MDR1 polymorphism had no significant effect on duration of TMX therapy, while in premenopausal women with variant hymozygotes of C3435T and G2677T/A had longer treatment duration (54.3 vs. 28.4 months). Comedication with inhibitors CYP2D6 decreased treatment duration from 39.3 to18.4 months. The relaps on TMX therapy was seen in 14 postmenopausal pts with DFS 30.7 months and in seven premenopausal pts with DFS 46.8 months. Significantly longer DFS was seen in homozygous carriers of 3435TT allele (39.6 vs. 16.6 months) in wild-type homozygotes and heterozygotes.

Conclusion: Our preliminary results tentatively support hypothesis, that the genetic variants of CYP2D6 and MDR1 and the concomitant medication influenced the effecacy of TMX therapy. We suggest that these factors could help clinicians in determining the therapeutic strategy.

Currently a second phase of examination and evaluation of the next 60 patients is in course. Results of the complete group of 160 pts were not known at the time of the abstract submision.

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O22
ASSESSMENT OF EFFICACY OF A NOVEL ANTITUSSIVE DRUG IN CAPSAICIN-INDUCED COUGH MODEL IN GUINEA PIGS

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Cough treatment is an unmet medical need, since available antitussives are often ineffective. Rengalin (Materia Medica Holding Company, Russia) is a novel antibody-based combination drug for peroral administration containing ultra-low doses of antibodies to bradykinin, to morphine, and histamine. The aim of the study was preclinical assessment of renalin antitussive activity in a capsaicine-induced cough model.

Conscious male guinea pigs (350–400 g) were exposed to aerosol capsaicin solution (30 mcM, Sigma; 5 min) generated with ultrasonic nebulizer. Animals were pre-screened to exclude low (number of coughs/15 min <3) and high responders (number of coughs/15 min >15) and were allocated into three groups to receive vehicle (n = 10; 0.3 ml/kg three times at 120-min interval) distilled water, butamirate citrate (Novartis; n = 10; 6.5 mg/kg three times at 120-min interval) or rengalin (Materia Medica Holding; n = 10; 0.3 ml/kg three times at 120-min interval). The outcome of the experiment is shown in the table.

	Number of coughs following capsaicin exposure, mean ± SEM		Inhibition of cough, % from baseline
	Baseline	Treatment	
Vehicle, 0.3 ml/kg i.g three times	9.6 ± 1.2	8.0 ± 0.5	12.5
Butamirate citrate, 6.5 mg/kg i.g three times	12.0 ± 0.6	9.2 ± 0.5	23.3
Rengalin, 0.3 ml/kg i.g three times	11.6 ± 0.5	5.2 ± 0.3	55.2

The results of the study suggest that rengalin could be clinically beneficial in treatment of cough. The pilot clinical trial of rengalin clinical efficacy of acute cough treatment in patients with URI's confirmed the preclinical findings.

O23
ADVERSE REACTION IN CHILDREN OF ASTHMA THERAPY WITH FLUTICASONE PROPIONATE

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Background: Fluticasone propionate is a synthetic corticosteroid derived from fluticasone used to treat asthma and chronic ostructive lungs disease. The treatment plan in children should be written down and adjusted according to changes in symptoms.

Aims: The aim of this article are establishing better control of asthma in childhood with possibility avoiding adverse reactions. The potential adverse effects of long-term corticosteroid treatment have been a concern in children.

Methods: Subjects were 202 children, aged 2–6 years, with more than three episodes of wheeze responsive to bronchodilators and a family history of asthma. Following inhalation administration, the initial disposition phase for fluticasone propionate was rapid and consistent with its high lipid solubility.

Results: The volume of distribution averaged about 4 l/kg. There was also no significant growth rate difference during the first 3 months of treatment, and estimates of growth rate and other adverse reactions. Rare cases of immediate and delayed hypersensitivity reactions, including urticaria and rash and other rare events of angioedema and bronchospasm, have been reported <1% cases.

Discussion: Chickenpox and measles, for example, can have a more serious or even fatal course in susceptible children or adults using corticosteroids. In children who have not had these diseases or been properly immunized, particular care should be taken to avoid exposure.

Conclusions: Treatment with inhaled corticosteroids improves the asthma-control domains of impairment and risk in children. Asthma is now the most common chronic illness in children, affecting one in every ten children. Less than 1% of kids patients in clinical trials discontinued because of adverse events, this rate was similar for vehicle placebo and active comparators.

Keywords: asthma, fluticasone propionate, children, adverse reactions.

O24
EFFECT OF STEAM AEROSOLIZATION ON HEAT SHOCK PROTEIN EXPRESSION IN RATS

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Introduction: Heat Shock Proteins (HSPs) are a group of stress proteins expressed in various tissues and organisms. These proteins are widely believed to play an important role in cellular protection when exposed to stressors such as positive pressure ventilation, lipopolysaccharide, and elevated temperatures. The level of HSP70 expression in cells or animals is dramatically induced after exposure to heat. The aim of this study was to investigate HSP70 expression in lungs of the rats treated with steam aerosolization.

Methods: Male Sprague-Dawley rats were breathed under steam aerosolization for 30, 60, 90 and 120 min at either 40 or 50°C. The lungs were removed and sonicated in lysis buffer. Immunoblotting was used to analyze the expression of HSP70 in the lung tissues.

Result: Immunoblotting revealed that steam aerosolization at 40°C for 60–90 min was the optimal condition to express HSP70 in rats. No rat could tolerate to 50°C-steam aerosolization longer than 30 min. After 60 min of steam aerosolization at 40°C, there was an increase in HSP70 expression in rat's lungs compared with those of control group.

Conclusion: The present study showed that steam aerosolization induced an expression of HSP70 in lungs of the rats, which may confer protection against lung injury.

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