臺北醫學大學 泌尿腎臟研究中心 會議記錄

時間：**110 年 11 月 17 日(星期三) 12:00-13:00**

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/umk-opva-ewy

(敬略稱位)

會議主席：溫玉清

與會人員：

【附醫】劉明哲、蔡曜州、葉劭德、吳建志、林孝友、吳政誠、張景欣、陳偉傑、顧芳瑜、羅詩修、方德昭、陳錫賢、林彥仲、吳岳霖、高治圻、陳靜怡、葉曙慶

【萬芳】李良明、林克勳、林雍偉、蕭志豪、許軒豪、賴宗豪、鄭仲益、陳作孝、蘇裕謀、陳彥成、劉崇德、楊韻紅、李明哲

【雙和】吳麥斯、吳佳璋、陳冠州、劉家宏、江怡德、林佳達、鄒凱亦、高偉棠、胡書維、魏汶玲、吳美儀、洪麗玉、鄭彩梅、邱怡仁、陳佑瑋、廖家德、游博翰、陳正憲、邱惠雯

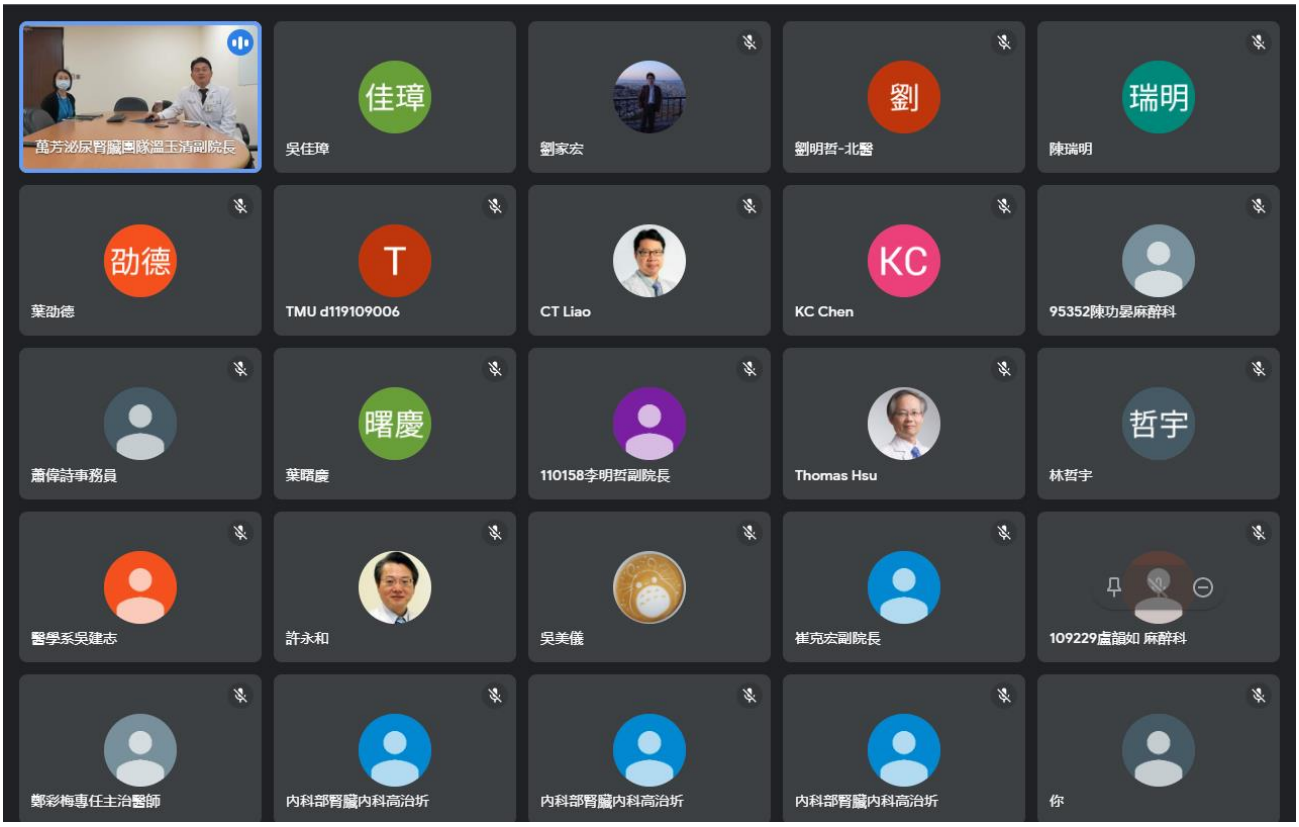
【新國民】許永和、鄒居霖

長官指導：

林建煌校長、黃彥華研發長、許志成教授、崔克宏副院長、陳瑞明所長

議程：

一、 泌尿創新技術與手術團隊、重症腎病團隊 小組報告



What is HIFU?

- HIFU focuses ultrasound waves to ablate tissue
- HIFU ultrasound waves do not burn the tissue between the transducer and the focal point
- **HIFU is an ideal energy for partial gland ablation**

Focal therapy for prostate cancer

- A targeted (partial gland) treatment, more non-cancer organ tissue would be spared

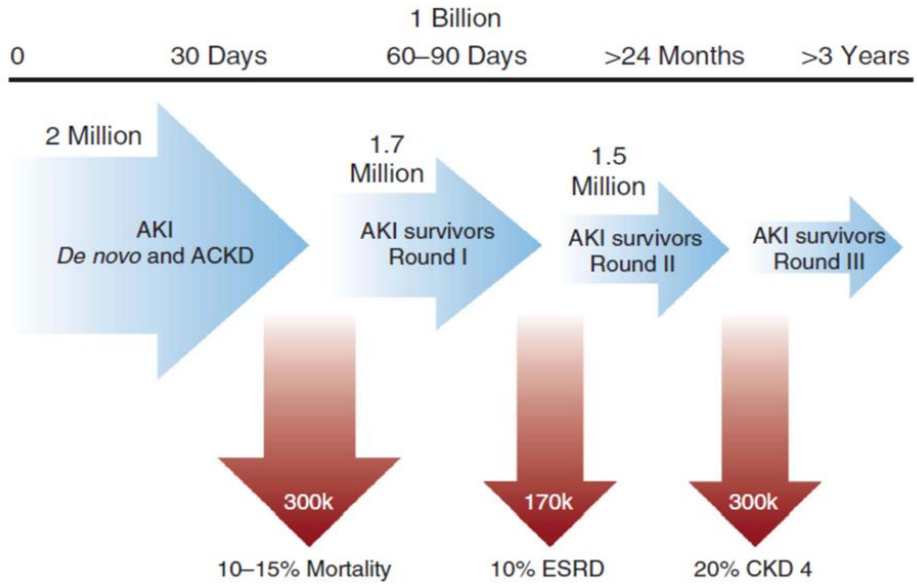
✓ *Prostate cancer can be treated in this manner*

✓ *HIFU can deliver targeted focal or partial gland ablation to the prostate*

Conclusions

- Oncological outcomes over 8 years:
  HIFU ≈ radical prostatectomy
- Urine leak and sexual problems: HIFU/radical prostatectomy, 10 folds reductions
- Ideal HIFU system + better patients selection + surgeon expertise = success of HIFU focal therapy
- Patient service + academic research

AKI is a global burden



Kidney Int. 2013; 84(3): 457-67

Exosomes and AKI

Ischemia/ reperfusion-induced AKI	Pathogenic mechanism	Urine (rat)	Decreased urinary exosomal AQP-1 in animals with ischemia/reperfusion-induced AKI.	(Sonoda et al., 2009)
	Pathogenic mechanism	Urine (rat)	Decreased urinary exosomal AQP-1 and AQP-2 in animals with ischemia/reperfusion-induced AKI.	(Asvapromtada et al., 2018)
	Biomarker	Urine (rat)	- Increased urinary exosomal miR-16, miR-24, and miR-200c at an early (injury) phase of ischemia/reperfusion injury. - Increased urinary exosomal miR-125 and miR-351 at a late (fibrotic) phase of ischemia/ reperfusion injury.	(Sonoda et al., 2019a)
	Therapeutics	MSCs (human)	Recovery of tubular damage in rats after administration of human Wharton's jelly MSCs-derived extracellular vesicles.	(Zhang et al., 2014; Zhang et al., 2016)
	Therapeutics	MSCs (mouse)	High expression of exosomal CCR2 could reduce macrophage infiltration.	(Shen et al., 2016)
	Therapeutics	MSCs (rat)	Exosomes derived from adipose MSCs could protect ischemia/reperfusion-induced AKI.	(Lin et al., 2016)
	Therapeutics	Renal tubular epithelial cells (rat)	Intravenous administration of extracellular vesicles (mainly exosomes) derived from rat renal tubular cells could improve ischemia-induced renal injury.	(Dominguez et al., 2017)
	Therapeutics	Renal tubular epithelial cells (human)	Intravenous administration of exosomes derived from human renal tubular cells could improve ischemia-induced renal injury.	(Dominguez et al., 2018)
	Therapeutics	MSCs (human)	Exosomes derived from bone marrow MSCs were rich with miR-199a-3p and could prevent ischemia/reperfusion-induced AKI by increasing expression of miR-199a-3p in renal cells.	(Zhu et al., 2019a)

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