This paper addresses a topic of significant clinical importance, supported by strong pathophysiological logic, an adequate sample size, internal and external validation, and methodological advantages. Below are my specific suggestions:

Title: The title is overly broad and should include key information on MRI features, such as transmural inflammation or active proctitis.

Thank you for this valuable suggestion. We changed the title "Magnetic resonance imaging predicts perianal fistula in Crohn's disease" into Transmural inflammation or active proctitis in Magnetic resonance imaging predicts perianal fistula in Crohn's disease.

Abstract: The structure is complete, but the results section contains unclear descriptions, e.g., "57/69 (82.6%) with perianal fistula in Crohn's disease and 35/182 (19.2%) patients with cryptoglandular anal fistula had transmural inflammation or active proctitis." Please provide further clarification for better expression.

Thank you for pointing this out. In abstract, we changed "In the discovery cohort with 251 patients, 57/69 (82.6%) with perianal fistula in Crohn's disease and 35/182 (19.2%) patients with cryptoglandular anal fistula had transmural inflammation or active proctitis." into "Of the 69 patients with perianal fistula in Crohn's disease in the discovery cohort, 57 had transmural inflammation or active proctitis, 21 (30.4) had both transmural inflammation and active proctitis, 11 (15.9) had transmural inflammation only, and 25 (36.2) had active proctitis only, whereas of the 182 patients with cryptoglandular anal fistula, only 35 (19.2) had transmural inflammation or active proctitis." and we made specific description about the results.

Introduction: The introduction explains Crohn's disease, the current treatment risks and complications associated with perianal fistulas in Crohn's disease, and the application of MRI. However, there is a lack of information on the current use of MRI in distinguishing between perianal fistulas in Crohn's disease and cryptoglandular anal fistulas. Additionally, language expression needs improvement; for instance, phrases like "(Fig. 1b, 1c, 1d)]are important MRI features of PFCD" should be revised into complete declarative sentences. The innovation of this study is not clearly articulated.

Thank you for pointing this out. We changed "(Fig. 1b, 1c, 1d) into (Fig. 1b-d)，and we added the description for (Fig. 1b-d).

Methods: The methods section states, "The diagnostic criteria for PFCD is based on…… released by World Gastroenterology Organization in 2014," but does not specify the implementation methods of this study. The inclusion and exclusion criteria are not fully described. It is recommended to add a section on diagnostic criteria. In the MRI analysis, terms such as transmural inflammation or active proctitis are mentioned but not clearly defined.

Thank you for pointing this out. In the first part of **Study design and participants, we changed** "Patients diagnosed with anal fistula on admission

who had undergone MRI were included. Patients with secondary anal fistulas associated with presacral cysts, malignancy, trauma, tuberculosis, sexually transmitted diseases, or radiation as documented by histopathological reports and preoperative clinical criteria documented were excluded. Patients with seton drainage at the time of MRI were also excluded because it could show a transmural appearance on the images (Fig. 1f).” into Inclusion criteria: 1. Anal fistula diagnosed on admission;2. Rectal MRI examination with clear and complete images;3. Anal fistula diagnosed on rectal MRI examination.Exclusion criteria: 1. Patients with secondary anal fistula associated with presacral cyst, malignancy, trauma, tuberculosis, sexually transmitted disease, or radiation;2. Patients with seton drainage at the time of MRI were also excluded because it could show a transmural appearance on the images (Fig. 1f).The inclusion criteria and exclusion criteria were described individually.

In the part of MRI analysis, we changed “They assessed the MRI scans for the presence of transmural inflammation or active proctitis.” **into** “They assessed the MRI scans for the presence of transmural inflammation (fistula originates from the mucosal layer, penetrates the submucosal and internal anal sphincter to the intersphincteric space, and even penetrates the external sphincter complex) or active proctitis (multiple submucosal and internal anal sphincter inflammation or rectal wall thickening).” providing a detailed description of the MRI features of transmural inflammation and active proctitis. As all enrolled patients had a confirmed diagnosis of Crohn's disease at admission, no additional diagnostic criteria were applied**.**

Results: The results are presented with charts and descriptions, which are relatively complete. However, the resolution of Figure 3 is insufficient and needs to be resubmitted. Discussion: The discussion is overly lengthy and contains multiple grammatical errors that require further improvement. Additionally, the reference format does not comply with journal standards; please revise it according to the journal’s requirements.

Thank you for pointing this out. The resolution of Figure 3 has been improved.The content cited from references 12, 13, 14, 18, 19, 22, and 23 in the Discussion section has been removed.

Overall Evaluation: This article reports a retrospective analysis primarily aimed at assessing the value of magnetic resonance imaging in predicting perianal fistulas in Crohn's disease. The study included hospitalized patients with anal fistulas who underwent MRI examinations from two hospitals, thereby avoiding a single-sample source. The topic is highly relevant and addresses a critical clinical need. The article is well-structured, clearly written, and adheres to the standard format of academic journals. The research focus is clear, and the study design effectively achieves the research objectives. Due to the large sample size and the use of robust statistical techniques, the results are instructive. However, the text could still benefit from further clarification

and revisions to enhance scientific clarity and impact. Specific feedback and revision suggestions are provided below. Key Comments: Strengths include scientific reasoning and originality. The authors recognize the critical clinical significance, noting that MRI is not only used as an auxiliary diagnostic tool but can also predict perianal fistulas in Crohn's disease, thereby guiding treatment decisions. The abstract provides a general description of the study's background, objectives, results, and conclusions. However, the background and objectives are described in a mixed manner, leading to unclear structuring. Separating these sections would improve clarity. In the methods section, the statement "Images were classified according to whether the magnetic resonance images had transmural inflammation or active proctitis" does not specify the detailed classification criteria. Although the study received approval from the medical ethics committee, specific inclusion and exclusion criteria for patient selection are not described in detail. It is recommended to add a dedicated section for this description. Additionally, the black arrows in the figures should be changed to a different color, as black arrows are not clearly visible against a black background. With these revisions, the manuscript has the potential to make a valuable contribution to the study of perianal fistulas in patients with Crohn's disease.

We have revised the MRI analysis section in the Methods as follows: originally, "They assessed the MRI scans for the presence of transmural inflammation or active proctitis" has been changed to "They assessed the MRI scans for the presence of transmural inflammation (fistula originates from the mucosal layer, penetrates the submucosa and internal anal sphincter to the intersphincteric space, and even penetrates the external sphincter complex) or active proctitis (multiple submucosal and internal anal sphincter inflammation or rectal wall thickening)." This provides a detailed description of the MRI features of transmural inflammation and active proctitis.

The first paragraph of the Study Design and Participants section has been revised from "Patients diagnosed with anal fistula on admission who had undergone MRI were included. Patients with secondary anal fistulas associated with presacral cysts, malignancy, trauma, tuberculosis, sexually transmitted diseases, or radiation as documented by histopathological reports and preoperative clinical criteria documented were excluded. Patients with seton drainage at the time of MRI were also excluded because it could show a transmural appearance on the images (Fig. 1f)." to the following inclusion and exclusion criteria presented separately:

Inclusion criteria: 1. Anal fistula diagnosed on admission; 2. Rectal MRI examination with clear and complete images; 3. Anal fistula diagnosed on rectal MRI examination.

Exclusion criteria: 1. Patients with secondary anal fistula associated with presacral cyst, malignancy, trauma, tuberculosis, sexually transmitted disease, or radiation; 2. Patients with seton drainage at the time of MRI were also excluded because it could show a transmural appearance on the images (Fig.

1f).
Additionally, the black arrows in Figure 1 have been changed to red arrows.