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Editorial: treating inflammatory bowel disease strictures - authors' reply

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We thank Professor Kamm for his interest in our paper^{1,2}. We agree that limited attention that has been given to developing therapies to prevent or treat stricturing Crohn's disease (CD). Although earlier data suggested an association between treatment with TNF antagonists and development of strictures^{3,4}, this relationship was not confirmed in subsequent cohort studies, including CREOLE^{5,6}, and was likely the result of bowel damage already present at initiation of treatment.

A major obstacle in this field is the lack of definitions and appropriate clinical trial endpoints for testing drugs in stricturing CD, which fueled the development of a global initiative: the Crohn's disease anti-fibrotic STRICTure Therapies (CONSTRUCT) study group's expert RAND/UCLA panel². We agree with the comment by Professor. Kamm that the proposed definitions of luminal narrowing, prestenotic dilation and wall thickening will mainly capture patients with severe strictures. Our intent was to ensure that patients entering trials of anti-fibrotics have sufficient disease severity at baseline in order to maximize the chance of detecting a true treatment difference in an efficient manner. Furthermore, these patients arguably have the most to gain through administration of anti-fibrotic therapy and avoidance of surgery. We however respectfully disagree with the notion that an inability to pass a stricture with an endoscope is a more objective measure of severity compared to cross sectional imaging definitions because this definition is naturally confounded by operator related factors. We note that this approach has previously been documented to have poor reliability during the validation of endoscopic indices for Crohn's disease⁷.

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AUTHORSHIP

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DECLARATIONS OF PERSONAL AND FINANCIAL INTERESTS

The authors' declarations of personal and financial interests are unchanged from those in the original article².

Bouhnik and colleagues in the CREOLE trial selected relief of obstruction-related symptoms as one of their endpoints⁵. Our consensus panel recommended a co-primary endpoint criterion should be selected consisting of recurrence or worsening of clinical symptoms and documented intestinal obstruction on magnetic resonance enterography (MRE), with inclusion of experimental sequences signaling the need for endoscopic intervention or surgery². We agree with Professor. Kamm's opinion that symptom relief or worsening may be an endpoint sensitive to change with therapy. However, a validated patient reported outcome (PRO) instrument specific for stricturing CD is not available. MRE was considered the preferred imaging modality due to high specificity and sensitivity and lack of radiation exposure². This assessment does not discount the role of abdominal ultrasound in the scenario of routine clinical care, but rather weights the appropriateness of imaging modalities for clinical trial endpoints.

Taken together, the development of a pathway towards testing anti-fibrotics in CD is a major unmet need. The CONSTRICT study group has established stricture definitions, defined optimal diagnostic tools, and proposed clinical trial endpoint configurations which may be acceptable to regulators. Nascent projects by the group focus on index development for PRO, radiology and histopathology to provide the necessary building blocks for testing anti-fibrotic drugs in CD.

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