

# 9<sup>TH</sup> EUROPEAN IMMUNOLOGY CONFERENCE

## ASSOCIATED WITH ANTIBODY ENGINEERING MEETING

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### Detection and characterization of IgG, IgE and IgA autoantibodies in bullous pemphigoid associated with dipeptidyl peptidase-iv inhibitors

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Bullous pemphigoid (BP) is a rare autoimmune subepidermal blistering disease characterized mainly by autoantibodies against two hemidesmosomal proteins named BP180 and BP230. Recently have been reported that dipeptidyl peptidase (DPP)-IV inhibitors, utilized in type 2 diabetes mellitus, could be involved in the etiopathogenesis of the disease. We report cases of BP associated to DPP-IV inhibitors characterizing the clinical phenotype and the antibodies against the two hemidesmosomal proteins. We typified IgG, IgE and IgA reactivity against specific domains of BP180 and BP230 by ELISA and Western Blot. Unlike previous reports, all our patients showed an inflammatory phenotype that clinically presented with erythema, urticarial lesions, and bullae. The epitope mapping showed that IgG reacted with multiple epitopes that spread over the BP180 antigen, in addition to NC16A. IgE reacted more against BP230 than against BP180. The IgG response appears to be important in the pathogenesis of these BP patients, while IgE reactivity seems to be a secondary event.

#### Biography

Luca Fania has his expertise in dermatological inflammatory and bullous diseases. He works at Istituto Dermatologico dell'Immacolata-IRCCS in Rome, which is an Italian referral center in bullous disease. In the last years, he is focusing on the study of drug-induced pemphigoid and mainly due to dipeptidyl peptidase-IV inhibitors.

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