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Reporting on IBS

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Reporting on IBS

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Psychological Factors and Quality Of Life

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A Comparative Study of Quality of Life in Irritable Bowel Syndrome and Inflammatory Bowel Disease

Blagden S et al

Abstract no. P0394

Methods

- Purpose
  - Determine the impact of IBS, a functional disorder, and IBD, an organic disorder, on health-related quality of life
- Methods
  - 187 gastroenterology outpatients (IBS: 96, IBD: 91) completed various outcome questionnaires:
    - Measure yourself medical outcome profile (MYMOP) (all patients)
    - IBS-QOL (IBS)
    - IBD-Q (IBD)
    - Simple clinical colitis activity index (IBD–UC)
    - Harvey-Bradshaw Index (IBD-CD)
  - Questionnaires were mapped to determine parallel concepts relating to symptoms and aspects of HRQoL in IBS and IBD and data re-coded to enable comparative analysis

Results

- Overall HRQoL was worse in IBS (mean: IBS=46, IBD=67, *P*<.001), as was emotional and social HRQoL
- Bowel function was similar, with certain GI symptoms more prevalent in IBD
- The most bothersome symptoms and the activities most affected by the two conditions were reported similarly
- Patients with IBS were significantly more likely to report psychosocial problems such as embarrassment, depression, lack of sympathy from others and diet affected by bowel problems
- Patients with IBD were significantly more likely to report physical symptoms such as incontinence, urgency, bloating and difficulty sleeping due to bowel problems

Conclusions

- HRQoL is significantly worse in IBS, with social and emotional reductions accounting for the difference
- Despite this, bowel function is equivalent, or slightly worse in IBD.
- The mechanisms by which IBS and IBD affect HRQoL differ, with HRQoL impaired in IBS via unidentified emotional and social pathways
- This is in contrast to IBD, where physical symptoms of disease appear to be more directly responsible for HRQoL impairments

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Diagnosis

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A Positive Diagnosis Versus a Diagnosis of Exclusion in Irritable Bowel Syndrome in Primary Care: A Randomised, Non-inferiority Trial. Safety Aspects.

Engsbro AL et al

Abstract no. PO396

Methods

- Background
  - Guidelines recommend a positive symptom-based diagnosis in IBS
  - No randomized study has compared a positive diagnosis to the traditional diagnosis of exclusion
- Methods
  - Patients aged 18-50 years presenting in primary care with GI symptoms consistent with IBS were referred for enrollment at 2 sites
  - Patients randomized to 2 groups:
    - *Diagnosis of exclusion:* Full blood count (FBC), CRP, liver enzymes, calcium, TSH, celiac serology (tTG), lactase gene test, faecal samples for intestinal parasites and sigmoidoscopy with biopsies
    - *Positive diagnosis:* FBC, CRP.
  - Thereafter, patients were returned to their GP and any additional testing or treatment was done at his/her discretion
  - Patients were followed for one year

Results

- In group A, 89% had an initial diagnosis of IBS, and 10% had an organic diagnosis; lactose intolerance (10), rectal adenoma (1), benign sigmoid polyp (1) and giardiasis (1).
- In group B, 99% were diagnosed with IBS; one had anemia but further investigations did not reveal GI pathology
- One year follow up was completed by 79%; 4% had a final organic diagnosis: LI 7, RA 1, parasitic infection (PI) 1
  - In 2 cases, an initial IBS diagnosis was changed to an organic diagnosis
  - In 5 cases, an initial organic diagnosis was changed to IBS due to lack of treatment effect:
- No cases of inflammatory bowel disease or colorectal cancer were found

Conclusions

- A positive diagnosis did not compromise the patient's safety by means of missing serious organic differential diagnoses
- This may potentially simplify the diagnostic process for a large number of patients in primary care

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Proving Intestinal Overgrowth by Quantitative PCR in Patients With Irritable Bowel Syndrome

Pyleris E et al

Abstract no. PO399

Methods

- Purpose
  - Evaluate molecular techniques to determine SIBO in IBS
- Methods
  - Duodenal aspirates were collected after upper GI tract endoscopy from 254 subjects
  - Fluid was aspirated from the third portion of the duodenum and quantitatively cultured under aerobic conditions. Subjects with IBS defined by Rome II criteria were identified
  - SIBO was defined as greater than 103 cfu/ml based on culture
  - Quantitative PCR was performed for the detection of *Escherichia coli* and *Klebsiella pneumonia* in the same samples
  - Results were compared between IBS, controls and non-IBS subjects.

Results

	SIBO-negative (Mean ± SE log_{10} qPCR)	SIBO-positive (Mean ± SE log_{10} qPCR)	*P*
E coli	1.42 ± 0.14	2.89 ± 0.36	<.0001
K pneumoniae	4.99 ±0.07	5.46 ±0.14	.0004

- Levels of both *E coli* and *K pneumoniae* were significantly higher by qPCR among patients with IBS than controls

Conclusions

- This is the first study to demonstrate an over-representation of coliform bacteria in IBS using molecular techniques and supports the role of SIBO in IBS subjects

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Fructose Malabsorption in Irritable Bowel Syndrome (IBS): Results of a Prospective Study

Melchior CA et al

Abstract no. PO534

Methods

- Purpose
  - Determine in IBS patients:
    - Prevalence of fructose malabsorption
    - Characteristics of IBS patients with fructose malabsorption
    - Response to low fructose diet
- Methods
  - 90 IBS patients (IBS-C: 18%, IBS-D: 31%, IBS-M: 51%) according to Rome III criteria were included
  - SIBO excluded by a glucose breath test to avoid a false positive fructose breath test
  - Fructose malabsorption was assessed by a breath test after a 25 g load of fructose (symptoms also monitored during the test)
  - A low fructose diet with the exclusion of any food with a fructose/glucose ratio >1 was then proposed to the patients with fructose malabsorption
  - Symptomatic effect of this regimen was evaluated after 1 month

Results

- Fructose malabsorption observed in 20/90 IBS patients
  - IBS-C: 25%
  - IBS-D: 30%
  - IBS-M: 45%
- Bloating or abdominal discomfort during the test were not more frequent in patients with a positive test compared to patients with a negative test
- The probability for positive test was higher in young (*P*=.031) and male patients (*P*=.029) while IBS characteristics were not discriminant
- Diet was effective on symptoms in 77% of the cases

Conclusions

- 22% of IBS patients had a fructose malabsorption after a 25 g fructose intake
- Patient characteristics had low predictive value to predict malabsorption
- Among patients with fructose malabsorption, an exclusion regimen was effective in a majority of the cases

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Treatment

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Significantly Improved Abdominal Pain (AP) With Linaclotide (LIN) vs Placebo (PBO) in Patients (Pts) With Irritable Bowel Syndrome (IBS) Regardless of Baseline Pain Severity in 2 Phase 3 Trials

Kurtz C et al

Abstract no. P1524

Methods

- Purpose
  - Examine effect of linaclotide on abdominal pain stratified by patient-reported baseline abdominal pain severity
- Methods
  - Data derived from 2 phase 3 clinical trials of linaclotide in IBS-C
  - Patients rated daily abdominal pain at its worst during the previous 24 hours (11-point scale; 0=none, 10=very severe) during baseline and treatment periods
  - Using pooled 12-week ITT data from 2 Phase 3 trials, patients were stratified by mean baseline AP score (<5, ≥5-<7, ≥7)

Results

Baseline AP Group	Baseline Score	Absolute Change (LS mean)			% Change		
		LIN	PBO	*P*	LIN	PBO	*P*
Overall (n=1602)	5.6	1.8	1.1	<.0001	32.2	18.9	<.0001
<5 (n=649)	3.9	1.1	0.7	<.0001	29.0	18.2	<.0001
≥5-<7 (n=577)	5.9	2.1	1.2	<.0001	35.7	19.6	<.0001
≥7 (n=376)	8.0	2.6	1.5	<.0001	32.1	18.7	<.0001

Results

- Linaclotide led to significant absolute and percentage improvement in abdominal pain vs PBO overall and stratified by baseline abdominal pain severity
- Absolute magnitude of improvement in abdominal pain significantly correlated with baseline abdominal pain severity; however, all groups had similar percentage improvement in abdominal pain
- Patient-rated relief of abdominal pain was consistent across baseline severity groups

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Effect of Rifaximin on Small Intestinal Bacterial Overgrowth in Patients With Irritable Bowel Syndrome

Reyes EC et al

Abstract no. P1526

Methods

- Patients enrolled with IBS (Rome III, all subtypes) and symptom of abdominal distension
- Association with bacterial overgrowth determined through hydrogen breath test with oral glucose (increase of 10 ppm $H^{+)}$
- Patients with IBS symptoms and SIBO received rifaximin 400 mg orally every 8 hours for 10 days
- Breath test was repeated at end of treatment

Results

- 50/75 (66.6%) patients were breath test-positive and administered rifaximin
  - IBS-C (32%), IBS-D (26%), IBS-M (12%), IBS-U (30%%)
- 10/16 (70%) with IBS-C normalized breath test
- In patients with IBS-C, normalization of breath test with rifaximin was strongly associated with improvements in abdominal pain, straining, and stool form.

Conclusions

- Rifaximin has been shown to improve overall symptoms of non-IBS-C and bloating[1]
- The effect of normalization of breath tests with rifaximin and IBS symptoms with rifaximin has not been widely examined
- This study suggests that, in patients with IBS-C and abnormal glucose breath tests, normalization with rifaximin is associated with improvement in symptoms

1. Pimentel M et al. *N Engl J Med.* 2011;364:22-32.

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Linaclotide Effect on Straining During Bowel Movements in Patients With Constipation (IBS-C): Post-hoc Analysis of Pooled Data from 2 Phase 3 Trials

Schneier H, et al

Abstract no. P1528

Methods

- Purpose
  - Examine the distribution of severity of straining during spontaneous bowel movements (SBM), responder rates for clinically meaningful change, and correlation of bowel symptoms and abdominal symptoms with constipation severity scores
- Methods
  - Data derived from 2 Phase 3 clinical trials of linaclotide
  - Straining scored for each SBM
  - Patients rated change in straining weekly on 7-point scale
  - A clinically meaningful change was defined as the mean change from baseline straining for all patients reporting a score of “somewhat improved”

Results

		Mean Distribution of Straining Scores for SBMs (%)		
	n	Little, Not at All	Moderate Amount	Great Deal/ Extreme Amount
Pretreatment	1392	14.9	30.8	54.3
Treatment Period				
PBO	761	39.1	33.5	27.4
LIN (290 µg)	787	61.7	23.8	14.5

Conclusions

- IBS-C patients experience significant straining with bowel movements
  - The contribution of straining to IBS-C severity and improvement is unknown
- Linaclotide treatment led to clinically meaningful improvements in straining associated with SBMs that was significantly greater than placebo
- Among multiple symptoms of IBS, improvement in straining was most strongly correlated in overall improvement in overall symptom improvement with linaclotide

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Doxepin is More Effective Than Nortryptyline and Placebo for the Treatment of Diarrhea-predominant IBS: A Randomized, Triple-blind, Placebo-controlled Trial

Ghadir MR et al

Abstract no. P1531

Methods

- Purpose
  - Compare the effect of doxepin and nortriptyline on IBS-D
- Methods
  - Patients with IBS according to Rome III criteria were treated for 2 months (N=75)
  - Patients were randomly assigned to doxepin, nortriptyline or placebo
  - Subjects were assessed clinically 1 and 2 months after treatment.

Results and Conclusions

- Improvements in abdominal pain and bloating in the doxepin group were significantly higher than the nortriptyline or the placebo groups (*P*=.001 and *P*=.012, respectively)
- Improvement in diarrhea in patients on nortriptyline was significantly higher than the other groups (*P*=.018)
- Average improvement of symptoms in the patients after 2 months of treatment in doxepin, nortriptyline and placebo groups, respectively were 2.56, 2 and 0.6 (*P*<.05).

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The Low-FODMAP Diet Improves Gastrointestinal Symptoms in Patients With Irritable Bowel Syndrome: A Prospective Study

de Roest RH et al

Abstract no. P1534

Methods

- Purpose
  - Studies have shown that a low FODMAP diet may be effective for the management of IBS symptoms
- Methods
  - Enrolled patients with IBS
  - Effect of FODMAP diet prospectively evaluated using a symptom questionnaire

Results

- Mean follow-up time was 15.7 months
- Fructose and lactose malabsorption were diagnosed in 75.6% and 37.8% respectively; 13.3% had small intestinal bacterial overgrowth.
- Significant improvements in the following symptoms were observed: abdominal pain, diarrhea, bloating, flatulence, constipation ($p<0.003$ for all symptoms).
- Patients with fructose malabsorption were significantly more likely to improve:
  - Abdominal pain (OR 7.09, *P*=.002)
  - Diarrhea (OR 3.39, *P*=.029)
  - Bloating (OR 8.71, *P*<.001)
  - Flatulence (OR 7.64, *P*<.001)
  - Constipation (OR 3.78 *P*=.032)
- The majority (75.6%) of the patients were adherent to the diet
- Adherence was positively correlated with symptom improvement (*P*<.02)

Conclusions

- This prospective observational study shows that the low FODMAP diet is efficient for improving symptoms in IBS patients in the long term
- The strategy of breath testing and dietary advice provides a good basis for patients to understand and adhere to the diet

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Vibrating Capsule for the Treatment of Chronic Idiopathic Constipation

Ron Y et al

Abstract no. P0964

Methods

- Purpose
  - Evaluate the efficacy of a vibrating capsule in the management of constipation
- Methods
  - Patients (N=12) with IBS-C or chronic idiopathic constipation and pharmacologic treatment failure were enrolled
  - All patients underwent 2-week laxative washout period
  - Patients received 2 capsules/week

Results

- Ten patients completed the study
- Significant increase in the number of spontaneous bowel movement from 2.2 to 3.7 per week (*P*=.0195)
- Number of patients requiring "rescue" laxatives was reduced from 4 in the run-in period to 2 during the study period
- Two patients had minor complaints of abdominal pain during the study period which resolved spontaneously during the study

Conclusions

- A swallowed capsule that vibrates in the colon is safe and it can affect bowel movements in constipated patients and improve their symptoms

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Movicol® (PEG3350 + Electrolytes) or Prucalopride in the Treatment of Chronic Constipation: A Head-to-Head Comparison in a Controlled Environment

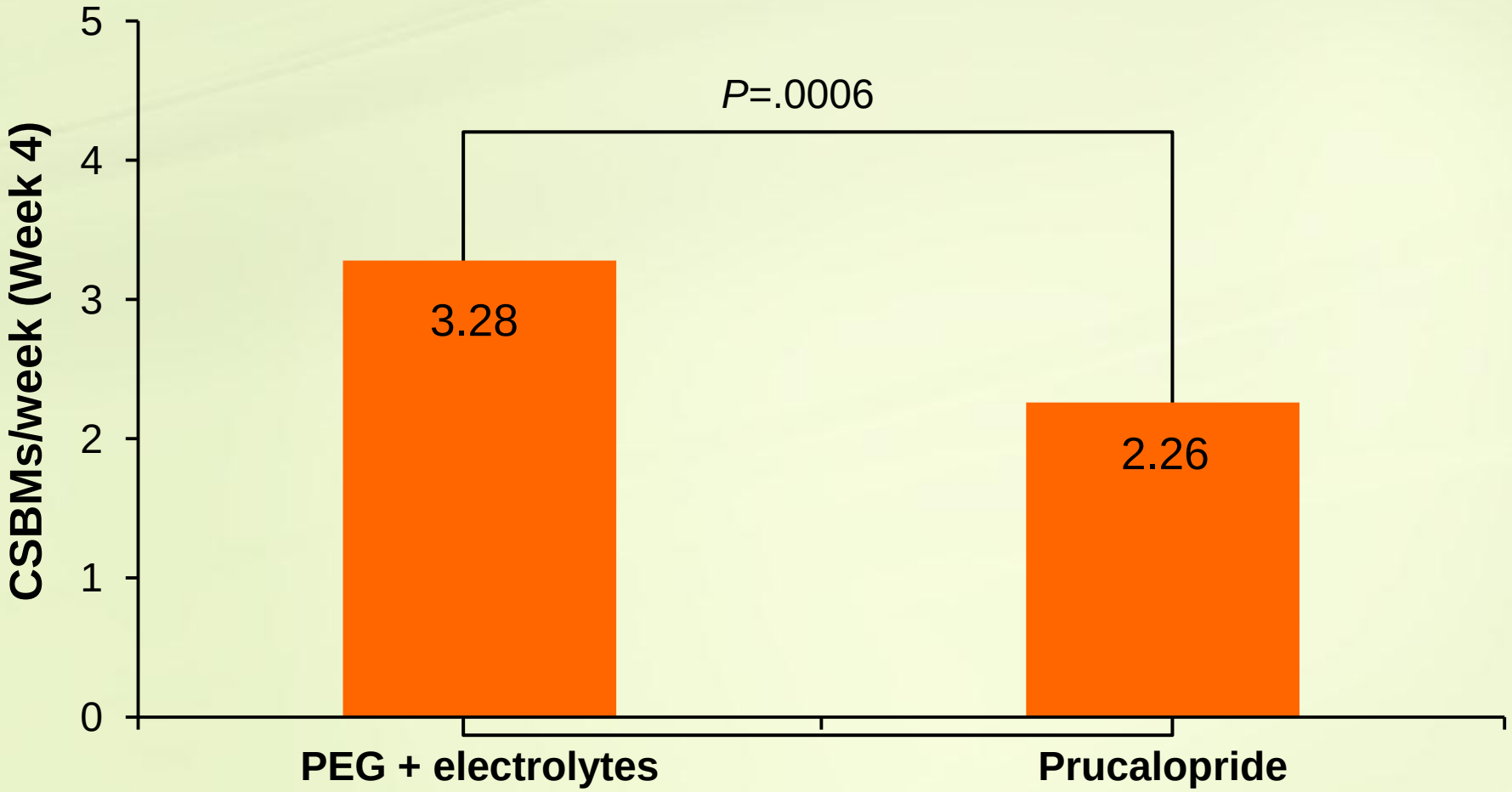
Halphen M et al

Abstract no. OP448

Methods

- Purpose
  - Compare safety and efficacy of PEG + electrolytes vs prucalopride
- Patients
  - Females with constipation for ≥6 months who were resistant to standard laxatives
  - Patients hospitalized in Phase I unit
- Treatments
  - PEG + electrolytes (Movicol) 2 sachets/day + placebo tablets
  - Prucalopride 1 mg tablets twice daily + placebo sachets
- Primary end point
  - Percentage of patients with ≥3 CSBMs during Week 4 of treatment

Results: Primary End Point



Fewer adverse events in PEG arm (202) vs prucalopride (304) and fewer led to discontinuation.

Conclusions

- When compared head to head in a controlled environment, PEG+electrolytes is at least as effective as prucalopride in female patients with constipation who are resistant to treatment with laxatives

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TD-1211 Demonstrates Improvement in Bowel Movement Frequency and Bristol Stool Scores in a Phase 2B Study of Patients With Opioid-induced Constipation

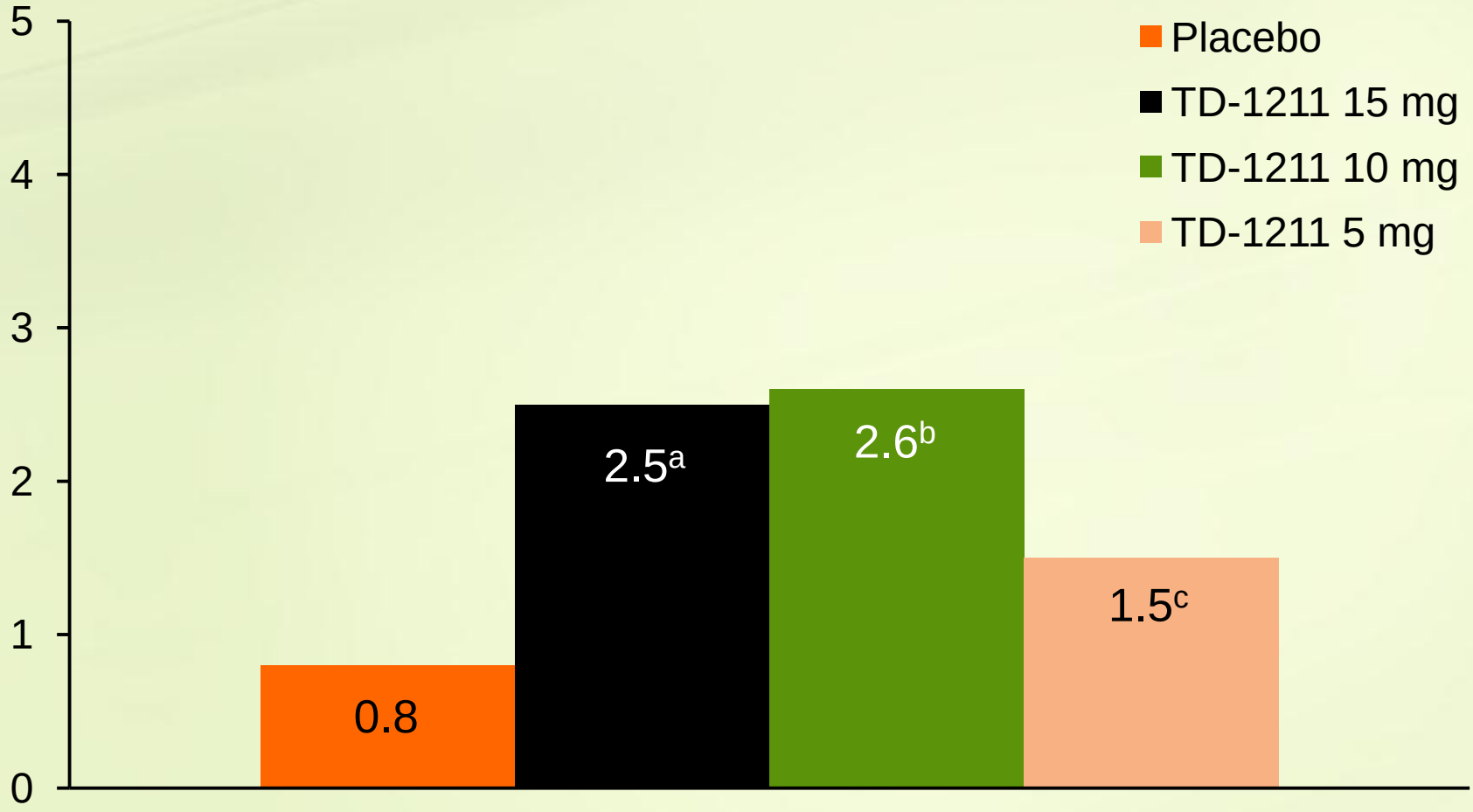
Vickery R et al

Abstract no. OP242B

Methods

- Purpose
  - Evaluate safety and efficacy of 3 oral doses of TD-1211 compared to placebo
- Patients (N=217)
  - Chronic noncancer patients with opioid-induced constipation
- Treatments
  - TD-1211 5 mg (continued at 5 mg or dose escalated to 10 or 15 mg) or placebo for 5 weeks
- Primary end point
  - Change from baseline in weekly average CSBMs over treatment weeks 2 to 5

Results: Increase From Baseline in CSBMs



[a]*P*=.0003; [b]*P*=.001; [c]*P*=.04 vs placebo.

Conclusions

- TD-1211 improved CSBM and SBM frequency in patients with opioid-induced constipation for 5 weeks
- Therapy did not impact analgesia
- Treatment was generally well-tolerated