Background: Anticancer drug taxol is biosynthesized mainly in Taxus baccata bark, although other congeneric species are also reported to produce various amounts of either taxol or its derivatives. Taxol is the most important taxane ever used in treating a variety of cancers including breast, ovarian, lung, head, and neck cancers. Taxol accumulation in plants is regulated by the expression of genes involved in their biosynthesis. The spatial and temporal expression of *bapt* gene involved in the later steps of taxol biosynthesis that resulted in converting baccatin III to 3'-N-debenzyloxyl-2'-deoxy taxol in *Taxus baccata*. It is known that production of taxol could be increased through elicitation, as an effective strategy to enhance the secondary metabolites.

**Objectives:** In this paper we have studied the effect of methyl jasmonate, taxol, and methyl jasmonate, taxol, *Taxus baccata*.

**Materials & Methods:** The expression of *bapt* gene was quantified by real-time PCR and amount of extracellular taxol with HPLC in the cell suspension culture of *Taxus*.

**Results:** Our results showed that treatment clearly increased the expression of the *bapt* gene compared to control.

**Conclusions:** it also showed that amounts of extracellular taxol were significantly increased in treated samples compared to control.

**Key word:** *bapt*, methyl jasmonate, taxol, *Taxus baccata*

**P-3-5337-The healing effect of *lavandula angustifolia* hydroalcoholic extract on the repair of indomethacin-induced gastric ulcer in rats**

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**Objectives:** To determine the healing effect of *lavandula angustifolia* hydroalcoholic extract on the repair of indomethacin-induced gastric ulcer in rats.

**Materials & Methods:** Male Wistar rats (250-300) divided randomly into five groups (n=6). Including control, indomethacin solvent, indomethacin (50mg/kg) in 1% carboxymethyl cellulose orally induced gastric ulcer and two gastric ulcer, 5days orally treating groups, by *lavandula angustifolia* hydroalcoholic extract (2008800mg/kg). In the 3th day, rats were sacrificed. Number and length of ulcers calculated under the stereomicroscope and the ulcer index and curative ratio were calculated.

**Result:** The *Lavandula* extract significantly decreased the gastric ulcer index in comparison with control and indomethacin groups (P < 0.01). A significant difference in the inflammatory and repair parameters during the healing process between treated and nontreated cases.

**Conclusions:** The results suggest that *Lavandula* hydroalcoholic extract can exert significant mucosal layer protection.

**Keywords:** *lavandula angustifolia*, Gastric ulcer, Indomethacin, Ulcer index, Rat.

**P-3-68744-Radioprotective effects of melatonin against radiation induced-lipid proxidation in rat’s lungs**

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**Background:** Bone marrow produces red blood cells. The principle function of red blood cells is delivering oxygen to tissues in the body. Red blood cells carry oxygen to tissues. Overproduction of red blood cells in bone marrow is called blood concentrations. These conditions that hemoglobin or red cell blood count is higher than normal is called blood concentrations. The disease is caused by eating unhealthy and fatty foods, vegetable oils liquid and solid non-season fruit, sometimes stress, joy and sadness. Hemoglobin levels between 12 to 14 grams per deciliter in women and men between 14 to 16 grams per deciliter is normal. But number higher than6 grams per deciliter in women and18 grams per deciliter in men is called blood concentration. High blood concentrations occur usually after the age of 40 years, and its prevalence is higher in men than women. High blood concentrations can block small blood vessels and can affect a person’s heart and brain.

**Objectives:** To determine the effect of radiation induced-lipid proxidation in rat’s lungs.

**Materials & Methods:** The experiments were done on 48 Wistar rats. The rats were randomly divided into six groups including:

1. (vehicle treated control group), (2) thorax 12 Gy linac x-irradiated group, (3) thorax 18 Gy linac x-irradiated group, (4) oral melatonin treated group(100 mg/kg, no radiation), (5) thorax 18