

**Chinese Society of Comparative Pathology**

中華民國比較病理學會

第 70 次比較病理學研討會  
腹腔疾病 (Abdominal diseases)



主辦單位

CHINESE SOCIETY OF COMPARATIVE PATHOLOGY

中華民國比較病理學會

協辦單位

佛教慈濟醫療財團法人花蓮慈濟醫院

Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation

August 12, 2017 (中華民國 106 年 8 月 12 日)

## SCHEDULE

### 70<sup>th</sup> MEETING OF COMPARATIVE PATHOLOGY

中華民國比較病理學會 第 70 次比較病理學研討會

時間：106 年 8 月 12 日(星期六)

地點：佛教慈濟醫療財團法人花蓮慈濟醫院大愛樓二樓二期講堂

地址：花蓮市中央路三段 707 號 電話：0963750228

Time (時間)	Schedule(議程)		Moderator (主持)
08:30~09:20	Registration (報到)		
09:20~09:30	Opening Ceremony (致詞) 許永祥 理事長		
09:30~10:30	專題演講	Topic: 慈濟大學病理學科 韓鴻志教授， 題目：生技產業中病理醫師及獸醫師的角色	張惠雯 秘書長
10:30-11:00	Coffee Break (拍團體照)		
11:00~11:25	Case 481	<u>Chia-Shuen Lin (林佳萱)</u> , Yen-Chang Chen (陳彥璋), Yung-Hsiang Hsu (許永祥), M.D. <i>Department of Pathology, Buddhist Tzu-Chi General Hospital and University</i> (佛教慈濟綜合醫院暨慈濟大學病理科)	廖俊旺 常務監事
11:25~11:50	Case 482	<u>Li, Wen-Ta (李文達)</u> , Ching-Sen Huang (黃靖森), Chang, Hui-Wen (張惠雯), Jeng, Chian-Ren (鄭謙仁), Pang, Victor, Fei (龐飛), Wang, Fun-In (王汎榮), Chen-Hsuan (劉振軒), DVM <i>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)</i>	廖俊旺 常務監事
11:50~13:10	Lunch and Board Meeting (午餐及理監事會議)		
13:10~13:35	Case 483	<u>Shih, C. W. (施洽雯)</u> , M.D., M.S. <sup>1</sup> Lee, M. J (李明璋), M.D. <sup>2</sup> <sup>1</sup> <i>Department of Pathology, Lotung Poh-Ai Hospital (羅 東博愛醫院病理科)</i> <sup>2</sup> <i>Department of Colorectal Surgery, Lotung Poh-Ai Hospital (羅東博愛醫院大腸直腸外科)</i>	施洽雯 理事
13:35~14:00	Case 484	<u>Chen, Chien-Hao (陳謙豪)</u> , Hui-Wen Chang (張惠雯), Pang, Victor Fei (龐飛), Jeng, Chian-Ren (鄭謙仁), DVM. <i>Pathobiology, School of Veterinary Medicine, National Taiwan University (國立台灣大學獸醫專業學院分子暨</i>	施洽雯 理事

		比較病理生物學研究所)	
14:00~14:25	Case 485	<u>祝志平</u> 醫師 <i>Show Chwan Memorial Hospital (秀傳醫療社團法人秀傳紀念醫院)</i>	張惠雯 秘書長
14:25~14:50	Coffee Break		
14:50~15:15	Case 486	<u>蘇雪妍</u> , 住院醫師, 陳燕麟, 主治醫師, 病理科, <i>Cardinal Tien Hospital (天主教耕莘醫療財團法人耕莘醫院)</i>	張惠雯 秘書長
15:15~15:40	Case 487	<u>賴銘淙</u> MD. PhD. <i>Department of Pathology, Taichung Hospital, Ministry of Health and Welfare (衛生福利部臺中醫院病理科)</i>	鄭謙仁 理事
15:40-16:05	Case 488	<u>Chien-Hsun Lee (李建勳)</u> , <u>Jia-Hung Liou (劉嘉鴻)</u> , <u>Kun-Tu Yeh (葉坤土)</u> <i>Department of pathology, Changhua Christian Hospital, Changhua, Taiwan (彰化基督教醫院病理部)</i>	鄭謙仁 理事
16:05~16:30	General Discussion (綜合討論)		

## 會議當天注意事項

### 一、交通部分：

#### 1. 地圖(花蓮車站→慈濟醫院)



#### 2. 地圖(大門→二期講堂)



3. 7/11 自台鐵網站下載，實際情況依台鐵公告為主  
時刻表(8/12 台北到花蓮)

出發時間:2017-08-12 從臺北前往花蓮,預計						
車種	車次	經由	發車站-終點站	開車時間	到達時間	行駛時間
普悠瑪	<a href="#">202</a>	-	樹林→花蓮	06:07	08:15	02時08分
莒光	<a href="#">51</a>	山	臺北→花蓮	06:12	16:43	10時31分
莒光	<a href="#">72</a>	-	樹林→臺東	06:12	09:02	02時50分
太魯閣	<a href="#">402</a>	-	樹林→知本	06:20	08:20	02時00分

時刻表(8/12 下午 5:00 後花蓮到台北)

出發時間:2017-08-12 從花蓮前往臺北,預計						
車種	車次	經由	發車站-終點站	開車時間	到達時間	行駛時間
自強	<a href="#">181</a>	山	花蓮→潮州	16:40	19:21	02時41分
自強	<a href="#">427</a>	-	臺東→樹林	17:00	19:26	02時26分
普悠瑪	<a href="#">431</a>	-	臺東→樹林	17:28	19:39	02時11分
莒光	<a href="#">71</a>	-	花蓮→樹林	17:32	20:04	02時32分
普悠瑪	<a href="#">283</a>	山	壽豐→斗六	17:58	20:12	02時14分
莒光	<a href="#">633</a>	-	花蓮→樹林	18:05	21:43	03時38分
太魯閣	<a href="#">285</a>	海	花蓮→員林	18:18	20:31	02時13分
普悠瑪	<a href="#">237</a>	-	花蓮→樹林	18:24	20:36	02時12分
莒光	<a href="#">81</a>	-	臺東→樹林	18:29	21:08	02時39分
太魯閣	<a href="#">239</a>	-	花蓮→樹林	19:03	21:16	02時13分
太魯閣	<a href="#">441</a>	-	知本→樹林	19:20	21:20	02時00分

## 二、住宿(提供車站附近民宿參考)

- [花蓮洄瀾窩旅舍](#) 花蓮市花蓮市國聯一路 83 號(靠近前站)
- [小旅行迷你公寓](#) 花蓮市國聯一路 103 號(靠近前站)

- [小松鼠民宿](#) 花蓮市國聯二路 117 號(靠近前站)
- [新京站民宿](#) 花蓮市富陽路 16 號(靠近後站)
- [愛戀鄉村風民宿](#) 花蓮市富陽路 43 號(靠近後站)
- [鳶尾花渡假民宿](#) 花蓮市富裕十一街 81 號(靠近後站)
- [穎居花蓮民宿](#) 花蓮市富裕十一街 75 號(靠近後站)
- [伊笛幔休閒民宿](#) 花蓮市富裕十一街 79 號(靠近後站)

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## Special Lecture

(專題演講)

題目：生技產業中病理醫師及獸醫師的角色

生技產業中 病理醫師及獸醫師的角色

以小分子新藥物暨投遞裝置治療人類惡性腦膠質瘤為例子

“從實驗室發現到通過美國 FDA及台灣TFDA 新藥臨床試驗許可 (IND)”

花蓮慈濟醫學中心 病理部/創新研發中心 韓鴻志教授

多型性神經膠母細胞瘤 (glioblastoma multiformis; GBM) 是相當惡性的腦部腫瘤，腫瘤最快 1 個月內可長大 16 倍，是惡化快速的原發性腦瘤，切除後的復發率也非常高，一般確診為 4 級 GBM 後的病患，平均存活時間只有 12 至 18 個月。惡性腦瘤擴散程度迅速又難以根除，一旦確診後，通常已是晚期，見圖 1，患者平均壽命往往只有 1 年左右，5 年存活率更只有 3.4%。

惡性腫瘤持續高居國人十大死因之首，根據美國癌症協會 (American Cancer Society, ACS) 以及美國腦瘤病例登錄中心 (Central brain tumor registry, CBTRUS) 的統計報告顯示，每年估計約有兩萬筆的腦瘤患者新病例產生，台灣每年約有四百名惡性膠質腦瘤新病例。目前醫學上有三種治療方式，手術治療、放射線治療及化學治療。在化學藥物輔助治療上，於 1996 年美國食品藥物管理局已核准利用生物可降解的 p(CPP-SA) 聚酸酐生醫材料攜帶化學藥物 Carmustine (BCNU) 之局部給藥裝置，稱之為格立得貼片 GLIADEL Wafer，如圖 2，植入於外科手術切除惡性腦瘤後所產生之空腔中，BCNU 會緩慢釋放擴散至周邊腦組織，而增強 BCNU 通過血腦障壁的效率，然而 BCNU 此烷基化藥物具有延遲性骨髓抑制、噁心、嘔吐與肺臟纖維化等副作用，且與安慰組之存活時期中位數 11.6 月做比較，GLIADEL™ Wafer 存活時期中位數為 13.8 月，其延長病患僅兩個多月。且治療費用昂貴。

由林欣榮 韓鴻志 邱紫文教授領導的新藥開發團隊 以正丁烯基苯酞 (z-Butylidene-phthalide, z-BP)，簡稱 BP，開發抗癌效果，以生醫材料 p(CPP-SA) 聚酸酐，但攜帶此有效成分正丁烯基苯酞 (Butylidene-phthalide, BP)，兩者合併之給藥裝置 BP-Wafer，此給藥裝置為圓形淡黃色錠片，每片總重 200 毫克，共包含 30 毫克的 BP，亦用於治療惡性腦瘤，如附圖 3。

研究以大鼠為實驗對象，將標靶小分子藥物 BP 藉由控制緩釋型化學晶片將藥物釋放至腦瘤區，比不接受治療，平均存活時間延長 2.55 倍 (55.78 Vs 21.83 見附圖 4)，標靶基因是 Ax1/EZH2/SOX2, telomerase 及 DNA 修復酶 MGMT, 目前已完成動物實驗無任何副作用，並且已獲得美國、大陸、日本、歐盟、台灣之專利，相關論文在 Journal of Neurochemistry, Neuro-Oncology、Biochemical pharmacology 及 Clinical Cancer Research, Oncogene 等 SCI 期刊發佈共 19 篇。並有台灣，大陸，美國，日本，歐盟等八國專利，分別由花蓮慈濟醫院，花蓮東華大學及台中中醫大擁有，並已技轉長弘生技公司，且長弘生技公司投資二億元及經濟部 A+7000 萬補助，並已委託台灣台耀公司完成：藥物化學製造 (CMC) 及美國 Pharmaron 公司完

成藥動及 GLP 動物毒理，台灣東洋公司完成錠片製劑，見下附圖 3。2016 八月已通過美國 FDA 及十一月通過台灣 TFDA 之 IND (investigate new drug; 新藥臨床試驗許可)，長弘公司將委託花蓮慈濟醫院及台北三軍總醫院展開第一到二 a 期臨床實驗

MEETING OF COMPARATIVE PATHOLOGY

August 12, 2017

中華民國比較病理學會第 70 次比較病理學研討會

CASE DIAGNOSIS

Case No.	Presenter	Slide No.	Diagnosis
Case 481	林佳萱	S2013-14670	Paraganglioma of liver <a href="http://www.ivp.nchu.edu.tw/slide_view.php?id=1277">http://www.ivp.nchu.edu.tw/slide_view.php?id=1277</a>
Case 482	李文達	NTU 2014-1160 & NTU2015-0572	1. Adenocarcinoma, transmural, recurrent, with desmoplasia and metastasis to regional lymph node, jejunum and ileocecal junction <a href="http://www.ivp.nchu.edu.tw/slide_view.php?id=1275">http://www.ivp.nchu.edu.tw/slide_view.php?id=1275</a> 2. Mast cell tumor, moderately-differentiated, multiple, jejunal and ileocecal masses <a href="http://www.ivp.nchu.edu.tw/slide_view.php?id=1276">http://www.ivp.nchu.edu.tw/slide_view.php?id=1276</a>
Case 483	施洽雯	LP1-9361	Solitary fibrous tumor of pelvis <a href="http://www.ivp.nchu.edu.tw/slide_view.php?id=1274">http://www.ivp.nchu.edu.tw/slide_view.php?id=1274</a>
Case 484	陳謙豪	NTU2017-1067	1. Chronic lymphocytic leukemia, with systemic dissemination, bone marrow, intestine, generalized lymph node, spleen, liver, kidney and lung 2. Intestine intussusception, with mild, locally extensive and subacute necrotizing serositis, ileum <a href="http://www.ivp.nchu.edu.tw/slide_view.php?id=1285">http://www.ivp.nchu.edu.tw/slide_view.php?id=1285</a>
Case 485	祝志平	SCMH S17-1AB	1. Intestine, large, colon, ascending, --- Carcinoma, poorly differentiated (pT4aN1b). (ADVANCED) 2. Stomach, distal, --- Adenocarcinoma, moderately differentiated (pT1bNO) (EARLY) (Synchronous cancer) <a href="http://www.ivp.nchu.edu.tw/slide_view.php?id=1279">http://www.ivp.nchu.edu.tw/slide_view.php?id=1279</a>
Case 486	蘇雪妍	421298-11 (4 slides)	IgG4-related sclerosing cholangitis (ISC) <a href="http://www.ivp.nchu.edu.tw/slidecenter.php?id=389">http://www.ivp.nchu.edu.tw/slidecenter.php?id=389</a>
Case 487	賴銘淙	SE217_531	Angiomyolipoma of the liver <a href="http://www.ivp.nchu.edu.tw/slide_view.php?id=1280">http://www.ivp.nchu.edu.tw/slide_view.php?id=1280</a>
Case 488	李建勳	K11713059	Crohn's disease <a href="http://www.ivp.nchu.edu.tw/slide_view.php?id=1278">http://www.ivp.nchu.edu.tw/slide_view.php?id=1278</a>

**Case Number: 481**

Slide No.: S2013-14670

**Slide view:** [http://www.ivp.nchu.edu.tw/slide\\_view.php?id=1277](http://www.ivp.nchu.edu.tw/slide_view.php?id=1277)

Chia-Shuen Lin (林佳萱), Yen-Chang Chen (陳彥璋), Yung-Hsiang Hsu (許永祥), M.D.

Department of Pathology, Buddhist Tzu-Chi General Hospital and University

(佛教慈濟綜合醫院暨慈濟大學病理科)

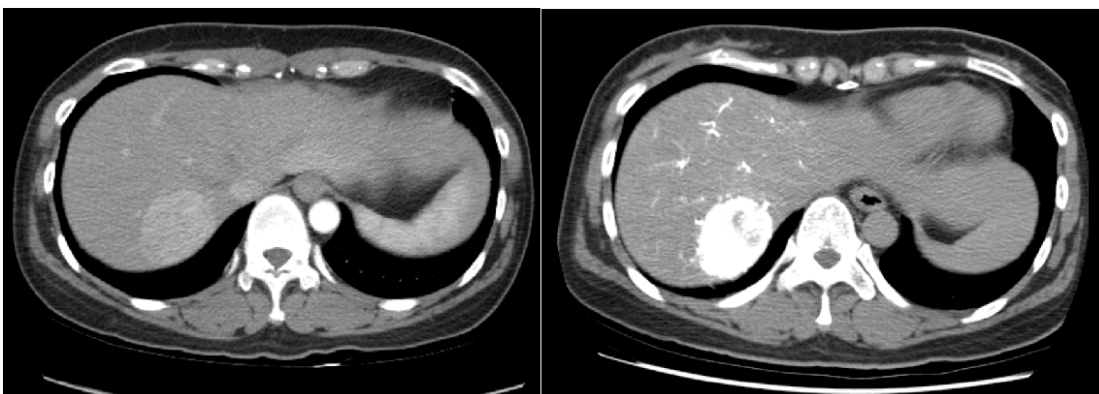
**CASE HISTORY**

**Signalment:** a 41-year-old woman

**Clinical History:**

A 41 year-old woman, without known systemic disease, came to our hospital on 2013/11 for management of an incidental finding liver tumor.

The tumor was first noted in 2006 during health examination at other hospital. The patient described no any symptom or discomfort. The tumor enlarged gradually in the past years and she visited our hospital for further evaluation. No significant finding, such as abdominal tenderness, ascites, or jaundice, was noted by physical examination. Blood examination showed normal liver enzymes, bilirubin level, prothrombin time, but the albumin level is lower than normal range (2.6 g/dL). The serology exam showed negative for HBsAg, Anti-HBs, Anti-HBc, and Anti-HCV, and the AFP level was within normal limit (6.5 ng/mL). The liver triphasic CT revealed a 5 cm well-enhancing hypervascular mass at S7 and patency of the portal veins, suspect hepatocellular carcinoma (HCC), focal nodular hyperplasia (FNH) or hepatic adenoma. The patient received surgical intervention later. Intra-operative sonography of liver revealed a hypoechoic lesion measuring 4.5 x 4.0 x 3.5 cm in size at S7 and another 0.3 cm nodule at surface of S5; therefore, anatomical resection of S7 and enucleation of S5 nodule were performed.



**Gross Finding:**

Frozen specimen: one nodule measuring 2.5 x 2.0 x 1.0 cm in size; brownish & soft.

Permanent:

S7: one well defined brownish & soft mass measuring 5.0 x 4.0 x 4.0 cm in size.

S5: one well defined whitish & firm nodule measuring 1.2 x 1.0 x 1.0 cm in size.

## **CASE RESULT:**

### **Histopathologic Finding:**

Polygonal eosinophilic tumor cell with round nuclei and indistinct nucleoli, arranged in small nests (“zellballen”) or trabeculae in vascular stroma, without pleomorphism nor mitotic figures. IHC: CD56(++), HMB45(++), and Arggrophil stain (++) in tumor cell; S-100(+) in sustentacular cells; herpar-1 and glypican 3 negative .

### **Diagnosis:**

Paraganglioma of liver

### **Differential Diagnosis**

1. Fibrolamellar hepatocellular carcinoma
2. Neuroendocrine tumors

### **Discussion:**

Paragangliomas are extra-adrenal pheochromocytomas that arise from paraganglion cell nests along the sympathetic chain extending from the skull-base to the pelvic floor. These tumors, like other neuroendocrine tumors, are hypervascular and usually benign. Patient can present with the clinical picture of catecholamine excess in case of functional tumor or may be completely asymptomatic. About 10% of pheochromocytomas are malignant and about 22% arise from extra-adrenal sites. Few unusual sites have been reported including the gallbladder, biliary ductal system, larynx, lung and the urinary bladder. Primary hepatic site is extremely rare and very few cases have been reported to date. The underlying cause of primary hepatic paraganglioma is related to ectopic chromaffin tissues. Since hepatic metastasis of pheochromocytomas is more frequent, it is important to exclude the presence of a primary adrenal tumor in these patients.

Hormonally active paraganglioma may present with symptoms such as palpitation, headache, and high blood pressure, which may facilitate the diagnosis with the indication for metaiodobenzylguanidine (MIBG) scintigraphy. The sensitivity of MIBG scintigraphy is 81%. Biochemical evaluation of paraganglioma includes 24-hour urine norepinephrine, epinephrine, metanephrines, normetanephrines, dopamine, and VMA. Plasma metanephrines and normetanephrines can also elicit the diagnosis of familial syndromes, such as multiple endocrine neoplasia Type 2, Von Hippel Lindau or familial paragangliomas. The paraganglioma may be non-functional. It could also be possible that any catecholamines produced by the tumor were being metabolized by the liver and this is more likely if the venous drainage of the tumour is into the portal system.

On imaging study, hepatic paraganglioma displays avid contrast enhancement due to a rich capillary network in the arterial phase of post-enhancement scans, like pheochromocytoma. Cystic

areas that occur as a result of hemorrhage, necrosis, or heterogeneous enhancement, may be observed in enhanced CT scans. In MRI studies, the tumor shows low to iso-signal intensity compared with normal liver parenchyma, and high or heterogeneous signal intensity on T1-weighted, and T2-weighted images, respectively. The T1 and T2 signal intensity may vary depending on the histologic variation.

Percutaneous preoperative biopsy (fine needle aspiration or core biopsy) should only be done with extreme caution and preparation if a paraganglioma is suspected, as it can potentially result in life-threatening crisis.

The best treatment for paraganglioma is to remove it surgically. The exception to surgical removal is patients who have other medical problems that are so dangerous that they would not survive an operation.

In our case, we diagnosed paraganglioma of liver histopathologically which is suspicious very lowly since the patient was asymptomatic and the liver is an extremely uncommon site for primary paraganglioma.

## **References**

1. Muhammad RK, Rushna R, Abdul J, Arsalan A. Primary non-functioning paraganglioma of liver: a rare tumour at an unusual location. *J Pak Med Assoc* 2011;61(8):814-816.
2. Seung WJ, Ung RK, Jae BP. Imaging findings of a primary paraganglioma of the liver: A case report. *J Korean Soc Radiol* 2016;75(5):389-393.

Case No: 482

Slide no.: NTU 2014-1160 & NTU2015-0572

Slide view: [http://www.ivp.nchu.edu.tw/slide\\_view.php?id=1275](http://www.ivp.nchu.edu.tw/slide_view.php?id=1275)

Slide view: [http://www.ivp.nchu.edu.tw/slide\\_view.php?id=1276](http://www.ivp.nchu.edu.tw/slide_view.php?id=1276)

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## **CASE HISTORY**

### **Signalment:**

14-year-old female neutered domestic shorthair cat

### **Clinical History:**

The cat showed lethargy, hyporexia, and frequent vomiting with significant weight loss (from 7 kg to 4.3 kg) within one month. Multifocal thickening of intestinal wall and enlarged mesenteric lymph nodes were noted under ultrasonography examination. Complete hematological examination revealed anemia (PCV: 17.9%), leukocytosis (total white blood cell count:  $35.2 \times 10^9/L$ ). Blood transfusion and exploratory laparotomy were performed. During the surgery, the ileum and caudal part of jejunum was dilated and filled with grey to green pulposus material, and there was a 2 x 1 x 1 cm grey to dark red mass on the serosal surface of ileocecal junction. The intestinal wall of ileocecal junction was thickened with a significantly narrow lumen. Furthermore, there was a 2 x 1 x 1 cm mass on the intestinal wall of jejunum, but no remarkable findings were noted on the regions adjacent to the jejunal mass. Therefore, the ileocecal mass most likely caused the clinical signs presented by the cat. Considering his body condition, the segment of ileocecal junction was resected with 5 cm margin, and the enlarged mesenteric lymph node and jejunal mass were only biopsied.

After surgery, the cat showed improved appetite and activity, was treated with prednisolone (1 mg/kg PO q12h), ranitidine (1.5 mg/kg PO q12h), and imatinib mesylate (10 mg/kg PO q24h) for 1 month, and subsequently treated with prednisolone (1.0 mg/kg) and ranitidine (1.5 mg/kg). His body weight gradually increased (from 4.3 to 5.5), and the size of the jejunal mass was stable and approximately 2.0 cm in diameter. After 10 months, the cat showed hyporexia and frequent vomiting again. Significant intestinal dilatation and ascites was noted under ultrasonography examination. Second exploratory laparotomy was performed. Intestinal obstruction with soft tissue adhesion were noted on the site of previous intestinal anastomosis, and the intestinal tract anterior to the site of previous intestinal anastomosis was severely dilated. Therefore, intestinal resection and anastomosis was performed to remove the jejunal mass and the intestine with soft tissue adhesion. Although his condition was improved after surgery, the cat showed frequent vomiting 1 month later. Therefore, the cat was euthanized due to poor prognosis. The owner refused to perform necropsy.

### **Gross Findings:**

**1. First surgery (NTU2014-1160):** The submitted specimens were several biopsied tissue

fragments from jejunal mass (not provided) and lymph node; a segment of intestinal tract with a raised mass on the mucosal surface. The cut sections showed that the mass was located in the submucosa and mottled white and dark red. Representative specimens were taken for microscopic examination.

- 2. Second surgery (NTU2015-0572):** The submitted specimens were several small pieces of white to yellow tissue fragments (not provided), an intestinal segment with soft tissue adhesion (not provided) and an intestinal segment with a raised mass on the serosa surface. The cut sections of the irregular serosa surface and the mass were generally white with scattered dark red foci. Representative specimens were taken for microscopic examination.

## **CASE RESULT**

### **Histopathologic Findings:**

#### **1. First surgery (NTU2014-1160):**

**Ileocecal mass:** The mass was poorly demarcated and composed of neoplastic round cells arranged in sheets with scattered eosinophils. The neoplastic round cells had an abundant granular eosinophilic cytoplasm, and contain a round to oval nucleus with clumped chromatin and prominent nucleoli. Mitotic count (MC; Total mitotic figures of 10 high power fields) was < 2. Multifocally, there were islands of neoplastic epithelial cells with glandular formations and desmoplasia in the muscular layer and serosa. The neoplastic epithelial cells had a scant indistinctly bordered eosinophilic cytoplasm, and contained a variably sized, round to polygonal vesicular nucleus with prominent nucleoli. Mitotic figures were occasionally observed.

**Lymph node:** Aggregates of the same neoplastic epithelial cells with desmoplasia are noted in the subcapsular region.

**Jejunal mass (not provided):** The specimen is composed of the same neoplastic round cells.

#### **2. Second surgery (NTU2015-0572):**

**Jejunal mass:** The normal architectures of intestinal wall was effaced by neoplastic round cells arranged in sheets with scattered eosinophils. The neoplastic round cells have an abundant granular amphophilic cytoplasm, and contain a round to oval nucleus with clumped chromatin and prominent nucleoli. MC is < 2. Multifocally, islands of neoplastic epithelial cells with glandular formations and desmoplasia are noted in the muscular and serosal layers, and extending to the peripheral adipose tissue with marked desmoplasia. The neoplastic epithelial cells have a scant indistinctly bordered eosinophilic cytoplasm, and contain a variably sized, round to polygonal vesicular nucleus with prominent nucleoli. Mitotic figures are occasionally observed.

**Lymph node and the intestinal segment with soft tissue adhesion (not provided):** The neoplastic epithelial cells are also found in the lymph node and the intestinal segment with soft tissue adhesion.

### **Morphological Diagnosis:**

#### **1. First surgery (NTU2014-1160):**



- a. Round cell tumor, jejunal and ileocecal mass
- b. Adenocarcinoma, transmural, with desmoplasia and metastasis to regional lymph node, ileocecal junction

**2. Second surgery (NTU2015-0572):**

- a. Round cell tumor, jejunal mass
- b. Adenocarcinoma, transmural, recurrent, with desmoplasia and metastasis to regional lymph node, jejunum and the intestine with soft tissue adhesion

**Differential Diagnosis:**

- 1. For feline intestinal round cell tumor:** Lymphoma, especially large granular lymphocyte (LGL) lymphoma
- 2. For diffuse infiltrative adenocarcinoma in intestinal tract:** Primary gastrointestinal adenocarcinoma, metastatic adenocarcinoma (peritoneal carcinomatosis), and mesothelioma

**Laboratory Examination:**

**1. Histochemical staining:**

Giemsa staining was performed, and scattered neoplastic round cells with intracytoplasmic blue-purple granules were noted.

**2. Immunohistochemical (IHC) staining:**

For IHC staining, antibodies against CK, CD117 (C-KIT), CK7, CK20, Napsin A, thyroid transcription factor-1 (TTF-1), PAX-8, and villin were used. All of the internal controls from the normal feline tissues for the monoclonal antibodies used in the present case were positive (except CK7 and CK20), indicative of good quality of IHC staining for some targeted cell markers. The neoplastic epithelial cells were positive for CK and villin, but negative for Napsin A, TTF-1, and PAX-8, indicative of intestinal adenocarcinoma. The neoplastic round cells of the jejunal and ileocecal masses showed focal to stippled cytoplasmic and membranous positivity for C-KIT, indicative of mast cell tumor.

**Final Diagnosis:**

- 3. Adenocarcinoma, transmural, recurrent, with desmoplasia and metastasis to regional lymph node, jejunum and ileocecal junction**
- 4. Mast cell tumor, moderately-differentiated, multiple, jejunal and ileocecal masses**

**DISCUSSION**

Intestinal adenocarcinoma (IAC) is the second most common intestinal neoplasm in cats, and more than 70% of cats with IAC have detectable metastatic lesions at the time of diagnosis.<sup>3</sup> Feline IAC commonly metastasizes within peritoneum and to regional lymph nodes and/or other internal organs.<sup>3,6</sup> Although pulmonary metastases have been reported, distant metastasis of feline IAC is rare occurring.<sup>6</sup> Feline mast cell tumor (MCT) in the intestine is much less common than lymphoma and adenocarcinoma. Feline intestinal MCT (FIMCT) may be diffuse, solitary, or multiple, and presented as nodular, plaque-like or fusiform appearance.<sup>6,8</sup> Metastasis is a common finding and mesenteric lymph nodes and liver are usually involved.<sup>6</sup> If multiple abdominal organs, such as the

intestine, liver, spleen, and mesentery, are concurrently involved, the diagnosis of disseminated MCT can be made.<sup>6</sup> To the best of our knowledge, concurrent adenocarcinoma and MCT of intestine have not been reported in animals and human.

Feline IAC is usually firm gray-white intramural masses that form annular rings and result in intestinal stricture.<sup>6,8</sup> In the present case, two detectable intestinal masses are FIMCT, and no primary tumor growth of IAC can be identified. Therefore, the current adenocarcinoma might be a diffuse and infiltrative IAC, a result of peritoneal metastasis from other organs (peritoneal carcinomatosis), or peritoneal mesothelioma. The result of IHC stainings (positive for villin and negative for Napsin A, TTF-1, PAX-8) indicates the current adenocarcinoma is intestinal origin.<sup>2</sup> Furthermore, CK7 and CK20 are used in the present case to identify whether the current IAC arises from small intestine or large intestine. However, both antibodies reveal poor cross reactivity, and thus the primary site of the current intestinal adenocarcinoma is still undetermined.

FIMCT usually has a more aggressive biological behavior when comparing to their cutaneous counterparts, but a previous study suggests that FIMCT might have variable biological behaviors.<sup>5,7</sup> FIMCT can be classified as well-, moderately-, and poorly- differentiated by the cellular morphology.<sup>7</sup> Sabattini, et al. (2016) indicate that poorly differentiated FIMCT and MC > 2 were significantly associated with reduced survival times, but there is no statistical relationships between survival times and Ki67 index or KIT pattern.<sup>7</sup> In the present case, the FIMCTs are moderately-differentiated with MC < 2, and their biological behavior is considered to be relatively benign because there are no evidences of metastasis and multi-organ involvement. Although the response of feline MCT to imatinib mesylate is still controversial in previous studies,<sup>1,4,7</sup> the relatively benign biological behavior presented by the current FIMCT might be also associated with the use of imatinib mesylate.

Surgical resection is the best treatment option for intestinal tumors. However, surgical resection in the current cat is a delaying tactics because the current intestinal MCT is multiple and the current IAC has metastasized to regional lymph node and the peritoneal cavity (peritoneal carcinomatosis). Therefore, a complete excision cannot be achieved, and the prognosis of the cat is poor.

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**Case Number: 483**

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## **CASE HISTORY:**

**Signalment:** 58-year-old man.

### **Clinical History:**

A 58-year old man was referred to the Department Colorectal Surgery of Lotung Poh-Ai Hospital on September 19, 2016 with the problem of an incidental finding of pelvic tumor noted during pelvic CT scan at ER due to traffic accident on August 28, 2016. The abdominal and pelvic CT scan showed a heterogenous enhancing mass in pelvis and just beside the rectum, and measuring up to 5.6 cm in greatest diameter. No other mass or lymph node was seen. He denied abdominal bloating and pain. No any specific symptom and sign. The patient has past history of diabetes mellitus and under medical treatment for 10 years. No hypertensive disease or coronary disease. He underwent pelvic tumor resection on September 21, 2016. The tumor was sent to the Department of Pathology for pathologic diagnosis.

Macroscopically, the mass showed smooth, mild lobulated, well demarcated, grayish-brown color and measuring up to 6.5 x 5.8 x 4.0 cm. It was elastic firm in consistency. Cut surface showed well-encapsulated grayish-white solid tumor with mild lobulated appearance. No hemorrhage or necrosis was noted.

### **Clinical Pathology:**

BUN: 14 mg/dL (6-20 mg/dL), Creatinine: 0.6 mg/dL (0.7-1.3 mg/dL), Glucose: 126 mg/dL (70-100 mg/dL), Na: 140 mmol/L (135-145 mmol/L), K: 4.5 mmol/L (3.5-5.1 mmol/L), RBC:  $4.9 \times 10^6$ /uL ( $4.2-5.4 \times 10^6$ /uL), Hb: 14.9 gm/dL (12.0-16.0 gm/dL), Hct: 44.5 % (37-47%), Plt:  $29.9 \times 10^4$ /dL ( $15-40 \times 10^4$ /dL), WBC: 7700/uL (4500-11000/uL), Lymphocyte: 36.7% (20.0-45.0%), Neutrophil: 55.6% (45.0-75.0%), Monocyte: 6.0% (0.0-9.0%), Eosinophil: 0.9% (1.0-3.0%). Laboratory tests of tumor markers were within the normal range with CA-199 : 11.65 U/mL (<27.00 U/mL), CEA: 1.72 ng/mL (<5.0 ng/mL).

## **CASE RESULT:**

**Histopathologic Findings:**

Microscopically, the solid tumor is well defined with fibrous capsule and surrounded by fatty-fibrous tissue with median sized blood vessels and focally infiltrated by chronic inflammatory cells. The tumor is composed of proliferated spindle-shaped tumor cells with many small blood vessels with thick vessel wall with hyalinization. The tumor cells show spindle-shaped nuclei, indistinct nuclei and moderate amount of cytoplasm. Areas of atypical cells with large and hyperchromatic nuclei are also noted. Only occasional mitosis is noted. Areas of hemorrhage, edematous change and chronic inflammatory cells infiltrate are also noted.

**Immunohistochemistry:**

Sections of tissue specimen were subjected for immunohistochemical evaluation. On immunohistochemical analysis, the tumor cells were diffusely positive for actin, CD34, Bcl2, CD99 and STAT6, and negative for MDM2, CDK4, calretinin, S-100, CD117 and Dog1. The Ki67 index showed less than 1 %.

**Differential diagnosis:**

1. Leiomyoma.
2. Neurofibroma, Schwannoma.
3. Gastrointestinal stromal tumor (GIST).
4. Dedifferentiated liposarcoma.
5. Solitary fibrous tumor.
6. Inflammatory pseudotumor.

**Diagnosis:** Solitary fibrous tumor of pelvis.

**Comments:**

Solitary fibrous tumors (SFTs) were first described by Klemperer and Rabin in 1931 as a localized fibrous mesothelioma. The origin of SFTs has been controversial, and it is now considered to be a pathologically diverse, ubiquitous mesenchymal neoplasm of fibroblastic or myofibroblastic origin that can be either benign or malignant. In the last 20 years, the classification of SFTs and hemangiopericytoma has changed, and most hemangiopericytomas are now thought to be cellular variants of SFTs.

Although SFTs may occur in any site of the body, they have been predominantly localized in the pleura, followed by the head and neck. Nasal cavity and upper respiratory tract are the most common among extrathoracic locations, and their presence in the abdomen and pelvis is rare. The retroperitoneal location is rare. Less than 30 cases have been reported in the literatures .

SFTs usually affect mid-adults with age of onset around 50-60 years, and equal distribution in men and women. There were no symptom in thoracic SFTs . Extrapleural SFTs were typically demonstrated as large, slow-growing soft tissue tumors. Symptoms related to the site are frequent in these locations, such as a palpable mass, pain, gross hematuria, bowel obstruction, and urinary retention or obstruction. It has been reported that around 5% of SFTs are associated with hypoglycemia due to the secretion of insulin-like growth factors.

SFTs were highly vascular and vigorously enhancing on both enhanced CT and MRI. . These tumors are usually heterogeneous, with hypervascular areas showing early intense enhancement, hypercellular areas showing moderate enhancement, and areas of necrosis or of cystic or myxoid degeneration showing no enhancement.

The most common imaging finding, recently reported in the literature, was a large, well-defined, round, oval, or lobulated hypervascular mass that tended to displace or invade adjacent structures such as the bowel. Radiological information provides useful information, such as detection, characterization, and localization of tumors. In addition, it can depict the local extent, possible invasion into adjacent structures, and locoregional and distant metastases.

Grossly, SFTs are rounded or ovoid, lobulated, and are encapsulated. The cut surfaces are grayish-white or yellowish-white in color, and fish meat-like in texture.

Histological examination demonstrated that the SFTs have a haphazard patternless architecture of spindle or ovoid cells with a varying degree of collagenous tissue and a hemangiopericytoma-like appearance with prominent thin-walled vascular vessels. The degree of cellularity varied for each tumor and was inversely related to the collagenous tissues. SFTs have a propensity to undergo hemorrhage, necrosis, and myxoid degeneration. SFTs show a wide range of morphological features, from predominantly fibrous lesions containing alternating fibrous areas and hyalinized thick-walled vessels (fibrous variants) to more cellular and less fibrous neoplasms with a “patternless pattern” (a monotonous appearance) and thin-walled branching vessels (cellular variant).

Immunohistochemistry of CD34 is crucial for diagnosis of SFTs, and it was suggested the both of Bcl-2 and CD34 immunostaining for making differential diagnosis from spindle cell neoplasia. Most cases of SFTs are also positive for CD99. Some cases of SFTs may show positive staining for S-100. Malignant SFTs tend to lose CD34 immunoreactivity and overexpress Ki-67, P53, and S-100. Molecular analyses have discovered that almost all SFTs harbor an NAB2-STAT6 fusion gene, which is considered specific to this tumor type. Recent studies have suggested that STAT6 immunohistochemistry is a reliable surrogate for detection of the fusion gene. STAT6 is a relatively specific biomarker for SFT, and may be used in the diagnosis

and differential diagnosis of SFT especially for the atypical cases, and allows the precise pathologic diagnosis of SFT.

Although most extrapleural SFTs have been reported to be benign histologically, approximately 10%-15% of SFTs demonstrate malignant behavior in the form of recurrence or metastasis. General histological features that may help to identify a malignant lesion include large size, infiltrative margins, hypercellularity, nuclear atypia, mitotic activity ( $\geq 4/10$  high-power fields), and the presence of necrosis and hemorrhage. Some cases of “histologically benign” SFTs that do recur or metastasize have been reported in the literature. The most important risk factor for recurrence is invaded surgical margins. Therefore, complete resection with negative surgical margins is the treatment of choice, and long-term follow-up of all patients is highly recommended, regardless of anatomic location

Surgical resection is mandatory for the treatment of SFTs, but it is often difficult to complete resection due to the hypervascular nature of tumors and collateral vessels. One patient with large SFT in the pelvis died of severe and uncontrolled hemorrhage during surgery in the tertiary care center. In one case report of SFT in the pelvis, resection was failed in the first operation due to the injury of iliac artery and vein. The vascular nature and the presence of large feeding vessels made surgical removal technically difficult and preoperative embolization that can reduce intraoperative hemorrhage may be required. According to the case series of SFTs, postoperative radiotherapy was given due to the high grade malignancy, narrow excision margins, large size and rapid growing. Also, patients underwent palliative chemotherapy in the cases of distant metastasis. Malignant extrathoracic SFTs have a higher rate of locoregional recurrence and distant metastasis, and patients with malignant SFTs were at increased risk of death. Extrathoracic SFTs with malignant histologic feature have aggressively malignant tumors with a poor prognosis (5-year survival 40%) and that even in the presence of benign histopathological features. Long term follow up is necessary to identify and manage the relatively high rate of recurrent disease.

Conclusion: The extrapleural SFTs are usually benign entities. SFTs with malignant histologic features may have more chance to have aggressive clinical course than that with benign histologic features. Histologic consultation by expert pathologist is necessary for the accurate diagnosis, and long-term follow up is crucial in order to detect recurrent disease because of the unpredictable clinical course.

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**Case Number: 484**

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### **CASE HISTORY:**

**Signalment:** A 10-year-old, castrated male, Dachshund

The animal presented to the National Taiwan University Veterinary Hospital (NTUVH) because of two-week vomiting, melena hematochezia with increased severity. The blood exam revealed severe lymphocytosis, regenerative anemia, mild thrombocytopenia, hypoalbuminemia, hypokalemia, and mildly elevated liver enzyme. Under ultrasound examination splenomegaly and mesentery lymph node enlargement were demonstrated while intussusception was suspected. Radiography also revealed enlargement of several lymph nodes, splenomegaly and hepatomegaly. Cytology of lymph node revealed large numbers of small-to-medium-sized lymphocyte and the blood smear also showed predominantly medium-sized lymphocytes. Euthanasia was performed due to poor prognosis.

**Gross Findings:** Upon necropsy, the individual was moderately emaciated and the labial mucosa was extremely pale. Postmortem examination revealed marked uniform splenomegaly with marginal bulging areas and several irregular beige plaques and mildly hepatomegaly with rounded margins. The lungs showed extremely pale appearance with mottled texture. Systemic lymph nodes (including prescapular, mediastinal, mesenteric and popliteal lymph nodes) were markedly enlarged with a complete loss of corticomedullary demarcation and the mediastinal lymph node presented a focal dark red hemorrhagic spot on the cut sections. The cecum was markedly enlarged with firm texture and after the cecal wall being cut away, the inner segment of part of ileum was exposed with hyperemic mucosa and strangulated portion. The cut section of invaginated ileum showed a cavity with remarkable hemorrhage and necrosis. On transverse sections, the bone marrow taken from the femoral diaphysis was rather soft, fleshy, and yellowish.

### **CASE RESULT:**

#### **Histopathological Findings:**

The bone marrow biopsy is effaced by a diffuse infiltration of uniform neoplastic cells, majorly the small, mature lymphocytes, which are 1 to 1.5 times larger than erythrocytes and characterized by high nucleus to cytoplasm ratio with minimal cytoplasm. The neoplastic cells have

infiltrated the marrow in dense clusters that displace normal marrow cells and are apparent by their nuclear homogeneity.

For the intussuscepted intestinal segment, inside-out structures of the intestine are identified. The normal architecture of the serosa of the intestine have been completely replaced by large areas of necrosis, hemorrhage and mild fibrosis. Increased fibroblasts with bundles of collagen are seen at the degenerative smooth muscle layer, where several small caliber blood vessels can be noted. The mucosal epithelium is also significantly erosive and remarkably infiltrated by monomorphic lymphocytes.

Generalized lymph nodes, intestine, spleen, liver, kidney and lung were variably infiltrated by densely cellular neoplasm composed of sheets of monomorphic round cells which share the similar histopathologic pattern as the lesion in the bone marrow.

#### **Immunohistochemical stainings:**

The results of immunohistochemistry were positive for CD3 but negative for CD79a.

#### **Flow cytometry:**

The result of flow cytometry was marked by CD3+, CD21- and CD34-

#### **Pathological Diagnosis:**

3. Chronic lymphocytic leukemia, with systemic dissemination, bone marrow, intestine, generalized lymph node, spleen, liver, kidney and lung
4. Intestine intussusception, with mild, locally extensive and subacute necrotizing serositis, ileum

#### **Differential diagnosis:**

1. Ileocecal intussusception
2. chronic lymphocytic leukemia
3. lymphoma, stage V

#### **Discussion:**

The exact cause of intussusceptions in both human and veterinary medicine is unknown. Any lesion in the bowel wall or irritant in the lumen that alters the normal peristaltic pattern may initiate invagination. In human medicine, ileocolic or ileocecal intussusception has been reported as a complication of lymphocytic leukemia. Herein we report a counterpart case in canine with systemic metastasis of chronic lymphocytic leukemia, which eventually leads to the weakness and clinical signs of the animal.

Intussusception involves the telescoping of one segment of bowel into an outer sheath formed by another, usually distal, segment of gut. The history is that of partial or complete intestinal obstruction, perhaps with bloody feces. Intussusception is common in dogs, where most frequently it is ileocolic, which corresponding the site in the current case. The exact cause of intussusceptions

in both human and veterinary medicine, in general, is unknown; however, any lesion in the bowel wall or irritant in the lumen that alters the normal peristaltic pattern such as linear foreign bodies, heavy parasitism, previous intestinal surgery, enteritis, and intramural lesions like abscesses and tumors may initiate invagination. In human medicine, the association between intussusceptions and inflammatory bowel disease is well known, even if referred to only in case reports or a small series of patients. Interestingly, there is also a reported case of a dog in which ileocolic intussusception and histiocytic ulcerative colitis appear to be associated. So, in the present case, though there is no obvious enteritis inducing the ileocolic intussusception, the infiltration of the neoplastic cell probably plays the same role with similar impact.

Differentiating between leukemia and stage V lymphoma can be challenging and arbitrary and is often based on significant lymphadenopathy, degree of blood and bone marrow involvement, and immunophenotypic characteristics. Since the current case has obvious and typical enlargement of lymph node with severely bone marrow involvement, it is more suspected as chronic lymphocytic leukemia (CLL). CLL is a lymphoid malignancy that affects dogs of all ages without sex predilection. Large-breed dogs are often predisposed and genetic factors likely play a role and have been compared between dogs and humans. In humans, lymphoid leukemia has been associated with genetic factors and exposure to radiation, benzene, phenylbutazone, and antineoplastic agents. However, the most etiologies of CLL in dogs remain unknown. Lymphocytic leukemia can occur in dogs of any age but typically occurs in middle-aged to older dogs (mean of 7 to 10 years); CLL usually occurs in older dogs (mean of 10 years).

Behavior of acute and chronic lymphoid leukemia is quite distinct. Acute leukemias tend to exhibit much more aggressive behavior and rapid progressive than their chronic counterparts. Under histopathologic examination, CLL represent lymphocytes being indistinguishable morphologically from normal small lymphocytes, correlating to the pathologic findings from this case, while the cells in ALL tend to be intermediate-sized or large cells with moderate amounts of basophilic cytoplasm. To differentiate lymphoblasts from myeloblasts, one should focus on the nuclear chromatin pattern of the lymphocytes as in the present case, which typically is more condensed than the chromatin in myeloblasts.

To further determine the exact origin of the CLL, a flow cytometry was conducted. Three primary subtypes of CLL are reported in dogs, based primarily on immunophenotyping. (1) T-CLL (CD3+, CD4-, CD21-), which is the most common form, with cells in the majority of cases being CD8+ granular lymphocytes; (2) B-CLL (CD21+, CD3-, CD4-), which is the next most common subtype; and (3) atypical CLL, which represents a combination of immunophenotypes (CD3-, CD8+; CD3+, CD4-, CD8-; CD3+, CD4+, CD8+; and CD3+ + CD21+). In contrast to CLL in humans, which is primarily a disease of B-cells. In this case, a T cell-origin CLL is suggested and confirmed with the result of flow cytometry marked by CD3+, CD21- and CD34- negative.

This may be the first report of ileocecal intussusception with chronic lymphocytic leukemia infiltration in animals. In human medicine, the pathologic features most commonly is leukemic infiltration in the intestine, which might share similar pathogenesis in the present case.

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Case No: 485

Slide no: SCMHS17-1AB

Slide view: [http://www.ivp.nchu.edu.tw/slide\\_view.php?id=1279](http://www.ivp.nchu.edu.tw/slide_view.php?id=1279)

祝志平醫師 Show Chwan Memorial Hospital (秀傳醫療社團法人秀傳紀念醫院)

#### Clinical history:

A 88 year old lady suffered from poor appetite, RLQ area dullness, intermittent pain, black stool passage off and on for 6 months. Clinical data showed tumor makers (CEA, AFP, CA19-1) within normal limit. KUB shows no mass or organomegaly. Both kidneys are atrophic. No abnormal bowel distention. No abnormal calcifications. T-12 & L-4 vertebral compression fractures.

Clinical Laboratory data: Tumor markers: AFP (Alfafetoprotein) 3.21 (< 8.78), CEA 1.0 (<5.0), CA 19-9 3.0 (<37.0)

106/04/12 colonoscopy and gastral endoscopy showed tumors as:: A. Colon, An ulcerative tumor with partial obstruction. Biopsy: --- Poorly differentiated adenocarcinoma. B. Stomach: An erosive tumor 4.0 cm extend from anterior wall to posterior wall of lesser curvature site antrum. Lifting sign (-). Rule in advanced malignancy. Biopsy: Stomach, antrum, --- Moderately differentiated adenocarcinoma. 106/04/19 PET-CT IMPRESSION: 1. The scan findings are compatible with a large tumor in the ascending colon and another tumor in the transverse colon. 2. There is no other definite evidence of other hypermetabolic lesion which indicates malignancy in this whole body scan in this study.

106/04/21 Operation Method : 1. Radical hemicolectomy, right; 2. Subtotal gastrectomy.

Gross description: A. Colon tumor" a segment of colon, measuring 24.5 cm, ileum, 3 cm, and an adherent liver tissue, 1.9 x 1.2 x 0.6 cm. A gray tan firm annular elevated and centrally ulcerative lesion, measuring 8.8 x 7.0 x 5.5 cm, is noted, 8.0 cm from the nearest colonic cut end. On cross section, the tumor invades the serosa and is adherent to the liver tissue. B. Stomach" distal part of a stomach, with lesser curvature, 8 cm, greater curvature, 11 cm, and duodenal cuff, 1.1 cm in length. There is a polypoid and infiltrating tumor, measuring 2.8 x 2.2 x 1.2 cm, located over lesser curvature of antrum, 3.0 cm from the nearest gastric (proximal) cut end and 4.5 cm from the nearest duodenal (distal) cut margin. On cut section, tumor has invaded to submucosa grossly.

#### Differential Diagnosis:

1. Colon cancer: poorly differentiated adenocarcinoma (or neuroendocrine carcinoma) with gastric metastasis
2. Synchronous colon cancer and gastric cancer

#### IHC Stains (biopsy):

1. Colon: CDX2 (-), CK7 (-), CK20 (-), CD56 (-), synaptophysin (-), chromogranin (-) (resected colon: CK7 (-), CK20 (+ in scanty cells), synaptophysin (-), and CEA (equivocal) done for section A4 (colon cancer). EBER in situ hybridization (focal +) done for section A4 (colon cancer).

2. Stomach: CDX2 (+), PPH3(+), p53 (-), ki67 (+), Her-2/neu (-), CK20 (+), TTF-1 (-) (resected stomach: CK7 (-), CK20 (+ in scanty cells), and Her-2/neu (negative, score: 1+)).

Pathological report: A. Colon, ascending, radical right hemicolectomy --- Carcinoma, poorly differentiated (pT4aN1b). Tumor penetrates serosa (visceral peritoneum) with fibrous adhesion to liver. Tumor metastasizes to regional lymph nodes (2/22). The appendix, ileum, liver, and bilateral cut margins are free of tumor.

B. Stomach, distal, subtotal gastrectomy --- Adenocarcinoma, moderately differentiated (pT1bN0). Tumor invades submucosa. The perigastric lymph nodes (lesser curvature: 0/1; greater curvature: 0/8), duodenum, and all resection margins are free of tumor.

Prognostic and predictive factor:

<< For colon cancer >> 1. Tumor size: 8.8 x 7.0 x 5.5 cm. 2. Depth of invasion: Tumor penetrates serosa (visceral peritoneum). 3. Histologic grade: Poorly differentiated . 4. Lymph-vascular invasion: Present. 5. Perineural invasion: Present. 6. Tumor deposits: Absent. 7. Circumferential (radial) margin: Close, less than 1 mm in distance . 8. Lymph node status: (a) Involved (2/22), (b) Extranodal extension: Present. 9. Treatment effect: Not applicable. 10. Type of polyp in which invasive carcinoma arose: Not identified. 11. Additional pathologic findings: Absent. 12. Pathological TNM stage (AJCC 2010): pT4aN1b.

<< For stomach cancer >> 1. Greatest dimension of tumor: 2.8 x 2.2 x 1.2 cm. 2. Microscopic extent of tumor: Tumor invades muscularis mucosa. 3. Margins: (a) Proximal margin: Uninvolved, 30 mm from invasive carcinoma.(b) Distal margin: Uninvolved, 45 mm from invasive carcinoma. (c) Omental (Radial) margin: Uninvolved, 14 mm from invasive carcinoma. 4. Lymph-vascular invasion: Present. 5. Perineural invasion: Absent. 6. Lymph node status: Uninvolved (0/9). (lesser curvature: 0/1; greater curvature: 0/8). 7. Her-2/neu status: Negative, score: 1+. 8. Treatment effect: No presurgical therapy. 9. Pathological TNM stage (AJCC 2010): pT1bN0. 10. TNM descriptors: Not applicable.

#### Diagnosis:

1. Intestine, large, colon, ascending, --- Carcinoma, poorly differentiated (pT4aN1b). (ADVANCED)
2. Stomach, distal, --- Adenocarcinoma, moderately differentiated (pT1bN0) (EARLY) (Synchronous cancer)

#### KEY DIAGNOSTIC POINTS

Colorectal adenocarcinomas are typically positive fo CK20, CDX-2, and villin, negative for CK7. Staining for the mismatch repair proteins, MLH1, MSH2, MSH6, and PMS2 can be used to screen for neoplasms with a high level of microsatellite instability (MSI-H)

MSI-H colonic adenocarcinomas can show decreased or absent CDX-2 and/or CK20 staining

CLINICAL DIAGNOSIS: 1.Adenocarcinoma of ascending colon, 2. Stomach cancer

CANCER STAGING: 1.Colon-- T4N2M0 stage IIIC pT4aN1bM0 stage IIIB

2. Stomach -- cT2N0M0 stage I pT1bN0M0 stage I

SUGGEST FURTHER MANAGEMENT

#### Discussion:

The different biopsy histopathologic pictures of the colon and the stomach suggest a synchronous cancer, but metastasis is still possible. Since treatment will be different between synchronous cancer and metastatic cancer, therefore, an adequate immunohistochemical staining for the definite diagnosis is indicated. CDX2 and CK20 are nealy 100% positive in the colorectal adenocarcinomas but CK20 stain in this colon biopsy was negative, while in the resected tumor, only scant cancer cells showed positive staining. This result may be due to the poorly differentiation of the colon adenocarcinoma. In colorectal adenocarcinomas, 80% to 100% are diffusely and strongly positive for CK20. Decreased CK20 staining occurs in microsatellite unstable adenocarcinomas. In general, colorectal adenocarcinomas infrequently express CK7 (13 %); This frequency is independent of site (primary or metastatic). In this case, CK7 stain shows negative result in both colon tumor biopsy and resection, consistent with the general rule of colon adenocarcinoma. Negative CK7 staining is consistent with colon cancer but not gastric cancer in our colon tumor behavior. The CK7/CK20 expression patterns of gastric carcinoma vary considerably; approximately 70% cases are CK7 positive and 20% are CK20 positive. On the other hand, 95% colorectal carcinomas are CK7 negative, CK20 positive; a CK7 negative, CK20 positive profile overwhelmingly favours a large bowel primary, whereas a CK7 positive and CK20 negative profile favours a metastasis (stomach to colon). But in our gastric tumor, although CK7 (-), CK20 (+) but tumor just involving mucosa and submucosam, strongly suggest a primary, early gastric tumor. In this condition, IHC stain of

CK20/CK7 seemed to be only a supportive evidence but inferior to the H & E stained morphologic diagnosis. CDX2 is a homeobox transcription factor that regulates the differentiation of intestinal epithelial cells, therefore is a marker of intestinal differentiation (90%, 72-100%). Beside in the colorectal adenocarcinoma, staining of CDX-2 can also be seen in pancreatobiliary, gastric, small bowel, lung, ovarian and bladder origin, when they show intestinal differentiation. To avoid potential erroneous diagnosis, especially when assessing small biopsy specimens and metastases of unknown origin, it is important to be aware that some cases of colorectal cancer can aberrantly express CK20, CDX-2 and/or CK7. Assessment of MSI (microsatellite instability) can be helpful in such challenging cases (32% negative CK20 and 20% negative CDX-2 staining in high level MSI colorectal adenocarcinoma).

Synchronous (concomitant) and metachronous (occurring one after other) cancers in the gastrointestinal (GI) tract are an extremely rare occurrence. There are no case series and only few case reports have been published in literature describing such cases. There have been several case reports in literature describing multiple metachronous and synchronous cancers of the gastrointestinal tract. Although patients with multiple cancers are not common, it is still important that the clinicians consider the possibility of second and third cancers in patients who have been treated for a primary cancer. Pricop reported a case of metachronous primary cancers of colon and stomach in a 69 years old woman. They also emphasized the importance of considering the possibility of development of metachronous cancers in patients who have been treated for a primary malignant tumour. Another case of synchronous transverse colon cancer and early gastric cancer was reported by Nakata.

Although, there is no evidence for a hereditary cancer syndrome in this case (nor have other writers who have reported such cases), the possibility of such a syndrome cannot be totally ruled out in this case and other such cases.

The presented patient suggests that in case of any doubt on symptomatology not corresponding with the diagnosis of digestive tract primary tumor, a possibility of synchronous multiple carcinomas should be considered. The detection of synchronous gastric cancer and colorectal cancer, obtained by easily available diagnostic methods, enabled us to treat both cancers simultaneously and thus beneficially influence the prognosis and the quality of life of the patient. Therefore, simultaneous resection represents the adequate approach to surgical treatment, although a longer follow-up is required to demonstrate oncological adequacy.

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**Slide no:** 421298-11

**Slide view:** <http://www.ivp.nchu.edu.tw/slidecenter.php?id=389>

蘇雪妍, 住院醫師, 陳燕麟, 主治醫師, 病理科, 天主教耕莘醫院

### Clinical history

This 64 years old male patient with past history of Type 2 DM and hypertension was under regular medication control. He was admitted with chief complaint of yellowish coloration of whole body skin for about two weeks. Jaundice was associated with epigastric discomfort, mild nausea, generalized weakness, malaise, fatigue and poor oral intake. He denied fever with chills, coffee ground vomiting, cold sweating, dizziness and palpitation. Deep yellow coloration of urine was noted for days. He noticed body weight loss (74 kg to 71 kg ) within one month. Due to above problems, he came to our GI OPD and then he was advised to admit for investigations and treatment. MRCP was done and reported as suspicious of intrahepatic cholangiocarcinoma with periductal infiltration and hilar involvement. Bilateral IHD dilatation. Radical excision of CBD, cholecystectomy, right lobectomy and Roux-en-Y hepaticojejunostomy was performed on 2017/3/28.

### Gross examination

The specimen consisted of a piece of liver weighing 580 gm and measuring 15 x 10 x 9 cm in size, attached with a gallbladder measuring 7 x 3.5 x 2.8cm in size, fixed in formalin. Grossly, the liver surface was intact without tumor rupture. On dissecting, the bile ducts of both intra and extra hepatic were thickened, measuring 1.8 cm. The remaining liver tissue showed fibrotic changes.

### Microscopic findings

Microscopically, sections showed pictures of sclerosing cholangitis characterized by ductopenia and mixed acute and chronic inflammatory cells infiltration with a surrounding pattern. Moderate fibrosis around the residual bile ducts was seen. The liver tissue showed fibrous septa extend between adjacent portal tracts.

### Differential diagnosis

- Primary sclerosing cholangitis
- IgG4-related cholangitis
- Cholangiocarcinoma

### Post op blood investigations

ANA : positive

Antimitochondrial antibody: negative

ANCA : negative

IgG4 level: 1170 mg/dL (normal range 3 ~ 201 mg/dl)

Diagnosis : IgG4-related sclerosing cholangitis

## Discussion

IgG4-related sclerosing cholangitis (ISC) is one of the common organ manifestations of IgG4-related disease; approximately 60 % of patients with this systemic condition have ISC in the proximal and/or distal bile ducts. ISC more commonly develops in males with a male-to-female ratio of 4:1. More than 90 % of patients are diagnosed with ISC in their 60s or older . Patients with ISC typically present with obstructive jaundice. Serum IgG4 elevations are the most sensitive and specific non-invasive examination for the diagnosis of ISC. The typical cut-off value is 135 or 140 mg/dl.

The image findings are useful for the diagnosis of ISC including multifocal biliary strictures, a markedly thickened bile duct wall (mean wall thickness, 4.9 mm), a smooth outer margin, a narrow but visible lumen, hyperenhancement during the late arterial phase, homogeneous hyperenhancement during the delayed phase, concurrent gallbladder wall thickening, and no vascular invasion.

The affected ducts show diffuse and circumferential wall thickening, with the overall appearance resembling a pipe stem. The mucosal surface is relatively smooth with no ulceration or intraductal granulation tissue. IgG4-related sclerosing cholangitis histologically exhibits transmural fibroinflammatory processes, in which inflammation and fibrosis are evenly distributed from the mucosal surface to subserosa. A characteristic pattern of fibrosis is called storiform fibrosis, in which collagen fibers are arranged in an irregularly whorled pattern.

Immunostaining for IgG4 reveals the massive infiltration of IgG4-positive plasma cells. The cut-off values for IgG4-positive plasma cells proposed for ISC are >50 cells/hpf for surgical specimens and >10 cells/hpf for biopsy samples.

ISC needs to be discriminated from cholangiocarcinoma, primary sclerosing cholangitis, and other rare forms of lymphoplasmacytic cholangiopathy (e.g., follicular cholangitis and sclerosing cholangitis with granulocytic epithelial lesions). Its diagnosis requires a multidisciplinary approach, in which serology, histology, and imaging play crucial roles (HISORT criteria).

Treatments with high-dose corticosteroids typically lead to the rapid and consistent induction of disease remission. Another promising therapeutic approach is B-cell depletion with rituximab. Although disease relapse is relatively common, provided that appropriate treatments are administered, ISC is considered a “benign” disease with a low risk of liver failure and biliary malignancy.

**Case Number: 487**

**Slide no:** SE217-531

**Slide view:** [http://www.ivp.nchu.edu.tw/slide\\_view.php?id=1280](http://www.ivp.nchu.edu.tw/slide_view.php?id=1280)

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### **CASE HISTORY:**

**Signalment:** A 79-year-old, female

This man had suffered heart disease, chronic renal failure and hypertension for about 20 years ago. According to the patient's statement, she intermittent epigastric pain for a period of time. She was send to our OPD, at 105/12/13 follow abdominal sona and showed: 1. Fatty liver, moderate 2. Hepatic nodule in S4. 3. Chronic renal parenchymal disease. At 105/12/23 follow liver MRI showed: 1. Hepatic tumor (1.9cm) at the S4 of the liver, BCLC stage 0. Suggest resection. 2. Hepatic cysts at the S1 and S6. 3. Right renal cysts, 4. Osteoporotic compression fracture at the T12. Impression: Liver tumor (HCC). Therefore, she was admitted to our GS ward arrange for operation. Throughout the whole course above, there was no symptom or sign of fever, chills, headache, dizziness, chest pain, dyspnea, abdominal pain, tenderness, muscle guarding, change of bowel habits, weakness of extremities.

### **Gross Findings:**

The specimen contain a segmental hepatectomy of liver(S4 and S%) and a gall bladder. The liver measures 6.0x5.0x5.0cm in size and contains a well-defined tumor measuring 2.5x2.5x1.5cm in size, The tumor have yellow-tan and soft with hemorrhage. The non-tumor part shows macronodularity in surface. The gall bladder measures 8.0x3.0x2.5cm in size with thin wall(0.1cm). No stone or polyp is seen.

### **CASE RESULT:**

#### **Histopathological Findings:**

Microscopically, the tumor shows a picture of angiomyolipoma with extrahemopoiesis, composed of epithelioid cells arranged in sheets and abundant eosinophilic or clear cytoplasm, vesicular nuclei, prominent nucleoli. Occasional spindle cells are mixed with irregular hyalinized and thick-walled blood vessels in mature adipose tissue. Focal area of extrahemopoiesis and inflammatory cells accumulation with hemorrhage are noted. No necrosis or lymphovascular invasion is seen. The immunohistochemical stains show HMB-45, SMA, S-100, Mela-A are positive. CK, Ck7, Hepar-1 and CD68 are negative. MPO, and LCA are focal positive in few cells. CD34 is positive in the increased capillaries. Ki-67 is mildly increased(around 30%)

## Pathological Diagnosis: angiomyolipoma of the liver

### Differential diagnosis:

- 1. HCC, clear cell type
- 2. fatty change in nodule; adenoma
- 3. Hemangioma
- 4. Extramedullary hemopoiesis
- 5. Lipoma or Liposarcoma
- 6. Melanoma
- 7. malignant spindle cell tumor

### Discussion:

1. Hepatic angiomyolipoma (HAML) Uncommon, mostly benign hamartomatous hepatic mass. It has malignant transformation potential, containing blood vessel (angiod), smooth muscle (myoid) and mature fat (lipoid) components. It has association with tuberous sclerosis, although this is less strong than for renal AMLs 20% of renal AMLs are associated with TS, compared to only 6% of hepatic AMLs
2. Clinical presentation : (1)most cases are detected incidentally . (2)mass-compression effects: upper abdominal pain, abdominal fullness, and palpable mass. (3)acute abdominal pain: intratumoral haemorrhage and intraperitoneal hemorrhage
3. Diagnosis: (1) hard to distinguish with other liver tumors (2)Correct preoperative diagnosis of HAML <25% (3)major preoperative diagnostic tools for HAML: US, CT, and MRI
4. Pathology: (1) well-circumscribed, nonencapsulated lesion. (2) fat content can vary from <10% to >95%.fat component is made up of mature yellow fat cells. smooth muscle cell and proliferating blood vessels (3) can be classified histologically: lipomatous (>70% fat), myomatous (<10% fat), angiomatous
5. Immunohistochemical stains: (1)Melanocytic markers: positive (2) Smooth muscle markers: positive in smooth muscle component (3)Epithelial markers: negative.
6. Treatment: asymptomatic patients meet the following criteria:
  - (1) tumor size < 5 cm,
  - (2) angiomyolipoma proved through FNAB
  - (3) patients with good compliance
  - (4) not a hepatitis-virus carrierConservative management, close follow-up
7. If severe abdominal pain or intraperitoneal bleeding: embolization and/or surgical resection
8. Differential diagnosis: (1) hepatocellular carcinoma (HCC) with fatty component fatty content is minimal and is in a scattered pattern, AFP is elevated and negative HMB-45 stain (2) focal fatty infiltration : poorly defined borders without pressure effect on adjacent

vessels (3) Hemangioma: may be indistinguishable on ultrasound delayed arterial phase in CT  
(4) hepatic lipoma very uncommon ;never shows enhancement after contrast administration

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## Case 488

Slide No. K11713059

Slide view: [http://www.ivp.nchu.edu.tw/slide\\_view.php?id=1278](http://www.ivp.nchu.edu.tw/slide_view.php?id=1278)

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### **CASE HISTORY:**

#### **Signalment:**

This 31-year-old woman had a past history of acute appendicitis s/p laparoscopic appendectomy in 2015. She suffered from fever on 2016-08-28. Abdominal pain, nausea, and diarrhea were also noted. According to the patient, she had recurrent acute gastroenterocolitis for one year. Abdominal computerized tomography showed thickened wall of colon/distal ileum with fistula formation between colon/ileum and lymphadenopathy at ileocolic mesentery. Colonoscopy was arranged and showed inflammatory bowel disease favor Crohn's disease. Colonoscopic biopsy revealed ulcer. Under the impression of Crohn's disease, she was received pharmacological management. Methyl-Prednisolone and azathioprine were prescribed initially then shifted to azathioprine and adalimumab.

Mild tarry stool and abdominal pain were noted, recently. Thus she visited CCH emergency department for help. Abdominal computerized tomography revealed thickened ascending colon wall with soft tissue mass at mesocolon and involvement of distal ileum, sinus tract with multifocal abscess formation in right posterior pararenal space, abdominal wall/subcutaneous space. Laparoscopic assisted right hemicolectomy and drainage of intra-abdominal abscess were performed on 2017-03-29. At surgery, inflammatory exudate coating on terminal ileum and ascending colon were seen with a perforation (2x3 mm) on ascending colon and accompanying abscess formation.

#### **Gross Findings:**

A segment of ascending colon measuring 13.5 cm in length and 5.5 cm in circumference connected the terminal ileum measuring 21 cm in length and 5.5 cm in circumference was submitted. Grossly, the outer surface of colon is partially coated with fibrinopurulent exudate. On the mucosal surface, a perforated ulceration is noted at ascending colon with adjacent pseudopolyp formation and coloenteric fistula formation. A linear ulceration measuring 5x1 cm in dimensions perpendicular to long axis of colon is evident in the colonic mucosa.

### **CASE RESULT:**

#### **Histopathological Findings:**

Microscopically, sections of colon shows ulceration with polypoid granulation tissue formation, neutrophilic and lymphoplasmacytic infiltrate, as well as inflammatory exudate. Fibrous thickening submucosa, pericolonic soft tissue, degenerative muscularis propria, as well as disarray and branching colonic crypts are also noted. Focal granulomas with epithelioid histiocytic aggregate surrounding by lymphocytes are seen at colonic wall. No fungus or mycobacterium is found under PAS and acid-fast stains. The picture is compatible with Crohn's disease. Perforated ulceration and enterocolonic fistula are also noticed.

**Pathological Diagnosis:**

Crohn's disease

**Differential diagnosis:**

1. Ulcerative colitis
2. Tuberculosis

**Discussion:**

Crohn's disease (CD) is a chronic relapsing inflammatory bowel disease (IBD). It is characterized by a transmural granulomatous inflammation which can affect any part of the gastrointestinal tract, most commonly the ileum and colon. Despite biological treatment being associated with an improved health-related quality of life, patients still report significant impediment on lifestyle and daily activities during both flares and remissions.

The most common presenting symptom of CD is chronic diarrhea, defined as a decrease in fecal consistency for more than 4 weeks. Abdominal pain, weight loss, and blood, mucus or both in stools are also common symptoms/signs. Extraintestinal manifestations affect approximately a third of patients with IBD. The most commonly observed extraintestinal manifestation is primary peripheral arthritis; aphthous stomatitis, uveitis, erythema nodosum, and ankylosing spondylitis.

The most widely used diagnostic investigation of CD is full ileocolonoscopy with biopsies. This can demonstrate noncaseating granulomas, though may only be detected in up to 60% of resected specimens and even less so in biopsy samples. Ultrasonography (US), computed tomography (CT), and magnetic resonance imaging (MRI) have been increasingly involved in the diagnostic evaluation of CD. Atypical perinuclear anti-neutrophil cytoplasmic antibodies (pANCA) and anti *Saccharomyces cerevisiae* antibodies (ASCA) are the two most intensively studied serological markers for the diagnosis of CD.

The characteristic morphologic changes of CD include longitudinal ulcers, which are more focal than diffuse. Epithelium has straight colonic crypts with cytoplasmic mucin and lymphoid aggregates but no crypt abscesses and minimal mucosal atrophy. Besides, inflammation primarily involves submucosa with marked edema, as well as submucosal nonnecrotizing granulomas in 60%, which are often adjacent to vessels. Fistula, a complication of CD, occurs in up to 35% of patients with CD, with perianal fistula occurring in 20%.

The differential diagnoses of CD are ulcerative colitis and tuberculosis. The active changes of ulcerative colitis include diffuse mononuclear inflammatory infiltrate in lamina propria, crypt abscesses (neutrophils in glandular lumen), and cryptitis but usually no neutrophils in lamina propria. Plasma cells are common at base of crypts (basal plasmacytosis). Muscularis mucosa may be exposed by ulceration or be covered by granulation tissue and reepithelialization. However, no granulomas, fissures, transmural inflammation, nor submucosal edema is noted in ulcerative colitis. The pathologic features of tuberculosis are caseous necrosis, presence of ulcers lined by bands of epithelioid histiocytes, and disproportionate submucosal inflammation.

The treatment for CD includes pharmacological management and surgical management. Usually medications such as corticosteroids, budesonide, or mesalazine are prescribed initially for induction of remission. Anti-tumour necrosis factor (TNF) immunosuppressive therapies are also used in patients who are refractory to conventional therapy. Surgical treatment is required for failed medical therapy, recurrent intestinal obstruction, malnutrition, and for septic complications such as perforations and abscesses. However, the underlying pathology still persists resulting in high recurrence of disease, ranging from 28 to 45% at 5 years and 36 to 61% at 10 years.

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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。
- 第二十條 理事、監事有下列情事之一者，應即解任：  
一、喪失會員資格。  
二、因故辭職經理事會或監事會決議通過者。  
三、被罷免或撤免者。  
四、受停權處分期間逾任期二分之一者。
- 第二十一條 本會置祕書長一人，承理事長之命處理本會事務，令置其他工作人員若干人，由理事長提名經理事會通過後聘免之，並報主管機關備查。但祕書長之解聘應先報主管機關核備。  
前項工作人員不得由選任之職員（理監事）擔任。  
工作人員權責及分層負責事項由理事會令另定之。
- 第二十二條 本會得設各種委員會、小組或其它內部作業組織，其組織簡則由理事會擬定，報經主機關核備後施行，變更時亦同。
- 第二十三條 本會得由理事會聘請無給顧問若干人，其聘期與理事、監事之任期同。

#### 第四章 會議

- 第二十四條 會員大會分定期會議與臨時會議兩種，由理事長召集，召集時除緊急事故之臨時會議外應於十五日前以書面通知之。定期會議每年召開一次，臨時會議於理事會過半數認為必要，或經會員五分之一以上之請，或監事會半數函請召集時召開之。
- 第二十五條 會員不能親自出席會員大會時，得以書面委託其他會員代理，每一會員以代理一人為限。
- 第二十六條 會員大會之決議，以出席人數過半之同意行之。但章程之訂定與變更、會員之除名、理事及監事之罷免、財產之處置、本會之解散及其他與會權利義務有關之重大事項應有出席人數三分之二以上同意。但本會如果辦理法人登後，章程之變更應以出席人數四分之三以上之同或全體會員三分之二以上書面之

同意行之。

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

前項會議召集時除臨時會議外。應於七日以前以書面通知，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 大醫院 醫齒藥總合研究科 博士	台北醫學大學副教授兼細胞學中心主任	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 醫院病理科主任
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	長青動物醫院病理部主任	長青動物醫院病理部主任

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	台灣大學分 子暨比較病 理生物學研 究所 助理 教授

中華民國比較病理學會會計報表  
106.04.16-106.7.31

科 目	預算金額	本月實收金額	本月實付金額	實收付累計金額	摘要
本會經費收入	72,080	0			
入會費	6,000				
常年會費	22,000				
贊助會費	40,000				
利息收入	80				
其它收入	4,000				
本會經費支出	72,080		343		
人事費	10,200				
兼職人員車馬費	4,200				
其它人事費	6,000				
辦公費	21,380		109		
印刷費	20,080				
旅運費	300				
郵電費	1,000			109	
公共關係費	0				
業務費	25,800		234		
會議費	25,800				
雜費	14,000				
提撥基金	700				
收入合計		0			
支出合計			343		
上期結餘	112,930				零用金\$51,740+合作金庫活存\$60,847
(零用金+活存)					
本月結餘	60,847				
(合作金庫活存)					
本月結餘	51,740				
(零用金)					
CSCP總收入	112,587				零用金\$+合作金庫活存\$
(零用金+活存)					

理事長



秘書長



會計

製表



中華民國比較病理學會  
收支決算表

中華民國 105 年 1 月 1 日至 105 年 12 月 31 日

單位：新臺幣(元)

款	項	科	目		決算數	預算數	決算與預算比較數		說明
			名稱	金額			增加	減少	
1			本會經費收入	72,080	72,080	9,931			
			入會費	7,500	6,000	1,500			新增一般會員 5 人(1 位學生轉一般), 學生 17 人
			常年會費	45,100	22,000	23,100			
			贊助會費	3,050	40,000		36,950		友聯贊助 68th 餐費
			利息收入	99	80	19			104.12\$43+105.06\$33+105.12\$23
2			其他收入	6,400	4,000	2,400			研討會費用 3,100, 書籍 1,800 及其它 1,500
			本會經費支出	39,062	72,080		33,018		
			人事費	4,000	10,200		6,200		
			兼職人員車馬費	4,000	4,200		200		
			其它人事費	0	6,000		6,000		專題演講者車馬費(歐鐸嘉.黃馨頤)
3			辦公費	12,642	21,380		8,738		
			印刷費	10,542	20,080		9,538		印刷第 66-68 次會議手冊
			旅運費	0	300		300		
			郵電費	2,100	1,000	1,100			
4			公共關係費	0	0				
			業務費	22,420	25,800		3,380		
			會議費	22,420	25,800				
			會費支出	0	14,000		14,000		3-66-68 次會議費(含餐費及點心費)
			雜費	0	700		700		
5			提撥基金	23,087	0				
			本期餘結	23,087	0				

俊 廖 旺

常務監事：

謙 鄭 仁

秘書長：

德 林

會計：

靜 許 宜

中華民國比較病理學會

現金出納表

中華民國 105 年 1 月 1 日至 105 年 12 月 31 日

單位：新臺幣(元)

收 入		支 出	
科目名稱	金 額	科目名稱	金 額
上期結存	63,453	本期支出	39,062
本期收入	62,149	本期結存	86,540
合 計	125,602	合 計	125,602

理事長：

常務監事：

秘書長：

會計：

中華民國比較病理學會  
資產負債表

中華民國 105 年 1 月 1 日至 105 年 12 月 31 日  
單位：新臺幣(元)

資 科	產		負 債 、 基 金		餘 絀 額
	目	金 額	科 目	金 額	
流動資產		86,540	流動負債		0
庫存現金		30,693	基金		0
銀行存款		55,847	提撥基金		0
銀行存款－基金		0	本期餘絀		23,087
			累計餘絀		63,453
合計		86,540	合計		86,540

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 105 年 1 月 1 日至 105 年 12 月 31 日止

單位：新臺幣(元)

收			支			出	
科	目	名稱	金額	科目	名稱	金額	額
準備基金	歷年累存		0	準備基金			0
	本年度利息收入		0	支付退職金			0
	本年度提撥		0	支付退休金			0
			0				
				結	餘		0

理事長：

常務監事：

秘書長：

會計：

說明：本會暫無基金專戶。於年底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壹萬肆仟元。

# 中華民國比較病理學會

## 106 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，缺繳三年以上進行停權

#### 3. 召開會議

召開會員大會一次

召開理監事會議，每三個月一次

#### 4. 學術活動

持續辦理三次研討會，並邀請國內外專家學者進行學術性演講

### 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

中華民國比較病理學會  
收支預算表

中華民國 106 年 1 月 1 日至 106 年 12 月 31 日

單位：新臺幣(元)

款	項	科	目		預算數	上年度 預算數	本年度與上年度 預算比較數		說明
			名稱	預算數			增加	減少	
1			本會經費收入	72,080	72,080		13,580		
			入會費	4,000	6,000		2,000		
			常年會費	30,000	22,000	8,000			
			贊助會費	20,000	40,000		20,000		
			利息收入	80	80				
2			其他收入	4,420	4,000	420			
			本會經費支出	58,500	72,080		13,580		
			人事費	8,000	10,200	3,800	2,200		講師費 2000 元 x 4 人
			兼職人員車馬費	0	4,200		6,000		
			其他人事費	0	6,000				
3			辦公費	14,000	21,380		7,380		
			印刷費	12,000	20,080		8,080		會議手冊印製
			旅運費	0	300		300		
			郵電費	2,000	1,000	1,000			郵寄
4			公共關係費	0	0				
			業務費	25,800	25,800				
			會議費	25,800	25,800				會議費(含餐費及點心費)
5			雜費支出	10,000	14,000		4,000		
			提撥基金	700	700				依收入總額提列 20% 以下作為準備基金
3			本期餘絀	0	0				

理事長：

常務監事

秘書長：

會計：



## 數位組織切片資料庫

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  
第一次至第六十九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
腫 瘤	72.	9	Reticulum cell sarcoma	Mouse	國家實驗動物繁殖及研究中心



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	新光吳火獅紀念醫院
			13	Cardiac schwannoma	SD rat	國家實驗動物繁殖及研究中心
		13	Desmoplastic infantile ganglioglioma	Human	高雄醫學院	
		13	1.Primary cerebral malignant lymphoma 2.Acquired immune deficiency syndrome	Human	台北市立仁愛醫院	

	13	Schwannoma	Human	三軍總醫院
	13	Osteosarcoma	Dog	美國紐約 動物醫學中心
	14	Mixed germ-cell stromal tumor, mixed sertoli cell and seminoma-like cell tumor	Dog	美國紐約 動物醫學中心
	14	Krukenberg's Tumor	Human	台北病理中心
	14	Primary insular carcinoid tumor arising from cystic teratoma of ovary.	Human	花蓮慈濟綜合醫院
	14	Polypoid adenomyoma	Human	大甲李綜合醫院
	14	Gonadal stromal tumor	Human	耕莘醫院
	14	Gestational choriocarcinoma	Human	彰化基督教醫院
	14	Ovarian granulosa cell tumor	Horse	中興大學獸醫學系
	15	Kaposi's sarcoma	Human	華濟醫院
	15	Basal cell carcinoma (BCC)	Human	羅東聖母醫院
	15	Transmissible venereal tumor	Dog	臺灣大學獸醫學系
	17	Canine Glioblastoma Multiforme in Cerebellopontine Angle	Dog	中興大學獸醫病理研究 所
143	18	Osteosarcoma associated with metallic implants	Dog	紐約動物醫學中心
144	18	Radiation-induced osteogenic sarcoma	Human	花蓮慈濟綜合醫院
145	18	Osteosarcoma, osteogenic	Dog	臺灣大學獸醫學系
146	18	Pleomorphic rhabdomyosarcoma	Human	行政院衛生署新竹醫院
147	18	Papillary Mesothelioma of pericardium	Leopard	屏東科大學獸醫學系
148	18	Cystic ameloblastoma	Human	台北醫學院
149	18	Giant cell tumor of bone	Canine	中興大學獸醫學院
150	18	Desmoplastic small round cell tumor (DSRCT)	Human	華濟醫院
152	18	Hepatocellular carcinoma	Human	羅東聖母醫院
158	20	Hemangiopericytoma	Human	羅東聖母醫院
160	20	Cardiac fibroma	Human	高雄醫學大學病理學科
166	21	Nephroblastoma	Rabbit	紐約動物醫學中心
168	21	Nephroblastoma	Pig	台灣動物科技研究所
169	21	Nephroblastoma with rhabdomyoblastic differentiation	Human	高雄醫學大學病理科
172	21	Spindle cell sarcoma	Human	羅東聖母醫院
174	21	Juxtaglomerular cell tumor	Human	新光醫院病理檢驗科
190	27	Angiosarcoma	Human	高雄醫學大學病理學科
192	27	Cardiac myxoma	Human	彰化基督教醫院病理科
194	27	Kasabach-Merrit syndrome	Human	慈濟醫院病理科
195	27	Metastatic hepatocellular carcinoma, right atrium	Human	新光醫院病理科
197	27	Papillary fibroelastoma of aortic	Human	新光醫院病理科

腫瘤

		valve		
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
	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	Human	基隆長庚醫院

腫瘤

		cholangiocarcinoma		
	43	Cutaneous epitheliotropic lymphoma	Canine	臺灣大學獸醫專業學院
	43	Cholangiocarcinoma	Felis Lynx	臺灣大學獸醫專業學院
	43	Lymphoma	Canine	臺灣大學獸醫專業學院
	43	Solitary fibrous tumor	Human	彰化基督教醫院
	43	Multiple sarcoma	Canine	臺灣大學獸醫專業學院
	44	Malignant solitary fibrous tumor of pleura	Human	佛教慈濟綜合醫院暨慈濟大學
	44	Ectopic thymic carcinoma	Human	彰濱秀傳紀念醫院病理科
	44	Medullary carcinoma of the right lobe of thyroid	Human	彰化基督教醫院病理科
	44	Thyroid carcinosarcoma with cartilage and osteoid formation	Canine	臺灣大學獸醫專業學院
	44	Lymphocytic leukemia/lymphoma	Koala	臺灣大學獸醫專業學院
	45	Neuroendocrine carcinoma of liver	Human	佛教慈濟綜合醫院暨慈濟大學
	45	Parachordoma	Human	羅東博愛醫院病理科
	45	Carcinoma expleomorphic adenoma, submandibular gland	Human	天主教耕莘醫院病理科
	45	Melanoma, tongue	Canine	國立臺灣大學獸醫專業學院
	45	Renal cell carcinoma, papillary type	Canine	國立臺灣大學獸醫專業學院
323	46	Metastatic papillary serous cystadenocarcinoma, abdomen	Human	國軍桃園總醫院
324	46	Malignant gastrointestinal stromal tumor	Human	天主教耕莘醫院
329	47	Sclerosing stromal tumor	Human	彰化基督教醫院
330	47	Pheochromocytoma	Human	天主教耕莘醫院
334	48	Metastatic infiltrating ductal carcinoma, liver	Human	佛教慈濟綜合醫院
335	48	Adenoid cystic carcinoma, grade II, Rt breast	Human	天主教耕莘醫院
336	48	Malignant lymphoma, diffuse, large B-cell, right neck	Human	林新醫院
337	48	Pulmonary carcinoma, multicentric	Dog	國立臺灣大學獸醫專業學院
338	48	Malignant melanoma, multiple organs metastasis	Rabbit	國立中興大學獸醫學院
340	49	Mucinous-producing urothelial-type adenocarcinoma of prostate	Human	天主教耕莘醫院
342	49	Plexiform fibromyxoma	Human	彰化基督教醫院
343	49	Malignant epithelioid trophoblastic tumor	Human	佛教慈濟綜合醫院

344	49	Epithelioid sarcoma	Human	林新醫院
346	49	Transmissible venereal tumor	Dog	國立臺灣大學獸醫專業學院
347	50	Ewing's sarcoma (PNET/ES tumor)	Human	天主教耕莘醫院病理科
348	50	Malignant peripheral nerve sheath tumor, epithelioid type	Human	林新醫院病理科
349	50	Low grade fibromyxoid sarcoma	Human	高雄醫學大學附設中和紀念醫院病理科
351	50	Orbital embryonal rhabdomyosarcoma	Dog	Gifu University, Japan (岐阜大学)
354	50	Granular cell tumor	Dog	國立臺灣大學獸醫專業學院
356	50	Malignant neoplasm of unknown origin, cerebrum	Dog	國立臺灣大學獸醫專業學院
357	51	Small cell Carcinoma, Urinary bladder	Human	天主教耕莘醫院
364	51	Perivascular epithelioid cell tumor, in favor of 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 (2) Hodgkin's lymphoma, mixed cellularity type. Acrokeratosis paraneoplastica	Human	佛教慈濟綜合醫院暨慈濟大學病理科
410	58	Von Hippel-Lindau disease	Human	奇美醫院病理部
411	58	Multiple neoplasia	Tiger	國立屏東科技大學獸醫教學醫院病理科
412	58	Hepatocellular carcinoma and multiple myeloma	Human	中山醫學大學醫學系病理學科暨附設醫院病理科
413	59	DEN plus AAF carcinogens induced hepatic tumor in male rats	Rat	中興大學獸醫病理生物學研究所
417	59	Alveolar soft part sarcoma	Human	高雄醫學大學附設中和紀念醫院病理科
418	60	Seminoma associated with supernumerary testicles	Human	羅東博愛醫院
422	61	Retinoblastoma in a baby girl	Human	彰化基督教醫院
423	61	Colloid goiter in a female Radiated tortoise ( <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

腫瘤

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	Malignant 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. 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
細菌		1	Tuberculosis	Monkey	臺灣大學獸醫學系
	7.	1	Tuberculosis	Human	省立新竹醫院
	12.	2	H. pylori-induced gastritis	Human	台北病理中心
	13.	2	Pseudomembranous colitis	Human	省立新竹醫院
	26.	3	Swine salmonellosis	Pig	中興大學獸醫學系
	27.	3	Vegetative valvular endocarditis	Pig	台灣養豬科學研究所
	28.	4	Nocardiosis	Human	台灣省立新竹醫院
	29.	4	Nocardiosis	Largemouth bass	屏東縣家畜疾病防治所
	32.	4	Actinomycosis	Human	台灣省立豐原醫院
	33.	4	Tuberculosis	Human	苗栗頭份為恭紀念醫院
	53.	7	Intracavitary aspergilloma and 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 ( <i>Lawsonia intracellularis</i> infection)	Porcine	屏東縣家畜疾病防治所
68.	9	Liver abscess (Klebsillae	Human	台北醫學院	

		pneumoniae)		
	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 <i>Streptococcus</i> 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 turtle	屏東科技大學獸醫系
	42	<i>Staphylococcus</i> 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</i> avian complex 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	<i>Mycobacterium avium</i> 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	
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 ( <i>Herpesvirus</i> infection)	Broilers	國立屏東技術學院獸醫學系
	69.	9	Pseudorabies ( <i>Herpesvirus</i> 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, poliovirus 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,	Goat	台灣動物科技研究所

		diffuse, sever, with marked epidermal pustules, ballooning degeneration, acanthosis, hyperkeratosis, and eosinophilic intracytoplasmic inclusion bodies.		
238	35	Hydranencephaly	Cattle	國立屏東科技大學獸醫學系
248	36	Porcine Cytomegalovirus (PCMV) infection	Swine	國立屏東科技大學獸醫學系
250	36	Porcine respiratory disease complex (PRDC) and polyserositis, caused by co-infection with pseudorabies (PR) virus, porcine circovirus type 2 (PCV 2), porcine reproductive and respiratory syndrome (PRRS) virus and <i>Salmonella typhimurium</i> .	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	Parrot	國立中興大學獸醫病理生物學研究所

病毒

		secondary aspergillosis				
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	
		45	Alfatoxicosis in dogs	Canine	國立臺灣大學 獸醫專業學院	
		322	Allergic fungal sinusitis	Human	羅東博愛醫院	
		326	Meningoencephalitis, Aspergillus flavus	Cat	國立臺灣大學 獸醫專業學院	
	黴菌	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)	Piglet	國立台灣大學分子暨比較病理生物學研究所	
寄生		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

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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 <i>Toxocara canis</i> 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 <i>Angiostrongylus cantonensis</i>	Human	台北榮民總醫院 病理檢驗部
156	19	<i>Parastrongylus cantonensis</i> infection	Formosan gem-face d civet	中興大學獸醫學院
	19	<i>Capillaria hepatica</i> , <i>Angiostrongylus cantonensis</i>	Norway R	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	<i>Psoroptes cuniculi</i> 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 <i>Spironucleus (Hexamita) muris</i>	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	<i>Trichosomoides crassicauda</i> , urinary bladder	Rat	國家實驗動物中心
362	51	Canine distemper virus infection combined pulmonary dirofilariasis	Dog	國家實驗研究院
370	52	Suppurative bronchopneumonia ( <i>Bordetellae trematum</i> ) with <i>Trichosomoides crassicauda</i> infestation	Rat	國立中興大學獸醫學院
416	59	Toxoplasmosis in a finless porpoise	Finless porpoise	國立屏東科技大學獸醫 教學醫院病理科
	63	Liver milk spots in pig	Pig	中興大學獸醫病理生物 學研究所
453	66	Liver fluke infection	Buffalo	中興大學獸醫病理生物 學研究所
471	68	Haemosporidian parasite infection	pigeon	國立台灣大學分子暨比

寄生蟲

寄生蟲

				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
	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



其它

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
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

其他	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 ( <i>Iguana iguana</i> )	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
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

## 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满兩年者。
- (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	性別 <input type="checkbox"/> 男 <input type="checkbox"/> 女	出生	民國 年 月 日			出生地
	英文		身份証				
		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 研究員 主任 其他:				
	(2)		研究興趣	(1)			
	(3)			(2)			
	(4)			(3)			
主要經歷	機關名稱		職務	起	止		
				年 月	年 月		
				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	