A



No risk of bias

Unclear risk of bias

High risk of bias



*Supplementary table 3. Results (A), and pipeline (B) of the risk of bias assessment on the studies included in the meta-analysis*

B

A

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Did the researchers rule out major GI comorbidity depending on previous medical reports or endoscopic/pathologic reports?** | **Did researchers rule out any other disorders or medications taken by the participants, that may influence the measured mucosal eosinophil cell counts?** | **Does the age distribution of the individuals cover the whole paediatric population?** | **Were the biopsies taken under visual control (i.e. video endoscopy or surgical specimen)?** | **Were the outcome assessors blinded to the diagnosis of the participants?** | **Did the outcome assessors evaluate more than one biopsy sample from separate locations?** | **Did the outcome assessors evaluate more than one sections from one biopsy sample?** | **Were eosinophil cell counts assessed/defined using valid and reliable measures, implemented consistently across all study participants?** |
| ***Yes***  *(No risk of bias)* | Rule-out was based on medical expert’s opinion. | Patients with allergic conditions (incl. food allergies), asthma, viral- or parasitic gastroenteritides, and functional bowel disorders were excluded, as well as patients taking systemic immunosuppressants or steroids, peroral NSAIDs, anti-histamines or PPIs. | The study population the whole paediatric age range (0-18 years). | The biopsies were taken during an upper- or lower videoendoscopic procedure, form a macroscopically intact mucosa. | The pathologist/ outcome assessor did not know the diagnosis of the person whom the biopsy at evaluation was taken from. | More than one biopsy samples were taken and were evaluated from each bowel segment and sub-segment | More than one sections were dyed and evaluated from the same biopsy sample. | The eosinophil cell recognition was based on pre-defined criteria depending on light microscopical morphology, and counted by manual, semi-automated or automatic methods. |
| ***Unclear*** | Not reported. | Not reported. | Not reported. | Not reported. | Not reported. | Not reported. | Not reported. | Not reported. |
| ***No***  *(High risk of bias)* | Rule-out was based on personal anamnesis, with no medical reports being checked. | On or more of the above-mentioned groups of individuals were not excluded. | The study specifies, that the age range of the study does not cover the whole paediatric age range. | Biopsies were not taken during a videoendoscopic procedure. | The pathologist/ outcome assessor was aware of the diagnosis of the person whom the biopsy at evaluation was taken from. | Only one biopsies per bowel segment and subsegment was evaluated. | Only one section was dyed and evaluated from one biopsy sample. | The criteria, used for eosinophil cell recognition were not pre-defined. |