

---

## **PhD Thesis Evaluation Form for external reviewers**

Please evaluate the PhD Thesis' different aspects using the following scale: unsatisfactory, satisfactory, good, very good, excellent. Extra space has been given with each evaluation to allow for a more detailed explanation of your rating, which would be

appreciated, since minor/major changes may be made by the Candidate before her/his final defence. This evaluation will be made available to members of the PhD course only.

Title of the thesis: Evaluation of the o vascular barrier in eosinophilic esophagitis

Name of the candidate: Carlo Maria Rossi

Name of the Reviewer: Nicola de Bortoli

## Evaluation of PhD Thesis

	<b>Grade 1-5 1 (Unsatisfactory) 5 (Excellent)</b>	<b>Comments</b>
<b>Objective</b>	5	The research aims to assess EVB disruption in EoE patients using advanced imaging and molecular analysis. The goal is well-defined and contributes to a better mechanistic understanding of the disease.
<b>Originality</b>	5	This study presents an innovative approach to understanding EoE by exploring the esophageal vascular barrier (EVB), an aspect previously unexamined in this disease. The integration of pCLE imaging and PV-1 analysis adds significant novelty to the field.
<b>Literature review</b>	4	Good. No specific comment to add.
<b>Research results</b>	4	The study demonstrates a clear association between EoE and EVB disruption, showing reversibility with dupilumab treatment. The findings are well-supported by both in vivo and ex vivo analyses, strengthening their validity.
<b>Methods and Analysis of data</b>	4	The methodology is robust, combining pCLE imaging, immunohistochemistry, and qRT-PCR for a comprehensive assessment. The statistical analysis is appropriate, though the small sample size is a limitation.
<b>Quality of writing</b>	5	The thesis is well-structured and scientifically rigorous, with clear explanations of complex methodologies. Some sections could benefit from minor grammatical refinements for improved readability.

General comments and recommendations (you may add comments and suggestions how to improve the work)

The study provides a detailed and well-structured analysis of the topic, demonstrating a solid methodological approach and a deep understanding of the subject. The clarity of exposition is a strong point, as is the appropriate use of sources, which enhances the credibility of the arguments presented. This study serves as a well-executed and thoroughly analyzed proof of concept. While additional data could further enhance its quality and robustness, the work already offers valuable insights. Overall, it is a strong and well-structured contribution that effectively explores the topic,

with potential for further development through expanded discussion and deeper connections between the various elements addressed.

**Overall evaluation** (Please check one)

<input checked="" type="checkbox"/>	<b>The candidate can be admitted to the final examination</b>
<input type="checkbox"/>	<b>The candidate can be admitted to the final examination but the thesis requires minor revision; further evaluation by the reviewer is not required</b>
<input type="checkbox"/>	<b>To be admitted to the final examination the thesis requires extensive revision; the revised version must be provided within 6 months and must be re-evaluated by the reviewer</b>

Date: 28/03/2025

Signature \_\_\_\_\_

