

**Chinese Society of Comparative Pathology**  
中華民國比較病理學會  
第 76 次比較病理學研討會  
頭頸疾病專題  
(Diseases of Head and Neck)



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  
August 10, 2019 (中華民國 108 年 8 月 10 日)

**SCHEDULE**  
**76<sup>th</sup> MEETING OF COMPARATIVE PATHOLOGY**  
 中華民國比較病理學會 第 76 次比較病理學研討會  
 頭頸疾病專題

時間：108 年 8 月 10 日(星期六)

地點：國立臺灣大學獸醫專業學院 獸醫三館 B01 會議室

地址：10617 台北市羅斯福路四段一號 獸醫三館

電話：0963750228

Time (時間)	Schedule (議程)		Moderator (主持)
09:30~10:00	Registration (報到)		
10:00~10:10	Opening Ceremony (致詞) 許永祥 理事長/鄭謙仁 院長		
10:10~11:10	專題演講	專題演講: 臺北醫學大學病理學科 林永和 副教授 題目：A tooth life span course with any possible changes	張惠雯 秘書長
11:10-11:35	Coffee Break (拍團體照)		
11:35~12:00	Case 529	Chang, Junn-Liang (張俊梁), MD, PhD <sup>1</sup> , Tsao; Yuan Heng (曹元亨) MD <sup>2</sup> <sup>1</sup> Department of Pathology & Laboratory Medicine, Taoyuan Armed Forces General Hospital. (國軍桃園總醫院 病理檢驗部) <sup>2</sup> Department of Otolaryngology, Taoyuan Armed Forces General Hospital. (國軍桃園總醫院 耳鼻喉科部)	張惠雯 秘書長
12:00~13:00	Lunch B09 會議室 Board Meeting 理監事會議 R202 會議室		
13:00~13:25	Case 530	Lee, Ting-Wei (李庭瑋), DVM <sup>1</sup> ; Liu, Chen-Hsuan (劉振軒), DVM, PhD <sup>1</sup> ; Huang, Wei-Hsiang (黃威翔), DVM, PhD <sup>1</sup> * <sup>1</sup> Graduate Institute of Molecular and Comparative Pathobiology, School of Veterinary Medicine, National Taiwan University (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)	朱旆億 理事
13:25~13:50	Case 531	Tsai You-Ting (蔡祐婷), Medical Student; Hsu Yung-Hsiang (許永祥) MD Department of Pathology, Hualien Tzu Chi Hospital and Buddhist Tzu Chi University, Hualien, Taiwan 花蓮慈濟大學暨慈濟醫院病理科	朱旆億 理事
13:50~14:15	Case 532	Yen-Han Chen (陳彥涵), DVM; Hui-Wen Chang (張惠雯), DVM, Ph D; Chian-Ren Jeng (鄭謙仁), DVM, PhD Graduate Institute of Molecular and Comparative Pathobiology, School of Veterinary Medicine, National Taiwan University (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)	朱旆億 理事
14:15~15:00	Coffee Break		
15:00~15:25	Case 533	Shih, Chia-Wen (施洽雯), M.D., M.S. <sup>1</sup> , Lin, Hsuan-Chin (林鉉智), M.D. <sup>2</sup> <sup>1</sup> Department of Pathology, Lotung Poh-Ai Hospital (羅東博愛醫院病理科)	朱旆億 理事

		<sup>2</sup> Department of Otolaryngology, Lotung Poh-Ai Hospital (羅東博愛醫院耳鼻喉科)	
15:25~15:50	Case 534	Zhi-Yi Lin(林芝儀), GIVP <sup>4</sup> ; Chia-Lin Ho (何佳霖), DVM, MS <sup>2</sup> , Chia-Hsuan Lee (李佳璇), DVM <sup>3</sup> . Yen-Chi Chang(張言齊), GIVP <sup>4</sup> . Hue-Ying Chiou(邱慧英), DVM, Ph. D <sup>4</sup> . <sup>1</sup> Department of Veterinary Medicine, National Chung Hsing University (國立中興大學獸醫系) <sup>2</sup> Animal Disease Diagnostic Center, National Chung Hsing University (國立中興大學動物疾病診斷中心) <sup>3</sup> National Chung Hsing University Veterinary Medicine Teaching Hospital(國立中興大學獸醫教學醫院) <sup>4</sup> Graduate Institute of Veterinary Pathobiology, National Chung Hsing University (國立中興大學獸醫病理生物學研究所)	廖俊旺 常務監事
15:50~16:15	Case 535	Su, Yi-Hui (蘇浥慧), DVM, MS <sup>1</sup> ; Lin, Yan-Xiu (林妍秀), DVM, MS <sup>1</sup> ; Tzeng, Yew-Min (曾耀銘), PhD <sup>2</sup> ; Chiou. Hue-Ying (邱慧英), DVM, PhD <sup>1</sup> , Liao, Jiunn-Wang (廖俊旺), DVM, PhD <sup>1</sup> <sup>1</sup> Graduate Institute of Veterinary Pathobiology, National Chung Hsing University (國立中興大學獸醫病理生物學研究所) <sup>2</sup> Department of Life Science, National Taitung University (國立臺東大學生命科學系)	廖俊旺 常務監事
<b>16:15-17:00</b>	<b>General Discussion (綜合討論) 許永祥 理事長</b>		

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## Special Lecture

(專題演講)

題目：A tooth life span course with any possible changes

林永和 副教授  
臺北醫學大學病理學科

### Abstract

#### A) A tooth life span course with any possible changes

##### 1. Tooth bud to complete tooth formation

Bud, cap, bell stages

Tooth anomaly:

Developmental: number, size, morphology, position, structure

Acquired: attrition, abrasion, erosion, resorption, 2<sup>nd</sup> dentin, pulp stone, hypercementosis

##### 2. Tooth eruption and its condition and complication

Eruption cyst, giant cell granuloma, impacted tooth, coronitis

##### 3. Erupted tooth with any condition on the oral cavity

Caries, attrition, abrasion, abfraction, erosion, internal and/or external resorption

Caries type: enamel, dentin, cementum, cervical, milk

Odontoma, ameloblastoma

##### 4. Destroyed tooth with restored and/or cap formation or inflamed change

- Amalgam, resin, golden filling
- crown formation, endocanal treated and filling
- radicular abscess → granuloma → cyst
- cementosis, cementoblastoma
- after traumatic injury
- → tooth: fixed, endotreated,
- → Bone: fracture fixed, occlusion regulation

##### 5. Exfoliation of tooth

- deciduous tooth with or without infection → turner tooth
- malformation → orthodontic treat

##### 6. Tooth implantation

- nature tooth
- artificial tooth
- periodontitis

#### B) Cystic or tumor lesion of maxilla and mandible

1. developmental cyst

- dentigerous (follicular) cyst, nasolabial cyst, odontogenic keratocyst
- odontogenic glanudular
- 2. reactive cystic lesion

#### C) Mucosal lesion:

- white, red, brown-black, yellow,
- ulcerated
- leukoplasia, erythroleukoplasia, verrucous leukoplasia, erythroplasia
- lichen planus
- proliferative Verrucous leukoplasia
- granular cell tumor

**D) Soft tissue lesion**

- pyogenic granuloma, irritation fibroma, ossifying fibroma (peripheral type)
- verruciform xanthoma

**E) Minor and major salivary gland lesions**

1) Benign and reactive lesions

- mucocele vs retention cyst
- sialolithiasis
- mumps
- pleomorphic adenoma, Warthin's tumor, oncocytoma

2) Sjogren's syndrome

3) Malignant tumor

- mucoepidermoid carcinoma (peripheral vs central types)
- adenoid cystic carcinoma
- acinar carcinoma
- Ca ex pleomorphic adenoma
- Pleomorphic adenocarcinoma
- Mammary analogue secretory carcinoma

4) Bony tissue lesion

- ossifying fibroma (central type)
- fibrous dysplasia
- cemento-osseous lesion
- odontogenic fibroma (peripheral vs central types)
- ameloblastoma (peripheral vs central types)
- odontoma (compound and complex)
- cementoblastoma
- osteoma exostosis

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**August 10, 2019**  
**中華民國比較病理學會第 76 次比較病理學研討會**  
**CASE DIAGNOSIS**  
**76 CP slide website**  
**1080810**

Case No.	Presenter	Slide No.	Diagnosis
Case 529	張俊梁	112161	Tongue, Schwannoma
Case 530	李庭瑋	NTU20182738	Amyloid-producing odontogenic tumor
Case 531	蔡祐婷	S2011-4288A	Embryonal rhabdomyosarcoma
Case 532	陳彥涵	NTU2019-2248	Adenocarcinoma, suspected mammary gland tumor metastasis, mass from iris and partially ciliary bodies of right eye
Case 533	施洽雯	LP-4243	Kaposi's sarcoma, parotid gland.
Case 534	林芝儀	CO18_516T10	Multiple Cartilaginous Exostoses Causing Spinal Cord Compression in a Dog
Case 535	蘇滄慧	CO1781020R2	Chondrodysplasia, diffuse, severe, chronic, growth plate, femur.

**Case Number: 529**

**Slide Number: 112161**

**Slide View: [http://www.ivp.nchu.edu.tw/slide\\_view.php?id=1614](http://www.ivp.nchu.edu.tw/slide_view.php?id=1614)**

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## **CASE HISTORY :**

**Signalment:** A 20-year-old male

### **Clinical History:**

A 20-year-old male presented with a 2-year history of a swelling painless mass on the right side of the dorsal base portion of tongue. He had ever visited at Chung-Gung Memorial Hospital, Lincou branch, where partial glossectomy was strongly recommended. But his father sought traditional therapy with herb initially. The mass grew larger progressively after near two-year during the therapeutic course with herb. He was admitted to our clinic with history of slowly enlarging tongue mass in a period of two years.

Physical examination showed a protruded, non-tender, elastic, oval, 3 x 2.5 x 2 cm in sized mass with smooth mucosal surface at the right side of the tongue. In physical examination, no other finding was found. The patient described mild discomfort in chewing, but there were no changes in his swallowing and taste functions. His past and medical history was unremarkable. The MRI images study, T1-weighted image without contrast showed a homogeneous lesion of the base of the tongue that appeared isointense to surrounding muscle. Then, the T1-weighted image with gadolinium contrast enhancement revealed a heterogeneously enhancing, well-circumscribed lesion over the tongue base. T2-weighted image showed a high signal intensity with well-demarcated, heterogeneous mass in appearance.

He has received the operation for diagnosis and treatment under local anesthesia. The patient finally was admitted and underwent partial glossectomy at our hospital.

### **Clinical Pathology :**

The laboratory evaluation showed within in normal for blood routine and biochemistry.

### **Gross Findings :**

The mass lesion measured about 3 x 2.5 x 2 cm, exhibited rubbery appearance with ulcerative mucosa.

### **Pathological Findings :**

The specimen submitted consisted of a small tumor measured 3 by 2.5 by 2 cm in size. The tumor was well defined, elastic firm in consistency and grayish-white in color. A cross-section revealed a gray-white encapsulated solid mass. Marked ulcer of the covered mucosa was found. There was uneventful and patient is without signs of recurrence during eight-year follow-up.



## **CASE RESULT :**

### **Histopathologic Findings :**

Histopathological evaluation demonstrated pictures of schwannoma with chronic ulcer. The tumor showed a well-circumscribed mass with chronic ulcer of the superficial epithelium, composed of focal myxomatous stroma with microcystic degeneration and spindle Schwann cells inside hypercellular (Antoni A) and hypocellular (Antoni B) areas. There was no evidence of extensive hemorrhage, necrosis, mitoses or malignancy.

### **Immunohistochemistry :**

Immunohistochemical study, these tumor cells displayed strongly immunoreactivity for S-100 protein, vimentin, NSE (neuron specific enolase) and focal expressed for GFAP (Glial fibrillary acidic protein), but there was no mitosis or cellular atypia.

### **Differential Diagnosis :**

1. Fibrous histiocytoma
2. Neuroma
3. Granular cell tumors
4. Leiomyoma.
5. Plexiform neurofibroma
6. Giant cell fibroma
7. Lymphangioma
8. Malignant lesions like squamous-cell carcinoma.

### **Diagnosis : Tongue, Schwannoma**

### **Discussion :**

Schwannoma also known as neurilemmoma is a benign encapsulated perineural neoplasm of neuroectodermal derivation that originates from the Schwann cells of the neural sheath of motor and sensory peripheral nerves, is relatively rare in occurrence. The etiology is unknown and the tumor is usually solitary, benign, smooth-surfaced, slow-growing, and generally asymptomatic or may occasionally cause pain and discomfort. Approximately 25-45% of all schwannomas occur in the head and neck region. Only about 1-12% of the tumors occur intraorally with the tongue being the most common location with presentation at the base of the tongue as the most frequent site for intraoral tumors.

Schwannoma usually occur during the third or fourth decades of life and the tongue is the most common intra-oral site. However, the parapharyngeal space is the most common anatomic site in the head and neck region. The tongue also a whole is the most common location for intraoral schwannomas to occur. The major clinical presentation was a painless mass on the lingual surface. Additionally, for all patients, no tumor recurrence or complication was noted after tumor extirpation.

The possible etiologies of the tongue schwannoma are spontaneous growth, external injury, chronic irritation, or exposure to radiation noticed; but the certain cause of the tongue schwannoma is unknown. Subsequently study, Lee et. al. reported that schwannoma of the tongue maybe caused by tongue biting injury. Shore-Freedman et. al. found 29 schwannomas in a long-term follow up of more than 2000 patients who had undergone irradiation exposure to neck area. Schwannomas also can arise from cranial nerves such as vagus nerve, spinal roots and peripheral nerves. Previous serial investigations showed that the tongue schwannomas can be located at all parts of the tongue but were mostly located at one side of the tongue (36.3%), following base (24.2%), tip (21.2%) and ventral surface (15.1%) in previous reports.

Symptoms of tongue schwannomas presented variable include painless swelling and tenderness, snoring, pain, otalgia, dysphagia, and change of the voice quality. In present case, mass at the base of the tongue had discomfort in chewing, but there were no changes in his swallowing and taste functions, no snoring, dysphagia, otalgia and pain symptoms. Moreover if the schwannomas arises in the posterior two-thirds of the tongue, they are more likely to produce debilitating symptoms. Choice of diagnosis at most of the cases was excisional biopsy. If the masses are excised totally, there is no need to do fine needle biopsy before surgery but masses which were located at base or sublingual portion are exceptions. In our case, we didn't perform fine needle biopsy and preferred excisional biopsy because of their location and easy surgical approach.

Preoperative diagnostic procedures suggest MRI is superior to CT in several aspects. The MRI image is not degraded by dental amalgam or the beam-hardening artifacts that plague CT scanning of the oral cavity. In addition, MRI allows an accurate measurement of tumor size and precise localization in relation to other structures.

Histological identification of the presence of a circumscribed capsule, Antoni A and B areas along with strong and diffuse expressed with S-100 stain pathologically completed the diagnosis of schwannoma. Morphologically, Antoni A or Antoni B stroma, and strongly positive stain with S-100, vimentin. Antoni A (cellular region) demonstrates compacted spindle cells, of which nuclei occasionally line up in palisades, forming Verocay bodies. Antoni B (edematous region) shows loose spindle cells within myxoid matrix. An acid S-100 protein in the Schwann supporting cells of the central and peripheral nerve can be demonstrated in schwannoma, particularly in the Antoni A areas. Necrosis, cystic degeneration and focal thrombosis can be seen in some cases. Schwannomas are almost slow-growing, painless masses and it is diagnosed by histopathological examination or imaging modalities.

Schwannomas uncommonly showed changes of tendency to malignancy. Malignity was found in 16% of all schwannomas. 9-14 % of malign schwannomas was reported in head and neck. Although malignant transformation of a benign schwannoma of the tongue has been controversial, it remains a concern. The differential diagnosis includes benign lesions such as granular cell tumors, leiomyoma, lymphangioma, lipoma, lingual thyroid, and malignant lesions like squamous-cell carcinoma, cancer of salivary glands, and soft tissue sarcoma. The final diagnosis is always made after a definitive histological evaluation.

We hereby report a further case of a schwannoma of the tongue, highlighting the need for this to be considered in the differential diagnosis. Recurrence of tongue schwannoma is rare. In previous reports that no any recurrence was noted and the longest follow up time was 16 years. Benign and malignant lesions can be seen on the tongue. The growth, histopathological examination and clinical appearance must be observed in differential diagnosis. Pain and neurologic deficit supports malignancy. Fibroma, malignant fibrous histiocytoma, leiomyoma, leiomyosarcoma, lipoma, neuroma and adenoma must be considered in the differential diagnosis of the tongue masses.

Surgical complete resection of the tumor is the primary mode of treatment with excellent postoperative prognosis with a clear free surgical margin can be considered as a curative treatment and rare instances of recurrence is even less frequent. The diagnosis of schwannoma is usually made post-operatively by histological identification although modern imaging techniques can provide useful indications.

In conclusion, schwannoma of the tongue base is a rare neoplasm with an excellent prognosis. Schwannoma of the tongue is a solid and slow-growing tumor which occurs rarely but must be kept in mind at differential diagnosis of tongue masses. Symptoms mostly include pain and tenderness. The clinicopathological characteristics are consistent with that of benign peripheral nerve sheath tumors.

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**Case Number: 530**

**Slide Number: NTU20182738**

**Slide View: [http://www.ivp.nchu.edu.tw/slide\\_view.php?id=1622](http://www.ivp.nchu.edu.tw/slide_view.php?id=1622)**

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## **CASE HISTORY:**

**Signalment:** A 11-year-old, castrated male, Maltese

The animal presented to the local veterinary hospital because of a mass on right mandibular body. The mass grew quickly, and X-ray showed bone lysis at that area. Total hemimandibulectomy was performed on October 17 2018 and submitted for histopathological examination.

## **Gross Findings:**

There was a globoid mass effacing canine teeth and premolar tooth at Rt. mandible. The mass was poorly demarcated and solid, and bony structures were effaced. The cut sections of the mass revealed multiple variably-sized cystic structures.

## **CASE RESULT:**

### **Histopathological Findings:**

Elevating the ulcerative mucosa, expanding the lamina propria and effacing the teeth and bone is a non-encapsulated neoplasm, which is composed of neoplastic odontogenic epithelium accompanied with wide accumulation of eosinophilic to amorphilic, amorphous, hyaline to waxy, weakly birefringent substance (amyloid) and multifocally-distributed deep basophilic, flecks of mineralization. The neoplastic cells are stellate and reticular in shapes, arranged in small islands and short cords. Frequently, the neoplastic cells become clustered, distinctly-bordered, and polygonal, having hypereosinophilic cytoplasm and intracytoplasmic globules of keratins (squamous differentiation). The neoplastic cells generally have moderate to scant cytoplasm and an oval to round nuclei with small distinct nucleoli. Mitosis is rare. The margins of the mandibulectomy and blood vessels are free of neoplastic cells. Under the Congo red staining, amyloid is stained dull-brick red and has an apple-green birefringence under polarized light.

**Pathological Diagnosis:** Amyloid-producing odontogenic tumor

### **Differential diagnosis:**

1. Calcifying epithelial odontogenic tumor (CEOT)
2. Ameloblastoma
3. Acanthomatous ameloblastoma

### **Discussion:**

Amyloid-producing odontogenic tumor (APOT) is a rare neoplasm originated from odontogenic epithelium associated with extracellular amyloid deposition. There are some reports of APOT in dogs and cats, and fewer in other animal species such as Bengal tiger and goat.

In veterinary medicine, APOT was previously named as calcifying epithelial odontogenic tumor (CEOT) because of the suggested similarity to those of human CEOT. They are all characterized by odontogenic epithelial proliferation with or without mineralization in the stroma and deposition of amyloid materials. However, the neoplastic epithelial cells in CEOT are arranged in sheets and are eosinophilic with nuclear pleomorphism. In APOT, the basal cells are palisading with the presence

of stellate reticulum, which has not been shown in human CEOT. Additionally, the immunohistochemistry (IHC) staining characteristic of amyloid in APOT is different from CEOT. Some studies have proven that the amyloid and the neoplastic cells in APOT are derived from ameloblast on the basis of the reactivity to the antibodies of ameloblastin, sheathlin, and amelogenin. As a result, APOT would more properly be named as canine amyloid-producing ameloblastoma (APA).

Epithelial odontogenic tumor can be divided into two groups based on the inductive interaction between dental epithelium and mesenchyme. Ameloblastoma, acanthomatous ameloblastoma, CEOT, and APOT are considered as non-inductive; while ameloblastic fibro-odontoma, odontoameloblastoma, ameloblastic fibroma, complex odontoma, and compound odontoma are considered to be inductive due to the evidence of mesenchyme induction. However, an amyloid-producing odontoameloblastoma, with presence of ectomesenchymal components including enamel and dentin, has been reported in a black-tailed prairie dog.

Generally, APOTs are a morphologically benign tumors but with malignant behaviors because of the feature of locally extensive invasion to the bone. No metastasis has been reported in APOTs, but tumor recurrence was shown in one case following surgical excision. The current case shows typical bone lysis to the mandibular bone clinically. So far, the patient is in good condition after the surgical excision.

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**Case Number: 531**

**Slide Number: S2011-4288A**

**Slide View: [http://www.ivp.nchu.edu.tw/slide\\_view.php?id=1615](http://www.ivp.nchu.edu.tw/slide_view.php?id=1615)**

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## **CASE HISTORY:**

**Signalment:** A 6-month-old, male infant

This 6 m/o male infant was a patient of rhabdomyosarcoma, stage IV s/p OP, C/T and R/T with refractory and progressive disease. The tumor was first noted as an eyelid mass over right upper eyelid(1.5x1x1 cm) with raised and smooth margin since birth. Intralesional steroid therapy had been injected under the impression of hemangioma. However, the tumor progressively enlarged in size(to 3x5x2 cm) in the following weeks. The tumor excision was performed and the pathology showed embryonal type rhabdomyosarcoma with desmin(++) and myogenin(++). Follow-up image studies revealed one nodular lesion (7 mm) over right hepatic lobe, metastatic lesion over bilateral lung fields and soft tissue mass over bilateral neck, right flank and buttock. Debulking surgery of right flank and left neck masses was performed. The pathology also showed metastatic embryonal rhabdomyosarcoma. Progressive respiratory distress with desaturation and consciousness disturbance caused patient expired.

## **Gross Findings:**

At autopsy, this male infant was 10.0 kg in weight and 63 cm in body length. Bilateral neck, right flank and right thigh mass were noted. Opening the chest & abdominal wall, 300 ml turbid left pleural effusion and 400 ml serous ascites were obtained. Bilateral lungs showed multiple metastatic nodules accompanied hilar lymph nodes enlargement and diaphragm metastasis. Prominent pulmonary artery and right ventricular dilatation (called cor pulmonale) were seen. Numerous enlarged para-esophageal lymph nodes and two enlarged mesenteric lymph nodes were noted. The liver showed two metastatic nodules. No metastatic nodules were found in spleen, bilateral kidneys and brain.

## **CASE RESULT:**

### **Histopathological Findings:**

Microscopically, the eyelid mass shows diffuse small blue round cells with diffuse myogenin positive and focal desmin positive diagnosed as embryonal rhabdomyosarcoma. Multiple metastatic lesions are noted in debulking specimens. In the autopsy specimens, metastatic lesions involve bilateral neck, right flank and right thigh. The tumor also metastasizes into bilateral neck lymph nodes, hilar lymph nodes, para-esophageal lymph nodes and mesenteric lymph nodes. In addition, this tumor metastasizes into liver and lungs. Right lung presents solid metastasis accompanied lymphangitic carcinomatosis & marked pulmonary edema. Left lung demonstrates metastatic nodules accompanied lymphangitic carcinomatosis and prominent compression atelectasis. We also find one ganglioneuroblastoma in the left adrenal gland and one Wolffian duct hamartoma in left testis.

**Pathological Diagnosis:** Embryonal rhabdomyosarcoma

### **Differential diagnosis:**

Capillary hemangioma

## Discussion:

This is a case of congenital embryonal rhabdomyosarcoma(RMS) of eyelid in a newborn. A clear margin and reddish eyelid tumor in his OD was revealed using orbital MRI. After the operation, metastases still occurred despite the treatment with chemotherapy and concurrent radiation. In an autopsy, a neuroblastoma was incidentally found in his left adrenal gland.

The tumor was initially mistaken for a capillary hemangioma because of its red hue. Therefore, intralesional steroids were injected and the tumor shrank initially, but grew rapidly later. Clinicians should carefully differentiate between congenital eyelid RMSs and capillary hemangiomas. The latter is a common type of benign orbital tumor in children, and approximately one third of capillary hemangiomas are present at birth. Clinically, a capillary hemangioma may present as a cutaneous, subcutaneous, deep orbital lesion, or a combination of the three types. The superficial cutaneous capillary hemangioma, or “strawberry nevus,” is initially evident as a confluence of telangiectasias, and later progresses to a red, raised, nodular lesion. The diagnosis of superficial cutaneous capillary hemangioma is usually clinical. Therefore, it is difficult to distinguish between a congenital eyelid RMS and a superficial cutaneous capillary hemangioma at the onset of the two diseases. An early biopsy may be useful in equivocal cases to an early correct diagnosis and avoid metastases.

RMS is the most common type of soft tissue sarcoma in children. However, they are rare, only 3 to 4 percent of all pediatric cancers. Two-thirds of cases are diagnosed in children younger than six years of age, and there is a male predominance (male to female ratio between 1.3 and 1.5). The specific risk factors for RMS are still unknown.

Histologically, RMS is a kind of small blue round cell tumors. Some major subtypes are identified, including, embryonal RMS, alveolar RMS, botryoid RMS and pleomorphic RMS. The embryonal RMS is the most common type (59 %), and composed of typical rhabdomyoblasts arranged in sheets and large nests. Patients with embryonal RMS show a intermediate prognosis and better 5-year survival rate than those with alveolar RMS. Previous studies have also demonstrated that age is a prognostic factor in RMS, and a poorer outcome is reported for infants than older children. In addition, head and neck RMS are more common in younger children; while arising in orbit, they are almost always the embryonal type.

The pathogenesis of embryonal RMS showed inactivation of the tumor suppressor genes p53 and CDKN2A/B, and activation of fibroblast growth factor receptor (FGFR), Rat sarcoma (RAS), and BRAF. Mutations in neuroblastomas included anaplastic lymphoma kinase (ALK) and mitogen-activated protein kinase kinase (MAP2K1), as well as a novel finding of rare presentations of BRAF and RAS, which have been found in embryonal RMS. The hypothesize that both RMS and neuroblastoma in this case were associated with the oncogene mutations. Further chromosomal and genetic studies in similar cases of multiple pediatric solid tumors might be necessary to elucidate their relationship.

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## Case Number: 532

**Slide Number: NTU2019-2248**

**Slide View:**

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### **CASE HISTORY:**

**Signalment:** Feline, Chinchilla, 15-year-old, female, neutered

An intraocular mass was found in the right eye on October 24, 2017. After ophthalmic examination, the iridal mass and uveitis were diagnosed. Due to increasing pain and the progressive development of its intraocular mass, right eye enucleation was performed on August 29, 2018. Besides, the cat has suffered the recurrent MGTs (unknown type and grading) for a long time.

### **Gross Findings:**

The received specimen was a right eyeball with diffusely turbid cornea and an irregular yellow-white mass protruded into the anterior chamber. On the cutting surfaces, the white and mottled black mass was identified from the iris to the irido-ciliary area, and the normal structures of anterior chamber, iris and partially ciliary body were effaced.

### **CASE RESULT:**

#### **Histopathological Findings:**

Local-extensively, the lesion shows severe necrosis with small amount of recognizable neoplastic tissues which are extending into the choroid layer, and almost replacing the whole iris and ciliary bodies. Focally, the neoplasm is invading into the scleral layer. The neoplasm reveals two types of patterns: (1) majorly, the tubular pattern is composed of cuboidal to flat shape tumor cell with eosinophilic cytoplasm, one or more pleomorphic, stratified and turbid nuclei and predominant nucleoli; occasionally, with grey to eosinophilic substance in the acinar; (2) a small area of squamous epithelial cells are present in the space of vitreous body/necrotic area, which presents light eosinophilic cytoplasm with small and round nuclei. Besides, some of them are individualized. Beneath this area, abundance of keratin materials is also found. In the necrotic area, large amount of eosinophilic cellular debris with few inflammatory cells are observed. Furthermore, neoplastic cells are focally present in adjacent lymphatics.

**Pathological Diagnosis:** Adenocarcinoma, suspected mammary gland tumor metastasis, with severe necrosis, mass from iris and partially ciliary bodies of right eye

#### **Differential diagnosis:**

1. Iridociliary epithelial carcinoma
2. Adenocarcinomas of undetermined origin

#### **Discussion:**

Based on the histologic feature, the results of the special stain (PAS±), immunohistochemical stain (pan-cytokeratins positive, vimentin negative, NSE negative, and S100 negative), and the disease history of the long-termed mammary gland tumors (MGT), a metastasized adenocarcinoma from the MGT is diagnosed.

The major differential diagnosis is iridociliary epithelial tumor. This is a rare tumor but is the second most common primary intraocular tumor in cats. Further processes including PAS staining and immunohistochemical staining (pan-cytokeratins, vimentin, S100 and NSE) are necessary.



Histologically, these tumors are pleomorphic, present either in the iris or the ciliary body, and mainly arranging in solid, papillary, or cystic patterns. Many of these tumors reveal thick, PAS-positive basement membrane reminiscent of the inner lining of the non-pigmented ciliary body epithelium with hyaluronic acid secretion. In addition, the positive IHC for vimentin, cytokeratin, S100 and NSE can be useful markers to confirm the primary iridociliary epithelial tumors. Comparing to the current case, tubular pattern is significant different from the common patterns of iridociliary epithelial tumor; beside, only scattered and thin membrane can be highlighted by PAS-stain among the present neoplasm. Accordingly, other metastasized tumor is strongly considered. Due to severe necrosis without significant inflammatory cells, a high level of malignant tumor and long-termed disease process are also suspected. In addition, the accidentally finding of squamous epithelial cells and keratin material is considered as squamous metaplasia which is often found in feline MGT carcinoma.

Iridociliary area is one of the hot spots of tumor metastasis in cats; the most common metastatic tumors are pulmonary adenocarcinoma and mammary adenocarcinomas. Other studies also revealed different kinds of intraocular metastatic neoplasms, including pulmonary adenosquamous carcinoma, squamous cell carcinoma, uterine adenocarcinoma, etc. If the specimens and clinical information were limited, the correctly diagnoses would be in a dilemma. In human medicine, in addition to the CK and vimentin staining, hormone receptors such as the ER and/or PR receptors are also the effective markers for the differentiation of intraocular metastatic tumor. Due to feline iridociliary epithelial tumors do not consistently stain positive for vimentin and NSE; therefore, histological patterns and the combination of IHC of CK, vimentin, S100, NSE and possibly feline ER/PR antibodies are important in the diagnosis of these neoplasms.

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**Case Number: 533**

**Slide Number: LP-4243**

**Slide View: [http://www.ivp.nchu.edu.tw/slide\\_view.php?id=1623](http://www.ivp.nchu.edu.tw/slide_view.php?id=1623)**

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## **CASE HISTORY:**

**Signalment:** 30-year-old male.

### **Clinical History:**

A 30-year-old male who has suffered from left parotid tumor for 2 months. The tumor got bigger recently. Intermittent tenderness was also noted. The came to the ENT ODP for help. Physical examination showed left parotid tumor measuring about 2.0 x 2.0 x 1.8 cm with tenderness. He denied any systemic disease. There was no fever. Under the impression of left parotid tumor, he was admitted to the ward for surgical intervention. The CT scan showed lobulated tumors in bilateral parotid glands. The right parotid tumor measuring 2.3 cm in the greatest diameter. The left parotid tumor measuring 2.7 cm in the greatest diameter. Left parotidectomy was performed. The specimen was sent to the department of pathology for pathologic diagnosis. The specimen submitted consisted of parotid gland with tumor and measuring 3.6 x 2.4 x 1.9 cm. The tumor measuring 2.2 x 1.8 x 1.7 cm with grayish-brown color and elastic firm consistency.

### **Clinical Pathology:**

BUN: 10 mg/dL (6-20 mg/dL), Creatinine: 1.0 mg/dL (0.7-1.3 mg/dL), Glucose: 79 mg/dL (70-100 mg/dL), Na: 138 mmol/L (135-145 mmol/L), K: 3.8 mmol/L (3.5-5.1 mmol/L), Ca: 8.6 mg/dL (8.6-10.20 mg/dL), AST (GOT): 29 U/L (5-40 U/L), ALT (GPT): 18 U/L (5-40 U/L), RBC: 4.04x10<sup>6</sup>/uL (4.6-6.2x10<sup>6</sup>/uL), Hb: 11.7 gm/dL (14.0-18.0 gm/dL), Hct: 35.8 % (40-54%), Plt: 22.7 x10<sup>4</sup>/dL (15-40 x10<sup>4</sup>/dL), WBC: 3.7 x10<sup>3</sup>/uL (4.5x10<sup>3</sup>-11.0x10<sup>3</sup>/uL), Lymphocyte: 24.0% (20.0-45.0%), Neutrophil: 59.3% (45.0-75.0%), Monocyte:13.0% (0.0-9.0%), Eosinophil: 3.4% (1.0-3.0%), Basophil: 0.3% (0.0-1.0%) .

## **CASE RESULT:**

### **Histopathologic Findings:**

Histopathological examination revealed parotid gland with tumor composed of proliferated spindle cells forming sinuous vascular spaces or slit-like spaces. The nuclei were mild irregular in size and shape. The nuclear chromatin was vesicular or hyperchromatic with indistinct nucleoli. Mitotic figures were identified up to 4/10HPF, including atypical forms. Erythrocytes were noted within the sinuous vascular spaces and slit-like vascular spaces. Eosinophilic, glassy-hyaline globules were occasionally found. Lymphocytes infiltration were noted within and around the tumor, suspected for tumor in lymph node. The tumor partially invaded the parotid gland and surrounding fibrous tissue. .

### **Immunohistochemistry:**

Sections of tissue specimen were subjected for immunohistochemical evaluation. On immunohistochemical analysis, the tumor cells were positive for CD31, CD34, CD99, Bcl2,  $\beta$ -catenin and HHV-8, and negative for S-100, actin and STAT6.

**Differential diagnosis:**

1. Spindle cell hemangioma
2. Kaposiform hemangioendothelioma.
3. Angiosarcoma
4. Kaposi's sarcoma

**Diagnosis:** Kaposi's sarcoma, parotid gland.

**Comments:**

Moritz Kaposi originally described multiple, slowly progressing, pigmented skin plaques in Mediterranean men as a vasoformative lesion that now bears his surname. Kaposi's sarcoma (KS) is a multicentric angioproliferative cancer of endothelial origin that usually occur in patients with immunodeficiency, such as Human Immunodeficiency Virus (HIV) or transplantation. KS-associated herpesvirus (KSHV), also known as human herpesvirus-8 (HHV-8), is associated with the development of KS. Although the incidence of KS has dramatically decreased in both USA and Europe after the introduction of Highly Active Antiretroviral Therapy (HAART), KS remains the second most frequent tumor in HIV-infected patients worldwide and the most common cancer in Sub-Saharan Africa. KS usually occurs in late stages of HIV infection and is characterized by an extremely aggressive clinical course. KS is less aggressive in patients on HAART

Isolated KS of the parotid gland is an uncommon but distinct entity in patients with HIV. Isolated KS of parotid gland has also been described in immunocompetent HIV-negative individuals with sporadic KS. The parotid gland is the only salivary gland with substantial lymphoid tissue. This explains why most case reports of KS were of intraparotid lymph nodes, particularly in the setting of AIDS. Thus, lesions confined to the lymph nodes may cause enlargement of the parotid gland but not of other salivary glands. Furthermore, intraparotid KS has been reported in HIV-infected patients due to parenchymal involvement, with or without lymph node invasion.

KS of the parotid gland has been described primarily in homosexual men, along with epidemic KS in general. The age distribution is 20–73 years, with a mean age of 53.0 years, at the time of initial presentation. None of the reported cases, have demonstrated KS of the salivary gland in female patients.

All of the patients presented clinically for evaluation of a mass or swelling of the major salivary gland with recently increasing in size. Additional symptoms included fever, pain, and ulceration. The symptoms lasted from 1 month to 70 months, with an average of 13.7 months, although there was a median of 2.5 months. The KS can located within the substance of the submandibular and parotid glands and ranged in greatest dimension from 1 cm to 4 cm (average, 2.5 cm). The parotid gland tumors (1 cm), on average, were much smaller than the submandibular gland tumors (3.3 cm).

Grossly, the excised tumors were characterized as well circumscribed to locally invasive ovoid masses, surrounded by normal to atrophic or inflamed salivary gland tissue. The cut surface of the tumors was fleshy, red-tan, and focally demonstrated fresh and old blood.

KSHV, renamed HHV-8, is believed to play an etiologic role in the development of KS in patients either with or without evidence of HIV infection. HHV-8 also is believed to be transmitted sexually and to precede the development of KS. Additional studies have shown that antibodies to HHV-8 are present in approximately 80-90% of patients with KS.

The incidence of GI tract involvement was more than 50% in AIDS patients with cutaneous KS. Pulmonary involvement was found in about 45% of patients with AIDS-related KS with cutaneous or GI involvement.

Microscopically, the KS is composed of a monomorphic population of spindled cells interlacing with one another. Irregular vascular channels are lined by plump endothelial cells

supported by an inconspicuous reticular to fibrotic supporting framework. The nuclei are irregular in size and shape, although they are fairly uniform with one another. The nuclear chromatin may vesicular, cleared or more hyperchromatic. Mitotic figures are frequent. Extravasated erythrocytes are prominent in the slit-like vascular spaces, usually coupled with hemosiderin pigment. Characteristic (although not pathognomonic) eosinophilic, glassy-hyaline globules are found both intracellularly and extracellularly. Invasion into the salivary gland acini is noted but usually is only a focal finding. Occasionally, isolated islands of tumor cells are found within salivary gland parenchyma but distant from the main mass, suggesting multifocal disease within the affected salivary gland. Furthermore, the tumor cells also are identified invading into intraparotid lymphoid tissue or lymph nodes when they are present. Immunohistochemically, KS are positive to the non-specific endothelial markers CD31 and CD34, and also to the lymphatic endothelial marker D2-40 or podoplanin. The antibody to HHV-8 latent nuclear antigen is a highly specific commercial stain and has simplified the diagnosis in difficult cases. KS are negative to SMA, S-100, HMB45, desmin and cytokeratin.

Patients who are both HIV positive and HHV-8 positive have a 49.6% chance of developing KS. Therefore, because KS of the head and neck area is quite common, there should be an increased index of suspicion for KS of the salivary gland when these patients present with salivary gland enlargement.

There is no hard evidence regarding the best mode of treatment of isolated intraparotid KS. For patients with localized KS, it is generally accepted that local therapies are most appropriate. For patients with parotid gland involvement, this could be radiation therapy. However, external beam radiation therapy can lead to notable mucosal toxicities. In this setting, local excision is certainly reasonable if, in the milieu of HAART, the lesion continues to grow, causes cosmetic deformity, or causes other symptoms.

The overall survival of the patients seemed to be dictated by the underlying nature of the disease (AIDS) rather than the presence of KS. Patients died of infectious complications of AIDS with an average of 2.0 years after the presentation of the salivary KS.

In conclusion, salivary gland KS is a rare manifestation of epidemic AIDS, occurring in male patients of any age who usually have documented HIV or HHV-8 antibodies. Unilateral or bilateral parotid gland enlargement in homosexual men with HIV-1, could represent a manifestation of KS.

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**Case Number: 534**

**Slide Number: CO18\_516T10**

**Slide View: [http://www.ivp.nchu.edu.tw/slide\\_view.php?id=1624](http://www.ivp.nchu.edu.tw/slide_view.php?id=1624)**

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## **CASE HISTORY**

### **Signalment:**

A 4-month-old, intact female corgi dog with a history of bilateral hip joint dysplasia.

### **Clinical History:**

On August 6<sup>th</sup>, 2018, the patient was found having gatism. Consequently, the patient was referred to a local animal hospital. The computed tomography examination showed that dorsal of T12-T13 spinal cord was compressed by a mineralized mass. On August 13<sup>th</sup>, 2018, the patient's gatism showed no signs of improvement. Therefore, the patient was referred to NCHU-VMTH. Upon visual inspection, paraplegia was found in both hindlimbs but no trauma was observed. The neurological examination showed that the cranial nerve reaction, the postural reaction and the spinal reflexes of the forelimbs were all normal. The postural reaction of both hind limbs were absent, superficial nociception and deep nociception were absent and the spinal reflexes of both hind limbs were hyperreflexic. The perineal reflex was absent. Cutaneous trunci reflex stopped at the site of L2. On August, 16<sup>th</sup>, 2018, after the discussion by the veterinarian and the owner, the patient underwent euthanasia. On August, 17<sup>th</sup>, 2018, the patient was submitted for further investigation to the Animal Disease Diagnostic Center at NCHU. Before the necropsy, the radiographic examination revealed increased opacity masses were on the scapula, rib, and spines of the thoracic and lumbar level. Computed tomography examination showed the bone-dense mass was in the T12-T13 vertebral canal, causing compression of the spinal cord. The tentative diagnosis of multiple hyperostosis in a dog was made.

### **Gross Findings:**

On the external examination, there was a multifocal redness foci around the perineum.

At necropsy, there were multiple masses at different segments of spines. At T2 vertebra, there are 4 solid nodular masses: one about 1 cm in diameter on the right side of the middle segment of the spinous process, one about 0.7 cm in diameter on the left side, one about 0.3 cm in diameter on the anterior side, and one about 0.3 cm in diameter on the dorsal side of the vertebral foramen. Additionally, the whole spinous process is remarkably thickened. At T6, on the left side of the spinous process had a diameter of 1.3 cm solid mass, and the left ventral side of the spinal canal had a solid mass of about 0.5 cm in diameter; the spinal cord was compressed to the right side due to the mass. At T10, a 2 x 0.8 cm solid mass expand the right lamina and protruding into the vertebral foramen. The spinal cord was compressed to the left due to the mass. At T11, on the right side of the vertebral

foramen had a solid mass, measuring 0.5 cm in diameter and compressed the spinal cord to the left. At T12, the spinous process had a solid mass, measuring 1.5 x 1 cm, extending to the dorsal side of the vertebral foramen and compressing the spinal cord to the left side. At L3, the right transverse process had a solid mass, measuring 0.4 cm in diameter. At L5, the right transverse process had a solid mass, measuring 0.7 cm in diameter. Both sides of the interface of the true rib and rib cartilage were swollen, a solid mass of about 1.5 cm in diameter at the junction of the second pair of left ribs; and a solid mass of about 0.5 cm in diameter was presented on the ventral side of the second pair of right ribs. Femur had a solid mass, measuring 0.3 cm in diameter, near the patellar groove. Both sides of the subscapular fossa had a solid mass, the left side was about 3.5 cm in diameter; the right side was about 5.5 cm in diameter. All the cross sections of the masses mentioned above were revealed that the mass was capsulated with white-gray cartilage, and bone marrow was presented in the center of mass. At the junction of the mitral valve and the chordae tendineae were multiple red, translucent, mucoid nodules, measuring 0.2-0.3 cm in diameter. On the surface of the lungs were mottled and dark red. The foamy mucus was presented in the lumen of trachea. 17 ml of clear pleural effusion was presented in thoracic cavity. The mucosal layer of bladder was red.

## **CASE RESULT**

### **Histopathologic Findings:**

1. Multiple masses: There are an exophytic, multinodular, well demarcated, and non-encapsulated proliferation arising from the multiple bone periosteum. Well-differentiated chondrocytes enmeshed within an abundant hyalinized extracellular matrix with enlarged lacuna. At the deep surface of the cartilage, endochondral ossification is occurring, and the marrow cavity contains hematopoietic and adipose tissue.
2. Spinal cord: At T6, the left ventral side of spinal cord is compressed to the central side due to the mass; at T11, the right dorsal side of spinal cord is compressed to the central side due to the mass, swollen axons and shrunken neuron are presented at two segment of spinal cord mentioned above. At T12, the spinal cord is compressed to the left ventral side of spinal canal, swollen axons, shrunken neuron, decreased neuron numbers and liquefaction necrosis is presented.
3. Lungs: Diffusely there are eosinophilic exudate with plasma cell, lymphocyte, macrophage and neutrophil in alveolar cavity. The blood vessels between alveoli are dilated with red blood cell stagnation.
4. Bladder: On the mucosa were multifocal urothelial desquamation and hemorrhage. Within the submucosa were large number of neutrophils and degenerative blood vessels. In the muscularis layer were multifocal fibrinoid necrosis with microthrombi formation in arterial blood vessel and neutrophil infiltration.
5. Perineal skin: There is focal ulceration characterized with severe necrosis in epidermal layer and neutrophils infiltration, along with epithelial desquamation.
6. Cerebellum: decreased of granular cell density was observed in the granule layer.

### **Morphological Diagnosis:**

1. Multiple cartilaginous exostoses, severe, chronic-progressive, multifocal, and near growth plate, bones, ribs, scapula, T2-L5 vertebra and femur.
2. Degenerative myelopathy, secondary, severe, chronic-progressive, multifocal, spinal cords, T6, T11 and T12.

### **Differential Diagnosis:**

1. Multiple cartilaginous exostoses
2. Osteosarcoma
3. Chondrosarcoma

#### 4. Osteoma

##### **Diagnosis:**

Multiple Cartilaginous Exostoses Causing Spinal Cord Compression in a Dog

##### **Discussion:**

Multiple cartilaginous exostosis (MCE) is a bone disease of uncertain origin characterized by multiple, cartilage-capped bony protuberances that arise from the surfaces of bones formed by endochondral ossification<sup>(15)</sup>. It's also termed osteochondromatosis. Solitary cartilaginous exostose is termed osteochondroma, while multiple cartilaginous exostoses is termed Osteochondromatosis. The condition is a relatively common syndrome in man and it has also been documented in dogs, horses and cats. Multiple cartilaginous exostoses presented it as multifocal, benign, proliferative lesions involving the surface of scapulae, ribs, vertebrae, and pelvis, in young dogs. It is theorized that multiple cartilaginous exostoses may arise from a failure of normal maturation of the perichondrial ring around the physis of bones, growth of the lesions in dogs ceases with fusion of the neighboring physes<sup>(10,13)</sup>. On the other hand, the feline leukemia virus has been implicated in feline MCE and viral particles have been detected in the chondrocytes of the cartilage cap of feline patients<sup>(15)</sup>. Potential clinical ramifications of cartilaginous exostoses include pain and altered limb function which may occur with compression of the spinal cord, peripheral nerves, tendons, or vessels in adjacent soft tissues<sup>(35)</sup>. In humans, mutations in the EXT1 and 2 genes are associated with hereditary multiple exostoses. These mutations lead to decreased heparin sulfate, which results in increased responsiveness to bone morphogenetic proteins and subsequent excessive chondrogenesis at the perichondrial ring<sup>(13,5,6)</sup>. Even though the exact mechanism of MCE caused by EXT1 and EXT2 mutations is unclear, it is possible to identify whether MCE dogs have the aforementioned gene mutations by sequencing the entire EXT2 gene<sup>(13, 15,16)</sup>; the other theory of MCE is associated with periosteal defects. The defect may lie with the periosteum, which may regain its perichondrial potential due to some unknown initiating factor<sup>(10, 15)</sup>

According to the age of patient and the radiology examination, there are 3 possible diagnoses, including osteosarcoma, chondrosarcoma and osteoma.

Osteosarcoma is the most common bone tumor in dogs. It is often spotted in the axial and appendicular skeleton<sup>(12)</sup>. Radiological examination reveals invasive bone lesions and fissures, sometimes accompanied by pathological fractures. The lesions show dense mineralized stroma, osteolysis is visible in the center, surrounded by an irregularly shaped periosteal reaction, and the cortical portion covering it is destroyed and incomplete, and the transition between the lesion and the normal bone is relatively small<sup>(7)</sup>; histopathologically, osteosarcoma is non-capsulated, indistinct tumor boundaries, highly cellular with a large number of poor-differentiated mesenchymal cells, cytoplasm of neoplastic cells are enlarged and vacuolated, with pleomorphic, necrotic, prolonged and deeply stained nucleus, mitoses are often, the bone matrix produced by tumor cells includes a large number of cartilage, collagen fibers and hard bone<sup>(12)</sup>.

Chondrosarcomas are malignant mesenchymal tumors in which the neoplastic cells produce variable quantities of cartilaginous or fibrillar matrix, but not osteoid. Radiological images show osteolysis with endosteal scalloping, with a slight bone opacity<sup>(23)</sup>. Grossly, chondrosarcomas is presented in different sizes, transparent gray-white cartilage is spotted on the cut surface, sometimes hemorrhagic necrosis and gelatinous areas can be seen, especially in larger tumors. In histopathology, undifferentiated mesenchymal cells and differentiated chondrocytes located in the lacunae are surrounded by an amorphous basophilic cartilage matrix. The neoplastic cells are pleomorphic and vary in size, sometimes eosinophilic glycogen granules is presented in the cytoplasm. PAS staining was positive, and the nucleus is round to oval with multiple nucleoli, showing mitotic phase<sup>(11, 23)</sup>.

Osteoma is an uncommon benign tumor composed of abnormally dense, but histologically normal, mature bone originating from the periosteal surface. It grows slowly and does not metastasize, often causing clinical symptoms after compression of surrounding tissues. Radiological examination



shows that proliferative masses with well demarcated boundaries and strong, homogeneous bone opacity. Osteolysis is not spotted. Histopathologically, osteomas is non-capsulated, multinodular mass, consisting of trabecular bone formed by osteoblasts, remodeled by osteoclasts, and ultimately converted almost entirely to lamellar bone<sup>(18,37)</sup>. Mitosis figure is rare.

In this case, the four-month old patient presented gaitism and paraplegia, neurological examination showed that the postural reaction of both hind limbs were absent, superficial nociception and deep nociception were absent and the spinal reflexes of both hind limbs were hyperreflexic. The perineal reflex was absent. Cutaneous trunci reflex stopped at the site of L2. In gross lesion, multiple bony protuberances varied in sizes were found on scapula, rib, femur, and thoracic and lumbar spines. A bony protuberance was on the dorsal of T12-T13 vertebral canal, causing spinal cord severely atrophy. Histopathological examination revealed that protuberances were capped by hyaline cartilages with irregular endochondral bone formation and ossification. Inside the protuberances showed the formation of osteocyte by cartilaginous cap. Hematopoietic and adipose tissues were between trabeculae. Protuberances were found on T11 and T12, which compressed spinal cords, leading demyelination of the spinal cords. According to the examination above, the final diagnosis of multiple cartilaginous exostoses causing spinal cord compression in a dog was made.

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**Case Number: 535**

**Slide No.: CO1781020R2**

**Slide view: [http://www.ivp.nchu.edu.tw/slide\\_view.php?id=1621](http://www.ivp.nchu.edu.tw/slide_view.php?id=1621)**

**Case Number:**

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### **CASE HISTORY:**

**Signalment:** 5-week-old, 5 male and 5 female, Sprague-Dawley rats

These Sprague-Dawley rats were treated with sorafenib (7.5 mg/kg bw) by oral gavage for consecutively 28 days. During the test period, some of the male and female rats showed clinical signs of rough fur, weight loss, and decrease in feed consumption.

### **Gross Findings:**

No significant gross finding was found during necropsy.

### **CASE RESULTS:**

#### **Histopathological Findings:**

Microscopically in femur, growth plate widths increased. Chondrocytes, especially in hypertrophic zone, showed hypertrophy and hyperplasia. In the bone marrow which showed diffuse hypocellularity and hematopoietic cells was replaced by adipocyte tissue.

#### **Pathological Diagnosis:**

1. Chondrodysplasia, diffuse, severe, chronic, growth plate, femur.
2. Hypocellularity, diffuse, moderate/severe, chronic, bone marrow, femur.

#### **Differential diagnosis:**

4. Sorafenib-induced chondrocyte dysplasia
5. Congenital chondrodysplasias
6. Osteochondrosis

#### **Discussion:**

Sorafenib (BAY43-9006) is an orally tyrosine kinase inhibitor, approved for the treatment for advanced renal cell carcinoma and hepatocellular carcinoma by USFDA in 2006 and 2007. As a multi-kinase inhibitor, sorafenib can interfere signaling pathways of tumor cells growth, proliferation, and angiogenesis. In phase III clinical trial of hepatocellular carcinoma showed that the patients in Asia-Pacific region treated with sorafenib could prolong survival time to 6.5 months (median overall survival time).

The common side effects of sorafenib in human including hand-foot reaction, gastrointestinal disturbance, hypertension, bleeding, etc. Moreover, long-term sorafenib-intake may lead to multi-organ toxicity and even life-threatening. In toxicity studies of mice and rats treatment-related pathological changes were found in several organs, including adrenal glands, liver, stomach,

duodenum, pancreas, kidneys, heart, spleen, lymph nodes, thymus and ovaries when the dose at 5 mg/kg or above.

In this case, Sprague-Dawley rats were orally treated with 7.5 mg/kg sorafenib. Growth plate thickening and bone marrow hypocellularity were found in both male and female rats. Similar pathological findings were also described in rats treated with other anti-angiogenesis drugs, such as imatinib and sunitinib. These drugs target VEGF and PDGF receptors, suspecting to disrupt endochondral ossification of long bones and erythroid cell lineages in hematopoietic systems. Endochondral ossification is normally depending on the invasion of capillaries, in which VEGF act as an important factor for the growth of capillaries. When the processes are disturbed, hypertrophic chondrocytes accumulate (chondrocytes dysplasia).

We also found other treatment-related changes in the rats. In clinical pathological examination revealed slightly elevated liver-associated enzymes, AST, ALT, HDL-C and cholesterol, indicated damage to liver cells. In histopathological examination, diffuse, slight to moderate atrophy with erythroid cell decrease in the red pulp of the spleen (5/5 in male rats) and diffuse, moderate to moderate/severe increase in the number of follicles in the ovaries (5/5 in female rats) were found.

In conclusion, multi-organs toxicity of the liver, bone marrow, growth plate, spleen and ovaries were found in sorafenib treated rats at the dose 7.5 mg/kg orally for 28 days. Other tyrosine kinase inhibitors, like imatinib or sunitinib, had been reported to have similar side effects with sorafenib after repeated feeding in rats, and the lesions may be correlated to the inhibition of vascular endothelial growth factor (VEGF) receptor, but the mechanism remain unclear.

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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、 其他有關比較病理學術發展之事項。
- 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。
- 第二十二條 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 本會置秘書長一人，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。但秘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。應於七日以前以書面通知，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 第八屆理監事簡歷冊

序號	職別	姓名	性別	學歷	經歷	現任本職
1	理事長	許永祥	男	國立台大醫學院病理研究所碩士	台大醫院病理科住院醫師	慈濟醫院病理科主任教授
2	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教授
3	常務理事	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
4	常務理事	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所長	台灣大學獸醫學系教授
5	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 助理教授
6	理事	朱旆億	男	國立臺灣大學醫學系	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
				國立臺灣大學獸醫專業學院博士		
7	理事	李進成	男	英國倫敦大學神經病理博士	長庚醫院內科醫師	新光吳火獅紀念醫院病理檢驗科醫師
8	理事	阮正雄	男	日本國立岡山大學大學院醫齒藥總合研究科博士	台北醫學大學副教授兼細胞科學中心主任	輔英科技大學附設醫院
9	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
10	理事	祝志平	男	台大病理研究所	台北醫學院講師	彰化秀傳紀念醫院病理部

11	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
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 醫系助理教授
13	理事	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
14	理事	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	國家實驗動物中 心病理獸醫師
15	理事	鄭明芳	男	國立陽明大學口腔 生物研究所博士	國防醫學院醫 學系病理學科 暨病理及寄生 蟲研究所	805 醫院病理主 任
16	常務監事	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
17	監事	蔡慧玲	女	台灣女科技人學會		監事
18	監事	楊俊宏	男	長庚大學生物醫學 研究所博士		農委會農業藥物 毒物試驗所
19	監事	簡耀君	男	國立臺灣大學獸醫 學研究所獸醫學碩 士		國立臺灣大學分 子暨比較病理生 物學研究所 病理 科總醫師
20	監事	彭奕仁	男	國防醫學院醫學科 學研究所博士班學 生		三軍總醫院病理 部主治醫師
21	秘書長	張惠雯	女	國立臺灣大學獸醫 專業學院 博士		國立臺灣大學分 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

## 107 年度工作報告

### 一、召開會員大會、理監事會議、邀請國內專家學者進行學術演講

#### 1. 會員大會

中華民國比較病理學會第八屆第四次會員大會訂於 107 年 4 月 15 日於衛生福利部台中醫院醫療大樓 12 樓大禮堂。

#### 2. 第八屆理監事會議

- i. 第八屆第四次理監事會議於 107 年 4 月 15 日於衛生福利部台中醫院召開。
- ii. 第八屆第五次理監事會議於 107 年 8 月 12 日於醫療財團法人羅許基金會羅東博愛醫院召開。
- iii. 第八屆第六次理監事會議於 107 年 12 月 9 日於國立臺灣大學獸醫專業學院召開。

#### 3. 舉辦學術研討會

- i. 第 72 次比較病理研討會於 107 年 4 月 15 日於衛生福利部台中醫院召開。
- ii. 第 73 次比較病理研討會於 107 年 8 月 12 日於醫療財團法人羅許基金會羅東博愛醫院召開。
- iii. 第 74 次比較病理研討會於 107 年 12 月 9 日於國立臺灣大學獸醫專業學院召開。

### 三、舉辦學術演講

1. 第 72 次比較病理研討會邀請黃威翔博士，Topic: 動物法醫病理學的過去、現在及未來
2. 第 73 次比較病理研討會邀請蘇桂英醫師，題目: IgG4-related disease 之診斷治療新進展
3. 第 74 次比較病理研討會邀請韓紹民醫師演講，講題為 The Application Multicolor Flow Cytometric Immunophenotyping in Hematologic Malignancies – An Overview of Euroflow System

### 四、舉辦學術病理切片病例討論

1. 於第 72 次比較病理研討會共有 6 個單位提供 7 個病例會員討論。
2. 於第 73 次比較病理研討會共 6 個單位提供 7 個病例供會員討論。
3. 於第 74 次比較病理研討會共有 4 個單位提供 10 個病例供會員討論。

### 五、架設學會網站

提供 72、73 及 74 次比較病理研討會活動花絮照片，於學會網站地

址：<http://www.ivp.nchu.edu.tw/cscp/>

六、完成 72、73 及 74 次比較病理研討會與會獸醫師再教育學分認證。

## 中華民國比較病理學會

### 108 年度工作計劃

#### 一、會務

1. 徵求會員  
持續進行學會推廣及會員招募，擴大會員陣容，
2. 整理會籍與清查會費
  - i. 更新整理會籍資料，並製作會員通訊錄
  - ii. 清查會員繳費狀況，進行催繳，缺繳三年以上徹底實行停權
3. 召開會議  
召開會員大會一次，審查 108 年度工作報告與經費收支狀況，研議 108 年度之工作計劃及預算
4. 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

#### 二、業務

1. 繳納會費
2. 文書處理  
整理與更新會員信箱，刪除無效信箱
3. 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
4. 研討會活動照片、會員狀態及網頁維護更新
5. 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  
收支預算表

中華民國108年1月1日至108年12月31日

單位：新臺幣(元)  
明


款	項	目	科目			本年度與上年度		說
			本年度 預算數	上年度 預算數	增加	減少		
1		本會經費收入	75,080	85,080				
	1	入會費	6,000	6,000			學生入會 100 元;一般會員 1000 元	
	2	常年會費	35,000	35,000			學生會員 100 元;一般會員 1000 元	
	3	贊助會費	30,000	40,000		10,000	贊助廠商 5000 元	
	4	利息收入	80	80				
	5	其他收入	4,000	4,000				
2		本會經費支出	54,460	65,880		11,420		
	1	人事費	8,000	6,000	2,000			
	1	兼職人員車馬費	0	0				
	2	其他人事費	8,000	6,000	2,000		講師費 2000 元	
	2	辦公費	11,000	15,380		4,380		
	1	印刷費	8,000	14,080		6,080	會議手冊印製	
	2	旅運費	2,000	300	1,700		病例切片郵寄	
	3	郵電費	1,000	1,000				
	4	公共關係費	0	0				
	3	業務費	30,000	35,800		5,800		
	1	會議費	4,500	8,000		3,500		
	4	雜費支出	2,000	960	1,040			
	5	提撥基金					如有盈餘，得依規定提列 5% 以上	
3		本期餘額	20,620	19,200	1,420			

理事長：

常務監事



秘書長：

會計：

中華民國比較病理學會  
收支決算表  
中華民國 107 年 1 月 1 日至 107 年 12 月 31 日  
單位：新臺幣(元)

款	項	目	科	目	名稱	決算數	預算數	決算與預算比較數		說明
								增加	減少	
1					本會經費收入	89,392	85,080	4,312		
					人會費	7,500	6,000	1,500		一般會員 14 人，學生 10 人
					常年會費 (三年內)	40,800	35,000	5,800		一般會員 44 人，學生 22 人
					贊助會費	35,000	40,000		5,000	廠商捐款
					利息收入	92	80	12		單次報名
2					其他收入	6,000	4,000	2,000		
					本會經費支出	48,595	65,880		17,285	
					人事費	8,000	6,000	2,000		
					兼職人員車馬費	0	0	0	8,000	專題演講者車馬費(共 3 位)及海報工讀生
					其它人事費	8,000	6,000	2,000	0	
2					辦公費	7,192	15,380		8,188	
					印刷費	6,464	14,080		7,616	印刷第 72、73 及 74 次會議手冊
					旅運費	0	300		300	
					郵電費	728	1,000		272	
3					公共關係費	0	0			
					業務費	29,441	25,800	3,641		
					會議費	29,441	25,800	3,641		
4					雜費支出 (獸醫再教育登錄)	4,500	8,000		3,500	
					提撥基金	2,100	960	1,140		
3					本期餘結	38,189	19,200	18,989		

會計：

秘書長：

常務監事：

理事長：

中華民國比較病理學會  
資產負債表

中華民國 107 年 12 月 31 日

單位：新臺幣(元)

資	產	負債 基金 暨 餘額	
歷年歲末累計結餘	38,189	合作金庫活存	140,187
提撥準備基金	2,100	現金	34,714
106 年度餘額	134,612		
合 計	174,901	合 計	174,901

理事長：  


常務監事：  


秘書長：  


會計：  





中華民國比較病理學會

基金收支表

中華民國 107 年 1 月 1 日至 107 年 12 月 31 日止

單位：新臺幣(元)

收		支		出	
科目	金額	科目	金額	科目	金額
準備基金	12,800	準備基金	0		
歷年累存	12,800				
本年度提撥	2,100				
		結餘			13,900

理事長：

常務監事：

秘書長：

會計：

說明：本會暫無基金專戶。於平時時依盈餘情形提列為不可動支的準備基金，於活期存簿中(合作金庫)。目前歷年累存之準備基金為壹萬三千玖百元。

中華民國比較病理學會

現金出納表

中華民國 107 年 1 月 1 日至 107 年 12 月 31 日止

單位：新臺幣(元)

收		人		支		出
科目	名稱	金額	科目	金額	名稱	金額
上期	結存		本期	134,612	支	49,103
本期	收入		本期	89,392	結	174,901
合計	計		合計	224,004	計	224,004

理事長：  


常務監事：  

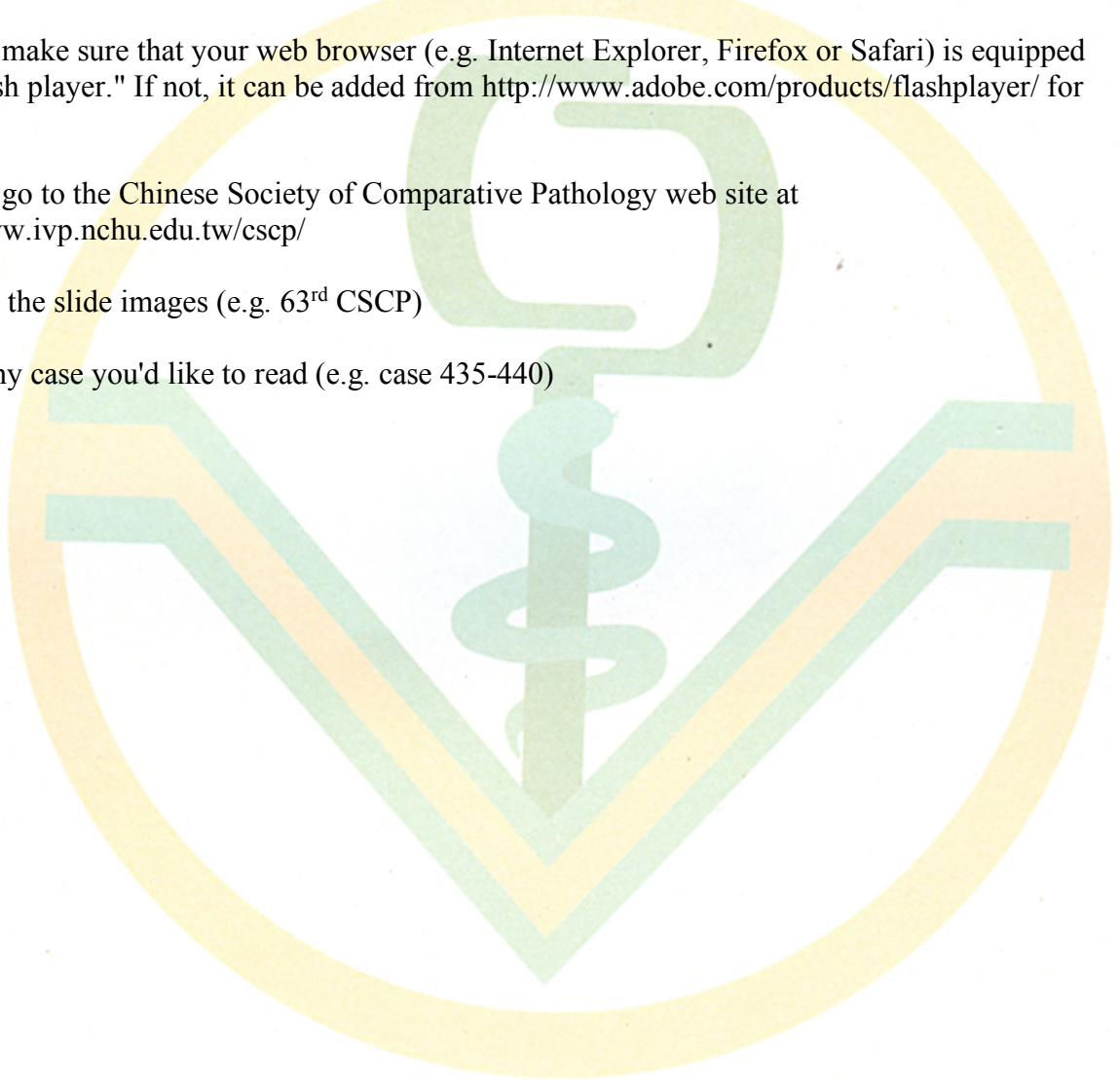

秘書長：  


會計：  


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. 63<sup>rd</sup> 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  
第一次至第七十次比較病理學研討會病例分類一覽表

分類	病例編號	會議場次	診 斷	動物別	提 供 單 位
腫 瘤	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	Ependyoblastoma	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	

腫 瘤	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, papillary carcinoma, metastatic	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
	腫 瘤	103.	13	Atypical central neurocytoma	Human
		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)-positive 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 (AIDS)with disseminated Kaposi's sarcoma	Human	慈濟醫院病理科
	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

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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	Feline	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

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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 lymphangiomyomatosis	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 4. cyst and atherosclerosis, chronic, testis	Goose	國立中興大學獸醫病理生物學研究所
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	Human	佛教慈濟綜合醫院暨慈濟大學病理科

		(2) Hodgkin's lymphoma, mixed cellularity type. Acrokeratosis paraneoplastica		
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 ( <i>Astrochelys radiata</i> )	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
細菌	1	Tuberculosis	Monkey	臺灣大學獸醫學系
	7.	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 cavitory 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 <i>Leptospira</i> 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, <i>Coxiella burnetii</i>	Goat	台灣動物科技研究所
321	46	Pneumonia, <i>Burkholderia pseudomallei</i>	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	<i>Chromobacterium violaceum</i> Septicemia	Gibbon	Bogor Agricultural University, Indonesia
353	50	Salmonellosis	Pig	國立中興大學獸醫學院
367	52	Melioidosis ( <i>Burkholderia pseudomallei</i> ), lung	Human	花蓮慈濟醫院
370	52	Suppurative bronchopneumonia ( <i>Bordetellae trematum</i> ) with <i>Trichosomoides crassicauda</i> infestation	Rat	國立中興大學獸醫學院
374	53	Pulmonary coccidiomycosis	Human	彰化基督教醫院
375	53	Paratuberculosis in <i>Macaca cyclopis</i>	<i>Macaca cyclopis</i>	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, <i>Mycobacterium abscessus</i>	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	<i>Neisseria</i> Infected Pneumonitis	Cat	中興大學獸醫學系
385	54	<i>Mycobacteria avian complex</i> dacryocystitis	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 <i>Streptococcus</i> 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 man	Human	嘉義聖馬爾定醫院
	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 <i>Austwickia chelonae</i> (basonym <i>Dermatophilus chelonae</i> ) in a free-ranging wild Taiwanese japalure	Taiwanese japalure	台灣大學獸醫學系
病毒	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	Pseudorabies	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, polyomavirus 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 II 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 intracytoplasmic inclusion bodies, Saanen goat. 2. Haired skin: Dermatitis, proliferative, lymphoplasmacytic, subacute, diffuse, sever, with marked epidermal pustules, ballooning degeneration, acanthosis, hyperkeratosis, and eosinophilic	Goat	台灣動物科技研究所

		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	
黴菌	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 cavitory 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	
	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	
	黴菌		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	

寄生蟲	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
	寄生蟲	156	19	Parastrongylus cantonensis infection	Formosan gem-faced civet
		19	Capillaria hepatica, Angiostrongylus 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
寄生蟲		370	52	Suppurative bronchopneumonia (Bordetellae trematum) with Trichosomoides crassicauda infestation	Rat
	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
原蟲	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	
立克次體	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
皮膚	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
其它	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

其它

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 endometrial 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 lymphadenitis)	Lymphadenitis	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



其他

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	Parastrongyliasis (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	Human	佛教慈濟綜合醫院暨慈濟大學病理科

		myocardial ischemia and acute kidney injury		
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

### 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

張惠雯 助理教授

cscptaiwan@gmail.com

02-33661296

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 張惠雯老師收。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：02-33661296

中華民國比較病理學會入會申請及會員卡

會電腦編號

姓名	中文		姓別	<input type="checkbox"/> 男 <input type="checkbox"/> 女	出生 身 份 証	民國	年	月	日	出生地	
	英文		會員身份： <input type="checkbox"/> 一般 <input type="checkbox"/> 學生 <input type="checkbox"/> 贊助								
學歷	(1)				稱謂(圈選)	先生	小姐	醫師	獸醫師	教授	博士
	(2)				研究員	主任	其他:				
	(3)				研究 興 趣	(1)					
	(4)					(2)					
主要 經 歷	機關名稱			職務	起			止			
					年	月	年	月			
					年	月	年	月			
現職					年	月	年	月			
通訊地址 現在： 電話： 傳真： 永久： 電話 傳真： 電子信箱(E-mail)：											
茲 贊 同 貴會宗旨擬加入為會員嗣後並願遵守一切章共圖發展 此 致 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										審核結果	