

# European Respiratory Society Annual Congress 2012

**Abstract Number:** 4809

**Publication Number:** P1760

**Abstract Group:** 3.1. Molecular Pathology and Functional Genomics

**Keyword 1:** Allergy **Keyword 2:** Asthma - diagnosis **Keyword 3:** Molecular pathology

**Title:** Assessment of allergic status of severe asthma with a new component resolved method using micro-array technique

Dr. Claire 29881 Mailhol [claire.mailhol@gmail.com](mailto:claire.mailhol@gmail.com) MD <sup>1</sup>, Dr. Pol Andre 29882 Apoil [apoil.pa@chu-toulouse.fr](mailto:apoil.pa@chu-toulouse.fr) <sup>2</sup>, Prof. Antoine 29883 Blancher [blancher.a@chu-toulouse.fr](mailto:blancher.a@chu-toulouse.fr) <sup>2</sup> and Prof. Alain 29884 Didier [didier.a@chu-toulouse.fr](mailto:didier.a@chu-toulouse.fr) <sup>1</sup>. <sup>1</sup> Pneumology and Allergology Department, Toulouse University Hospital, Toulouse, France, 31059 and <sup>2</sup> Immunology Department, Toulouse University Hospital, Toulouse, France, 31059 .

**Body:** Immunocap® ISAC biochip is a new biologic test using component micro-array technique for detection of specific IgE (sIgE) toward 103 molecular allergens. We have used this test to screen a group of severe asthmatics. ISAC was performed in 21 consecutive patients with severe asthma (American Thoracic Society criteria). Lung function, exhaled nitric oxide (NO), blood eosinophilia, serum total IgE and skin prick tests for pneumallergens were systematically collected. Population included 11 women and 10 men (mean age 52 +/-16), median FEV1 72% predicted normal, mean NO 66 +/- 47 ppb. Seventeen (81%) patients had a negative ISAC and 4 (19%) had sIgE for at least one molecular allergen of the test. Three of the 4 positive patients had sIgE toward several allergenic sources (mites, pollens, animal dander). One patient was exclusively sensitized for Fel d1 (cat major allergen). Skin prick tests and ISAC were concordant in all patients. The other parameters, clinical, lung function and biology were not different in patients with positive ISAC compared to patients negative for the test. ISAC is useful to confirm the non atopic status of a subgroup of severe asthmatics and to identify precisely the sensitization profile of severe allergic asthmatics.