

# Letter to the Editor: FIT Sensitivity—A Clinical Perspective

Eddie Cole<sup>1</sup>, Deepa Narayanan<sup>2</sup>, Ree Nee Tiam<sup>2</sup>, John Shepherd<sup>1</sup> and Mark O. R. Hajjawi<sup>1</sup>\*

<sup>1</sup>York and Scarborough Teaching Hospitals NHS Foundation Trust, York, United Kingdom, <sup>2</sup>Hull University Teaching Hospitals NHS Trust, Hull, United Kingdom

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#### A response to

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Faecal Immunochemical Test (FIT) Sensitivity: A Five Year Audit

by Jerjes W (2024) Br. J. Biomed. Sci. 81:13381. doi: 10.3389/bjbs.2024.13381

Dear Editors,

We would like to thank Dr. Jerjes for his interest in our paper [1] and very much welcome his positive feedback and personal perspective on our work. We would like to address some of the points raised in his letter and add our support to some of the national initiatives called for.

Our work focused on sensitivity and highlighted false negative FIT results. Our data showed most negative FIT results could be trusted to rule out colorectal cancer (CRC), but a minority of results were negative when cancer was present. We agree with Dr. Jerjes that this leaves the General Practitioner (GP) with a difficult diagnostic decision. When the GP is presented with a symptomatic patient who has a positive FIT, the patient still has a high probability of being cancer free [2, 3], but it is clear that the GP must refer urgently onto a 2 week wait cancer pathway for a definitive diagnosis. Therefore a "true" positive and a "false" positive FIT often lead to the same action by the GP. When presented with a negative FIT result in a symptomatic patient, the decision and action the GP must take is less clear. Therefore we welcome the roll out by NHS England of Rapid Diagnostic Centres, Community Diagnostic Centres, and non-specific symptoms cancer pathways which we believe are ideally suited to investigate FIT negative symptomatic patients using imaging techniques [4–6]. We would hope to see these centres develop into the multidisciplinary services called for, and that commissioners consider FIT in patient pathways.

In addition to the recommendations for primary and secondary care suggested by Dr Jerjes, we also suggest that providers review the health inequalities that may prevent a timely completion of a FIT by the patient. Sampling faeces using a FIT collection device is unpleasant and technically demanding for patients. When coupled with language barriers, learning disabilities and other physical ailments this task may become impossible.

As we stated in our paper, we support the clear recommendations from the Association of Coloproctology of Great Britain and Ireland (ACPGBI) and the British Society of Gastroenterology, and the recommendations of NICE DG56 that a negative FIT result should not prevent a colonoscopy [7, 8]. We are also keen to see the development of better diagnostic tools, including risk based algorithms [9] and molecular based tests [10, 11], but we note that further studies may still be required [12]. However, it must be noted that FIT and any

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#### \*Correspondence

Mark O. R. Hajjawi, ⊠ mark.hajjawi@nhs.net

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Cole E, Narayanan D, Tiam RN, Shepherd J and Hajjawi MOR (2024) Letter to the Editor: FIT Sensitivity—A Clinical Perspective. Br J Biomed Sci 81:13444. doi: 10.3389/bjbs.2024.13444 future molecular tests are not diagnostic tests for CRC. They should be viewed as a tool to help decide who to perform the invasive diagnostic colonoscopy and biopsy on.

We agree that a holistic patient-centred-approach is best and that the patient should be aware of the significance of the FIT. This will empower them to be actively involved in making decisions about their own treatment. We strongly encourage GPs to "trust their gut feeling" when diagnostic tests do not match the clinical picture presented to them. We hope that our work can help guide service development across primary and secondary care and provide empirical evidence for any decisions made.

### DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/Supplementary Material, further inquiries can be directed to the corresponding author.

### REFERENCES

- Cole E, Narayanan D, Tiam RN, Shepherd J, Hajjawi MOR. Faecal Immunochemical Test (FIT) Sensitivity; A Five Year Audit. Br J Biomed Sci (2024) 81:12862. doi:10.3389/bjbs.2024.12862
- Godber IM, Todd LM, Fraser CG, MacDonald LR, Ben YH. Use of a Faecal Immunochemical Test for Haemoglobin Can Aid in the Investigation of Patients With Lower Abdominal Symptoms. *Clin Chem Lab Med* (2016) 54(4):595–602. doi:10.1515/cclm-2015-0617
- Ayling RM, Machesney M. Faecal Immunochemical Testing (FIT) in Primary Care: A Follow-Up Service Evaluation. J Clin Pathol (2023) 77:495–9. doi:10. 1136/jcp-2022-208459
- Monroy-Iglesias MJ, Martin S, Cargaleiro C, Jones G, Steward L, Murtagh C, et al. Real-World Data Evaluating Guy's Rapid Diagnostic Clinic as an Alternate Pathway for Patients With FIT Levels Below 10. *BMJ Open* (2024) 14(4):e080285. doi:10.1136/bmjopen-2023-080285
- Nigam GB, Meran L, Bhatnagar I, Evans S, Malik R, Cianci N, et al. FIT Negative Clinic as a Safety Net for Low-Risk Patients With Colorectal Cancer: Impact on Endoscopy and Radiology Utilisation-A Retrospective Cohort Study. *Frontline Gastroenterol* (2023) 15(3):190–7. doi:10.1136/flgastro-2023-102515
- Erridge S, Lyratzopoulos G, Renzi C, Millar A, Lee R. Rapid Diagnostic Centres and Early Cancer Diagnosis. Br J Gen Pract (2021) 71(712):487–8. doi:10.3399/ bjgp21X717413
- 7. Monahan KJ, Davies MM, Abulafi M, Banerjea A, Nicholson BD, Arasaradnam R, et al. Faecal Immunochemical Testing (FIT) in Patients With Signs or Symptoms of Suspected Colorectal Cancer (CRC): A Joint Guideline From the Association of Coloproctology of Great Britain and

## **AUTHOR CONTRIBUTIONS**

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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## **CONFLICT OF INTEREST**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Ireland (ACPGBI) and the British Society of Gastroenterology (BSG). Gut (2022) 71(10):1939-62. doi:10.1136/gutjnl-2022-327985

- National Institute for Health and Care Excellence (NICE). DG56: Quantitative Faecal Immunochemical Testing to Guide Colorectal Cancer Pathway Referral in Primary Care (2023). Available from: https://www.nice.org.uk/guidance/ dg56 (Accessed June 19, 2024).
- Hampton JS, Kenny RPW, Rees CJ, Hamilton W, Eastaugh C, Richmond C, et al. The Performance of FIT-Based and Other Risk Prediction Models for Colorectal Neoplasia in Symptomatic Patients: A Systematic Review. *EClinicalMedicine* (2023) 64:102204. doi:10.1016/ j.eclinm.2023.102204
- Imperiale TF, Porter K, Zella J, Gagrat ZD, Olson MC, Statz S, et al. Next-Generation Multitarget Stool DNA Test for Colorectal Cancer Screening. New Engl J Med (2024) 390(11):984–93. doi:10.1056/NEJMoa2310336
- Barnell EK, Wurtzler EM, La Rocca J, Fitzgerald T, Petrone J, Hao Y, et al. Multitarget Stool RNA Test for Colorectal Cancer Screening. *JAMA* (2023) 330(18):1760–8. doi:10.1001/jama.2023.22231
- Niedermaier T, Seum T, Hoffmeister M, Brenner H. Lowering Fecal Immunochemical Test Positivity Threshold vs Multitarget Stool RNA Testing for Colorectal Cancer Screening. *JAMA* (2024):e249289. doi:10. 1001/jama.2024.9289

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