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**Title:** Real life effectiveness of omalizumab in severe allergic asthma, does the IgE level matter? A Bradford experience

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**Body:** IgE (immunoglobulin E) plays a pivotal role in allergic asthma. Omalizumab is a recombinant monoclonal antibody that inhibits IgE. In the UK, Omalizumab was licensed for patients with IgE levels between 30-700 IU/ml till 2010. The license was extended to include IgE levels up to 1500IU/ml. In our study, 41 patients fulfilled the criteria for commencing omalizumab were recruited. 27 (66%) patients had IgEs between 30-700IU/ml and 14 (34%) patients fell out of the license initially, until the licence was increased to 1500IU/ml, 4 (9%) patients had significant higher levels of IgE and were out of the license. We aimed to compare the response to treatment in the licensed and unlicensed group. Response to treatment was measured by comparing the frequency of visits to the GP & A&E, hospital/ICU stays, use of oral steroids, and improvement in QOL scores.

	Pre Treatment		Post Treatment		% Change	
	Licensed	Unlicensed	Licensed	Unlicensed	Licensed	Unlicensed
Mean AQLQ	2.6	2.87	3.95	4.97	34.2	35.0
Mean ACT	8.3	9.0	14.2	17.2	41.6	47.8
Hospital Days	9.3	16.5	4.0	5.1	57.4	68.8
ICU Days	0.44	0	0.29	0	34	0
OCS )MG)	9.07	10.5	5.7	3.2	36.7	52.0
Mean IgE (kU/I)	208.9	1613				

From these results it is possible to see that those patients that fall out of the omalizumab license do fair well if not better than those within the license. Depicted by a greater reduction in hospital days and ICU admission, a greater reduction in the daily oral corticosteriod use and an increase in ACT/AQLA scores once commenced on treatment.