**P0023**

**EXPRESSION OF CK-19 IN CIRCULATING TUMOUR CELLS FROM WOMEN WITH METASTATIC BREAST CANCER**

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**Background:** Metastasis occurs in a third of all patients with breast cancer and is the main cause of mortality. Tumour cells detach from the primary tumour and enter into the circulation, from where they can form metastatic lesions. The aim of this study was to investigate the expression of CK-19 in blood samples from women with metastatic breast cancer, compared with a control group.

**Methods:** 21 patients with metastatic breast cancer and 19 healthy female volunteers enrolled in this study. For every patient and healthy donor, 10 ml peripheral blood was collected. Peripheral blood mononuclear cells were isolated by gradient density centrifugation using Ficoll Hypaque. CK-19 expression was evaluated using SYBR green-based real-time qPCR assays. The relative expression level of CK-19 was calculated using the 2^{-ΔΔCt} analysis method.

**Findings:** Peripheral blood mononuclear cells from breast cancer patients had a 1.5-fold up-regulation of CK-19 expression. CK-19 was upregulated in 38.1% of patients. There was no statistically significant difference between the relative expression level of CK-19 and the patient’s clinicopathological characteristics (p > 0.05).

**Interpretation:** Our results suggest that the CK-19 mRNA expression investigation may be useful for monitoring circulating tumour cells in the blood of patients with metastatic breast cancer patients, predicting early metastatic relapse, or monitoring of anti-metastasis treatments.

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**P0025**

**COMPARISON OF THE PROGNOSTIC VALUE OF PREOPERATIVE INFLAMMATION-BASED SCORES AND TNM STAGE IN PATIENTS WITH GASTRIC CANCER**

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**Background:** Several inflammation-based scores have been demonstrated to have prognostic value in many types of malignant solid tumours. However, there are no studies elucidating which of these prognostic scores is more suitable in predicting outcomes in patients with gastric cancer undergoing surgery. We aimed to compare the prognostic value of inflammation-based prognostic scores (Glasgow prognostic score [GPS], neutrophil lymphocyte ratio [NLR], platelet lymphocyte ratio [PLR], prognostic nutritional index [PNI] and prognostic index [PI]) and TNM staging in patients undergoing resection of gastric cancer.

**Methods:** The inflammation-based prognostic scores were calculated for 207 patients who underwent resection of gastric cancer between June 2005 and September 2011 in the First Affiliated Hospital of Fujian Medical University. Prognostic significance was evaluated for 207 patients who underwent resection of gastric cancer and is the main cause of mortality. Tumour cells detach from the primary tumour and enter into the circulation, from where they can form metastatic lesions. The aim of this study was to investigate the expression of CK-19 in blood samples from women with metastatic breast cancer, compared with a control group.

**Findings:** Peripheral blood mononuclear cells from breast cancer patients had a 1.5-fold up-regulation of CK-19 expression. CK-19 was upregulated in 38.1% of patients. There was no statistically significant difference between the relative expression level of CK-19 and the patient’s clinicopathological characteristics (p > 0.05).

**Interpretation:** Our results suggest that the CK-19 mRNA expression investigation may be useful for monitoring circulating tumour cells in the blood of patients with metastatic breast cancer patients, predicting early metastatic relapse, or monitoring of anti-metastasis treatments.

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**P0026**

**THE CHEMOPREVENTIVE POTENTIAL OF CURCUMA PURPURASCENS RHIZOME IN REDUCING AZOXYMETHANE-INDUCED ABERRANT CRYPT FOCI IN RATS**

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**Background:** Curcuma purpurascens rhizome, a member of the Zingiberaceae family, is a popular spice in Indonesia and is traditionally used for assorted remedies. Dichloromethane extract of C. purpurascens rhizome (DECPR) has previously been shown to have apoptosis-inducing effect on colon cancer cells.

**Methods:** We examined the potential of DECPR to prevent colon cancer development in rats treated with azoxymethane (AOM, 15 ml/kg) by the incidence of aberrant crypt foci (ACF). Starting from the day immediately after AOM treatment, the rats were orally administered once a day for 2 months with 10% Tween-20 (5 ml/kg, cancer control), DECPR (250 mg/kg, low dose) and DECPR (500 mg/kg, high dose). Meanwhile, the control group was intra-peritoneally injected with fluorouracil (35 mg/kg) for 5 days consecutively. After euthanising the rats, the number of ACF was enumerated in colon tissues. Bax, Bcl-2, and PCNA protein levels were examined using immunohistochemical and western blot analyses. Antioxidant enzymatic activity was measured in colon tissue homogenates and associated with malondialdehyde level.

**Findings:** DECPR exposure at both doses significantly decreased AOM-induced ACF formation, which was accompanied with the reduced expression of PCNA. Up-regulation of Bax and down-regulation of Bcl-2 suggested the involvement of apoptosis in the chemopreventive effect of DECPR. In addition, the oxidative stress resulting from AOM treatment was significantly attenuated after administration of DECPR, which was shown by the elevated antioxidant enzymatic activity and reduced malondialdehyde level.

**Interpretation:** DECPR significantly inhibits ACF formation in AOM-treated rats and may offer protection against colon cancer development.

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**P0028**

**ISOLIQUITRITIGENIN CAUSES DNA DAMAGE AND INHIBITS ATM EXPRESSION IN ORAL SQUAMOUS CELL CARCINOMA**

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