臺北醫學大學 泌尿腎臟研究中心 會議記錄

時間：**114 年 2 月 13 日(星期四) 9:00-10:00**

地點：視訊會議- (請以正式全名登入會議室，以利進行會議簽到)

使用 Google Meet (會議前 10 分鐘即開啟會議室)

會議室連結： https://meet.google.com/jtv-taqu-qwg

(敬略稱位)

會議主席：洪冠予

與會人員：

【附醫】劉明哲、葉劭德、吳建志、林孝友、吳政誠、張景欣、羅詩修、林敬哲、吳致寬、方德昭、吳逸文、陳錫賢、林彥仲、高治圻、陳靜怡、葉曙慶、邵月珠、周安琪

【萬芳】溫玉清、李良明、林克勳、林雍偉、蕭志豪、許軒豪、賴宗豪、鍾卓興、許永和、鄭仲益、陳作孝、劉崇德、楊韻紅、吳岳霖

【雙和】吳佳璋、陳冠州、劉家宏、江怡德、鄒凱亦、高偉棠、胡書維、董劭偉、陳至亨、吳美儀、李明哲、洪麗玉、鄭彩梅、廖家德、高芷華、林冠宏、陳正憲、邱惠雯

【新國民】蘇裕謀、鄒居霖

長官指導：

吳麥斯校長、許志成教授、陳瑞明所長、盧星華副院長、許永和副院長

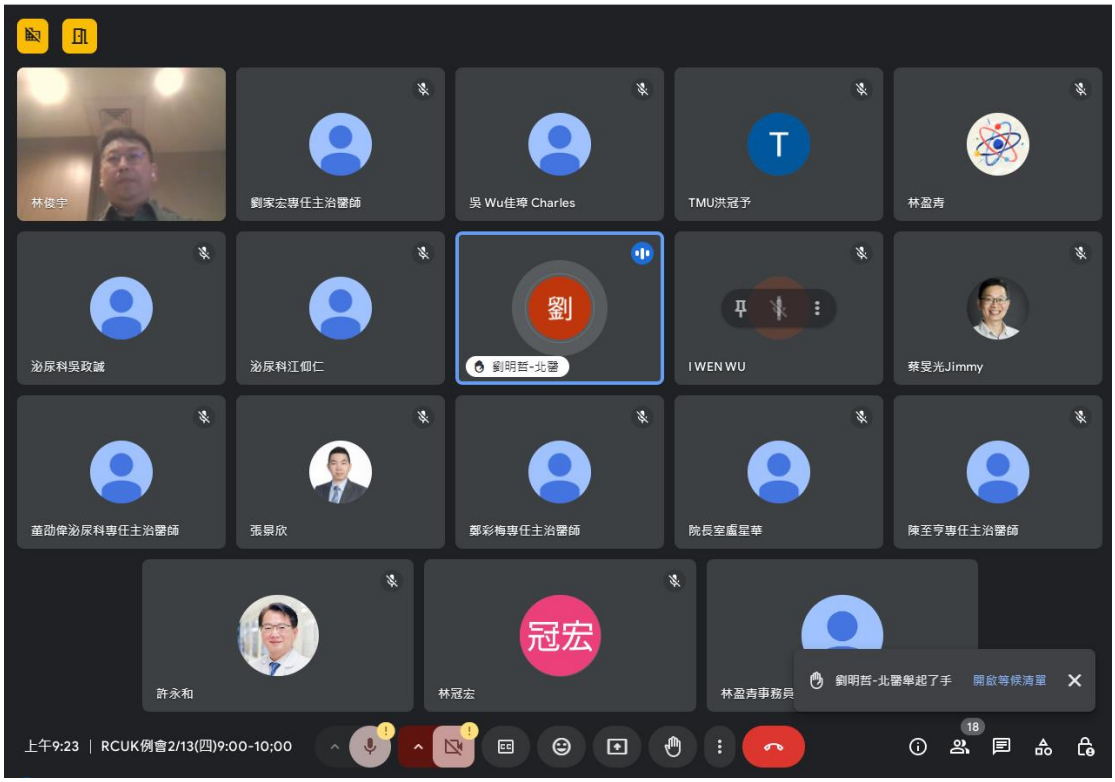
議程：

一、 腎臟泌尿精準健康計畫及生物檢體資料庫進度報告(吳逸文主任)

二、 校級研究中心第二季績效成果報告(吳佳璋主任)

三、 團隊報告

泌尿腎臟癌症團隊(邀請臺安醫院林俊宇醫師演講



臺北醫學大學
TAIPEI MEDICAL UNIVERSITY

臺北醫學大學
泌尿腎臟研究中心

腎臟泌尿精準健康計畫及生物檢體資料庫進度報告

報告人：吳逸文 副教授

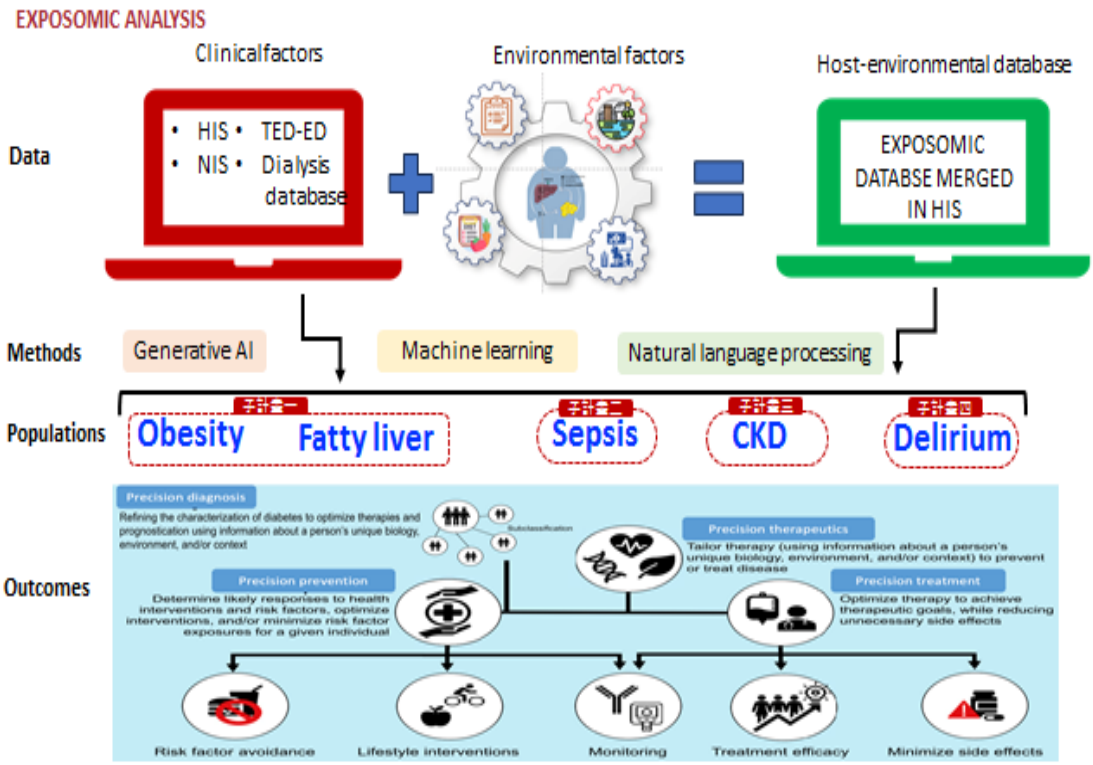
114年2月13日

精準腎臟健康計畫進度：

https://docs.google.com/forms/d/e/1FAIpQLSeWgJ3cN3ue8jDkuUtRfqtUY7-G5mW43UIGBjxj49kIc9cD5w/viewform?usp=pp_url&entry.1813552769=T20241105-01

Biobank 收案時，公衛學生同時收集問卷

附醫	雙和	萬芳
高治圻	林冠宏	吳岳霖
吳逸文	廖家德	



One campus: 共同收案，共享資料，共同發表

- **Prospective Genomic Cohort Establishment:**

高治圻/吳逸文

IgA nephropathy

廖家德/林冠宏

Polycystic kidney disease

Diabetic kidney disease

吳岳霖

Other kidney disease

年度	月份	腎臟科_簡和_血液	腎臟科_附醫_血液	腎臟科_萬芳_血液
2024	7	0	1	0
2024	8	0	2	0
2024	9	0	7	0
2024	10	0	13	0
2024	11	0	11	0
2024	12	0	18	0
2025	1	0	12	0

目前成果及未來工作

目前成果：

- 教育部深耕計畫：腎病精準醫學計畫（吳逸文, 2024/1-2024/12）
- 國際研討會：台灣腎臟醫學會-台馬泰國際研討會（吳逸文, 2024/12/14)

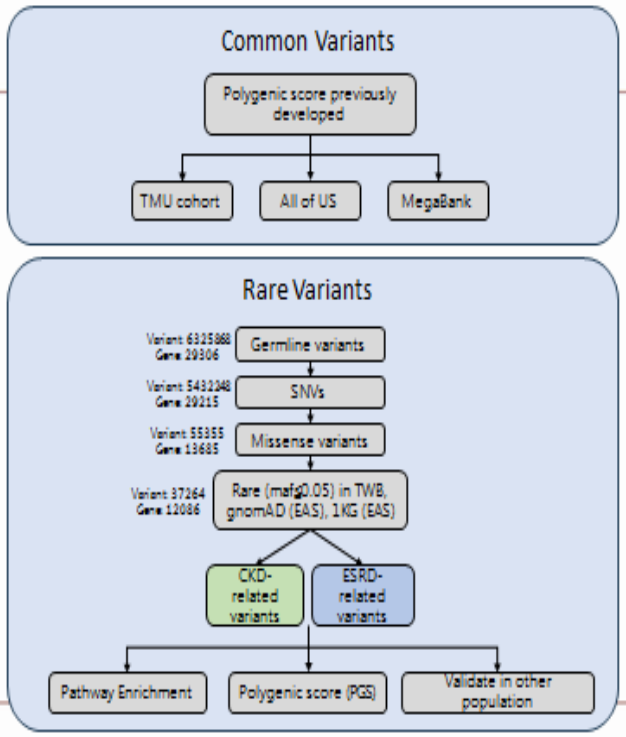
未來工作：

國科會計畫：2 件（吳逸文，洪冠宇，已投出）

教育部深耕計畫：1 件（吳逸文，已投出）

國衛院計畫：1 件（吳麥斯，預計2025/03 投出）

Figure 1. Study Workflow



113學年度研究績效指標

績效指標	113學年度目標值	Q1 (8-10)			Q2 (11-1)			Q3 (2-4)			Q4 (5-7)		
		目前值	目標值	達成率	目前值	目標值	達成率	目前值	目標值	達成率	目前值	目標值	達成率
國科會計畫件數	20	18		90%	-	-	-						
大型/專案計畫件數	1	0			0								
發表論文數(SCIE、SSCI、EI等)	90	22	22	100%	22	22	100%						
學術論文IF≧8 篇數	15	3	3	100%	2	4	50%						
雙聯共指導	1	1	1	100%	-	-	-						
募款-研究中心發展基金	100萬				100萬		100%						

113學年度臨床轉譯績效指標

績效指標	目標值	Q1 (8-10)			Q2 (11-1)			Q3 (2-4)			Q4 (5-7)			當責者
		目前值	目標值	達成率	目前值	目標值	達成率	目前值	目標值	達成率	目前值	目標值	達成率	
三院AKD收案量年增率10%(現況累計330例)	380	351 T:0 W:59 S:292	350	100.3%	374 T:0 W:66 S:308	360	103.9%		370			380		(T)吳諭文 (W)鄭仲益 (S)廖家德
三院攝護腺癌局部精準治療(海福刀)	60例	14 T:4 W:0 S:10	15	93.3%	12 T:2 W:0 S:10	15	80%		15			15		(T)劉明哲 (W)林庭偉 (S)吳佳瑾

SCIENTIFIC REPORTS

Evaluation of right adrenal vein anatomy by Dyna computed tomography in patients with primary aldosteronism

Bo-Ching Lee, Chin-Chen Chang, Kao-Lang Lin, Yeun-Chung Chang, Vin-Cent Wu & Kuo-How Huang

Department of Medical Imaging, National Taiwan University Hospita, etc

Published: 23 June 2016

Taiwan Adventist hospital

Chun Yu Lin

林俊宇 醫師

現職
- 台安醫院影像診斷科 主治醫師
- 三軍總醫院 放射診斷部 兼任主治醫師
- 天主教永和耕莘醫院 放射科 兼任主治醫師
- 台灣介入放射線學會 秘書長
- 台灣周邊血管學會 理事
- 台北市守護天使癌症關懷協會 理事
- 中華民國放射線學會 病人安全及醫療影像品質委員會-輻射安全次委員會 委員

學歷
- 臺北醫學大學醫學系
- 臺北醫學大學臨床醫學研究所

經歷
- 臺大醫院實習醫師
- 雙和醫院內科住院醫師
- 高雄榮民總醫院放射線部 住院醫師、總醫師
- 台北醫學大學附設醫院影像醫學部主治醫師
- 中華民國放射線學會 學術教育與次專科發展委員會-腹部影像診斷次專科委員會 委員
- 台灣介入放射線學會青年介入醫師教育課程 種子教師

重要獲獎
- 2022 The Rising Star at NTUH : 1st Prize
- APCIO 2019 6th Asia Pacific Congress on Interventional Oncology cTACE Challenge 3rd Prize
- RSROC 2018 Best Scientific Exhibition Award
- ACTA 2014 The 1st Asian Conference of Tumor ablation Best Scientific Exhibition Award
- ACAR 2013 The 4th Asian Congress of abdominal Radiology Best Scientific Exhibition Award

Introduction

- **Primary aldosteronism (PA)** is the most common cause of **secondary hypertension** and consists **up to 11%** of patients with hypertension.
- Common underlying etiologies include an aldosterone-producing adenoma, unilateral adrenal hyperplasia, and bilateral idiopathic adrenal hyperplasia.
- PA can be divided into unilateral and bilateral subtypes. **Surgery is indicated for patients with unilateral hyperaldosteronism**, which is able to alleviate or cure hypertension in most patients.
- It has been shown that computed tomography (CT) and magnetic resonance imaging (MRI) can be **misleading and unreliable** for distinguishing unilateral from bilateral PA.

Introduction

- Adrenal venous sampling (AVS) is the recommended procedure for diagnosis of PA, but the technique is difficult and the **right adrenal vein is especially hard to catheterize**.
- Recently, the presence of **Comebeam CT** and its ability to delineate the vascular structures have **increased the success rate of AVS**.
- A detailed description of the clinical relevant anatomy of the right adrenal vein incorporating Dyna CT images is lacking. **The aim of this study was to determine the location and anatomical variation of the right adrenal vein using Dyna CT during AVS.**

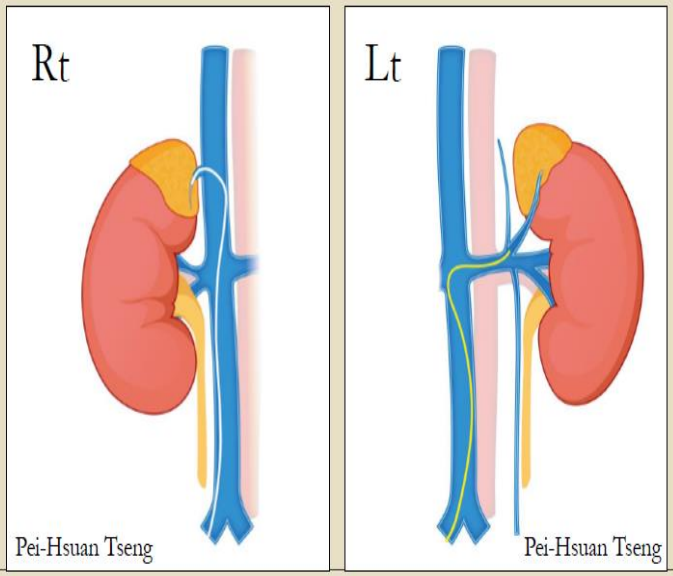
Materials and Methods

- **AVS protocol**
  - All AVS was **performed between 8:00 AM and 11:00 AM**
  - Maintain a **supine position** one hour before the AVS procedure
  - **No adrenocorticotropic hormone (ACTH) stimulation** was administered before or during AVS
  - The position of the catheter tip before sampling the right adrenal vein was checked via the injection of a small amount of diluted contrast medium (Omnipaque 350) and Dyna CT
  - Discarded the first 10 ml of blood during IVC sampling and the first 5 ml of blood during adrenal sampling

Materials and Methods

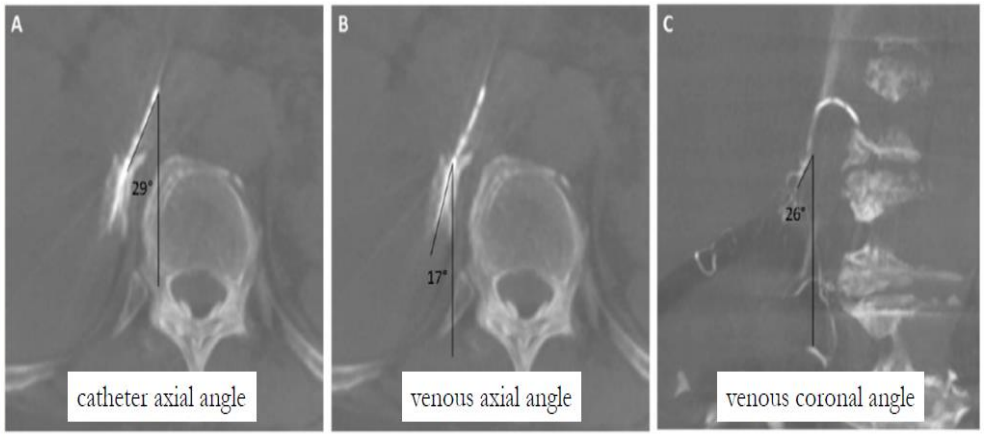
- **Dyna CT protocol.**
  - Diluted the contrast medium with normal saline in a **1:3 ratio** to avoid an excessive streak artifact
  - The actual Dyna CT was acquired 2 seconds after the start of the injection of contrast medium
  - The **contrast medium was injected for 8 seconds (rate of 0.5 to 1.0 ml/s)** and the total injected volume ranged from 4 to 8 ml
  - The rotation time for Dyna CT is 6 seconds, and the detector moves at 45° per second. The patients were told to **breath as gentle as possible** before the Dyna CT and to **hold their breath without inspiring or expiring**

Example for AVS (Cartoon diagram)



Materials and Methods

- **Dyna CT interpretation**

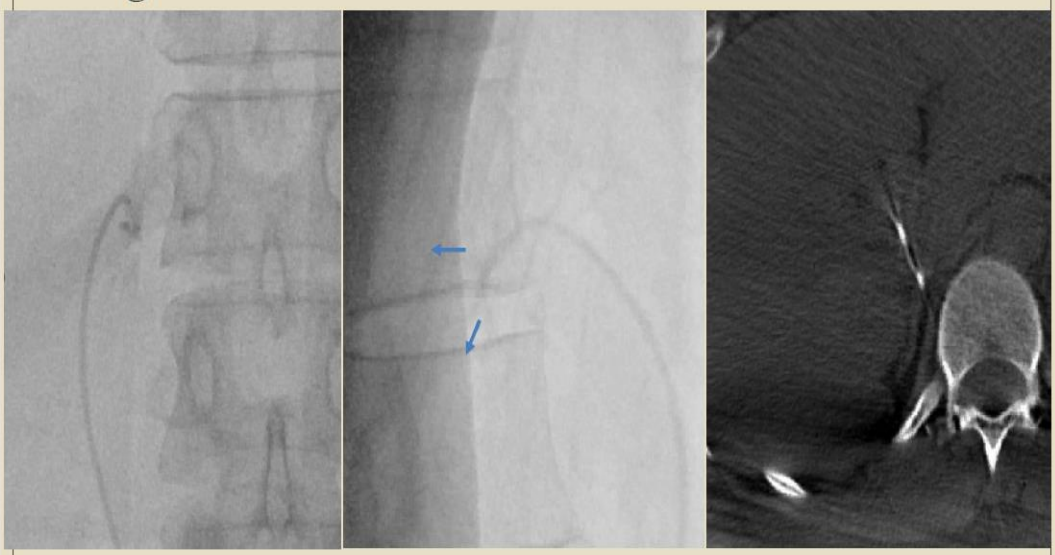


Materials and Methods

- Statistical analysis
  - The Spearman rank correlation coefficient
    - Evaluate the correlations between **the level of the right adrenal vein orifice, the venous axial angle, the venous coronal angle, and body mass index (BMI)**
  - Divided vertebral bodies into superior, middle, and inferior segments

Right adrenal catheterization

T12 inferior segment



AP view | Lateral view | Dyna CT

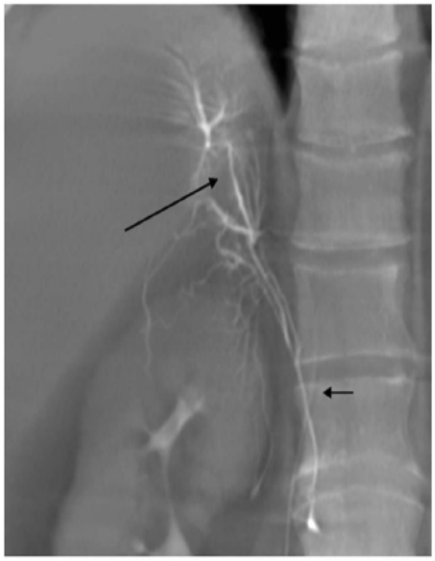
Results

- Accessory vessel of the right adrenal vein.

Right adrenal vein drainage into the accessory hepatic vein was found in 7/66 patients (10.6%)

Opacification of the right inferior phrenic vein occurred in 16 (24.2%)

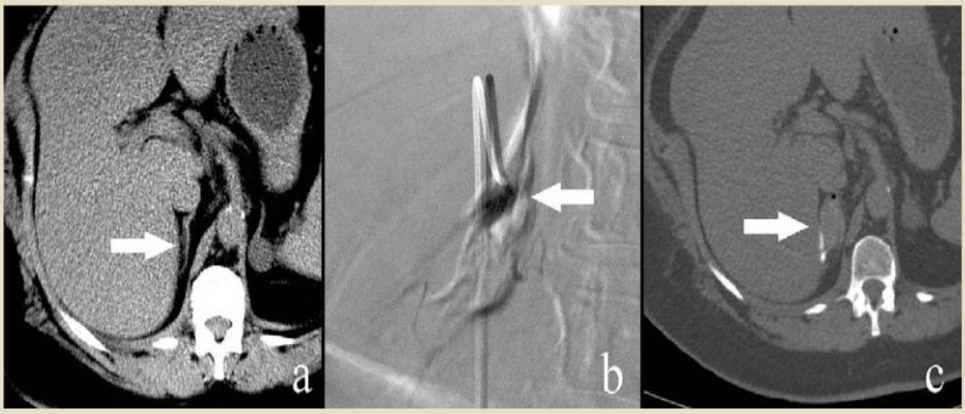
Communicating capsular veins of the right adrenal glands were opacified in 59 (89.4%)



Short communication European Journal of Radiology Volume 81, Issue 9, September 2012, Pages 2304-2307

Adrenal venous sampling using Dyna-CT—A practical guide

Christina Plank*, Florian Wolf, Herbert Langenberger, Christian Loewe, Maria Schoder, Johannes Lammer



Extravasation Hematoma

Discussion

- Limitations
  - Conebeam CT and the mechanical injection of contrast medium might introduce **unknown effect** to the AVS result, especially when the adrenal vein was injured after forceful injection during Dyna CT.
  - Vein variation
  - Streak artifact
  - Unilateral hyperaldosteronism had uneven distribution of lateralization, in which 27 of them to the right side and 5 to the left

Conclusion

- This study shows that Conebeam CT is able to provide detailed anatomical information to the course and direction of the right adrenal vein.