

# POEMs

## Patient-Oriented Evidence That Matters

### FIT More Acceptable with Better Detection Rate Than gFOBT for Colorectal Cancer Screening

#### Clinical Question

Are the uptake and detection rates better for the fecal immunochemical test (FIT) than for older guaiac-based screening tests for colorectal cancer?

#### Bottom Line

FIT is more sensitive and specific than the older guaiac-based fecal occult blood tests (gFOBTs) when screening for colorectal cancer. We now know that it is also more acceptable to patients and increases uptake in a centrally administered screening program. Physicians should offer patients the option of FIT or colonoscopy, and should replace their stocks of gFOBTs with FITs in their office practice. (Level of Evidence = 1b)

#### Synopsis

Previous randomized trials have shown that screening for colorectal cancer, even using the older gFOBTs, reduces disease-specific mortality. The most recent modeling estimates put this benefit at 220 to 270 life-years saved per 1,000 persons screened over their lifetime (<https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/colorectal-cancer-screening2>). The FIT is a newer test for occult blood in the stool that is specific to human blood, and only requires a single sample with no food restrictions prior to testing. But do these advantages translate into greater uptake by patients? In England, the standard of care has been to mail three gFOBT cards to all persons 60 to 74 years of age every two years, and ask them to obtain two

samples from each of three separate bowel movements. The current study gave every 28th person (in a region with 1.2 million screening candidates) the newer FIT; the other 27 persons got the standard gFOBT. Although not randomized, the authors assure us that the order of persons on the screening list is not influenced by age, sex, socioeconomic status, or other demographic factors.

They found that the uptake was significantly higher for the FIT than for gFOBTs (66.4% vs. 59.3%;  $P < .001$ ). Uptake increased for men and women in all age groups and in all levels of socioeconomic status. The increase in uptake was somewhat greater in men than in women. And among previous nonresponders, the response rate approximately doubled. At lower cutoffs for hemoglobin, the number of colonoscopies required increased three- to fourfold, but the detection rate for cancers and advanced adenomas was also significantly higher. For example, using a cutoff of 40 mcg per g of feces, 5.2% of persons had a positive FIT result compared with 1.7% using gFOBTs; the rates of cancer and advanced adenoma detection were 0.24% and 1.29% with the FIT, and only 0.12% and 0.35% with gFOBTs.

**Study design:** Nonrandomized controlled trial

**Funding source:** Government

**Allocation:** Concealed

**Setting:** Population-based

**Reference:** Moss S, Mathews C, Day TJ, et al.

*Increased uptake and improved outcomes of bowel cancer screening with a faecal immunochemical test: results from a pilot study within the national screening programme in England. Gut. 2017;66(9):1631-1644.*

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## Injectable Extended-Release Naltrexone Effective for Opioid Use Disorder

### Clinical Question

Is injectable extended-release naltrexone (Vivitrol) as effective as daily oral buprenorphine/naloxone (Suboxone) for preventing relapse in adults with opioid use disorder?

### Bottom Line

Injectable extended-release naltrexone administered every four weeks is similar in efficacy to daily oral buprenorphine/naloxone for the treatment of opioid use disorder. Patients using extended-release naltrexone reported higher satisfaction with treatment and were more likely to recommend it to others. (Level of Evidence = 1b-)

### Synopsis

The use of oral medications to treat opioid use disorder is fraught with low adherence and a high dropout rate. These investigators identified 159 adults, 18 to 60 years of age, who met standard diagnostic criteria for opioid use disorder. Study participants randomly received (concealed allocation assignment) oral buprenorphine/naloxone, 4 to 24 mg per day administered in a controlled environment, or intramuscular extended-release naltrexone, 380 mg every four weeks. Although individuals who assessed outcomes were not masked to treatment group assignments, individual primary outcomes were objective and minimally prone to biased reporting (e.g., study retention rate, number of days with negative urine drug tests, number of days of heroin and other illicit opioid use). Missing urine drug tests was considered positive for opioids. Complete follow-up occurred for 66% of participants at 12 weeks. More individuals in the daily buprenorphine/naloxone group failed to complete follow-up than in the extended-release naltrexone group (23 vs. 15, respectively).

Using intention-to-treat analysis, no significant differences occurred between the extended-release naltrexone group and the oral buprenorphine/naloxone group in study retention time, negative opioid urine drug tests, and days of heroin and other illicit opioid use. Similarly, no group differences occurred in the use of amphetamines, cocaine, alcohol, cannabis, or injected drugs. Significantly more patients in the extended-release naltrexone group had a reduction in days of benzodiazepine use and higher

reported satisfaction, and significantly more were likely to recommend their treatment to others. No significant differences occurred in dropout rates due to adverse events.

**Study design:** Randomized controlled trial (single-blinded)

**Funding source:** Foundation

**Allocation:** Concealed

**Setting:** Outpatient (specialty)

**Reference:** Tanum L, Solli KK, Latif ZE, et al. Effectiveness of injectable extended-release naltrexone vs daily buprenorphine-naloxone for opioid dependence: A randomized clinical noninferiority trial. *JAMA Psychiatry*. 2017;74(12):1197-1205.

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## Drugs for Chronic Idiopathic Constipation Are Similarly Effective

### Clinical Question

What is the most effective drug treatment for chronic idiopathic constipation?

### Bottom Line

If nondrug measures are unsuccessful for chronic idiopathic constipation, the choice of a pharmacologic agent should be based on cost, tolerability, and long-term adherence rather than efficacy, because the efficacy is similar among drugs and drug classes. Bisacodyl (Dulcolax) increases the number of spontaneous bowel movements more than other drugs. (Level of Evidence = 1a)

### Synopsis

There are many treatment options for patients with chronic idiopathic constipation, including osmotic and stimulant laxatives; 5-hydroxytryptamine receptor 4 agonists, such as prucalopride, tegaserod, and velusetrag (none of which are currently available in the United States); linaclotide (Linzess); lubiprostone (Amitiza); and elobixibat (not approved in the United States). This study was a network meta-analysis that performed direct comparisons (where possible) and indirect comparisons of trials of different drugs compared with a common control drug or placebo. This was a methodologically rigorous meta-analysis, with a thorough search of multiple databases, data abstraction by two independent investigators, and careful

assessment of study quality. The authors identified 21 studies with a total of 9,189 patients that compared nine different drugs with placebo. The primary outcomes that defined a clinical response were having at least three more complete spontaneous bowel movements (CSBMs) per week or an increase from baseline of one or more CSBMs per week. Most studies were set in the United States or Europe, were adequately powered, and enrolled patients with a mean age of late 40s or 50s. Most studies defined constipation as less than two or three CSBMs per week. The overall quality of most included studies was judged to be moderate or high.

The results for several drugs (including bisacodyl, tegaserod, linaclotide, and sodium picosulfate) came from a single trial. In direct comparisons with placebo, the drugs roughly doubled the likelihood of having three or more CSBMs per week, with an average increase overall of slightly more than one CSBM per week. These improvements were statistically significant for bisacodyl,

sodium picosulfate, prucalopride, and velusetrag. Although velusetrag had the largest effect, there was a wide confidence interval around the results from its single study, and it was not significantly better than the other drugs. For the secondary outcome of the increase in the number of any (not only complete) spontaneous bowel movements, bisacodyl was more effective, with an increase of 4.9 spontaneous bowel movements compared with 1.9 to 3.2 for the other drugs.

**Study design:** Meta-analysis (randomized controlled trials)

**Funding source:** Government

**Setting:** Various (meta-analysis)

**Reference:** Nelson AD, Camilleri M, Chirapong-sathorn S, et al. Comparison of efficacy of pharmacological treatments for chronic idiopathic constipation: a systematic review and network meta-analysis. *Gut*. 2017;66(9):1611-1622.

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