



Differential regulation of IL-22BP in Crohn's disease versus ulcerative colitis

Jérôme Martin, Céline Bossard, Arnaud Boureille, Régis Josien

► **To cite this version:**

Jérôme Martin, Céline Bossard, Arnaud Boureille, Régis Josien. Differential regulation of IL-22BP in Crohn's disease versus ulcerative colitis. 6th european workshop on immune-mediated inflammatory diseases, Nice, France. BioMed Central, 9 (Suppl 2), pp.P11, 2011. <inserm-00643977>

HAL Id: inserm-00643977

<http://www.hal.inserm.fr/inserm-00643977>

Submitted on 23 Nov 2011

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



POSTER PRESENTATION

Open Access

Differential regulation of IL-22BP in Crohn's disease versus ulcerative colitis

Jérôme Martin^{1,2}, Céline Bossard³, Arnaud Boureille^{4,5}, Régis Josien^{1,2*}

From 6th European Workshop on Immune-Mediated Inflammatory Diseases
Nice, France. 23-25 November 2011

Introduction

IL-22 is a newly described IL-10 cytokine family member. It mainly acts on epithelial cells and hepatocytes by interacting with a membrane receptor. IL-22 has been shown to have protective or deleterious effects on its targets cells depending on the context. IL-22 has been implicated in inflammatory bowel diseases (IBD) but its role still remains unclear. IL-22 is increased in Crohn's disease (CD) but not in ulcerative colitis (UC). Furthermore IL-22 appears to have beneficial effects in several murine models of IBD. IL-22BP is a soluble inhibitory receptor specific for IL-22 whose physiological role and regulation are mainly unknown during inflammatory conditions.

Aims

To assess the regulation of IL-22BP during IBD.

Methods

Colonic biopsies were obtained from patients with active CD or UC. Biopsies were made in inflammatory and non-inflammatory mucosa for both conditions. Patients with polyps were used as healthy controls. IL-22BP mRNA expression was assessed by q-PCR and confirmed at the protein level by immunohistology, using a monoclonal Ab to IL-22BP. Informed consent was obtained from all the patients.

Results

No difference could be observed in the IL-22BP mRNA expression between the non inflammatory mucosa of CD or UC patients compared with healthy controls. In UC patients, IL-22BP was expressed at the same level in inflammatory or non inflammatory samples. In contrast, important up-regulation of IL-22BP mRNA expression was detected in the inflammatory mucosa of CD patients as

compared to non inflammatory samples. This upregulation was confirmed at the protein level by immunostaining experiments. IL-22BP was mostly detected in the lamina propria of the colon. In UC patients, IL-22BP protein exhibited actually a diminished expression as compared to controls.

Conclusion

Taken together these results highlight a different profile of IL-22BP production during CD and UC. Up-regulation of IL-22BP during CD is probably concomitant to IL-22 up-regulation already described, suggesting an immunomodulatory function of IL-22BP specific to CD.

Author details

¹INSERM U643, ITUN, Nantes, France. ²Laboratoire d'Immunologie, Nantes, France. ³Service d'Anatomo-Pathologie, Nantes, France. ⁴INSERM U913, Nantes, France. ⁵Service d'Hépatogastroentérologie, CHU Nantes, Nantes, France.

Published: 23 November 2011

doi:10.1186/1479-5876-9-S2-P11

Cite this article as: Martin et al.: Differential regulation of IL-22BP in Crohn's disease versus ulcerative colitis. *Journal of Translational Medicine* 2011 **9**(Suppl 2):P11.

¹INSERM U643, ITUN, Nantes, France

Full list of author information is available at the end of the article