

The impact of patient support programs among patients with severe asthma treated with biologic therapies: A systematic literature review and indirect treatment comparison

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Supplementary Table 3. Quality assessment of studies identified in the review using Newcastle-Ottawa

A. Cohort studies

Category	Studies	Morris, 2022	Cohn, 2021	Benfant e, 2022	Giuber gia, 2019	Bègne, 2020	Estrada, 2017	Eley, 2019	Hansen , 2021	Namaz ova, 2015	Liebha ber, 2007	Fui, 2022	Sousa, 2023	Bendie n, 2022	Makhec ha, 2021	D'Anco na, 2021	D'Anco na, 2021 (2)
		Quality Assessment number of stars (1-7, 1=biased)	4	2	4	5	5	3	5	3	2	2	3	5	5	3	3
Representativeness of the exposed cohort	Truly representative of the average patients with severe asthma in the community*								*								
	Somewhat representative of the average patients with severe asthma in the community*	*	*	*	*	*	*	*		*	*		*	*	*	*	*
	Selected group of users											✓					
	No description																
Selection of the non exposed cohort	Drawn from the same community as the exposed cohort*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Drawn from a different source	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	No description	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ascertainment of exposure	Secure record (eg surgical records)*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Structured interview*																
	Written self report																
	No description																
Demonstration that outcome of	Yes*																

Category	Studies	Morris, 2022	Cohn, 2021	Benfante, 2022	Giuber gia, 2019	Bègne, 2020	Estrada, 2017	Eley, 2019	Hansen, 2021	Namaz ova, 2015	Liebha ber, 2007	Fui, 2022	Sousa, 2023	Bendie n, 2022	Makhec ha, 2021	D'Anco na, 2021	D'Anco na, 2021 (2)
	Quality Assessment number of stars (1-7, 1=biased)	4	2	4	5	5	3	5	3	2	2	3	5	5	3	3	3
interest was not present at start of study	No	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Comparability	Study controls for prognostic factors associated with outcomes*																
	Study controls for any additional factor*																
Assessment of outcome	Independent blind assessment*																
	Record linkage*	*		*	*	*		*	*			*	*	*	*	*	*
	Self report		✓														
	No description						✓			✓	✓						
Was follow-up long enough for outcome to occur? (at least 6 months)	Yes*	*			*	*	*	*	NA				*	*			
	No		✓	✓					NA			✓			✓	✓	✓
Adequacy of follow up of cohorts	Complete follow up-all subjects accounted for*			*	*	*		*	NA			*	*	*			
	Subjects lost to follow up unlikely to introduce bias - small number lost*								NA								
	Follow up rate low and no description of those lost	✓	✓						NA								
	No statement						✓		NA	✓	✓				✓	✓	✓

B. Cross-sectional studies (using adapted Newcastle-Ottawa scale, adapted from Brandenberger, J., Tylleskär, T., Sontag, K. *et al.* A systematic literature review of reported challenges in health care delivery to migrants and refugees in high-income countries - the 3C model. *BMC Public Health* 2019, 19, 755.)

Category	Studies	Al-Jahdali, 2021	Guarnieri, 2022	Timmerman, 2020	Reed, 2019	Flokstra-de Blok, 2022
	Quality Assessment number of stars (1-7, 1=biased)	4	5	5	2	5
Representativeness of the cases	Truly representative of the patients with severe asthma (consecutive or random sampling of cases)*			*		
	Somewhat representative of the average in the patients with severe asthma (non-random sampling)*	*	*		*	*
	Selected demographic group of users					
	No description of the sampling strategy					
Sample size	Justified and satisfactory * (>50 patients)	*	*	*		*
	Not justified				✓	
Non-response rate	Comparability between respondents and non-respondents characteristics is established, and the response rate is satisfactory. *	*	*	*		*
	The response rate is unsatisfactory, or the comparability between respondents and non-respondents is unsatisfactory.					
	No description of the response rate or the characteristics of the responders and the non-responders.				✓	
Ascertainment of the screening/surveillance tool	Validated screening/surveillance tool**					
	Non-validated screening/surveillance tool, but the tool is available or described*		*	*		*
	No description of the measurement tool	✓			✓	
Comparability - The subjects in different outcome groups are comparable, based on the study design or analysis. Confounding factors are controlled	The study controls for the most important factor (select one). *					
	The study control for any additional factor. *					

Category	Studies	Al-Jahdali, 2021	Guarnieri, 2022	Timmerman, 2020	Reed, 2019	Flokstra-de Blok, 2022
	Quality Assessment number of stars (1-7, 1=biased)	4	5	5	2	5
Outcome	Assessment of the outcome - Independent blind assessment. **					
	Assessment of the outcome -Record linkage. **					
	Assessment of the outcome -Self report. *	*	*	*	*	*
	Assessment of the outcome -No description					
Statistical test	The statistical test used to analyze the data is clearly described and appropriate, and the measurement of the association is presented, including confidence intervals and the probability level (p value). *	NA	NA	NA	NA	NA
	The statistical test is not appropriate, not described or incomplete.	NA	NA	NA	NA	NA

