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**Title:** Concentrations of nitric oxide metabolites in the exhaled breath condensate in children with different bronchial asthma control

Prof. Dr Svetlana 23151 Soodaeva soodaeva@mail.ru MD <sup>1</sup>, Dr. Igor 23152 Klimanov igorklimanov@yandex.ru MD <sup>1</sup>, Dr. Tatyana 23153 Eliseeva EliseevaTI@yandex.ru MD <sup>2</sup> and Dr. Nailja 23154 Kubysheva pulmo70@mail.ru MD <sup>3</sup>. <sup>1</sup> Clinical and Experimental Biophysics, Pulmonology Research Institute, Moscow, Russian Federation ; <sup>2</sup> Department of Internal Medicine, The Medical Institute, Nizhny Novgorod, Russian Federation and <sup>3</sup> Immunology Laboratory, Municipal Hospital "Aibolit", Nizhny Novgorod, Russian Federation .

**Body:** Although bronchial asthma (BA) is an inflammatory disease, the clinical tools that evaluate asthma control today do not include the qualitative measures of inflammations. **OBJECTIVE:** Determination of correlations between total concentration of nitrates and nitrites (TNN) in the exhaled breath condensate (EBC) and children asthma control level determined using the Asthma Control Questionnaire (ACQ). **MATERIAL AND METHODS:** 81 patients with atopic BA (from 6 to 17 years old) were clinically evaluated. Patients completed ACQ, underwent spirometry, and measurements of their TNN in EBC. In 55 children, the high BA control (ACQ=0.29±0.26) was diagnosed. 13 children had partially controlled BA (ACQ=0.96±0.20), and 13 children had only bad BA control (ACQ=1.95±0.33). Among the children with high BA control, 27 had no steroid (IGKS) treatment, 28 had only basic IGKS therapy. All children with partial or bad control had IGKS therapy. In 27 steroid-naive patients with high-controlled asthma, the TNN in EBC was 6.24±2.93 mkM. In 28 patients with controlled BA taking IGKS, TNN was 4.66±2.34 mkM (p=0.03). In patients with partially controlled BA, TNN level was 6.23±2.62 mkM; in patients with bad control - 6.52±2.62 mkM. The correlation between TNN and ACQ scores was found in the whole group (p=0.047), however, the significance was varying in groups with different therapy. In the group of steroid-naive patients, p=0.07; in patients treated with IGKS, p=0.024. The interpretation of TNN in patients with BA, if it is performing for the additional characterization of the control level, should include the consideration of therapy taking by patients.