補選之。

第十九條　理事、監事均為無給職，任期三年，連選得連任。理事長之連任以一次為限。

第二十條　理事、監事有下列情事之一者，應即解任：

一、喪失會員資格。

二、因故辭職經理事會或監事會決議通過者。

三、被罷免或撤免者。

四、受停權處分期間逾任期二分之一者。

第二十一條　本會置祕書長一人，承理事長之命處理本會事務，令置其他工作人員若干人，由理事長提名經理事會通過後聘免之，並報主管機關備查。但祕書長之解聘應先報主管機關核備。

前項工作人員不得由選任之職員（理監事）擔任。

工作人員權責及分層負責事項由理事會令另定之。

第二十二條　本會得設各種委員會、小組或其它內部作業組織，其組織簡則由理事會擬定，報經主機關核備後施行，變更時亦同。

第二十三條　本會得由理事會聘請無給顧問若干人，其聘期與理事、監事之任期同。

第四章　會議

第二十四條　會員大會分定期會議與臨時會議兩種，由理事長召集，召集時除緊急事故之臨時會議外應於十五日前以書面通知之。定期會議每年召開一次，臨時會議於理事會過半數認為必要，或經會員五分之一以上之請，或監事會半數函請召集時召開之。

第二十五條　會員不能親自出席會員大會時，得以書面委託其他會員代理，每一會員以代理一人為限。

第二十六條　會員大會之決議，以出席人數過半之同意行之。但章程之訂定與變更、會員之除名、理事及監事之罷免、財產之處置、本會之解散及其他與會權利義務有關之重大事項應有出席人數三分之二以上同意。但本會如果辦理法人登後，章程之變更應以出席人數四分之三以上之同或全體會員三分之二以上書面之同意行之。

第二十七條　理事會及監事會至少每六個月各舉行會議一次，必要時得召開聯席會議或臨時會議。

前項會議召集時除臨時會議外。應於七日以以書面通知，會議之決議各以理事、監事過半數之出席，出席人較多數之同意行之。

第二十八條　理事應出席理事會議，監事應出席監事會議，不得委託出席；理事、監事連續二次無故缺席理事會、監事會者，視同辭職。

第五章　經費及會計

第二十九條　本會經費來源如下：

一、入會費：一般會員新台幣壹仟元，學生會員壹佰元，贊助會員伍仟元，於入會時繳納。

二、常年會費：一般會員新台幣壹仟元，學生會員壹佰元。

三、事業費。

四、會員捐款。

五、委託收益。

六、基金及其孳息。

七、其他收入。

第三十條　本會會計年度以國曆年為準，自每年一月一日起至十二月三十一日止。

第三十一條　本會每年於會計年度開始前二個月由理事會編造年度工作計劃、收支預算表、員工待遇表，提會員大會通過（會員大會因故未能如期召開者，先提理監事聯席會議通過），於會計年度開始前報主管機關核備，並於會計年度終了後二個月內由理事會編造年度工作報告、收支決算表、現金出納表、資產負債表、財產目錄及基金收支表，送監事會審核後，造具審核意見書送還理事會，提會員大會通過，於三月底前報主管機關核備（會員大會未能如期召開者，需先報主管機關備查）。

第三十二條　本會解散後，剩餘財產歸屬所在地之地方自治團體或主管機關指定之機關團體所有。

第三十三條　本章程未規定事項，悉依有關法令規定辦理。

第三十四條　本章程經大會通過，報經主管機關核備後施行，變更時亦同。

第三十五條　本章程經本會民國八十五年二月四日第一屆第一次會員大會通過，並報經內政部 85 年 3 月 14 日台(85)內社字第 8507009 號函准予備查。

中華民國比較病理學會 第十屆理監事簡歷冊

序號	職別	姓名	性別	學歷	經歷	現任本職
1	理事長	張俊梁	男	國防醫學院醫學科學研究所博士	國防醫學院兼任助理教授	國軍桃園總醫院病理檢驗部兼任主治醫師/台北榮民總醫院桃園分院兼任主治醫師/銘傳大學、國防醫學院兼任教授
2	常務理事	邱慧英	女	國立台大獸醫專業學院博士	台灣養豬科學研究所	國立中興大學獸醫病理生物學研究所副教授
3	常務理事	張惠雯	女	國立臺灣大學獸醫專業學院博士	美國哈佛醫學院博士後	台灣大學分子暨比較病理生物學研究所副教授
4	常務理事	陳燕麟	男	輔仁大學化學研究所博士	日本國立神經精神中心研究員	三軍總醫院病理部主治醫師/國防醫學院助理教授
5	常務理事	劉振軒	男	美國加州大學戴維斯校區比較病理學博士	國立臺灣大學獸醫專業學院院長	台灣大學分子暨比較病理生物學研究所兼任教授
6	理事	江家瑋	男	國立臺灣大學獸醫專業學院碩士		霍普獸醫病理專科醫院病理獸醫師
7	理事	林永和	男	國立台大病理研究所碩士	台北醫學院病理科講師	台北醫學院病理科副教授
8	理事	曹文恬	女	國立臺灣大學獸醫專業學院碩士		霍普獸醫病理專科醫院病理獸醫師
9	理事	張皓凱	男	國立中興大學獸醫病理學研究所碩士		立眾病理實驗室主任病理獸醫
10	理事	彭奕仁	男	國防醫學院醫學科學研究所博士	美國西雅圖華盛頓大學病理研究員	三軍總醫院病理部主任/國防醫學院病理及寄生蟲研究所所長/副教授
11	理事	黃威翔	男	國立臺灣大學獸醫專業學院博士		台灣大學分子暨比較病理生物學研究所助理教授
12	理事	賈敏原	男	國立臺灣大學獸醫專業學院博士	國衛院研究員	國立中興大學獸醫系副教授

13	理事	鄭明芳	男	國立陽明大學口腔生物研究所博士	三軍總醫院病理部主治醫師	國軍花蓮總醫院組織臨床病理科主任
14	理事	賴銘淙	男	清華大學生命科學院博士	彰濱秀傳紀念醫院病理科主任	衛生福利部臺中醫院病理學科主任/中山醫學大學病理科副教授
15	理事	簡耀君	男	國立臺灣大學獸醫專業學院碩士	長青動物醫院病理部主任	長青動物醫院病理部主任
16	常務監事	陳姿妤	女	國立中興大學獸醫病理學研究所碩士	生技中心研究員	財團法人國家實驗研究院國家實驗動物中心副技術師
17	監事	朱旆億	男	國立臺灣大學醫學系/國立臺灣大學獸醫專業學院博士	輔仁大學醫學系兼任助理教授	彰化秀傳紀念醫院病理科主任
18	監事	施洽雯	男	國立國防醫學院病理研究所	中山醫學院病理科副教授	羅東博愛醫院病理科主任
19	監事	廖俊旺	男	國立台灣大學獸醫學研究所博士	農業藥物毒物試驗所應用毒理組副研究員	國立中興大學獸醫病理生物學研究所教授
20	監事	鄭謙仁	男	美國北卡羅萊納州立大學博士	台灣大學獸醫學系教授兼院長	台灣大學分子暨比較病理生物學研究所教授
21	秘書長	張晏禎	女	國立臺灣大學獸醫專業學院博士	中央研究院博士後	台灣大學分子暨比較病理生物學研究所助理教授

中華民國比較病理學會 112 年度工作計劃

一、 會務

(一) 徵求會員

二、 持續進行學會推廣及會員召募，擴大會員陣容，

(一) 整理會藉與清查會費

1. 更新整理會藉資料，並製作會員通訊錄
2. 清查會員繳費狀況，進行催繳，缺繳三年以上徹底實行停權

(二) 召開會議：召開會員大會一次，審查 111 年度工作報告與經費收支狀況，研議 112 年度之工作計劃及預算

(三) 學術活動：持續辦理三次研討會，並邀請國內外專家學者做學術性的演講

三、 業務

(一) 繳納會費

(二) 文書處理

(三) 整理與更新會員信箱，刪除無效信箱

(四) 病例資料處理：掃描研討會議病例切片，供會員研究教學使用

(五) 研討會活動照片、會員狀態及網頁維護更新

(六) 進行獸醫再教育學分申請及協助會員學分認證

中華民國比較病理學會 112 年度工作報告

一、　召開會員大會、理監事會議、舉辦學術研討會

(一) 會員大會

1. 第九屆第四次會員大會於 112 年 4 月 22 日於台大獸醫專業學院召開。

(二) 理監事會議

1. 第十屆第一次理監事會議於 112 年 4 月 22 日於台大獸醫專業學院召開。

2. 第十屆第二次理監事會議於 112 年 8 月 12 日於台北市立動物園召開。

二、 舉辦學術演講

(一) 第 86 次比較病理研討會邀請專題演講：

1. 陳志學醫師：Updated classification of soft tissue tumor

(二) 第 87 次比較病理研討會邀請專題演講：

1. 林佑俊醫師：心臟血管疾病與案例分享

2. 陳冀寬醫師：從人類病理到動物模式與醫材開發

三、　舉辦學術病理切片病例討論

(一) 於第 86 次比較病理研討會共有 4 個單位提供 4 個病例供會員討論。

(二) 於第 87 次比較病理研討會共有 4 個單位提供 4 個病例供會員討論。

四、　架設學會網站（網址： http://www.ivp.nchu.edu.tw/cscp/）

(一) 提供第 86 次比較病理研討會活動花絮照片

(二) 提供第 87 次比較病理研討會活動花絮照片

五、 獸醫師繼續教育學分認證

(一) 第 86 次比較病理研討會提供獸醫師繼續教育認證。

(二) 第 87 次比較病理研討會提供獸醫師繼續教育認證。

資料庫使用須知

How-To Access Comparative Pathology Virtual Slides
Hosted at the Web Library in NTU Vet Med Digital Pathology Lab
(中華民國比較病理學會數位式組織切片影像資料庫)

Comparative Pathology glass slides are now digitalized and accessible to all participants through the internet and a web browser (see below for detail instruction).

1. Please make sure that your web browser (e.g. Internet Explorer, Firefox or Safari) is equipped with "flash player." If not, it can be added from http://www.adobe.com/products/flashplayer/ for free.

2. Please go to the Chinese Society of Comparative Pathology web site at http://www.ivp.nchu.edu.tw/cscp/

3.Choose the slide images (e.g. 63rd CSCP)

4. Pick any case you'd like to read (e.g. case 435-440)

比較病理研討會病例分類一覽表

中華民國比較病理學會

第一次至第八十七次比較病理學研討會病例分類一覽表

腫瘤

病例編號	會議場次	診　　斷	動物別	提　供　單　位
1.	1	Myxoma	Dog	美國紐約動物醫學中心
2.	1	Chordoma	Ferret	美國紐約動物醫學中心
3.	1	Ependymoblastoma	Human	長庚紀念醫院
8.	2	Synovial sarcoma	Pigeon	美國紐約動物醫學中心
18.	3	Malignant lymphoma	Human	長庚紀念醫院
19.	3	Malignant lymphoma	Wistar rat	國家實驗動物繁殖及研究中心
24.	3	Metastatic thyroid carcinoma	Human	省立新竹醫院
25.	3	Chordoma	Human	新光吳火獅紀念醫院
34.	4	Interstitial cell tumor	Dog	中興大學獸醫學系
35.	4	Carcinoid tumor	Human	長庚紀念醫院
36.	4	Hepatic carcinoid	Siamese cat	美國紐約動物醫學中心
38.	6	Pheochromocytoma	Ferret	美國紐約動物醫學中心
39.	6	Extra adrenal pheochromocytoma	Human	新光吳火獅紀念醫院
40.	6	Mammary gland fibroadenoma	Rat	國家實驗動物繁殖及研究中心
41.	6	Fibroadenoma	Human	省立豐原醫院
42.	6	Canine benign mixed type mammary gland tumor	Pointer bitch	中興大學獸醫學系
43.	6	Phyllodes tumor	Human	台中榮民總醫院
44.	6	Canine oral papilloma	Dog	台灣大學獸醫學系
45.	6	Squamous cell papilloma	Human	中國醫藥學院
47.	7	1. Lung: metastatic carcinoma associated with cryptococcal infection. 2. Liver: metastatic carcinoma. 3. Adrenal gland, right: carcinoma (primary)	Human	三軍總醫院
56.	8	Gastrointestinal stromal tumor	Human	台中榮民總醫院

59.	8	Colonic adenocarcinoma	Dog	美國紐約動物醫學中心
62.	8	Submucosal leiomyoma of stomach	Human	頭份為恭紀念醫院
64.	8	1. Adenocarcinoma of sigmoid colon 2. Old schistosomiasis of rectum	Human	省立新竹醫院
71.	9	Myelolipoma	Human	台北耕莘醫院
72.	9	Reticulum cell sarcoma	Mouse	國家實驗動物繁殖及研究中心
73.	9	Hepatocellular carcinoma	Human	新光吳火獅紀念醫院
74.	9	Hepatocellular carcinoma induced by aflatoxin B1	Wistar rats	台灣省農業藥物毒物試驗所
	10	Angiomyolipoma	Human	羅東博愛醫院
	10	Inverted papilloma of prostatic urethra	Human	省立新竹醫院
	10	Nephrogenic adenoma	Human	國泰醫院
	10	Multiple myeloma with systemic amyloidosis	Human	佛教慈濟綜合醫院
	10	Squamous cell carcinoma of renal pelvis and calyces with extension to the ureter	Human	台北病理中心
	10	Fibroepithelial polyp of the ureter	Human	台北耕莘醫院
90.	10	Clear cell sarcoma of kidney	Human	台北醫學院
93.	11	Mammary gland adenocarcinoma, complex type , with chondromucinous differentiation	Dog	台灣大學獸醫學系
94.	11	1. Breast, left, modified radical mastectomy, showing papillary carcinoma, invasive 2. Nipple, left, modified radical mastectomy, papillary carcinoma, invasive 3. Lymph node, axillary, left, lymphadenectomy, palillary carcinoma, metaststic	Human	羅東聖母醫院
95.	11	Transmissible venereal tumor	Dog	中興大學獸醫學系
96.	11	Malignant lymphoma, large cell type, diffuse, B-cell phenotype	Human	彰化基督教醫院
97.	11	Carcinosarcomas	Tiger	台灣養豬科學研究所
98.	11	Mucinous carcinoma with intraductal carcinoma	Human	省立豐原醫院

99.	11	Mammary gland adenocarcinoma, type B, with pulmonary metastasis, BALB/cBYJ mouse	Mouse	國家實驗動物繁殖及研究中心
100.	11	Malignant fibrous histiocytoma and paraffinoma	Human	中國醫藥學院
102.	11	Pleomorphic adenoma (benign mixed tumor)	Human	佛教慈濟綜合醫院
103.	13	Atypical central neurocytoma	Human	新光吳火獅紀念醫院
	13	Cardiac schwannoma	SD rat	國家實驗動物繁殖及研究中心
	13	Desmoplastic infantile ganglioglioma	Human	高雄醫學院
	13	1.Primary cerebral malignant lymphoma 2.Acquired immune deficiency syndrome	Human	台北市立仁愛醫院
	13	Schwannoma	Human	三軍總醫院
	13	Osteosarcoma	Dog	美國紐約動物醫學中心
	14	Mixed germ-cell stromal tumor, mixed sertoli cell and seminoma-like cell tumor	Dog	美國紐約動物醫學中心
	14	Krukenberg's Tumor	Human	台北病理中心
	14	Primary insular carcinoid tumor arising from cystic teratoma of ovary.	Human	花蓮慈濟綜合醫院
	14	Polypoid adenomyoma	Human	大甲李綜合醫院
	14	Gonadal stromal tumor	Human	耕莘醫院
	14	Gestational choriocarcinoma	Human	彰化基督教醫院
	14	Ovarian granulosa cell tumor	Horse	中興大學獸醫學系
	15	Kaposi's sarcoma	Human	華濟醫院
	15	Basal cell carcinoma (BCC)	Human	羅東聖母醫院
	15	Transmissible venereal tumor	Dog	臺灣大學獸醫學系
	17	Canine Glioblastoma Multiforme in Cerebellopontine Angle	Dog	中興大學獸醫病理研究所
143	18	Osteosarcoma associated with metallic implants	Dog	紐約動物醫學中心
144	18	Radiation-induced osteogenic sarcoma	Human	花蓮慈濟綜合醫院
145	18	Osteosarcoma, osteogenic	Dog	臺灣大學獸醫學系
146	18	Pleomorphic rhabdomyosarcoma	Human	行政院衛生署新竹醫院

147	18	Papillary Mesothelioma of pericardium	Leopard	屏東科大學獸醫學系
148	18	Cystic ameloblastoma	Human	台北醫學院
149	18	Giant cell tumor of bone	Canine	中興大學獸醫學院
150	18	Desmoplastic small round cell tumor (DSRCT)	Human	華濟醫院
152	18	Hepatocellular carcinoma	Human	羅東聖母醫院
158	20	Hemangiopericytoma	Human	羅東聖母醫院
160	20	Cardiac fibroma	Human	高雄醫學大學病理學科
166	21	Nephroblastoma	Rabbit	紐約動物醫學中心
168	21	Nephroblastoma	Pig	台灣動物科技研究所
169	21	Nephroblastoma with rhabdomyoblastic differentiation	Human	高雄醫學大學病理科
172	21	Spindle cell sarcoma	Human	羅東聖母醫院
174	21	Juxtaglomerular cell tumor	Human	新光醫院病理檢驗科
190	27	Angiosarcoma	Human	高雄醫學大學病理學科
192	27	Cardiac myxoma	Human	彰化基督教醫院病理科
194	27	Kasabach-Merrit syndrome	Human	慈濟醫院病理科
195	27	Metastatic hepatocellular carcinoma, right atrium	Human	新光醫院病理科
197	27	Papillary fibroelastoma of aortic valve	Human	新光醫院病理科
198	27	Extraplacental chorioangioma	Human	耕莘醫院病理科
208	30	Granulocytic sarcoma (Chloroma) of uterine cervix	Human	高雄醫學大學病理學科
210	30	Primary non-Hodgkin's lymphoma of bone, diffuse large B cell, right humerus	Human	彰化基督教醫院病理科
213	30	Lymphoma, multi-centric type	Dog	中興大學獸醫系
214	30	CD30 (Ki-1)-postitive anaplastic large cell lymphoma (ALCL)	Human	新光醫院病理科
215	30	Lymphoma, mixed type	Koala	台灣大學獸醫學系
217	30	Mucosal associated lymphoid tissue (MALT) lymphoma, small intestine	Cat	臺灣大學獸醫學研究所
	31	Nasal type NK/T cell lymphoma	Human	高雄醫學大學病理科
	31	Acquired immunodeficiency syndrome	Human	慈濟醫院病理科

		(AIDS)with disseminated Kaposi's sarcoma		
	32	Epithelioid sarcoma	Human	彰化基督教醫院病理科
	32	Cutaneous B cell lymphoma, eyelid , bilateral	Human	羅東聖母醫院病理科
	32	Extramammary Paget's disease (EMPD) of the scrotum	Human	萬芳北醫皮膚科病理科
	32	Skin, back, excision, CD30+diffuse large B cell lymphoma, Soft tissue, leg , side not stated, excision, vascular leiomyoma	Human	高雄醫學大學附設醫院病理科
	34	Malignant melanoma, metastasis to intra-abdominal cavity	Human	財團法人天主教耕莘醫院病理科
	34	Vaccine-associated rhabdomyosarcoma	Cat	台灣大學獸醫學系
	34	1. Pleura: fibrous plaque 2. Lung: adenocarcinoma 3. Brain: metastatic adenocarcinoma	Human	高雄醫學大學附設 中和醫院病理科
	34	1. Neurofibromatosis, type I 2. Malignant peripheral nerve sheath tumor (MPNST)	Human	花蓮慈濟醫院病理科
	35	Glioblastoma multiforme	Human	羅東聖母醫院
	35	Pineoblastoma	Wistar rat	綠色四季
	35	Chordoid meningioma	Human	高醫病理科
	35	Infiltrating lobular carcinoma of left breast with meningeal carcinomatosis and brain metastasis	Human	花蓮慈濟醫院病理科
	35	Microcystic Meningioma.	Human	耕莘醫院病理科
	36	Well-differentiated fetal adenocarcinoma without lymph node metastasis	Human	新光吳火獅紀念醫院
	36	Adenocarcinoma of lung.	Human	羅東聖母醫院
	36	Renal cell carcinoma	Canine	國立台灣大學獸醫學系獸醫學研究所
	36	Clear cell variant of squamous cell carcinoma, lung	Human	高雄醫學大學附設中和醫院病理科

	37	Metastatic adrenal cortical carcinoma	Human	耕莘醫院病理科
	37	Hashimoto's thyroiditis with diffuse large B cell lymphoma and papillary carcinoma	Human	高雄醫學大學附設中和醫院病理科
	38	Medullar thyroid carcinoma	Canine	臺灣大學獸醫學系
	39	Merkel cell carcinoma	Human	羅東博愛醫院
	39	Cholangiocarcinoma	Human	耕莘醫院病理科
	39	Sarcomatoid carcinoma of renal pelvis	Human	花蓮慈濟醫院病理科
	39	Mammary Carcinoma	Canine	中興大學獸醫學系
	39	Metastatic prostatic adenocarcinoma	Human	耕莘醫院病理科
	39	Malignant canine peripheral nerve sheath tumors	Canine	臺灣大學獸醫學系
	39	Sarcomatoid carcinoma, lung	Human	羅東聖母醫院
	40	Vertebra,T12,laminectomy, metastatic adenoid cystic carcinoma	Human	彰化基督教醫院
	40	rhabdomyosarcoma	Canine	臺灣大學獸醫學系
	40	Fetal rhabdomyosarcoma	SD Rat	中興大學獸醫學系
	40	Adenocarcinoma, metastatic, iris, eye	Human	高雄醫學大學
	40	Axillary lymph node metastasis from an occult breast cancer	Human	羅東博愛醫院
	40	Hepatocellular carcinoma	Human	國軍桃園總醫院
	40	Feline diffuse iris melanoma	Faline	中興大學獸醫學系
	40	Metastatic malignant melanoma in the brain and inguinal lymph node	Human	花蓮慈濟醫院病理科
	41	Tonsil Angiosarcoma	Human	羅東博愛醫院
	41	Malignant mixed mullerian tumor	Human	耕莘醫院病理科
	41	Renal cell tumor	Rat	中興大學獸醫學系
	41	Multiple Myeloma	Human	花蓮慈濟醫院病理科
	41	Myopericytoma	Human	新光吳火獅紀念醫院
	41	Extramedullary plasmacytoma with amyloidosis	Canine	臺灣大學獸醫學系
	42	Metastatic follicular carcinoma	Human	羅東聖母醫院病理科
	42	Primitive neuroectodermal tumor (PNET), T-spine.	Human	羅東博愛醫院病理科
	42	Hemangioendothelioma of bone	Human	花蓮慈濟醫院病理科

	42	Malignant tumor with perivascular epithelioid differentiation, favored malignant PEComa	Human	彰化基督教醫院
	43	Mucin-producing cholangiocarcinoma	Human	基隆長庚醫院
	43	Cutaneous epitheliotropic lymphoma	Canine	臺灣大學獸醫專業學院
	43	Cholangiocarcinoma	Felis Lynx	臺灣大學獸醫專業學院
	43	Lymphoma	Canine	臺灣大學獸醫專業學院
	43	Solitary fibrous tumor	Human	彰化基督教醫院
	43	Multiple sarcoma	Canine	臺灣大學獸醫專業學院
	44	Malignant solitary fibrous tumor of pleura	Human	佛教慈濟綜合醫院暨慈濟大學
	44	Ectopic thymic carcinoma	Human	彰濱秀傳紀念醫院病理科
	44	Medullary carcinoma of the right lobe of thyroid	Human	彰化基督教醫院病理科
	44	Thyroid carcinosarcoma with cartilage and osteoid formation	Canine	臺灣大學獸醫專業學院
	44	Lymphocytic leukemia/lymphoma	Koala	臺灣大學獸醫專業學院
	45	Neuroendocrine carcinoma of liver	Human	佛教慈濟綜合醫院暨慈濟大學
	45	Parachordoma	Human	羅東博愛醫院病理科
	45	Carcinoma expleomorphic adenoma, submandibular gland	Human	天主教耕莘醫院病理科
	45	Melanoma, tongue	Canine	國立臺灣大學獸醫專業學院
	45	Renal cell carcinoma, papillary type	Canine	國立臺灣大學獸醫專業學院
323	46	Metastatic papillary serous cystadenocarcinoma, abdomen	Human	國軍桃園總醫院
324	46	Malignant gastrointestinal stromal tumor	Human	天主教耕莘醫院
329	47	Sclerosing stromal tumor	Human	彰化基督教醫院
330	47	Pheochromocytoma	Human	天主教耕莘醫院
334	48	Metastatic infiltrating ductal carcinoma, liver	Human	佛教慈濟綜合醫院

335	48	Adenoid cystic carcinoma, grade II, Rt breast	Human	天主教耕莘醫院
336	48	Malignant lymphoma, diffuse, large B-cell, right neck	Human	林新醫院
337	48	Pulmonary carcinoma, multicentric	Dog	國立臺灣大學 獸醫專業學院
338	48	Malignant melanoma, multiple organs metastasis	Rabbit	國立中興大學獸醫學院
340	49	Mucinous-producing urothelial-type adenocarcinoma of prostate	Human	天主教耕莘醫院
342	49	Plexiform fibromyxoma	Human	彰化基督教醫院
343	49	Malignant epithelioid trophoblastic tumor	Human	佛教慈濟綜合醫院
344	49	Epithelioid sarcoma	Human	林新醫院
346	49	Transmissible venereal tumor	Dog	國立臺灣大學獸醫專業學院
347	50	Ewing's sarcoma (PNET/ES tumor)	Human	天主教耕莘醫院病理科
348	50	Malignant peripheral nerve sheath tumor, epithelioid type	Human	林新醫院病理科
349	50	Low grade fibromyxoid sarcoma	Human	高雄醫學大學附設 中和紀念醫院病理科
351	50	Orbital embryonal rhabdomyosarcoma	Dog	Gifu University, Japan (岐阜大学)
354	50	Granular cell tumor	Dog	國立臺灣大學 獸醫專業學院
356	50	Malignant neoplasm of unknown origin, cerebrum	Dog	國立臺灣大學 獸醫專業學院
357	51	Small cell Carcinoma, Urinary bladder	Human	天主教耕莘醫院
364	51	Perivascular epithelioid cell tumor, in favor of lymphangiomyomatosi	Human	高雄醫學大學附設中和紀念醫院病理科
365	52	Angiosarcoma, skin (mastectomy)	Human	天主教耕莘醫院病理科
366	52	Rhabdomyoma (Purkinjeoma), heart	Swine	屏東縣家畜疾病防治所
368	52	Langerhans cell sarcoma, lung	Human	高雄醫學大學附設中和紀念醫院病理科
369	52	Biliary cystadenocarcinoma, liver	Camel	國立屏東科技大學獸醫教學醫院病理科
371	52	Malignant melanoma, nasal cavity	Human	羅東博愛醫院病理科

373	53	Malignant giant cell tumor of tendon sheath	Human	天主教耕莘醫院病理科
376	53	Malignant mesothelioma of tunica vaginalis	Golden hamster	中興大學獸醫病理生物學研究所
377	53	Perivascular Epithelioid Cell Tumor (PEComa) of the uterus	Human	彰化基督教醫院病理部
378	53	Medullary carcinoma	Human	高雄醫學大學病理部
389	55	Mantle cell lymphoma involving ascending colon, cecum, ileum, appendix and regional lymph nodes with hemorrhagic necrosis in the colon and leukemic change.	Human	奇美醫院病理部
390	55	Pulmonary Squamous Cells Carcinoma of a Canine	Dog	國立屏東科技大學 獸醫教學醫院病理科
391	55	Squamous cell carcinoma, lymphoepithelioma-like type	Human	高醫附設醫院病理科
393	55	Malignant peripheral nerve sheath tumor (MPNST), subcutis, canine.	Dog	中興大學獸醫學系
394	55	Desmoplastic malignant melanoma (mimic malignant peripheral nerve sheath tumor)	Human	中山醫學大學醫學系病理學科暨附設醫院病理科
397	56	Atypical meningioma	Human	奇美醫院病理科
401	57	Lymph nodes, excision - Hodgkin's lymphoma, mixed cellularity	Human	天主教耕莘醫院
402	57	1. Leukemia, nonlymphoid, granulocytic, involving bone marrow, spleen, liver, heart, lungs, lymph nodes, kidney, hardian gland, duodenum and pancreas. 2. Pinworm infestation, moderate, large intestines. 3. Fibrosis, focal, myocardium.	Mouse	國家實驗動物中心
403	57	Non-secretory multiple myeloma with systemic amyloidosis	Human	佛教慈濟綜合醫院暨慈濟大學病理科
404	57	1. Hepatocellular adenocarcinoma, multifocal, severe, liver 2. Hemorrhage, moderate, acute, body cavity 3. Bumble foot, focal, mild, chronic, food pad	Goose	國立中興大學獸醫病理生物學研究所

		4. cyst and atherosclerosis, chronic, testis		
406	57	Castleman's disease	Human	羅東博愛醫院
407	58	Hepatoid adenocarcinoma of colon with multiple liver metastases	Human	羅東博愛醫院
408	58	Cardiac and pulmonary melanoma	Pig	國立中興大學獸醫病理生物學研究所
409	58	Double Tumors: (1) small cell carcinoma of lung (2) Hodgkin's lymphoma, mixed cellularity type. Acrokeratosis paraneoplastica	Human	佛教慈濟綜合醫院暨慈濟大學病理科
410	58	Von Hippel–Lindau disease	Human	奇美醫院病理部
411	58	Multiple neoplasia	Tiger	國立屏東科技大學獸醫教學醫院病理科
412	58	Hepatocellular carcinoma and multiple myeloma	Human	中山醫學大學醫學系病理學科暨附設醫院病理科
413	59	DEN plus AAF carcinogens induced hepatic tumor in male rats	Rat	中興大學獸醫病理生物學研究所
417	59	Alveolar soft part sarcoma	Human	高雄醫學大學附設 中和紀念醫院病理科
418	60	Seminoma associated with supernumerary testicles	Human	羅東博愛醫院
422	61	Retinoblastoma in a baby girl	Human	彰化基督教醫院
423	61	Colloid goiter in a female Radiated tortoise (Astrochelys radiata)	Tortoise	台灣大學獸醫專業學院分子暨比較病理生物學研究所
424	61	Lymphoepithelial carcinoma in a women	Human	羅東博愛醫院
425	61	Histiocytic sarcoma in a SJL/J mouse	mouse	國家實驗動物中心
428	62	Maligant lymphoma, diffuse large B-cell (DLBCL) in a women	Human	國軍桃園總醫院病理檢驗部
429	62	Immune reconstitution inflammatory syndrome (IRIS)-associated Kaposi's sarcoma in a man	Human	花蓮慈濟醫院
430	62	Mammary adenocarcinoma, tubular form in a female feline	Cat	中興大學獸醫病理生物學研究所

433	62	Rhabdomyosarcoma, retroperitoneal cavity in a female mouse	Mouse	國家實驗動物中心
434	62	Malignant pheochromocytoma with pleural metastasis in a man	Human	天主教聖馬爾定醫院病理科
436	63	Primary non-Hodgkins lymphoma of terminal ileum	Human	國軍桃園總醫院病理檢驗部
438	63	Ectopic thyroid gland tumor	Beagle	台灣大學獸醫專業學院分子暨比較病理生物學研究所
440	63	Hepatocellular cell carcinoma Squamous cell carcinoma	Human	天主教聖馬爾定醫院口腔顎面外科
442	64	Large B cell lymphoma in a man	Human	羅東博愛醫院
444	64	Olfactory neuroblastoma in a female cat	Cat	台灣大學獸醫專業學院分子暨比較病理生物學研究所
445	64	Oligodendroglioma in a man	Human	國軍桃園總醫院病理檢驗部
447	64	Ameloblastoma of mandible in a man	Human	天主教聖馬爾定醫院口腔顎面外科
448	65	EBV associated extranodal NK / T-cell lymphoma, nasal type	Human	羅東博愛醫院
451	65	Mouse, subcutaneously mass – exocrine pancreatic adenocarcinoma, AsPC-1 cells, human origin, heterotopical model	Mouse	國家實驗動物中心
452	65	1. Extranodal NK/T-cell lymphoma, nasal type 2. 2. Regional lymph nodes and omentum are involved.	Human	台中醫院
457	66	Metastatic squamous cell carcinoma (SCC)	Horse	台灣大學獸醫專業學院分子暨比較病理生物學研究所
459	66	Squamous intraepithelial lesion (SIL)	Human	高雄醫學大學附設醫院病理部
460	66	Subcutaneous liposarcoma and uterine endometrial stromal sarcoma	African hedgehog	中興大學獸醫病理生物學研究所

463	67	Splenic undifferentiated pleomorphic sarcoma in a Djungarian hamster	Hamster	國立中興大學獸醫教學醫院鳥禽與野生動物科
465	67	Plasmacytoid urothelial carcinoma	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
467	67	1.Poorly differentiated hemangiosarcoma in face 2.Squamous cell carcinoma in ear	Civet	農委會特有生物研究保育中心
473	68	Simple mammary gland adenocarcinoma	Guinea pig	中興大學獸醫病理生物學研究所
476	69	Mediastinum dedifferentiated liposarcoma	Human	羅東博愛醫院
477	69	Uterus adenosarcoma	Hedgehog	中興大學獸醫病理生物學研究所
478	69	Primary pericardial mesothelioma in a woman	Human	佛教慈濟綜合醫院暨慈濟大學病理科
479	69	Pulmonary solid adenocarcinoma	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
481	70	Paraganglioma of liver	Human	佛教慈濟綜合醫院暨慈濟大學病理科
482	70	Adenocarcinoma, transmural, recurrent, with desmoplasia and metastasis to regional lymph node, jejunum and ileocecal junction Mast cell tumor, moderately-differentiated, multiple, jejunal and ileocecal masses	Cat	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
483	70	Solitary fibrous tumor of pelvis	Human	羅東博愛醫院病理科
484	70	Chronic lymphocytic leukemia, with systemic dissemination, bone marrow, intestine, generalized lymph node, spleen, liver, kidney and lung	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所

485	70	Intestine, large, colon, ascending, --- Carcinoma, poorly differentiated (pT4aN1b). (ADVANCED) 2. Stomach, distal, --- Adenocarcinoma, moderately differentiated (pT1bNO) (EARLY) (Synchronous cancer)	Human	秀傳醫療社團法人秀傳紀念醫院
487	70	Angiomyolipoma of the liver	Human	衛生福利部臺中醫院病理科
490	71	Xp11.2 translocation renal cell carcinoma	Human	羅東博愛醫院病理科
491	71	Anaplastic renal cell carcinoma	Djungarian hamster	國立中興大學獸醫病理生物學研究所
493	71	Mucin-producing urothelial-type adenocarcinoma of the prostate (MPUAP)	Human	天主教耕莘醫療財團法人耕莘醫院
494	71	Left paratesticular dedifferentiated liposarcoma with leiomyomatous differentiation.	Human	天主教耕莘醫療財團法人耕莘醫院
495	71	Renal nephroblastoma, blastema-predominant with metastasis to gingiva, renal mass	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
496	71	Testis, left: Malignant mixed germ cell–sex cord stromal tumor (spermatocytic germinoma and Sertoli cell tumor), with angiolymphatic invasion. Testis, right: Germ cell atrophy, multifocal, moderate.	Dog	長青動物醫院
499	72	Brain, frontal lobe, Lt., Malignant melanoma, consistent with metastatic cutaneous malignant melanoma.	Human	國軍桃園總醫院
501	72	Anaplastic carcinoma thyroid (spindle cell type)	Human	天主教耕莘醫院

502	72	Primitive neuroectodermal tumor (PNET), most likely originating from ureter, with metastasis to liver and involvements of urinary bladder, uterus and left adrenal gland	Formosan serow	臺灣大學獸醫學系
503	72	Metastatic follicular carcinoma	Human	衛生福利部台中醫院
506	73	Type B1 thymoma	Human	天主教耕莘醫院
508	73	Metastatic melanoma	Human	秀傳醫療社團法人秀傳紀念醫院
511	74	Crystal storing histiocytosis associated with multiple myeloma.	Human	羅東博愛醫院病理科
512	74	Myeloid sarcoma	Human	佛教慈濟綜合醫院暨慈濟大學病理科
513	74	Neurolymphomatosis (neurotropic lymphoma), B cell, right musculocutaneous nerve	Cat	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
514	74	Primary diffuse large B-cell lymphoma (activated B- cell type) of right testis, Stage IE at least	Human	國防醫學院三軍總醫院病理部
515	74	Thymoma, most likely, mediastinal mass	Dolphin	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
516	74	Extranodal marginal zone lymphoma of mucosa- associated lymphoid tissue (MALT lymphoma)	Human	秀傳醫療社團法人秀傳紀念醫院
517	74	Angioliposarcoma in a Cockatiel	Dog	國立中興大學獸醫病理生物學研究所
520	74	Intravascular diffuse large B cell lymphoma.	Human	國防醫學院三軍總醫院病理部
521	75	Primary anorectal malignant melanoma (PAMM)	Human	國軍桃園總醫院
523	75	Pancreatic panniculitis associated with acinar cell carcinoma	Human	羅東博愛醫院

524	75	Anaplastic large cell lymphoma (ALCL), ALK-negative	Human	秀傳醫療社團法人秀傳紀念醫院
525	75	Canine cutaneous epitheliotropic T-cell lymphoma with the involvement of left axillary lymph node	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
528	75	Basal cell carcinoma with sebaceous differentiation	Human	天主教耕莘醫院
529	76	Tongue, Schwannoma	Human	國軍桃園總醫院
530	76	Amyloid-producing odontogenic tumor	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
531	76	Embryonal rhabdomyosarcoma	Human	花蓮慈濟大學暨慈濟醫院病理科
532	76	Adenocarcinoma, suspected mammary gland tumor metastasis, mass from iris and partially ciliary bodies of right eye	Cat	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
533	76	Kaposi's sarcoma, parotid gland.	Human	羅東博愛醫院病理科
537	77	Primary appendiceal mantle cell lymphoma (MCL), B-cell type, caused acute suppurate appendicitis.	Human	國軍桃園總醫院
538	77	Follicular lymphoma in thyroid of nodular goiter.	Human	羅東博愛醫院
544	78	Ectopic parathyroid adenoma, anterior mediastinum.	Human	羅東博愛醫院
547	79	Glucagonoma, pancreas	Human	羅東博愛醫院
548	79	Neuroendocrine carcinoma, skin	Cat	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
549	79	Paraganglioma of urinary bladder	Human	花蓮慈濟大學暨慈濟醫院病理科
550	79	Hepatic carcinoid (Neuroendocrine carcinoma), liver	Cat	霍普獸醫病理診斷中心
551	79	Strumal carcinoid tumor of the ovary (SCTO) arising from mature cystic teratoma	Human	國軍桃園總醫院

552	79	Pheochromocytoma and Associated Cardiomyopathy	Meerkat (*Suricata suricatta*)	國立中興大學獸醫病理生物學研究所
553	79	Adrenal, left, laparoscopic adrenalectomy --- Pheochromocytoma, malignant. Staging (pT2)	Human	天主教耕莘醫院
554	80	Carcinoma, sweat gland, with metastases to the lung and cerebrum, the left forelimb 3rd and 4th digits, skin	North American cougar (*Puma concolor couguar*)	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
555	80	Angiosarcoma, scalp	Human	羅東博愛醫院
559	80	Sebaceous adenoma	Human	天主教耕莘醫院
560	81	Glioblastoma	Human	天主教耕莘醫院
561	81	Transmissible venereal tumor (TVT)	Dog	霍普獸醫病理診斷中心
562	81	Metastatic small cell carcinoma. Right axillary lymph node.	Human	羅東博愛醫院
563	81	Presumptive chronic myelomonocytic leukemia	Central bearded dragon *(Pogona vitticeps*)	國立中興大學獸醫病理生物學研究所
564	82	Epithelioid gastrointestinal stromal tumor (GIST)	Human	羅東博愛醫院
566	82	Intestine, small bowel, segmental resection,---Primitive neuroectodermal tumor(PNET) / Extraskeletal Ewing sarcoma Lung, needle biopsy,Small blue cell tumor, compatible with primitive neuroectodermal tumor (PNET) metastasis	Human	衛生福利部台中醫院病理科

567	82	Gastric carcinoma, whit lymphatic infiltration, stomach, dog Lymph node metastasis from gastric carcinoma, dog	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
568	82	Descending colon, adenocarcinoma, grade 2; C/W FAP syndrome associated advanced CRC.	Human	國軍桃園總醫院
569	83	Gastric Schwannoma	Human	羅東博愛醫院
571	83	Feline inductive odontogenic tumor (FIOT), cat	Cat	霍普獸醫病理診斷中心
573	83	Multiple primary malignant (MPM) (Synchronous / metachronous? or metastatic) non-Hodgkin lymphomas (DLBCLs) of the jejunum with JJ intussusception with mesenteric lymph nodal and pleural involvement.	Human	國軍桃園總醫院
574	84	Testicular carcinoid	Human	羅東博愛醫院
577	84	Testis, Lt., Primary diffuse large B-cell lymphoma (DLBCL) / Primary testicular (DLBCL)-PT-DLBCL	Human	國軍桃園總醫院
579	85	Mixed germ cell tumor (seminoma and mature teratoma)	Human	三軍總醫院
580	85	Renal cell carcinoma	Dog	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
581	85	Leiomyoma with ovarian sex cord-like elements	Human	羅東博愛醫院
582	85	Endometrial stromal sarcoma and endometrial polyp, uterus	Hedgehog	霍普獸醫病理診斷中心
583	85	Uterine papillary serous carcinoma, metastatic	Human	國軍桃園總醫院
585	86	T-cell rich large B-cell lymphoma (TCRLBCL)	Cat	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所

586	86	Epithelioid sarcoma, right hand.	Human	羅東博愛醫院
587	86	Precursor T-cell lymphoblastic lymphoma (Pre-T LBL, thymic lymphoma)	Mouse	國立中興大學獸醫病理生物學研究所
588	86	Soft tissue, right hypochondriac (flank), excision: Hepatocellular cell carcinoma (HCC), metastatic.	Human	國軍桃園總醫院
590	87	Glandular cardiac myxoma, heart.	Human	羅東博愛醫院

細菌

病例編號	會議場次	診　　斷	動物別	提　供　單　位
	1	Tuberculosis	Monkey	臺灣大學獸醫學系
7.	1	Tuberculosis	Human	省立新竹醫院
12.	2	H. pylori-induced gastritis	Human	台北病理中心
13.	2	Pseudomembranous colitis	Human	省立新竹醫院
26.	3	Swine salmonellosis	Pig	中興大學獸醫學系
27.	3	Vegetative valvular endocarditis	Pig	台灣養豬科學研究所
28.	4	Nocardiosis	Human	台灣省立新竹醫院
29.	4	Nocardiosis	Largemouth bass	屏東縣家畜疾病防治所
32.	4	Actinomycosis	Human	台灣省立豐原醫院
33.	4	Tuberculosis	Human	苗栗頭份為恭紀念醫院
53.	7	Intracavitary aspergilloma and cavitary tuberculosis, lung.	Human	羅東聖母醫院
54.	7	Fibrocalcified pulmonary TB, left Apex. Mixed actinomycosis and aspergillosis lung infection with abscess DM, NIDDM.	Human	林口長庚紀念醫院
58.	7	Tuberculous enteritis with perforation	Human	佛教慈濟綜合醫院
61.	8	Spirochetosis	Goose	國立嘉義農專獸醫科
63.	8	Proliferative enteritis (Lawsonia intracellularis infection)	Porcine	屏東縣家畜疾病防治所
68.	9	Liver abscess (Klebsillae pneumoniae)	Human	台北醫學院

	10	Xanthogranulomatous inflammation with nephrolithiasis, kidney, right. Ureteral stone, right.	Human	羅東聖母醫院
	10	Emphysematous pyelonephritis	Human	彰化基督教醫院
89.	10	Severe visceral gout due to kidney damaged Infectious serositis	Goose	中興大學獸醫學系
	13	Listeric encephalitis	Lamb	屏東縣家畜疾病防治所
	13	Tuberculous meningitis	Human	羅東聖母醫院
	16	Swine salmonellosis with meningitis	Swine	中興大學獸醫學系
	16	Meningoencephalitis, fibrinopurulent and lymphocytic, diffuse, subacute, moderate, cerebrum, cerebellum and brain stem, caused by Streptococcus spp. infection	Swine	國家實驗動物繁殖及研究中心
	17	Coliform septicemia of newborn calf	Calf	屏東縣家畜疾病防治所
	20	Porcine polyserositis and arthritis（Glasser's disease）	Pig	中興大學獸醫學院
	20	Mycotic aneurysm of jejunal artery secondary to infective endocarditis	Human	慈濟醫院病理科
	21	Chronic nephritis caused by Leptospira spp	Pig	中興大學獸醫學院
	21	Ureteropyelitis and cystitis	Pig	中國化學製藥公司
	36	Pulmonary actinomycosis.	Human	耕莘醫院病理科
	37	Tuberculous peritonitis	Human	彰化基督教醫院病理科
	38	Septicemic salmonellosis	Piglet	屏東科技大學獸醫系
	38	Leptospirosis	Human	慈濟醫院病理科
	39	Mycobacteriosis	Soft turtles	屏東科技大學獸醫系
	42	Staphylococcus spp. infection	Formosa Macaque	中興大學獸醫病理學研究所
	42	Leptospirosis	Dog	台灣大學獸醫學系
	43	Leptospirosis	Human	花蓮慈濟醫院
	43	Cryptococcus and Tuberculosis	Human	彰濱秀傳紀念醫院
319	46	Placentitis, Coxiella burnetii	Goat	台灣動物科技研究所

321	46	Pneumonia, Buirkholderia pseudomallei	Goat	屏東縣家畜疾病防治所
339	48	Mycoplasmosis	Rat	國家實驗動物中心
352	50	Chromobacterium violaceum Septicemia	Gibbon	Bogor Agricultural University, Indonesia
353	50	Salmonellosis	Pig	國立中興大學獸醫學院
367	52	Melioidosis (Burkholderia pseudomallei), lung	Human	花蓮慈濟醫院
370	52	Suppurative bronchopneumonia (Bordetellae trematum) with Trichosomoides crassicauda infestation	Rat	國立中興大學獸醫學院
374	53	Pulmonary coccidiodomycosis	Human	彰化基督教醫院
375	53	Paratuberculosis in Macaca cyclopis	Macaca cyclopis	國立屏東科技大學獸醫學院
379	53	Bovine Johne's disease (BJD) or paratuberculosis of cattle	Dairy cow	屏東縣家畜疾病防治所
380	53	NTB, Mycobacterium abscessus	Human	佛教慈濟綜合醫院暨慈濟大學病理科
382	54	Leptospirosis	Pig	國立屏東科技大學獸醫學院
384	54	Neisseria Infected Pneumonitis	Cat	中興大學獸醫學系
385	54	Mycobacteria avian complex dacryocyctitis	Human	花蓮佛教慈濟綜合醫院
387	54	Swine Erysipelas	Pig	屏東縣家畜疾病防治所
396	56	Suppurative meningitis caused by Streptococcus spp in pigs	Pig	國立中興大學獸醫病理生物學研究所
399	56	Listeric encephalitis in dairy goats	Goat	屏東縣家畜疾病防治所
435	63	Tuberculosis	Human	花蓮佛教慈濟綜合醫院
438	63	Porcine proliferative enteritis (PPE)	Pig	國立中興大學獸醫病理生物學研究所
446	64	Actinomycosis (lumpy jaw) in a dairy cattle	Cattle	國立中興大學獸醫病理生物學研究所
450	65	Mycobacterium avium infection	Human	花蓮佛教慈濟綜合醫院
464	67	Ulcerative actinomycotic squamous plaque with focal (basal) severe dysplasia, mucosa, gingivobuccal junction, right lower gingiva in a	Human	嘉義聖馬爾定醫院

		man		
469	68	Scrub typhus	Human	佛教慈濟綜合醫院暨慈濟大學
489	71	Malakoplakia due to Escherichia coli infection, left testis	Human	佛教慈濟綜合醫院暨慈濟大學
492	71	Cystitis, bilateral ureteritis and pyelonephritis, hemorrhagic, necrotic, purulent, severe, diffuse, chronic progressive, urinary bladder, ureters and kidneys	Dog	國立中興大學獸醫病理生物學研究所
522	75	Secondary syphilis	Human	佛教慈濟綜合醫院暨慈濟大學
526	75	Dermatophilosis caused by *Austwickia chelonae (basonym Dermatophilus chelonae*) in a free-ranging wild Taiwanese japalure	Taiwanese japalure	台灣大學獸醫學系
584	85	*Salmonella* Enteritidis Infection in Chicks	Chicks	國立中興大學獸醫病理生物學研究所

病毒

病例編號	會議場次	診　　斷	動物別	提　供　單　位
21.	3	Newcastle disease	Chicken	台灣大學獸醫學系
22.	3	Herpesvirus infection	Goldfish	台灣大學獸醫學系
30.	4	Demyelinating canine distemper encephalitis	Dog	台灣養豬科學研究所
31.	4	Adenovirus infection	Malayan sun bears	台灣大學獸醫學系
50.	7	Porcine cytomegalovirus infection	Piglet	台灣省家畜衛生試驗所
55.	7	Infectious laryngo-tracheitis (Herpesvirus infection)	Broilers	國立屏東技術學院獸醫學系
69.	9	Pseudorabies (Herpesvirus infection)	Pig	台灣養豬科學研究所
78.	10	Marek's disease in native chicken	Chicken	屏東縣家畜疾病防治所
92.	11	Foot- and- mouth disease (FMD)	Pig	屏東縣家畜疾病防治所
101.	11	Swine pox	Pig	屏東科技大學獸醫學系

	13	Pseduorabies	Piglet	國立屏東科技大學
	13	Avian encephalomyelitis	Chicken	國立中興大學
	15	Contagious pustular dermatitis	Goat	屏東縣&台東縣家畜疾病防治所
	15	Fowl pox and Marek's disease	Chicken	中興大學獸醫學系
	16	Japanese encephalitis	Human	花蓮佛教慈濟綜合醫院
	17	Viral encephalitis, polymavirus infection	Lory	美國紐約動物醫學中心
	17	1. Aspergillus spp. encephalitis and myocarditis 2. Demyelinating canine distemper encephalitis	Dog	台灣大學獸醫學系
	19	Enterovirus 71 infection	Human	彰化基督教醫院
	19	Ebola virus infection	African Green monkey	行政院國家科學委員會實驗動物中心
	19	Rabies	Longhorn Steer	台灣大學獸醫學系
	20	Parvoviral myocarditis	Goose	屏東科技大學獸醫學系
	28	SARS	Human	台大醫院病理科
	28	TGE virus	swine	臺灣動物科技研究所
	28	Feline infectious peritonitis(FIP)	Feline	台灣大學獸醫學系
	30	Chicken Infectious Anemia (CIA)	Layer	屏東防治所
219	31	1. Lymph node:Lymphdenitis, with lymphocytic depletion and intrahistiocytic basophilic cytoplasmic inclusion bodies. Etiology consistent with Porcine Circovirus (PCV)infection. 2. Lung: Bronchointerstitial pneumonia, moderate, lymphoplasmacytic, subacute.	Pig	臺灣動物科技研究所
220	31	Cytomegalovirus colitis	Human	彰化基督教醫院病理科
221	31	Canine distemper virus Canine adenovirus type ll co-infection	Canine	國家實驗動物繁殖及研究中心
223	32	1. Skin, mucocutaneous junction (lip): Cheilitis, subacute, diffuse, sever, with epidermal pustules, ballooning degeneration, proliferation, and eosinophilic	Goat	台灣動物科技研究所

		intracytoplasmic inclusion bodies, Saanen goat. 2. Haired skin: Dermatitis, proliferative, lymphoplasmacytic, subacute, diffuse, sever, with marked epidermal pustules, ballooning degeneration, acanthosis, hyperkeratosis, and eosinophilic intracytoplasmic inclusion bodies.		
238	35	Hydranencephaly	Cattle	國立屏東科技大學獸醫學系
248	36	Porcine Cytomegalovirus (PCMV) infection	Swine	國立屏東科技大學獸醫學系
250	36	Porcine respiratory disease complex (PRDC) and polyserositis, caused by co-infection with pseudorabies (PR) virus, porcine circovirus type 2 (PCV 2), porcine reproductive and respiratory syndrome (PRRS) virus and Salmonella typhimurium.	Swine	屏東縣家畜疾病防所
255	37	Vaccine-induced canine distemper	gray foxes	國立台灣大學獸醫學系
265	39	Bronchointerstitial pneumonia (PCV II infection)	Swine	台灣大學獸醫學系
295	42	Feline infectious peritonitis (FIP)	Cat	中興大學獸醫病理所
362	51	Canine distemper virus infection combined pulmonary dirofilariasis	Dog	國家實驗研究院
381	54	Polyomavirus infection of urinary tract	Human	羅東博愛醫院
405	57	Porcine circovirus-associated lymphadenitis	Swine	國立屏東科技大學 獸醫教學醫院病理科
414	59	Rabies virus infection	Human	佛教慈濟綜合醫院暨慈濟大學病理科
415	59	Canine distemper virus infection	Dog	台灣大學獸醫專業學院分子暨比較病理生物學研究所
420	60	Respiratory syncytial virus infection	Human	佛教慈濟綜合醫院暨慈濟大學病理科

421	60	Porcine epidemic diarrhea (PED)	Piglet	國立中興大學獸醫病理生物學研究所
455	66	Goose Haemorrhagic Polyomaviruses (GHPV)	Goose	農委會家畜衛生試驗所
456	66	HPV associated small cell neuroendocrine carcinoma of uterine cervix	Human	羅東博愛醫院病理科
458	66	Roventricular dilatation disease (PDD)	Cacatuini	國立中興大學獸醫病理生物學研究所
468	68	Avian poxvirus	Eagle	國立中興大學獸醫病理生物學研究所
472	68	Suspected viral infection with secondary aspergillosis	Parrot	國立中興大學獸醫病理生物學研究所
510	73	Porcine reproductive and respiratory syndrome (PRRS)	pig	國立中興大學獸醫病理生物學研究所
542	78	Feline infectious peritonitis (FIP)	Cat	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
543	78	Porcine epidemic diarrhea (PED)	Pig	國立中興大學獸醫系
556	80	Cutaneous pigeonpox	Pigeon	國立中興大學獸醫系

黴菌（含藻類）

病例編號	會議場次	診　　斷	動物別	提　供　單　位
23.	3	Chromomycosis	Human	台北病理中心
47.	7	Lung: metastatic carcinoma associated with cryptococcal infection. Liver: metastatic carcinoma. Adrenal gland, right: carcinoma (primary)	Human	三軍總醫院
48.	7	Adiaspiromycosis	Wild rodents	台灣大學獸醫學系
52.	7	Aspergillosis	Goslings	屏東縣家畜疾病防治所
53.	7	Intracavitary aspergilloma and cavitary tuberculosis, lung.	Human	羅東聖母醫院
54.	7	Fibrocalcified pulmonary TB, left Apex.	Human	林口長庚紀念醫院

		Mixed actinomycosis and aspergillosis lung infection with abscess DM, NIDDM.		
105.	13	Mucormycosis Diabetes mellitus	Human	花蓮佛教慈濟綜合醫院
	15	Eumycotic mycetoma	Human	花蓮佛教慈濟綜合醫院
	17	1. Aspergillus spp. encephalitis and myocarditis 2. Demyelinating canine distemper encephalitis	Dog	台灣大學獸醫學系
	43	Systemic Candidiasis	Tortoise	中興大學獸醫學院
	45	Alfatoxicosis in dogs	Canine	國立臺灣大學 獸醫專業學院
322	46	Allergic fungal sinusitis	Human	羅東博愛醫院
326	46	Meningoencephalitis, Aspergillus flavus	Cat	國立臺灣大學 獸醫專業學院
331	47	Histoplasmosis	Human	花蓮慈濟醫院病理科
332	47	Pulmonary Blastomycosis	Rat	中興大學獸醫學院
355	50	Encephalitozoonosis	Rabbit	國立中興大學獸醫學院
356	50	Eosinophilic granuloma with fungal infection, Skin	Cat	國立臺灣大學獸醫專業學院
386	54	Dermatophytic pseudomycetoma	Cat	台灣動物科技研究所
395	56	Systemic Cryptococcus neoformans infection in a Golden Retriever	Dog	國立台灣大學分子暨比較病理生物學研究所
441	63	Protothecosis	Dog	國家實驗動物繁殖及研究中心
449	65	Porcine epidemic diarrhea (PED)	Pig	國立台灣大學分子暨比較病理生物學研究所
519	75	Chicken infectious anemia in chicken	Chicken	國立中興大學獸醫學院
536	77	Skin infection of Orf virus	Human	佛教慈濟醫療財團法人花蓮慈濟醫院
545	78	Candida endocarditis	Human	佛教慈濟醫療財團法人花蓮慈濟醫院
570	83	Protothecosis	Dog	立众生技有限公司

寄生蟲（含原蟲）

病例編號	會議場次	診　　斷	動物別	提　供　單　位
14.	2	Dirofilariasis	Dog	台灣省家畜衛生試驗所
15.	2	Pulmonary dirofilariasis	Human	台北榮民總醫院
20.	3	Sparganosis	Human	台北榮民總醫院
46.	7	Feline dirofilariasis	Cat	美國紐約動物醫學中心
49.	7	Echinococcosis	Human	台北榮民總醫院
60.	8	Intestinal capillariasis	Human	台北馬偕醫院
64.	8	Adenocarcinoma of sigmoid colon Old schistosomiasis of rectum	Human	省立新竹醫院
66.	8	Echinococcosis	Chapman's zebra	台灣大學獸醫學系
67.	9	Hepatic ascariasis and cholelithiasis	Human	彰化基督教醫院
	13	Parasitic meningoencephalitis, caused by Toxocara canis larvae migration	Dog	臺灣養豬科學研究所
	17	Disseminated strongyloidiasis	Human	花蓮佛教慈濟綜合醫院
	17	Eosinophilic meningitis caused by Angiostrongylus cantonensis	Human	台北榮民總醫院 病理檢驗部
156	19	Parastrongylus cantonensis infection	Formosan gem-faced civet	中興大學獸醫學院
	19	Capillaria hepatica, Angiostongylus cantonensis	Norway Rat	行政院農業委員會 農業藥物毒物試驗所
	29	Colnorchiasis	Human	高雄醫學院附設醫院
	29	Trichuriasis	Human	彰化基督教醫院
	29	Psoroptes cuniculi infection (Ear mite)	Rabbit	農業藥物毒物試驗所
	29	Pulmonary dirofilariasis	Human	和信治癌中心醫院
	29	Capillaries philippinesis	Human	和信治癌中心醫院
	29	Adenocarcinoma with schistosomiasis	Human	花蓮佛教慈濟綜合醫院
	41	Etiology- consistent with Spironucleus (Hexamita) muris	Rat	國家實驗動物繁殖及研究中心
327	46	Dermatitis, mange infestation	Serow	中興大學獸醫學院

328	46	Trichosomoides crassicauda, urinary bladder	Rat	國家實驗動物中心
362	51	Canine distemper virus infection combined pulmonary dirofilariasis	Dog	國家實驗研究院
370	52	Suppurative bronchopneumonia (Bordetellae trematum) with Trichosomoides crassicauda infestation	Rat	國立中興大學獸醫學院
416	59	Toxoplasmosis in a finless porpoise	Finless porpoise	國立屏東科技大學獸醫教學醫院病理科
	63	Liver milk spots in pig	Pig	中興大學獸醫病理生物學研究所
453	66	Liver fluke infection	Buffalo	中興大學獸醫病理生物學研究所
471	68	Haemosporidian parasite infection	pigeon	國立台灣大學分子暨比較病理生物學研究所
540	77	Systemic toxoplasmosis	Ring-tailed lemur	國立台灣大學分子暨比較病理生物學研究所
4.	1	Cryptosporidiosis	Goat	台灣養豬科學研究所
15.	2	Amoebiasis	Lemur fulvus	台灣養豬科學研究所
16.	2	Toxoplasmosis	Squirrel	台灣養豬科學研究所
17.	2	Toxoplasmosis	Pig	屏東技術學院 獸醫學系
51.	7	Pneumocystis carinii pneumonia	Human	台北病理中心
57.	8	Cecal coccidiosis	Chicken	中興大學獸醫學系
65.	8	Cryptosporidiosis	Carprine	台灣養豬科學研究所
211	30	Avian malaria, African black-footed penguin	Avian	臺灣動物科技研究所
242	35	Neosporosis	Cow	國立屏東科技大學 獸醫學系
263	38	Intestinal amebiasis	Human	彰化基督教醫院病理科
320	46	Cutaneous leishmaniasis	Human	佛教慈濟綜合醫院
325	46	Myocarditis/encephalitis, Toxoplasma gondii	Wallaby	國立臺灣大學獸醫專業學院
443	65	Brain toxoplasmosis in a man	Human	佛教慈濟綜合醫院病理科
462	67	Toxoplasmosis	Human	佛教慈濟綜合醫院病理科

470	68	Leucocytozoonosis	chickens	中興大學獸醫病理生物學研究所
572	83	Systemic Coccidiosis	ducks	中興大學獸醫病理生物學研究所

立克次體

病例編號	會議場次	診　　斷	動物別	提　供　單　位
229	32	Necrotizing inflammation due to scrub typhus	Human	佛教慈濟醫院病理科
251	36	Scrub typhus with diffuse alveolar damage in bilateral lungs.	Human	佛教慈濟醫院病理科

其他

病例編號	會議場次	診　　斷	動物別	提　供　單　位
216	30	Cytophagic histiocytic panniculitis with terminal hemophagocytic syndrome	Human	佛教慈濟綜合醫院病理科
359	51	Eosinophilic granuloma with fungal infection, Skin	Cat	國立臺灣大學獸醫專業學院
360	51	Septa panniculitis with lymphocytic vasculitis	Human	慈濟綜合醫院暨慈濟大學
9.	2	Perinephric pseudocyst	Cat	台灣大學獸醫學系
10.	2	Choledochocyst	Human	長庚紀念醫院
11.	2	Bile duct ligation	Rat	中興大學獸醫學系
37.	4	Myositis ossificans	Human	台北醫學院
75.	9	Acute yellow phosphorus intoxication	Rabbits	中興大學獸醫學系
76.	10	Polycystic kidney bilateral and renal failure	Cat	美國紐約動物醫學中心
80.	10	Glomerular sclerosis and hyalinosis, segmental, focal, chronic, moderate Benign hypertension	SHR rat	國防醫學院 & 國家實驗動物繁殖及研究中心
83.	10	Phagolysosome-overload nephropathy	SD rats	國家實驗動物繁殖及中心
85.	10	Renal amyloidosis	Dog	台灣養豬科學研究所

89.	10	Severe visceral gout due to kidney damaged infectious serositis	Goose	中興大學獸醫學系
91.	10	Hypervitaminosis D	Orange-rumped agoutis	台灣大學獸醫學系
	14	Cystic endometrical hyperplasia	Dog	臺灣養豬科學研究所
	14	Cystic subsurface epithelial structure (SES)	Dog	國科會實驗動物中心
	15	Superficial necrolytic dermatitis	Dog	美國紐約動物醫學中心
	15	Solitary congenital self-healing histiocytosis	Human	羅東博愛醫院
	15	Alopecia areata	Mouse	國家實驗動物繁殖及研究中心
	17	Avian encephalomalacia (Vitamin E deficiency)	Chicken	國立屏東科技大學獸醫學系
151	18	Osteodystrophia fibrosa	Goat	台灣養豬科學研究所&台東縣家畜疾病防治所
	20	Hypertrophic cardiomyopathy	Pig	台灣大學獸醫學系
	21	Chinese herb nephropathy	Human	三軍總醫院病理部及腎臟科
	21	Acute pancreatitis with rhabdomyolysis	Human	慈濟醫院病理科
	21	Malakoplakia	Human	彰化基督教醫院
	25	Darier's disease	Human	高雄醫學大學病理科
191	27	1. Polyarteritis nodosa 2. Hypertrophic Cardiomyopathy	Feline	台灣大學獸醫學系
193	27	Norepinephrin cardiotoxicity	Cat	台中榮總
196	27	Cardiomyopathy (Experimental)	Mice	綠色四季
212	30	Kikuchi disease (histiocytic necrotizing lymphandenitis)	Lymphandenitis	耕莘醫院病理科
225	32	Calcinosis circumscripta, soft tissue of the right thigh, dog	Dog	台灣大學獸醫所
230	34	Hemochromatosis, liver, bird	Bird	台灣大學獸醫學系
234	34	Congenital hyperplastic goiter	Holstein calves	屏東縣家畜疾病防治所
236	34	Hepatic lipidosis (fatty liver)	Rats	中興大學獸醫學病理學研究所
237	35	Arteriovenous malformation (AVM) of cerebrum	Human	耕莘醫院病理科
244	35	Organophosphate induced delayed neurotoxicity in hens	Hens	中興大學獸醫學病理學研究所

257	37	Severe lung fibrosis after chemotherapy in a child with Ataxia- Telangiectasia	Human	慈濟醫院病理科
294	42	Arteriovenous malformation of the left hindlimb	Dog	台灣大學獸醫學系
299	43	Polioencephalomalacia	Goat kid	屏東家畜疾病防治所
310	44	Hyperplastic goiter	Piglet	屏東家畜疾病防治所
311	44	Melamine and cyanuric acid contaminated pet food induced nephrotoxicity	Rat	中興大學獸醫學病理學研究所
318	45	Alfatoxicosis	Canine	國立臺灣大學獸醫專業學院
333	47	Lordosis, C6 to C11	Penguin	國立臺灣大學獸醫專業學院
341	49	Pulmonary placental transmogrification	Human	羅東博愛醫院
345	49	Acute carbofuran intoxication	Jacana	國立中興大學獸醫學院
350	50	Malakoplakia, liver	Human	慈濟綜合醫院暨慈濟大學
351	50	Eosionphilic granuloma, Right suboccipital epidural mass	Human	羅東博愛醫院病理科
359	51	Eosinophilic granuloma with fungal infection, Skin	Cat	國立臺灣大學獸醫專業學院
360	51	Septa panniculitis with lymphocytic vasculitis	Human	慈濟綜合醫院暨慈濟大學
361	51	Hepatotoxicity of SMA-AgNPs	Mouse	國立中興大學獸醫病理生物學研究所
363	51	Hypertrophy osteopathy	Cat	國立臺灣大學獸醫專業學院
372	52	Snake bite suspected, skin and spleen	Monkey (red guenon)	國立臺灣大學獸醫專業學院
383	54	Langerhans cell histiocytosis	Human	聖馬爾定醫院病理科
388	54	Canine protothecosis	Dog	國立臺灣大學獸醫專業學院
392	55	Lithium nephrotoxicity	Human	佛教慈濟綜合醫院暨慈濟大學病理科
398	56	Gamma-knife-radiosurgery-related demyelination	Human	佛教慈濟綜合醫院暨慈濟大學病理科

400	56	Canine Disseminated form Granulomatous Meningoencephalitis (GME)	Dog	國立屏東科技大學獸醫教學醫院病理科
419	60	Mucopolysaccharidosis	Cat	國立中興大學獸醫病理生物學研究所
426	61	Phleboliths in a man	Human	台北醫學大學附設醫院口腔外科口腔病理科
427	61	Visceral gout in a Green iguana (Iguana iguana)	Iguana	中興大學獸醫病理生物學研究所
431	62	pulmonary alveolar proteinosis in a man	Human	羅東博愛醫院病理科
432	62	Congenital pulmonary airways malformation, type 2 in a women	Human	高雄醫學大學附設醫院
437	63	Large solitary luteinized follicular cyst of pregnancy and puerperium	Human	羅東博愛醫院病理科
454	66	Eosinophilic granuloma	Human	佛教慈濟綜合醫院暨慈濟大學病理科
461	67	Intestinal emphysema	Pig	中興大學獸醫病理生物學研究所
466	67	Nodular goiter	Human	彰化秀傳醫院病理科
474	68	Parastrongyliaisis (Previously called Angiostrongyliasis)	squirrel	中興大學獸醫病理生物學研究所
475	69	Bronchogenic cyst	Dog	國立臺灣大學獸醫專業學院
480	69	Toxic pneumonitis caused by inhalation of waterproofing spray	Dog	中興大學獸醫學病理學研究所
486	70	IgG4-related sclerosing cholangitis (ISC)	Human	天主教耕莘醫療財團法人耕莘醫院
488	70	Crohn’s disease	Human	彰化基督教醫院病理部
Gross	64	Hydronephrosis	Pig	中興大學獸醫病理生物學研究所
Gross	65	1. Traumatic pericarditis, severe, chronic progressive, diffuse, heart. 2. Hardware disease	Cattle	中興大學獸醫病理生物學研究所
497	72	Combined central and peripheral demyelination (CCPD)	Dog	國立臺灣大學獸醫專業學院
498	72	Inflammatory demyelinating pseudotumour	Human	佛教慈濟綜合醫院暨慈濟大學病理科

500	72	Ischemic stroke in a dog	Dog	中興大學獸醫病理生物學研究所
504	73	Autoimmune pancreatitis (IgG4 related pancreatitis)	Human	羅東博愛醫院病理科
505	73	Thrombotic microangiopathy with hemorrhagic infarct of brain, acute myocardial ischemia and acute kidney injury	Human	佛教慈濟綜合醫院暨慈濟大學病理科
507	73	The most likely diagnosis is erythema multiforme (EM).	Dog	國立臺灣大學獸醫專業學院
509	73	Doxorubicin-induced diseases	Chicken	中興大學獸醫病理生物學研究所
518	74	Idiopathic multicentric Castleman disease with abundant IgG4-positive cells	Human	佛教慈濟綜合醫院暨慈濟大學病理科
527	75	Coryneform hyperkeratosis in NOG mice	Mice	中興大學獸醫病理生物學研究所
534	76	Multiple Cartilaginous Exostoses Causing Spinal Cord Compression in a Dog	Dog	中興大學獸醫病理生物學研究所
535	76	Chondrodysplasia, diffuse, severe, chronic, growth plate, femur.	Rat	中興大學獸醫病理生物學研究所
539	77	Epitheliotropic mastocytic conjunctivitis	Cat	臺灣動藥國際股份有限公司
541	77	Protothecosis	Dog	國立臺灣大學獸醫專業學院
546	78	Ascites syndrome in broilers	Avian	國立中興大學動物疾病診斷中心
557	80	Systemic lupus erythematosus with erythema multiforme-like lesions, human	Human	佛教慈濟綜合醫院暨慈濟大學病理科
558	80	Pododermatitis, left forelimb and right hindlimb foot pad	Cat	霍普獸醫病理診斷中心

565	82	Intestinal intramural hemorrhage/hematoma, small intestine	Dog	霍普獸醫病理診斷中心
575	84	Ovotestes, epididymis, and uterus, reproductive organs	Cat	霍普獸醫病理診斷中心
576	84	Oxalate nephropathy	Asian yellow pond turtle (柴棺龜; Mauremys mutica)	國立中興大學獸醫病理生物學研究所
578	84	Yolk embolism	Savannah monitor	國立台灣大學獸醫專業學院分子暨比較病理生物學研究所
589	87	Portosystemic shunt	feline	霍普獸醫病理診斷中心
591	87	Fabry disease	human	三軍總醫院病理科
592	87	Atherosclerosis	mouse	財團法人國家實驗研究院國家實驗動物中心

會 員 資 料 更 新 服 務

各位會員：

您好！如果您的會員資料有更新或誤刊情形，麻煩您填妥表格後寄回學會秘書處或電話連絡：

中華民國比較病理學會秘書處

張晏禎 助理教授
cscptaiwan@gmail.com
02-33663873
106 台北市羅斯福路四段一號 國立台灣大學 獸醫專業學院

----------中華民國比較病理學會----------

會員資料更改卡

姓　　名：_____　　會員類別：□一般會員

□學生會員

□贊助會員

最高學歷：_____

服務單位：_____職　　稱：_____

永久地址：_____

通訊地址：_____

電　　話：_____傳　　真：_____

E-Mail Address：_____

中 華 民 國 比 較 病 理 學 會

誠摯邀請您加入

入會辦法

一、　本會會員申請資格為：

（一）一般會員：贊同本會宗旨，年滿二十歲，具有國內外大專院校（或同等學歷）生命科學及其它相關科系畢業資格或高職畢業從事生命科學相關工作滿兩年者。

（二）學生會員：贊同本會宗旨，在國內、外大專院校生命科學或其他相關科系肄業者（請檢附學生身份證明）。

（三）贊助會員：贊助本會工作之團體或個人。

（四）榮譽會員：凡對比較病理學術或會務之推廣有特殊貢獻，經理事會提名並經會員大會通過者。

二、　會員：

（一）入 會 費：一般會員新台幣壹仟元，學生會員壹佰元，贊助會員伍仟元，於入會時繳納。

（二）常年會費：一般會員新台幣壹仟元，學生會員壹佰元。

【註：學生會員身份變更為一般會員時，只需繳交一般會員之常年會費】

三、入會費及常年會費繳交方式：以銀行轉帳或匯款（**006 合作金庫銀行、帳號：0190-717-052017、戶名：中華民國比較病理學會**）；並請填妥**入會申請表**連同**銀行轉帳交易明細表**或**匯款單**以郵寄或傳真方式寄回中華民國比較病理學會秘書處 張晏禎 老師收。地址：**106 台北市羅斯福路四段一號 國立台灣大學 獸醫專業學院**

電話：02-33663873

中華民國比較病理學會入會申請及會員卡

會電腦編號

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<tr><td rowspan="2">姓名</td><td>中文</td><td></td><td rowspan="2">姓別</td><td rowspan="2">□ 男
□ 女</td><td>出生</td><td>民國　年　月　日</td><td rowspan="2">出生地</td><td rowspan="2"></td></tr>
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研究員 主任 其他:</td></tr>
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中華民國比較病理學會
申請人　　簽章
介紹人　　簽章
介紹人　　簽章
中華民國　　年　　月　　日</td><td>審核結果</td></tr>
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