downstream of a luciferase gene, and luciferase reporter assays were performed to verify the direct binding of miR-99a to mTOR transcripts. The mRNA and protein expression level of mTOR were measured by Q-PCR and Western blot, respectively. Cell viability of miR-99a transfected cells was detected by WST-1 and colony formation assays. Inhibition of mTOR complex 1 and 2 (mTORC1 and mTORC2) signaling was monitored by detecting the phosphorylation of S6K and Akt using Western blot. Induction of autophagy was accessed by the expression of LC3-II marker protein.
**Results**: Transfection of miR-99a expressing vector elevated the expression level of miR-99a up to 4.5-fold in cells compared to vector-only control. The function of matured miR-99a was confirmed by luciferase reporter assays. The level of mTOR RNA and protein were decreased in miR-99a transfected cells. Dual inhibition of mTORC1 and mTORC2 was confirmed by immunoprecipitation (IP) of mTOR associated Rictor and Raptor, and the decreased phosphorylation of S6K and Akt in miR-99a transfected cells. The LC3-II protein was accumulated in miR-99a transfected cells compared to monk transfected control, suggesting that inhibition of mTOR by miR-99a induces autophagy in bladder cancer cells.
**Conclusions**: This is the first study showed that miR-99a markedly inhibits bladder cancer cell growth via dual inhibition of mTORC1 and mTORC2. miR-99a treatment also induces autophagy through mTOR inhibition. However, the role of miR-99a induces autophagy remains further investigation.

**MP4-4.**
**BLUE-LIGHT EXPOSURE ACCELERATES PHOTO-OXIDATIVE DISRUPTION OF LYSOSOMAL MEMBRANES AND APOPTOSIS IN ACRIDINE ORANGE-LOADED CHLOROQUINE-TREATED HUMAN BLADDER CANCER CELLS**

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**Introduction**: We previously showed that human bladder cancer cells exhibited high basal level of autophagic activity. Administration of chloroquine (CQ) or hydroxychloroquine (HCQ) inhibits autophagy and causes apoptotic cell death in bladder cancer cells. Acridione orange (AO) is commonly used to identify acidic vescular organelles (AVOs) in autophagic cells. The uncharged state of AO in cells was characterized by green fluorescence; while protonated form of AO accumulates in acidic compartments and forms aggregates that characterized by red fluorescence. An incidentally found disruption of the lysosome under treatment of CQ and blue light was observed. An experiment was conducted to verify the phenomenon is meaningful.
**Methods**: Inhibition of basal autophagy was achieved using CQ inT24 human bladder cancer cell lines by detecting LC3-II formation. Acridine orange relocalization was performed in T24 cells with or without CQ treatment for 2 hours. Immunofluorescence and Western blot were used for detection of cathepsin B and D release from lysosome. Cell viability and induction of cell death were detected using ApoTox-Glo Triplex Assay kit from Promega.
**Results**: CQ inhibited basal autophagy and decreased cell viability in T24 cells. AO relocalization was detected only in CQ-treated T24 cells. CQ-treated T24 cells that exposed for a short period of time to AO and under ordinary culture condition, accumulate the AO within AVOs, giving rise to a mainly red, granular fluorescence upon excitation with blue light. When AO-loaded CQ-treated cells are irradiated with intense blue light, AO soon starts to leak from lysosomes to nuclear and cytosol diffusely. Severe lysosomal damage that causing necrosis and apoptosis was only detected in AO-loaded CQ-treated T24 cells. This photo-oxidative disruption of lysosome was responsible for triggering cell death in bladder cancer cells. Necrotic and apoptotic death were both detected in cell treated with CQ up to 50%.
**Conclusions**: Photo-oxidative disruption of lysosomal membrane with AO and CQ may be an effective cancer therapy in human bladder cancer.

**MP4-5.**
**THE APPLICATION OF SPIES IN THE DIAGNOSIS AND TREATMENT OF BLADDER UROTHELIAL CARCINOMA-THE PRELIMINARY REPORT IN TAIPEI CITY HOSPITAL**

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**Purpose**: To report our preliminary experience regarding the application of SPICE technology in the diagnosis and treatment of bladder urothelial carcinoma.
**Patients and methods**: A prospective randomized trial will be conducted from January 2015 to May 2015. A total of 30 patients with bladder urothelial carcinoma will be enrolled into this study. All patients received standard cystoscopy followed by SPICE technology cystoscopy. The number of tumor was counted under direct vision by two experienced urologists. All patients received transurethral resection of bladder tumor. All patients received standard treatment protocol and followed every 3 months using standard cystoscopy.
**Results**: The number of tumor diagnosed under standard cystoscopy or SPICE technology cystoscopy will be compared in this study. The incidence of tumor recurrence and metastasis will be calculated in this study.
**Conclusion**: Cystoscopy empowered with SPICE technology will be a viable option to assist the diagnosis and treatment of bladder urothelial carcinoma.

**MP4-6.**
**TOLL-LIKE RECEPTOR 6 AND CONNECTIVE TISSUE GROWTH FACTOR ARE SIGNIFICANTLY UPREGULATED IN MITOMYCIN-C-TREATED UROTHELIAL CARCINOMA CELLS UNDER HYDROSTATIC PRESSURE STIMULATION**

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**Purpose**: Urothelial carcinoma (UC) is the most common histologic subtype of bladder cancer. The administration of mitomycin C (MMC) into bladder after transurethral resection of the bladder tumor (TURBT) is a common treatment strategy for preventing recurrence after surgery. We previously applied hydrostatic pressure combined with MMC in UC cells and found that hydrostatic pressure synergistically enhanced MMC-induced UC cell apoptosis via the Fas/FasL pathways.
**Materials and methods**: To understand the alteration of gene expressions in UC cells caused by hydrostatic pressure and MMC, oligonucleotide microarray was used to explore all of the differentially expressed genes.
**Results**: After bioinformatics analysis and gene annotation, toll-like receptor 6 (TLR6) and connective tissue growth factor (CTGF) showed significant up-regulation among altered genes, and their gene and protein expressions with each treatment of UC cells were validated by quantitative real-time PCR and immunoblotting.
**Conclusion**: Under treatment with MMC and hydrostatic pressure, UC cells showed increasing apoptosis via extrinsic pathways through upregulation of TLR6 and CTGF.

**MP4-7.**
**CLINICAL OUTCOMES IN CASTRATION RESISTANT PROSTATE CANCER PATIENTS TREATING WITH CABAZITAXEL**

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**Purpose**: The aim of this study was to assess the clinical outcomes of Cabazitaxel in treating castration resistant prostate cancer patients in Taichung Veterans General Hospital.
**Materials and methods**: From Aug 2011 to Dec 2014, thirty-two patients with castration resistant prostate cancer were treated with Cabazitaxel 20-

25mg/m2, IV, every three to four weeks. Thirty patients ever received prior docetaxel treatments. The PSA response, pain response, time to progression duration and adverse events were recorded.
**Results**: The median age of the thirty-two patients was 65.7 years (range 45–84) and the median PSA when started Cabazitaxel was 65.5 ng/ml (range 3.82–5239). The mean treatment courses of the patient were 5.9 (range 3–17). PSA declined in twenty-two patients (69%, 22/32) and eighteen of them (56%, 18/32) got more than 50% declination (PSA response). The median progression free survival was 6 months. The most common subjective adverse effects were leukopenia (84%). Ten (31%) patients had grade 3-4 neutropenia and 4 (12.5%) patients had more than grade 2 anemia. Liver function impairment was also found in three (9%) patients.
**Conclusions**: Cabazitaxel 20-25mg/m2, IV, every three to four weeks were tolerated and revealed good PSA response in castration resistant prostate cancer patients. However, high risk of neutropenia should be kept in mind.

**MP4-8.**
**ANDROGEN RECEPTOR EXPANDS THE POPULATION OF CANCER STEM CELLS IN UPPER URINARY TRACT UROTHELIAL CARCINOMA CELLS**

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**Purpose**: Androgen receptor (AR) plays a role in the development and progression of upper urinary tract urothelial cell carcinoma (UUTUC). Here we investigated whether AR stimulates UUTUC development and progression, possibly by expanding the population of cancer stem cells (CSCs), which are a particular population of cells within cancer cells responsible for tumor initiation, drug resistance and metastasis.
**Materials and methods**: We compared BFTC 909 cells with or without the addition of AR on their CSC population with flow cytometry, colony formation and sphere formation assay to determine the effects of AR on CSC activity. To observe the effects of AR on BFTC 909 cells, quantitative real-time PCR was used to detect the expression stemness genes and miRNAs and western blotting was also performed to examine EMT (epithelial-mesenchymal transition) related proteins. In vivo tumor formation was also evaluated with the implantation of cancer cells in nude mice and IHC was used to detect OCT4 and MMP9 expression on the tumor samples.
**Results**: We found that the addition of AR in UUTUC cells, (BFTC 909 cell line) significantly increased the population of CSC, clonogenicity, sphere formation and the expression of stemness genes (Oct4, Bmi1 and Nanog) and CSC-related miRNA profile as well as EMT related proteins. Furthermore, in an immune-deficient mouse model, the addition of AR in UUTUC cells also increased the tumor formation.
**Conclusions**: This study will help us better understand the extent to which AR contributes to UUTUC by expanding their CSC population and capacity and could explain high incidence of UUTUC observed in males. These findings may lead AR to serve as a potential therapeutic target for urothelial carcinomas in the future.

**MP4-9.**
**RENAL CLASSIC AND EPITHELIOID ANGIOMYOLIPOMA – EXPERIENCE OF CHI MEI HOSPITAL AND LITERATURES REVIEW**

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**Introduction**: Renal angiomyolipoma (AML) is a benign neoplasm. There are two major histologic types of AMLs: classic and epithelioid. Recently malignant epithelioid variant of angiomyolipoma has been further described. We would like to compare these two histologic types receiving surgical treatment of our own experience
**Material**: We collected 53 cases of renal angiomyolipoma from our hospital receiving surgical intervention from September 2010 to August 2014.
**Results**: Among these cases, 38 (71.7%) was female with medium age 56.9 year-old. 15 male (28.3%) with medium age 58.7 year-old. 21 of 53 (39.6%) had right side AML with left 30 of 53 (56.6%) and bilateral 1 of 53 (1.9%). 3 of 53 (5.7%) received nephrectomy and 50/53 (94.3%) received partial nephrectomy. Classic angiomyolipoma accouted for 92.5% (49/53) of all cases with epithelioid variant 7.5% (4/53). No recurrence was noticed among classic type with average follow-up length 32.6 months. Recurrence was noted in one of epithelioid variant in 31 months follow-up.
**Conclusion**: Renal angiomyolipoma is a benign neoplasm consisting of thick-walled aneurysmal vessels, smooth muscle, and varying levels of mature adipose tissue. Recently malignant epithelioid variant of angiomyolipoma has been further described since it was presented on 1997 by Eble and colleagues. Here, We compared these two histologic types receiving surgical treatment of our own experience and we would like to compared it with data of other institute to see of there's any differences and the cause leading to it.

**MP4-10.**
**RETROPERITONEAL LIPOSARCOMA: EXPERIENCE OF CHI-MEI HOSPITAL**

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**Purpose**: Retroperitoneal liposarcomas are rare malignant tumor with an aggressive disease course and high recurrent rate. In this article, we will share our experience in treating retroperitoneal liposarcoma and describe the tumor behavior we observed.
**Materials and methods**: During January 2010 to December 2014, 11 patient are treated in our hospital for retroperitoneal liposarcomas. We review the treatments (surgical or non-surgical), clinical presentation, tumor behavior, pathological subtype, and the characteristics of recurrent tumor.
**Results**: There are 11 patients of retroperitoneal liposarcoma enrolled in this analysis. 9 patients are female, and 2 are male. 7 patients are well-differentiated liposarcoma, and 4 are de-differentiated liposarcoma. One patient died one month after surgical excision of tumor because of pneumonia. One patient has no recurrence in 3 years of follow-up. One has bone metastasis at the time of diagnosis. 8 patients are found recurrent and receive repeated surgical excision of tumor, and 3 of them experience second recurrence. One patient experience third recurrence, and one has forth recurrence. The mean time to recurrence is 40 months. 4 patients have surgical margin involved with tumor, and the mean recurrence time in this subgroup is 5 months.
**Conclusions**: During the past 4 years, 11 patients with retroperitoneal liposarcoma receiving surgical excision of tumor have been followed at our hospital. There is no obvious difference in tumor recurrence between pathology subtypes. Patients with positive surgical margin experience shorter time to recurrence.

## Moderated Poster-5

### *Oncology*

**MP5-1.**
**THE INFLUENCE OF INTRAVESICAL PROSTATIC PROTRUSION AND POST OPERATIVE CONTINENCE AFTER PATIENTS RECEIVED ROBOTIC ASSISTED LAPAROSCOPIC RADICAL PROSTATECTOMY**

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**Purpose**: We try to evaluate the influence of intravesical prostatic protrusion (IPP) in the postoperative continence of patient who received robotic assisted laparoscopic radical prostatectomy.
**Materials and methods**: A total 600 patients who underwent robotic assisted laparoscopic radical prostatectomy were included in the study. Preoperative MRI was performed in all patients and the vertical distance from the tip of the protruding prostate to the base of the urinary bladder was measured in all sagittal plane. The degree of intravesical prostatic protrusion were divided into three groups ( IPP<5mm, 5mm<IPP<10mm,