



Perspectives on the PUNCH™ CD Trial of a Microbiota-based Drug Targeted at Recurrent *Clostridium difficile* Infection

Kathy Tracey, LPN, CCRC, *Chevy Chase Clinical Research, Chevy Chase, MD*

Mary Kay Sobcinski, RN, MHA, *Rebiotix Inc., Roseville, MN*



The Society of Gastroenterology Nurses and Associates, Inc. is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's (ANCC) Commission on Accreditation.

Disclosure: Relationships with commercial interest organizations whose products are related to program content include: Mary Kay Sobcinski is an employee of Rebiotix® Inc.

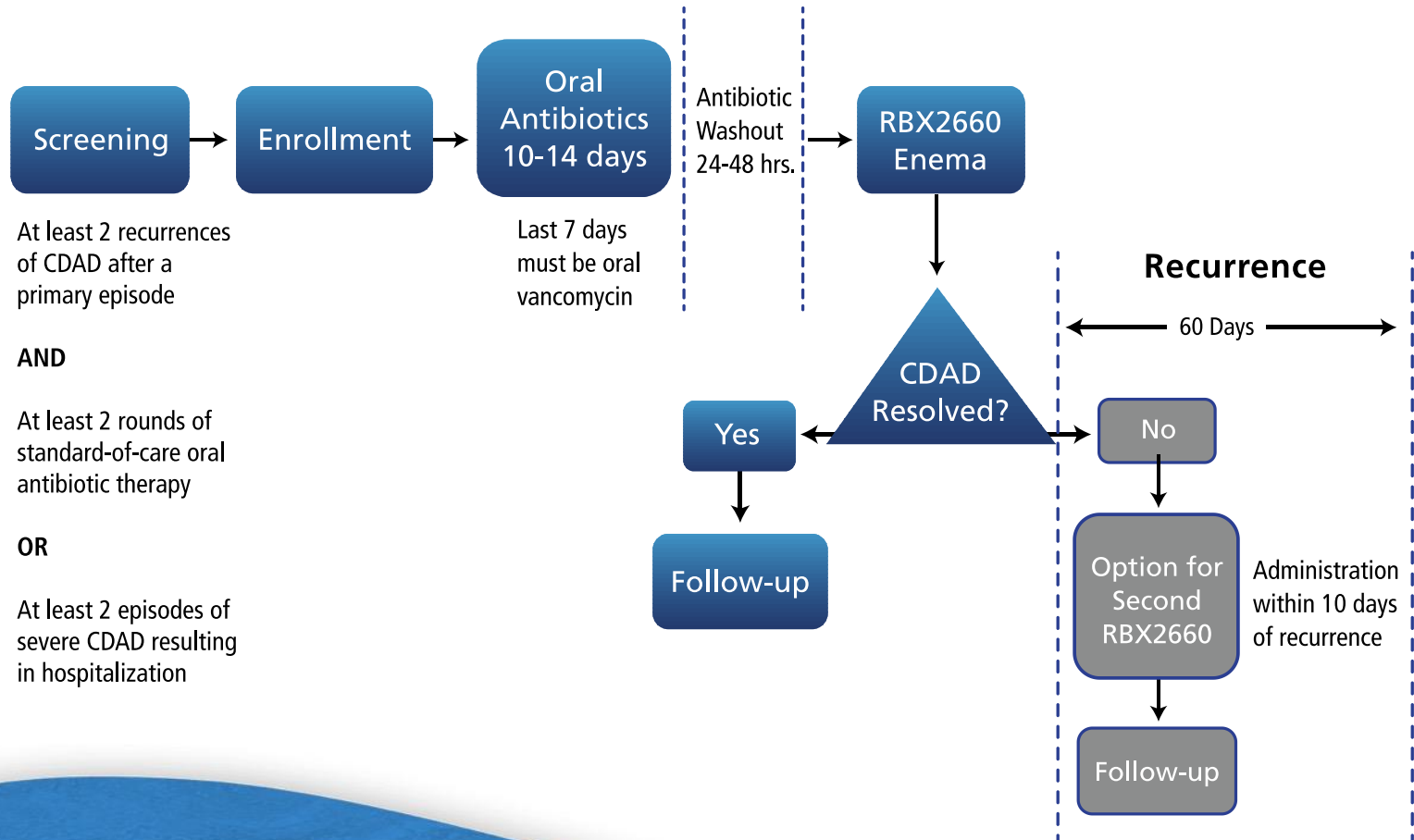
PUNCH™ CD Study

- First multi-center study of a next-generation fecal microbiota transplant (FMT) product
- Phase 2 open-label study of RBX2660 (microbiota suspension) for recurrent *C. diff.* infection
- Multicenter, prospective, study using a single protocol under an FDA Investigational New Drug application
- Objective: Evaluate the safety and effectiveness of RBX2660

RBX2660 Compared with FMT

- Designed to mimic FMT but provides a consistent, quality-controlled product
- Manufactured using standardized, quality-controlled processes
- Donors are rigorously screened (blood and stool)
- RBX2660 contains a minimum guaranteed quantity of live intestinal microbes
- Supplied in a ready-to-use enema format
- Saves patients the considerable time, trouble, testing and cost of finding their own donor

PUNCH™ CD Study Design



About the PUNCH™ CD Protocol

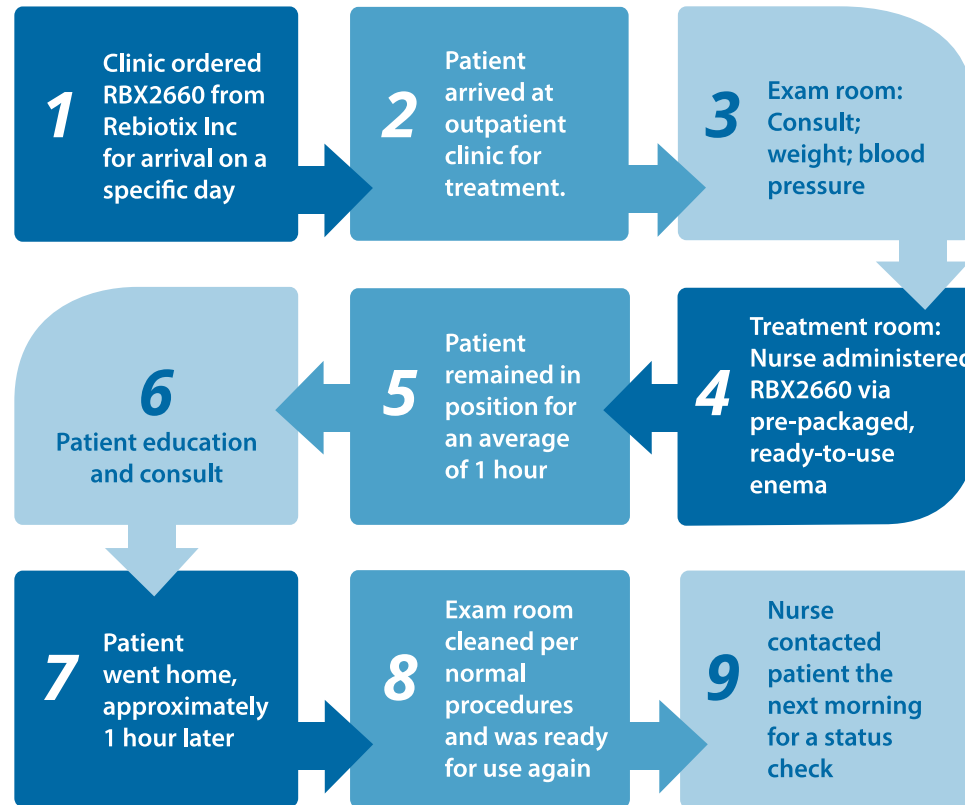
- First dose: Administered within 24-48 hours of completion of a 7-day course of standardized oral vancomycin
- Second dose: Permitted if CDI reoccurred ≤ 8 weeks; administered to patients with active CDI symptoms
- Bowel prep not needed
- No sedation, special room or equipment needed for enema delivery
- Administered by a healthcare professional (doesn't need to be a physician)

Chevy Chase Clinical Research Experience

- Enrolled 8 of the 40 patients in the study
- Six patients were treated with RBX2660
 - Mean age 71.5 years; range: 26-89 years
 - Female: 83.3%
 - White: 100%
 - Multiple comorbidities
- Efficacy at 8 weeks: 80.0% (4/5)



PUNCH™ CD Study Logistics



Patient Recruitment

- FMT was an unfamiliar therapy when we first started recruiting in August 2013
- Surprisingly, almost all of the patients who contacted us had some basic knowledge about FMT
- Highly educated patient population
- Social media was an effective recruitment tool
- Great support from our referral network
- No one refused screening after learning about the therapy and study



Patient Education

- Advance diet slowly
- Disinfect home with a 10% bleach solution; allow to air dry
- Vigorously wash hands with soap and water (not sanitizers)
- Two doses may be needed



Administration

- RBX2660 (microbiota suspension) supplied as a ready-to-use enema
- Easy to administer and comfortable for the patient
 - Administered by a nurse
 - No bowel prep or sedation required
- Patients remained in position for approximately 1 hour
- Minimal leakage; none in most patients
- Did not cause a bowel movement
- Patients could have family present

Follow-up

- In-office follow-up visits at 7, 30, and 60 days
- Phone call follow-up at 2, 3, 5, 6, and 7 weeks and at 3 and 6 months
- We did much more; encouraged patients to call, e-mail or text at any time if they had a question or concern
- There is no such thing as too much communication for this condition
- No patients lost-to-follow-up
- Patients anecdotally reported feeling much better, “calmer,” immediately or very shortly after administration

Safety

- Very aggressive adverse event (AE) collection through a detailed subject diary and phone calls
- 7 AEs
 - Mostly mild; GI or orthopedic
 - Lasted only 1-2 days
 - 1 case of food poisoning
- 4 serious AEs
 - 1 for recurrent *C. diff.* hospitalization after dose 2
 - 3 in one patient: UTI → pelvic fracture → respiratory distress

Results

- Chevy Chase Clinical Research enrolled 8 of the 40 patients in the study
- Six of 8 patients were treated with RBX2660; 5 patients had efficacy data at 8 weeks
- Overall efficacy was 80%
- We were very excited to participate in this study and to provide a new therapy to our patients
- Some of our patients are still in contact with us even though the study has been completed

Case Study

- 84-year-old white male; BMI 21 kg/m²
- Medical history
 - Anemia (Hb 8.2 g/dL)
 - Pacemaker
 - Segmental colon resection
 - Kidney failure
 - Depression
- Living in a long-term care facility
 - Mild-to-moderately active when free of recurrent *C. diff.*

For illustrative purposes only. Not designed to represent overall study results.

Case Study

- Received 2 doses of RBX2660 7 days apart
 - Symptoms returned 4 days after 1st dose
 - Complete resolution of *C. diff.* symptoms within 7 days after 2nd dose
- Quality of life scores (SF-36) improved over time
- Adverse events
 - Dose 1: Vomiting with dehydration when symptoms reoccurred
 - Dose 2: Constipation for 1 day at 30 days
- At 30-day visit, reported that he had gone on a 2-mile walk
- Continues contact with study coordinator; remains free of *C. diff.* 18 months after 2nd dose

For illustrative purposes only. Not designed to represent overall study results.

Conclusion

- The PUNCH™ CD study to assess RBX2660 for recurrent *C. diff.* infection provided patient access to a new therapy with minimal disruption to clinic operation
- Overall, our patients had very good success (4/5 had resolution of recurrent *C. diff.*)
- Study was interesting and well-supported by the sponsor
- We're participating in the next study, PUNCH CD 2

The logo for the PUNCH CD study, featuring the word "PUNCH" in blue and "CD" in a lighter blue, with a cluster of five colored dots (blue, green, yellow, blue, green) above the "CD".

The logo for the PUNCH CD 2 study, featuring the word "PUNCH" in blue and "CD 2" in a lighter blue, with a cluster of five colored dots (blue, green, yellow, blue, green) above the "CD 2".

Thank you!

Kathy W. Tracey, LPN, CRC
Manager of Clinical Research
Chevy Chase Clinical Research
5550 Friendship Blvd. Suite T-90
Chevy Chase, MD 20815
Kathy.Tracey@capitaldigestivecare.com