



# Association of omalizumab with other biologics: a case series



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## BACKGROUND

Biologics are new options for several inflammatory diseases, targeting specific immunologic pathways. No literature is available about association of omalizumab with other biologic in the same patient. So physicians could be reluctant to make such a prescription.

## MATERIAL AND METHODS

This retrospective study involving the GEM Resopso centers, conducted between May 2017 and March 2018, sought to investigate the efficacy and safety of combined biotherapy comprising omalizumab, dermatologically indicated, and another biologics prescribed for dermatological, rheumatological or gastrointestinal indications. The inclusion criteria were: disease diagnosis according to current guidelines; age >18 years; combined omalizumab and another biologics therapy for ≥3 months. Patient age, gender, underlying disease diagnosis, biotherapy type and duration, CSU disease evolution, CSU disease progression since omalizumab initiation, and undesirable events were collected.

Table 1. Patient and disease characteristics

Patient	Age	Gender	Biotherapy indication	Biotherapy type	Biotherapy duration In months	CSU duration In months	Omalizumab treatment duration in months
#1	28	Female	Psoriasis	Secukinumab	6	12	3
#2	35	Female	Psoriasis	Adalimumab	9	24	8
#3	25	Female	Psoriasis	Adalimumab	64	84	9
#4	21	Female	Crohn's disease	Infliximab	18	12	4
#5	29	Male	Ankylosing spondylarthritis	Etanercept	48	60	9
#6	60	Female	Psoriasis	Infliximab	72	24	3
#7	25	Male	Ulcerative colitis	Adalimumab	10	10	7
#8	51	Male	Psoriasis	Etanercept	36	144	10
#9	49	Male	Psoriasis and psoriasis arthritis	Etanercept	37	NA	12
#10	53	Female	Psoriasis	Etanercept	108	2	12
Mean	37.6	4 M / 6 F	Gastrointestinal: 2 Dermatology: 7 Rheumatology: 1	ETN: 4 IFX: 2 ADA: 3 SECU:1	40.8	41.3	7

CSU: chronic spontaneous urticaria; ETN: etanercept; IFX: infliximab; ADA: adalimumab; SECU: secukinumab; NA: not available

## RESULTS

Six women and 4 men were included, mean age of 37.6 years (21-60)(Table 1). Seven were treated for psoriasis, two for inflammatory bowel diseases and one for ankylosing spondylitis. They received etanercept (n=4), adalimumab (n=3), infliximab (n=2), secukinumab (n=1) for a mean duration of 40,8 months (6-108) before initiation of omalizumab. Indication for omalizumab was chronic spontaneous urticaria (CSU) unresponsive to high-dose antihistamines (n=9) and indolent systemic mastocytosis (ISM) with idiopathic anaphylactic shocks (n=1). In all 10, omalizumab was initiated after the first biologics, with combined biotherapy duration of 7 (3-12) months on average. Underlying disease remained controlled after initiation of omalizumab. Eight patients underwent complete remission of CSU; one only partial improvement (decrease of 30 % of UAS 7), but this patient discontinued antihistamines during observation. Patient with ISM underwent no anaphylactic shock. No undesirable events were reported.

## CONCLUSION

This observational approach of combining omalizumab with another biologics produced encouraging safety and efficacy data. Further prospective studies are now necessary for confirmation, and should be particularly vigilant of the associated safety profile.