

# Irritable Bowel Syndrome Working Group

## Presented at the Sixth Annual PRO Consortium Workshop – Silver Spring, MD – April 29-30, 2015



### Background

#### Rationale for Irritable Bowel Syndrome (IBS) Working Group (WG)

- IBS is one of the most commonly diagnosed GI disorders
- IBS lacks a standard and fit for purpose PRO instrument for measuring important patient-experienced signs and symptoms of IBS
- PRO Consortium member representatives and FDA advisors identified IBS as a priority area for the development of a PRO instrument

#### Goal of the IBS WG

- To develop three PRO measures for patient-reported symptoms in IBS with constipation (IBS-C), IBS with diarrhea (IBS-D), and IBS with mixed symptoms (IBS-M) for use in clinical trials as a primary endpoint to establish treatment benefit

#### Targeted Labeling Language

- Product X is indicated in adults for the treatment of symptoms associated with irritable bowel syndrome [with constipation (IBS-C), with diarrhea (IBS-D), or mixed (IBS-M)]
- Product X improved abdominal symptoms (as measured by the abdominal symptom severity subscale) and bowel movement-related symptoms (as measured by an appropriate BM-related symptom subscale).

Note: This indication would be supported by an improvement in both abdominal symptoms and bowel movement-related symptoms

### Milestones

| Milestone  | Expected Date | Completed Date |
|--|---------------|----------------|
| Content Validity Stage   |               |                |
| Vendor selection and contracting   |               | 10/29/2010     |
| Complete background research (literature review and Expert Panel Meeting)  |               | 02/22/2011     |
| Draft Instrument: Complete initial qualitative research and generate items (concept elicitation interviews, item generation, expert panel input, and two rounds of cognitive interviews) |               | 09/09/2011     |
| Submit Qualitative Research Summary Interim Briefing Document to FDA for review and feedback   |               | 09/26/2013     |
| Received comments from FDA   |               | 12/6/2013      |
| Teleconference with FDA  |               | 12/11/2013     |
| Refine initial instrument (final cognitive interviews on demo ePRO device)   |               | 2/21/2014      |
| Complete qualitative research phase; submit briefing package to FDA (final Cognitive Interview Report and updated Briefing Document)   |               | 8/15/2014      |
| Complete documentation of content validity via quantitative evaluation of item functioning   | Q42016        |                |
| Submit exploratory endpoint qualification briefing document to FDA   | 1Q2017        |                |

### Content of Interest

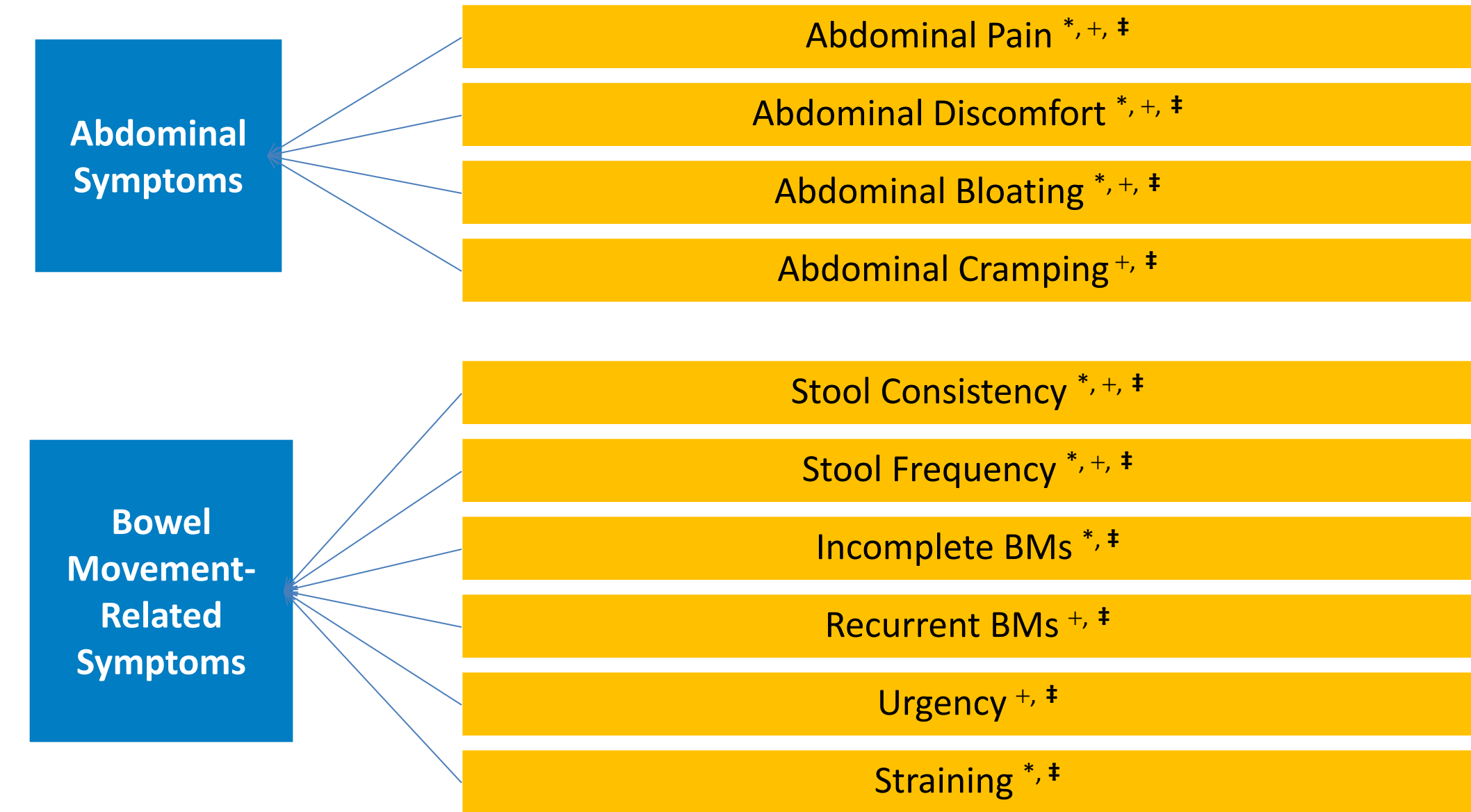
#### Endpoint Model for Treatment of IBS (Example provided for IBS-M)

| Endpoint Hierarchy | Endpoint Concept(s)  | Endpoint Type |
|--------------------|--|---------------|
| Primary            | Overall response (TBD) indicating improvement in IBS-M symptom severity<br><br>•Improvement in abdominal symptoms (abdominal pain, discomfort, bloating, cramping)<br><br>•Improvement in selected BM-related symptoms (stool consistency, stool frequency, incomplete BMs, straining, recurrent BMs, urgency) | PRO           |

#### Target Population

- US-based adult patients (18 years and older; males and non-pregnant females)
- Diagnosis of IBS of three main subtypes based on Rome III criteria (i.e., IBS-C, IBS-M, and IBS-D)
- Patients without known or suspected organic disorder (e.g., Crohn’s disease) that would better explain symptoms
- Patients not concomitantly using medications known to affect GI mobility, constipation, or other IBS symptoms

#### Hypothesized Conceptual Framework



Bowel movement-related symptoms pertain to the following subtypes:

\* IBS-C; + IBS-D; ‡ IBS-M

### Updates

- Conceptual framework confirmed by qualitative research
- Final Qualitative Research Summary Briefing Document for three PRO instruments (IBS-C, IBS-D, and IBS-M) submitted to FDA on August 15, 2014
- Received FDA agreement to advance instruments to quantitative evaluation on December 4, 2014
- Quantitative pilot study proposal finalized and contracts executed

### Working Group Plans

#### Next Steps

- Develop preliminary scoring algorithm and protocol for quantitative evaluation of scale and item functioning
- Quantitative pilot study protocol to be submitted to FDA for review – 3Q2015

#### Dissemination Plan

- Qualitative research phase manuscript under development for submission to *Value in Health*

### Topics for Discussion

#### Unique Issues for the Working Group and Their Resolution

- Continued evaluation during upcoming quantitative pilot study needed to consider potential item reduction around abdominal pain and discomfort
- Continued evaluation of how the Bristol Stool Form Scale (BSFS) may (or may not) translate across languages and cultures
- Ensure representation of patients who are 18 to 21 years of age in quantitative pilot study
- Evaluate whether there are different symptom experiences by gender, age and race

#### Lessons learned

- Important to consider and develop hypothesized preliminary scoring algorithm prior to quantitative phase

### Working Group Participants

| Company/Organization   | Name  |
|--|---|
| Actavis, Inc., an affiliate of Forest Research Institute, Inc. | Robyn T. Carson, MPH (Co-Chair); Steven J. Shiff, MD; Jessica Buono     |
| Ironwood Pharmaceuticals, Inc.                                 | David Reasner, PhD; Jennifer Hanlon, MPH; Joe Lavins, MD                |
| Takeda Pharmaceuticals International                           | Gianna Rigoni, PharmD (Co-Chair); Maria Claudia Perez; Charles Baum, MD |

| Nonmember Participants | Affiliation  |
|------------------------|--|
| Nancy Norton, BS       | International Foundation for Functional Gastrointestinal Disorders (IFFGD) |

| Expert Panel Members           | Affiliation  |
|--------------------------------|--|
| Lin Chang, MD                  | University of California, Los Angeles                              |
| William D. Chey, MD            | University of Michigan   |
| Douglas A. Drossman, MD        | University of North Carolina, Chapel Hill                          |
| Mark P. Jensen, PhD            | University of Washington   |
| Jeffrey M. Lackner, PsyD       | University at Buffalo, SUNY  |
| Brian E. Lacy, MD, PhD         | Dartmouth-Hitchcock Medical Center                                 |
| Brennan M.R. Spiegel, MD, MSHS | University of California, Los Angeles                              |
| Contract Research Organization | Research Team  |
| RTI Health Solutions           | Sheri Fehnel, PhD; Claire Ervin, MPH; Lori McLeod, PhD; Diana Goss |