

Managing Raised Platelet Counts and Their Cancer Risk in Primary Care

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Key Information

- Thrombocytosis is generally defined as a raised platelet count $>450 \times 10^9/l$ ^[1]
- Thrombocytosis is a common incidental finding in around 2% of those aged ≥ 40 years attending primary care^[2]
- Reassuringly, 80–90% of thrombocytosis is reactive (secondary to acute blood loss, infection, or inflammation) and the majority of cases resolve within 3 months.^[1]

'Think Cancer'

- Although most cases are reactive, NICE's *Suspected Cancer: Recognition and Referral* (NG12; updated 2026) and the *Scottish Referral Guidelines for Suspected Cancer* (updated 2025) illustrate that unexplained thrombocytosis is a risk marker for some solid tumour malignancies^{[3][4]}
 - thrombocytosis is associated with a 1-year cancer incidence of 11.6% and 6.2% in males and females respectively, well exceeding the standard 3% threshold warranting investigation for underlying malignancy^{[2][5]}
- However, thrombocytosis should not be used as a standalone diagnostic or screening test for cancer, or to rule out cancer
 - unexplained thrombocytosis should prompt us to **'think cancer'**^[4]
- The Scottish referral guideline includes thrombocytosis in the investigation criteria for **LEGO-C** cancers: **L**ung, **E**ndometrial, **G**astric, **O**esophageal, and **C**olorectal^[4]
- NG12 includes thrombocytosis in the investigation criteria for **LEGO** cancers: **L**ung, **E**ndometrial, **G**astric, and **O**esophageal.^[3]

Recommended Actions After an Incidental Finding of a High Blood Platelet Count

- Consider possible causes: infection, inflammation, blood loss (including menstrual), myeloproliferative disorders (e.g. PRV, CML, essential thrombocythaemia), and malignancy^{[1][6][7]}
- Based on clinical examination and suspected diagnosis, arrange necessary investigations^{[1][6][7]}
- Review FBC and repeat if likely underlying reversible cause present^{[1][6]} (remember: 80–90% of cases are reactive thrombocytosis and the majority of cases resolve within 3 months^[1])
- **Consider urgent Haematology referral if platelet count $>1000 \times 10^9/l$, or $450\text{--}1000 \times 10^9/l$ with associated:**^[8]
 - recent thrombosis
 - abnormal bleeding
 - age >60 years
 - other significantly abnormal FBC indices
 - neurological symptoms (Neurology referral may be warranted)
- Consider routine Haematology referral if two platelet counts $>600 \times 10^9/l$ in 4–6 weeks, or if platelet count $>450 \times 10^9/l$ for >3 months, and an alternative cause has not been identified.^{[8][9]}

If thrombocytosis is unexplained or not resolving: **check ferritin, CRP, and blood film, in addition to more detailed history taking and examination, to elicit any red flags.**^{[1][6][10]}

Unexplained thrombocytosis should prompt us to **'think cancer'**
Use clinical judgement to guide next most appropriate steps.

- Consider a JAK-2 gene mutation test (if available locally) and Haematology referral to exclude myeloproliferative disorders^{[1][6][10]}
 - JAK-2 is a genetic mutation that may be present in people with essential thrombocythaemia and can indicate a diagnosis of PRV^{[1][6][10]}
- Consider a referral for unexplained symptoms of cancer (if available locally).^[4]

- Carry out safety netting^{[3][4]} (consider weight diary)
 - NG12 recommends considering a review for people with symptoms associated with increased cancer risk but who do not meet referral criteria^[3]
 - this review could be planned within a timeframe agreed with the patient, or initiated by the patient if they continue to be concerned, new symptoms develop, or their symptoms worsen, persist, or recur^[3]
- Check for resolution of thrombocytosis according to the condition being suspected and/or treated—repeat FBC after 4–12 weeks (remember: most cases resolve within 3 months).^{[1][6][9][10]}

- **Exclude LEGO-C cancers**
 - L:** Consider an urgent CXR (to be performed within 2 weeks) for people aged ≥ 40 years—if normal, consider alternative diagnoses, including other cancers^[3]
 - E:** Consider direct-access pelvic USS in women aged ≥ 55 years with unexplained vaginal discharge or visible haematuria^[3]
 - G/O:** Consider direct-access UGIE if aged ≥ 55 years and associated UGI symptoms and/or weight loss (use clinical judgement to determine urgency of referral)^[3]
 - C:** Consider qFIT (if available locally) or urgent lower GI investigations (see *Indications for qFIT/Colorectal Cancer Referral*)^{[3][4]}
 - refer urgently using a suspected cancer pathway referral if qFIT results are above the referral threshold (10 mcg/g in NG12, 20 mcg/g in the Scottish guideline).^{[3][4]}

Indications for qFIT/Colorectal Cancer Referral

NICE Suspected Cancer: Recognition and Referral (updated 2026)^[3]

Indications for qFIT:

- Abdominal mass
- Change in bowel habit
- IDA
- Age ≥ 40 years with unexplained weight loss and abdominal pain
- Age <50 years with rectal bleeding and abdominal pain or weight loss
- Age ≥ 50 years with rectal bleeding, abdominal pain, or weight loss
- Age ≥ 60 years with any anaemia.

People with a rectal mass, an unexplained anal mass, or unexplained anal ulceration do not require qFIT before referral is considered.

It is good practice to include the numerical value of the qFIT result when referring, to allow effective triage.^[4] If qFIT cannot be arranged, the reason for the absence of a qFIT should be included in the referral.^[4]

Scottish Referral Guidelines for Suspected Cancer (2025)^[4]

Indications for qFIT:

- Bleeding (repeated rectal bleeding without an anal cause, or blood mixed with the stool)
- Persistent change in bowel habit (for >4 weeks, especially if looser or more frequent stools)
- ≥ 4 weeks of abdominal pain with weight loss of $\geq 5\%$ of bodyweight (or strong clinical suspicion)
- IDA (Hb below reference range and ferritin <30 mg/l, or IDA confirmed with other iron studies).

Unexplained abdominal mass, palpable anorectal mass, and unexplained anal ulceration are all reasons for an urgent referral for suspected cancer without the need for qFIT.

CML=chronic myeloid leukaemia; **CRP**=C-reactive protein; **CXR**=chest X-ray; **FBC**=full blood count; **GI**=gastrointestinal; **IDA**=iron deficiency anaemia; **JAK-2**=Janus kinase 2; **LEGO-C**=Lung, Endometrial, Gastric, Oesophageal, Colorectal; **NG**=NICE Guideline; **NICE**=National Institute for Health and Care Excellence; **PRV**=polycythaemia rubra vera; **qFIT**=quantitative faecal immunochemical test; **UGI**=upper gastrointestinal; **UGIE**=upper gastrointestinal endoscopy; **USS**=ultrasound scan.