Appendixes.

Appendix E1. Search strategy. This systematic review has been conducted according to the Preferred Reporting Items for Systematic reviews and Meta-Analysis (PRISMA) guidelines [12], employing PubMed, EMBASE, and Global Health databases. On these websites, we searched for articles from January 1st, 2007, to July 2021, using key terms related to asthma attacks in pediatric population.

1. Biologic drugs
2. biological
3. Monoclonal antibody
4. Omalizumab
5. Mepolizumab
6. Dupilumab
7. Cystic fibrosis
8. Allergic bronchopulmonary aspergillosis
9. Child
10. Children
11. Adolescent
12. Adult
13. 1 or 2 or 3
14. 4 and/or 5 and/or 6
15. 13 and/or 14 and/or and 7 and 8
16. 13 and/or 14 and/or and 7 and 8 and/or 9/10 and/or 11 and/or 12
17. Guideline/ or practice guideline/ as topic/ or practice guidelines as topic/

18. (guideline* or algorithm* or standard*).ti.ab.

19. “best practice”.ti.ab.

20. meta-analysis, stematic review, review, original article, case series, case report, letter
### Appendix E2. List of the studies included in the systematic review

| N.* | Authors               | Year | Title                                                                                                                                                                                                 | Type of study            |
|-----|-----------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| 1   | Van der Ent et al.    | 2007 | Successful treatment of allergic bronchopulmonary aspergillosis with recombinant anti-IgE antibody                                                                                                 | Case report              |
| 2   | Nové-Josserand R et al. | 2021 | Case series of omalizumab for allergic bronchopulmonary aspergillosis in cystic fibrosis patients                                                                                                  | Case series              |
| 3   | Zirbes JM et al.      | 2008 | Steroid-sparing effect of omalizumab for allergic bronchopulmonary aspergillosis and cystic fibrosis                                                                                                | Case series              |
| 4   | Randhawa I et al.     | 2009 | Resolution of Corticosteroid-Induced Diabetes in Allergic Bronchopulmonary Aspergillosis with Omalizumab Therapy: A Novel Approach                                                              | Case report              |
| 5   | Elmallah MK et al.    | 2012 | Management of patients with cystic fibrosis and allergic bronchopulmonary aspergillosis using anti-immunoglobulin e therapy (omalizumab)                                                               | Case report              |
| 6   | Wong R et al.         | 2013 | Omalizumab in the management of steroid dependent allergic bronchopulmonary aspergillosis (ABPA) complicating cystic fibrosis                                                                     | Case report              |
| 7   | Zicari AM et al.      | 2014 | Anti IgE antibody as treatment of allergic bronchopulmonary aspergillosis in a patient with cystic fibrosis                                                                                      | Case report              |
| 8   | Lehmann S et al.      | 2014 | Omalizumab: a new treatment option for allergic bronchopulmonary aspergillosis in patients with cystic fibrosis                                                                                  | Case series              |
| 9   | Delgado Pecellín I et al. | 2015 | Role of omalizumab in the management of allergic bronchopulmonary aspergillosis in patients with cystic fibrosis                                                                               | Case series              |
| 10  | Perisson C et al.     | 2017 | Omalizumab treatment for allergic bronchopulmonary aspergillosis in young patients with cystic fibrosis                                                                                          | Case series              |
| 11  | Ashkenazi M et al.    | 2018 | Omalizumab in allergic bronchopulmonary aspergillosis in patients with cystic fibrosis                                                                                                | Case series Retrospective study |
| 12  | Koutsokera A et al.   | 2020 | Omalizumab for asthma and allergic bronchopulmonary aspergillosis in adults with cystic fibrosis                                                                                                 | Retrospective observational study |
| 13  | Brinkmann F et al.    | 2010 | Steroid dependency despite omalizumab treatment of ABPA in cystic fibrosis                                                                                                                        | Case report              |
| 14  | NCT00787917           | 2008 | An exploratory study to assess multiple doses of Omalizumab in patients with cystic fibrosis complicated by acute bronchopulmonary aspergillosis (ABPA)                                              | RCT                      |
| 15  | Emiralioglu N et al.  | 2016 | Allergic Bronchopulmonary Aspergillosis in Cystic Fibrosis                                                                                                                                          | Case series              |
|   | Author(s)          | Year | Title                                                                                           | Study Type |
|---|-------------------|------|-------------------------------------------------------------------------------------------------|------------|
| 16| Lebecque P et al. | 2009 | Omalizumab for treatment of ABPA exacerbations in CF patients                                   | Case report|
| 17| Parisi GF et al.  | 2019 | Successful treatment with omalizumab of allergic bronchopulmonary aspergillosis in patients with cystic fibrosis: Case reports and literature review | Case series|
| 18| Kanu A et al.     | 2008 | Treatment of allergic bronchopulmonary aspergillosis (ABPA) in CF with anti-IgE antibody (omalizumab) | Case report|
| 19| Thomas et al.     | 2009 | Life-threatening allergic bronchopulmonary aspergillosis treated with methylprednisolone and anti-IgE monoclonal antibody | Case report|
| 20| Zhang et al.      | 2020 | Use of mepolizumab in adult patients with cystic fibrosis and an eosinophilic phenotype: case series | Case series|
| 21| Boyle et al.      | 2020 | Mepolizumab use in cystic fibrosis-associated allergic bronchopulmonary aspergillosis            | Case report|

*N: number.