



Benralizumab Effects modulate NK cell maturation, proliferation and activation in severe asthmatic patients

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PULMON



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Severe Asthma

Selected asthma subphenotypes





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BENRALIZUMAB: Mechanisms of action

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Natural killer cell-mediated inflammation resolution is disabled in severe asthma

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Anti-inflammatory corticosteroids are a first line of defense against many types of asthma, but patients with severe asthma do not frequently respond to this therapy. Duvall *et al.* now report that this lack of response may be due in part to defects in natural killer (NK) cells, which are important mediators of inflammation resolution. They found that NK cells from patients with severe asthma had impaired killing and that corticosteroid exposure further inhibited the function of these cells, whereas the proresolving mediator LXA₄ preserved NK cell effector mechanisms. Therefore, corticosteroids may be a counterproductive therapy in patients with severe asthma, and specifically activating NK cells may provide an alternate therapeutic target.











International Meeting on PULMONARY RARE DISEASES AND ORPHAN DRUGS





Results





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Results

	ТО	<i>T1</i>	<i>T6</i>	Р
%FEV1	87,84 ± 14.55	90,90 ± 16,38	95,85 ± 20,78	0,03
% FVC	$106,53 \pm 15.50$	111,07±15,64	113,67 ± 13,1	0,02
DAILY ORAL GLUCOCORTICOID DOSE (MG/DAY)	2,91 ± 4,50	$1,44 \pm 3,35$	0,5±1,58	<0,0001
INHALED GLUCOCORTICOID DOSE (MCG/DAY)	611,6±281,14	541,6 ± 314,2	410,8±263,06	<0,0001
ACQ-5 SCORE	$11 \pm 7,90$	$7,14 \pm 3,71$	2,77 ± 2,27	<0,0001
ACT SCORE	$15,66 \pm 6,16$	21 ± 2,59	24,44± 1,01	<0,0001
BLOOD EOSINOPHIL COUNT (CELLS/MM3)	864,44±476,34	0	15,71 ± 41,57	<0,0001

Super responders patients!





Results







Results



Increase proliferative capacity

Increase release of IFN-gamma



Conclusions



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Thank you for the attention

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