March 22, 2022

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To Whom it May Concern:

Following please find the Statistical Analysis Plan (SAP) for the study titled “Randomized, Double-Blind, Sham-Controlled, Prospective, Multi-Center Pilot Study to Evaluate the Safety and Effectiveness of Duodenal Mucosal Resurfacing Using the Revita™ System in the Treatment of Type 2 Diabetes”, version date 19May2020, NCT03653091.

Sincerely,

DocuSigned by:
Sarah Hackett
FF259F44539D417...

Sarah Hackett
Sr. Director of Clinical Operations
Fractyl Health

Sponsor	Fractyl Laboratories, Inc.
Protocol Title:	Randomized, Double-Blind, Sham-Controlled, Prospective, Multi-Center Pilot Study to Evaluate the Safety and Effectiveness of Duodenal Mucosal Resurfacing Using the Revita™ System in the Treatment of Type 2 Diabetes
Protocol Number:	C-40000
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Approvals

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Document History

Not applicable.

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1. Overview

This statistical analysis plan (SAP) describes the planned analysis and reporting for Fractyl Laboratories Inc.'s protocol number C-40000 (Randomized, Double-Blind, Sham-Controlled, Prospective, Multi-Center Pilot Study to Evaluate the Safety and Effectiveness of Duodenal Mucosal Resurfacing Using the Revita™ System in the Treatment of Type 2 Diabetes), dated 29-Jan-2019 Version 2.0. Reference materials for this statistical plan include the protocol and the accompanying sample data collection documents. Operational aspects related to collection and timing of planned clinical assessments are not repeated in this SAP unless relevant to the planned analysis.

The structure and content of this SAP provides sufficient detail to meet the requirements identified by the Food and Drug Administration (FDA), European Medicines Agency (EMA), and International Conference on Harmonization (ICH) of Technical Requirements for Registration of Pharmaceuticals for Human Use: Guidance on Statistical Principles in Clinical Trials[1]. All work planned and reported for this SAP will follow internationally accepted guidelines, published by the American Statistical Association[2] and the Royal Statistical Society[3], for statistical practice.

The planned analyses identified in this SAP may be included in clinical study reports (CSRs), regulatory submissions, or future manuscripts. Also, post-hoc exploratory analyses not necessarily identified in this SAP may be performed to further examine study data. Any post-hoc or unplanned, exploratory analysis performed will be documented in a supplemental SAP (drafted after lock) and clearly identified as such in the final CSR.

The statistical plan described hereafter is an *a priori* plan. It will be submitted to file prior to any unblinded inferential or descriptive analysis of data pertaining to Fractyl's study C-40000.

2. Study Objectives and Endpoints

2.1. Study Objectives

The study objectives are:

- To assess the safety of the Fractyl Revita™ System for the treatment of subjects with type 2 diabetes (T2D) suboptimally controlled on 2 to 3 oral antidiabetic medications (OADs)
- To assess the effect of Duodenal Mucosal Resurfacing (DMR) versus Sham procedures on glycemic endpoints 24 weeks after the procedure
- To assess the effect of DMR on glycemic endpoints 48 weeks after the procedure for durability of effect determination

2.2. Study Endpoints

2.2.1. Safety Endpoints

The safety endpoints of this study include the following:

- Event number and incidence of reported adverse events (AEs) and serious adverse events (SAEs), as well as device- and procedure-relatedness of AEs and SAEs, unanticipated adverse device effects (UADEs), and withdrawals due to AEs

Other safety endpoints include:

- Assessments including vital signs and weight, physical examinations, laboratory values, and electrocardiograms (ECGs)
- Duodenal biopsy samples for histological evidence of mucosal regrowth, inflammation and fibrosis
- Magnetic resonance imaging enterography (MRE) to assess thermal injury to the duodenum

2.2.2. Efficacy Endpoints

2.2.2.1. Primary Efficacy Endpoint

The primary efficacy endpoint of this study is HbA1c change from baseline to Week 24, DMR vs Sham.

2.2.2.2. Secondary Efficacy Endpoints

The secondary efficacy endpoints of this study include the following:

(i) HbA1c change from baseline to Week 24 by visit over time, DMR vs. Sham
(ii) Fasting plasma glucose (FPG) change from baseline to Week 24, DMR vs. Sham
(iii) FPG change from baseline to Week 24 by visit over time, DMR vs. Sham
(iv) Proportion of DMR-treated subjects with an HbA1c improvement from baseline at 24 weeks that maintain an HbA1c improvement at 48 weeks
(v) Urine albumin-to-creatinine Ratio (UACR) change from baseline to Week 24, DMR vs. Sham
(vi) Alanine aminotransferase (ALT) and Aspartate aminotransferase (AST) change from baseline to Week 24, DMR vs. Sham

2.2.2.3. Additional Efficacy Endpoint

Additional efficacy endpoints of this study include the following:

(i) HbA1c change from baseline to Week 48 by visit over time, DMR only
(ii) FPG change from baseline to Week 48 by visit over time, DMR only
(iii) UACR change from baseline to Week 48 by visit over time, DMR only
(iv) ALT and AST change from baseline to Week 48 by visit over time, DMR only
(v) HbA1c change from Week 24 (pre-DMR) in Sham cross-over group to Week 48
(vi) FPG change from Week 24 (pre-DMR) in Sham cross-over group to Week 48
(vii) Short Form (36) Health Survey Version 2 (SF-36) change from baseline at Week 24 (pre-assessments and endoscopy) vs Sham
(viii) PROMIS® (Patient-Reported Outcomes Measurement Information System) change from baseline at Week 24 (pre-assessments and endoscopy) vs Sham

3. Overall Study Design and Plan

The United States (US) pilot study is a prospective, randomized, double-blind (subject and endocrinologist), 24-week, Sham-controlled, multi-center, pilot trial in a maximum of 18 subjects with T2D suboptimally controlled on 2 to 3 OADs, one of which must be metformin.

Randomization will be 2:1 DMR treatment to Sham procedure. Total post-randomization study duration will be 48 weeks.

All eligible subjects will participate in a 4-week antidiabetic medication Run-In Period before randomization to the index procedure to assess stability of blood glucose control in conjunction with medication compliance and lifestyle (diet, exercise) counseling. OADs will be held constant from the start of the Run-In Period through Week 24, with protocol pre-specified treatment algorithms for hypoglycemia and hyperglycemia.

Following the medication Run-In Period, subjects will be scheduled for an endoscopic evaluation consisting of an assessment of the esophagus, stomach, duodenum and associated structures to ensure there are no conditions that would exclude the subject from having the index procedure (DMR or Sham).

Following confirmation of subject eligibility during the endoscopic evaluation, subjects will be randomized to receive the DMR or Sham procedure. Post-procedure, the subjects will be required to return for follow-up visits as per the visit schedule.

Both treatment groups will be followed up for a total of 48 weeks from the index procedure and will continue to receive lifestyle counseling through the end of the study. At the Week 24 visit, subjects will be unblinded and subjects randomized to the DMR treatment group will have an ablation site biopsy and will be followed for an additional 24 weeks. At the Week 24 visit, the Sham treatment group will be provided the opportunity to cross over to receive the DMR treatment. Sham subjects will then repeat all study visits from the DMR procedure through 24 weeks post crossover. Sham subjects that choose not to crossover and have the DMR treatment will be withdrawn from the study.

Subject follow up visits conducted by telephone will occur at 7 and 14 days and at Weeks 8, 15, 21, 30 and 42 post procedure. Subject follow up visits conducted in clinic will occur at Weeks 4, 12, 18, 24, 36 and 48 post procedure.

3.1. Overall Design

3.2. Sample Size and Power

The total study enrollment is planned to reach up to 18 subjects (12 DMR, 6 Sham). Sample size determination is based on the nature of this pilot study and not statistical considerations, therefore, this study is not statistically powered to demonstrate a statistically significant difference in effectiveness parameters between the treatment groups.

3.3. Study Population

The protocol is written such that a maximum of 18 subjects at up to 6 study sites in the US will be enrolled into this clinical study. The clinical study population will be comprised of males and females, 28 - 65 years of age.

3.4. Treatments Administered

The Fractyl Revita™ System consists of two main components: the Revita™ Catheter and a Console.

The Revita™ Catheter is a sterile, single use device that is delivered transorally over a guidewire into the duodenum using standard techniques, by a therapeutic endoscopist, and performs two

functions: 1) injects saline into the submucosa of the duodenum to create a thermal barrier while also lifting the mucosa with saline to create a more uniform surface for ablation; and 2) ablates the mucosal surface using heated water recirculating inside a balloon. The Revita™ catheter is placed in the proximal duodenum distal to the papilla.

The console is a reusable electro-mechanical piece of equipment and provides precisely controlled functionality to the catheter to perform the submucosal lift and hot fluid ablation steps of the procedure. The console is controlled by the user through the use of a software user interface monitor. Prior to use, the console is fitted with a sterile single use line set that serves as the pathway for the saline to be placed into the duodenal submucosa during the procedure.

The DMR procedure (mucosal lift and mucosal ablation) using the Revita™ System utilizes an over the wire endoscopic approach to ablate the duodenum. Using the console interface, the balloon is inflated and vacuum delivered to draw the intestinal mucosal tissue into the ports located on the balloon. The actuator on the handle is moved to advance the needle into the submucosal space within each of the ports. The console delivers saline colored with methylene blue or similar dye into the submucosa through the needles within the lumens of the catheter resulting in complete circumferential lift of the mucosa. Once complete, the ablation cycle is started and hot water is circulated into the balloon to complete an ablation of the previously expanded tissue. The balloon is deflated and the catheter repositioned distally to the next segment to be treated. The process of expansion, ablation and repositioning is repeated until the needed length is treated. A full DMR procedure is defined as 5 complete ablations representing 10 axial centimeters of circumferentially ablated tissue in the duodenum. The Revita™ catheter and endoscope are then removed.

The Sham procedure will consist of placing the Revita™ Catheter as described above into the duodenum for a minimum of 30 minutes and then removing it from the patient.

3.5. Method of Assigning Subjects to Treatment Groups

Following confirmation of subject eligibility during the endoscopic evaluation, the subject will be randomized using electronic assignment via a web-based system at a 2:1 ratio to DMR procedure or Sham procedure.

3.6. Blinding and Unblinding

In this study, the endocrinologist and the associated site personnel and the subjects will be blinded to the treatment through the Week 24 follow-up visit, as will the Sponsor study team (except the proctors and technicians who will be present at the procedure). While the endoscopist will not be blinded to individual treatments, he or she will be blinded to cohort level data and will not be responsible for the diabetes management of the subjects. At the Week 24 Visit, the subjects, the endocrinologist and the blinded study site staff, as well as the blinded Sponsor study team will be unblinded.

Subjects who received the Sham treatment will be offered the option to crossover and undergo the DMR procedure at the Week 24 Visit post randomization.

No study staff, associated hospital personnel, or study subjects will be informed of the randomization assignments until the scheduled time of unblinding at Week 24, and care will be taken to minimize the risk of inadvertent premature unblinding. The unblinding occurs after all assessments have been conducted at the Week 24 Visit.

3.7. Schedule of Events

A detailed schedule of events for the DMR cases is provided in

Table 1. A detailed schedule of events for the Sham cases is provided in

Table 1Table 2.

Table 1: Schedule of Events—DMR Cases

Visit #	Visit	*Visit Window / Intervention*	Informed Consent	History & Full PE	Body Weight & Targeted PE	Pregnancy Test (if applicable)	Blood Analysis	H.pylori Test	ECG	Renal Function	MRE	Endoscopic Evaluation	Subject Randomization & Enrollment	DMR Procedure	Biopsy	Blinding Assessment	Lifestyle Counseling	SF-36 Questionnaire	PROMIS® Patient Reported Outcome	Self-Monitoring Blood Glucose/ Glycemia Diary	Adverse Events	Medication Use®
1	**Screening (Pre Run-In)**		X	X[&]			X	X	X								X			*	X	X
2	**Baseline (Post Run-In)**	*Visit to occur 4-6 weeks after Screening*			X[&]	X	X			X	X						X	X	X	X	X	X[@]
3	**Procedure (DMR)**	*Max is 21 days from Baseline Visit*										X	X	X			¥				X	X[@]
4	**Day 7 Call**	*+/- 2 days*															**			X	X	X[@]
5	**Day 14 Call**	*+/- 2 days*															**			X	X	X[@]
6	**Week 4 (28 Day)**	*+/- 7 days*			X		X									X	X			X	X	X
7	**Week 8 Call (56 Day)**	*+/- 2 days*															X			X	X	X

8	**Week 12 (84 Day)**	*+/- 7 days*			X		X			X	X					X	X	X	X	X	X
9	**Week 15 Call (105 Day)**	*+/- 2 days*															X			X	X	X
10	**Week 18 (126 Day)**	*+/- 7 days*			X		X										X			X	X	X
11	**Week 21 Call (147 Day)**	*+/- 2 days*															X			X	X	X
12	**Week 24 (168 Day)**	*+/- 7 days*			X		X		X	X		X#			X		X	X	X	X	X	X
13	**Week 30 Call (210 Day)**	*+/- 2days*															X			X	X	X
14	**Week 36 (252 Day)**	*+ 7 days*			X		X										X			X	X	X
15	**Week 42 Call (294 Day)**	*+/- 2 days*															X			X	X	X
16	**Week 48 (336**	*+ 7 days*			X		X			X								X	X	X	X	X

	Day)																				

& for the purpose of eligibility, Mean of 3 separate blood pressure measurements >180 mmHg (systolic) or >100 mmHg (diastolic), for other Blood Pressure assessments it will be measured in a sitting position in duplicate (in same arm) after 15 min of rest

*Provide diary & glucose meter to the subject

@Subjects using SU will be asked to adjust their SU intake based on section 5.3.1

#A follow up endoscopic evaluation to visually examine the treatment site and adjacent tissues will be conducted after unblinding and within 7 days of visit 12 / week 24

¥The 14-day post procedure diet reviewed with the subject

**Lifestyle Counseling discussions during phone calls at Day 7 & 14 are conducted by the study coordinator in the form of reminders for the subjects and do not need to be conducted by a member of the nutrition staff

Note: Subjects randomized to DMR who do not receive any ablations during the DMR procedure will be followed for safety through the Week 4 visit and then discontinued from the study.

Table 2: Schedule of Events—Sham Cases

Visit #	Visit	*Visit Window / Intervention*	Informed Consent	History & Full PE	Body Weight & Targeted PE	Pregnancy Test (if applicable)	Blood Analysis	H.pylori Test	ECG	Renal Function	MRE	Endoscopic Evaluation	Subject Randomization & Enrollment	Sham / Crossover DMR Procedure	Biopsy	Blinding Assessment	Lifestyle Counseling	SF-36 Quality of Life Questionnaire	PROMIS® Patient Reported Outcome	Self-Monitoring Blood Glucose/ Glycemia Diary	Adverse Events	Medication Use®
1	Screening (Pre Run-In)		X	X&			X	X	X								X			*	X	X
2	Baseline (Post Run-In)	*Visit to occur 4-6 weeks after Screeni*			X&	X	X			X	X						X	X	X	X	X	X@

Visit #	Visit	Visit Window / Intervention	Informed Consent	History & Full PE	Body Weight & Targeted PE	Pregnancy Test (if applicable)	Blood Analysis	H.pylori Test	ECG	Renal Function	MRE	Endoscopic Evaluation	Subject Randomization & Enrollment	Sham / Crossover DMR Procedure	Biopsy	Blinding Assessment	Lifestyle Counseling	SF-36 Quality of Life Questionnaire	PROMIS® Patient Reported Outcome	Self-Monitoring Blood Glucose/ Glycemia Diary	Adverse Events	Medication Use®
		ng																				
3	Procedure (DMR)	Max is 21 days from Baseline Visit										X	X	X			¥				X	X@
4	Day 7 Call	+/- 2 days															**			X	X	X@
5	14 Day Call	+/- 2 days															**			X	X	X@
6	Week 4 (28 Day)	+/- 7 days			X		X									X	X			X	X	X
7	Week 8 Call (56 Day)	+/- 2 days															X			X	X	X
8	Week 12 (84 Day)	+/- 7 days			X		X			X	X					X	X	X	X	X	X	X
9	Week 15 Call (105 Day)	+/- 2 days															X			X	X	X
10	Week	+/- 7			X		X										X			X	X	X

Visit #	Visit	*Visit Window / Intervention*	Informed Consent	History & Full PE	Body Weight & Targeted PE	Pregnancy Test (if applicable)	Blood Analysis	H.pylori Test	ECG	Renal Function	MRE	Endoscopic Evaluation	Subject Randomization & Enrollment	Sham / Crossover DMR Procedure	Biopsy	Blinding Assessment	Lifestyle Counseling	SF-36 Quality of Life Questionnaire	PROMIS® Patient Reported Outcome	Self-Monitoring Blood Glucose/ Glycemia Diary	Adverse Events	Medication Use®
	18 (126 Day)	*days*																				
11	**Week 21 Call (147 Day)**	*+/- 2 days*															X			X	X	X
12	**Week 24 (168 Day)**	*+/- 7 days*			X		X		X	X							X	X	X	X	X	X
3C	**Crossover to DMR**	*Within 21 days from Week 24*										X		X			¥				X	X
4C	**Crossover Day 7 Call**	*+/- 2 days*															**			X	X	X
5C	**Crossover Day 14 Call**	*+/- 2 days*															**			X	X	X
6C	**Crossover Week 4 (28 Day)**	*+/- 7 days*			X		X										X			X	X	X

Visit #	Visit	*Visit Window / Intervention*	Informed Consent	History & Full PE	Body Weight & Targeted PE	Pregnancy Test (if applicable)	Blood Analysis	H.pylori Test	ECG	Renal Function	MRE	Endoscopic Evaluation	Subject Randomization & Enrollment	Sham / Crossover DMR Procedure	Biopsy	Blinding Assessment	Lifestyle Counseling	SF-36 Quality of Life Questionnaire	PROMIS® Patient Reported Outcome	Self-Monitoring Blood Glucose/ Glycemia Diary	Adverse Events	Medication Use®
7C	Crossover Week 8 Call (56 Day)	*+/- 2 days*															X			X	X	X
8C	Crossover Week 12 (84 Day)	*+/- 7 days*			X		X			X	X						X	X	X	X	X	X
9C	Crossover Week 15 Call (105 Day)	*+/- 2 days*															X			X	X	X
10 C	Crossover Week 18 (126 Day)	*+/- 7 days*			X		X										X			X	X	X
11 C	Crossover Week 21 Call (147	*+/- 2 days*															X			X	X	X

Visit #	Visit	Visit Window / Intervention	Informed Consent	History & Full PE	Body Weight & Targeted PE	Pregnancy Test (if applicable)	Blood Analysis	H.pylori Test	ECG	Renal Function	MRE	Endoscopic Evaluation	Subject Randomization & Enrollment	Sham / Crossover DMR Procedure	Biopsy	Blinding Assessment	Lifestyle Counseling	SF-36 Quality of Life Questionnaire	PROMIS® Patient Reported Outcome	Self-Monitoring Blood Glucose/ Glycemia Diary	Adverse Events	Medication Use®
	Day)																					
12 C	Crossover Week 24 (168 Day)	+/- 7 days			X		X		X	X								X	X	X	X	X

& for the purpose of eligibility, Mean of 3 separate blood pressure measurements >180 mmHg (systolic) or >100 mmHg (diastolic), for other Blood Pressure assessments it will be measured in a sitting position in duplicate (in same arm) after 15 min of rest

*Provide diary & glucose meter to the subject

@Subjects using SU will be asked to adjust their SU intake based on section 5.3.1

¥The 14-day post procedure diet reviewed with the subject

**Lifestyle Intervention discussions during phone calls at Day 7 & 14 are conducted by the study coordinator in the form of reminders for the subjects and do not need to be conducted by a member of the nutrition staff

Note: Subjects randomized to Sham who crossover to DMR but do not receive any ablations during the DMR procedure will be followed through the 4 week post crossover visit and then discontinued from the study.

Note: Subjects that choose not to crossover from Sham to DMR will be discontinued from the study and the End of Study CRFs will be completed.

4. Statistical Analysis and Reporting

4.1. Introduction

Data processing, tabulation of descriptive statistics, calculation of inferential statistics, and graphical representations will be performed primarily using SAS (release 9.4 or higher). If the use of other software is warranted, the final statistical methodology report will detail what software was used for what purposes.

Continuous (quantitative) variable summaries will include the number of subjects (n) with non-missing values, mean, standard deviation (SD), median, quartiles, interquartile range (IQR) minimum, and maximum. 95% confidence interval of the mean will be presented where appropriate for efficacy analyses.

Categorical (qualitative) variable summaries will include the frequency and percentage of subjects who are in the particular category or each possible value. In general, the denominator for the percentage calculation will be based upon the total number of subjects in the study population for the treatment group, unless otherwise specified. The denominator for by-visit displays will be the number of subjects in the relevant study population with non-missing data at each visit.

The minimum and maximum will be reported with the same degree of precision (i.e., the same number of decimal places) as the observed data. Measures of location (mean, quartiles, IQR, and median) will be reported to 1 degree of precision more than the observed data and measures of spread (SD) will be reported to 2 degrees of precision more than the observed data.

Percentages will be presented to 1 decimal place, unless otherwise specified and with the following exceptions: a percentage of 0% will not be displayed (i.e., only the count of 0 will be displayed), and a percentage of 100% will be displayed with 0 decimal places.

95% confidence intervals (CIs) will be presented where applicable and will be reported to 1 decimal place. Confidence intervals that cannot be obtained will be displayed as “Not est.”

While this protocol does specify primary and safety endpoints, these are not meant to define subject and study success. Instead, the results of this evaluation will be used to establish the safety and efficacy profile of the DMR procedure and to evaluate the effect size for powering future clinical investigations. No *P* values will be reported. More details can be found in Section **Error! Reference source not found.**.

4.2. Interim Analysis and Data Monitoring

It is anticipated that there will be two unblinded deliveries of the data.

1. Week 24 Primary Analysis: The first analysis will occur when all subjects have completed their participation in the randomized treatment phase by either reaching the Week 24 primary endpoint or discontinuing from the study and the data through Week 24 have been frozen. Data through Week 24 will be entered, cleaned, and monitored, and decisions regarding the evaluability of all subject data for inclusion in the primary statistical analysis will be made prior to freezing the data. Other data in the database will

continue to be entered and queried as per normal study conduct. Adverse events (AEs) and concomitant medications that were ongoing at the time of the primary analysis will be unfrozen so the outcomes can be entered for the final analysis.

2. Final Analysis: The second and final analysis will occur when all subjects have completed their participation in the study by either reaching the Week 48 conclusion of the study, or discontinuing, and after the full database has been locked.

Section 13 will delineate which tables, listings, and figures will be provided at each analysis.

4.2.1. Clinical Events Committee

A clinical events committee (CEC) will be established to review important safety AEs reported by trial investigators to determine whether the adjudication of severity and relatedness meets protocol-specified criteria.

Information reviewed on each death, SAE, UADE, or AE of Special Interest (AESI) may include laboratory, pathology and/or imaging data, autopsy reports, physical descriptions, and any other data deemed relevant. The CEC will be masked to the assigned treatment group when performing their assessments. The importance of the CEC is in assessing investigator attribution of causality to the randomized treatment (DMR or Sham) in instances when severity or causality assessments may be deemed subjective and/or require the application of a complex definition.

The CEC will schedule meetings at the following milestones/time points: after the first six (6) subjects, the second set of 6 subjects (total of 12 subjects), and the third set of 6 subjects (total of 18 subjects) have completed visit 6. To allow for adjudication of events following the DMR procedure for Sham subjects who participated in the crossover study, an additional meeting will be scheduled after all crossover Sham subjects have completed visit 6c, Week 4 post procedure. In addition, two other meetings will be scheduled after all DMR subjects complete visit 12, post DMR endoscopic evaluation and biopsy, and Visit 14, 12 weeks post biopsy.

4.2.2. Data Monitoring Committee

A Data Monitoring Committee (DMC) will be established to conduct reviews of subject safety. It is expected that at least 6 such DMC reviews will occur during the study and they will follow the schedule for the CEC meetings. The DMC reviews will monitor for issues that may justify modifying, suspending, or terminating the study. Only events that have been adjudicated will be used in the DMC safety assessments to guide the DMC decision regarding study continuation. The CEC will not share responsibility with DMC for evaluating interim comparisons; however, their assessments (with results incorporated into the database in a timely manner) will help to ensure that the data reviewed by DMC are as accurate and free of bias as possible.

The sponsor may request additional reviews, e.g., should any other findings/issues pertaining to safety or efficacy emerge requiring DMC review. Details of the operation of the DMC were developed in conjunction with the members of the DMC and can be found in the charter.

The unblinded analysis will be performed by the person responsible for the primary analysis of this study. The DMC listings will not be seen by anyone except the DMC and the performing statistician.

Since there will be no formal hypothesis testing in the summary tables presented in the DMC reports, there will be no statistical penalty.

5. Analysis Populations

The following analysis populations are planned for this study:

- **Study Population**: The study population includes all subjects consented at the site. Within this population there are Screened, Medication Run-In, Intent-to-Treat, As-Treated and Safety populations.
- **Screened Population**: The Screened population includes all subjects who complete Visit 1.
- **Medication Run-In Population:** The Medication Run-In population includes all subjects who entered the Run-In Phase.
- **Intent-To-Treat Population (ITT):** The ITT population includes all subjects who were randomized after the Medication Run-In phase. This is the secondary analysis population for efficacy. Subjects will be analyzed under the treatment to which they were randomized.
- **As-Treated (AT) Population:** The AT population includes a subset of ITT subjects who received at least one ablation or underwent the randomized Sham procedure. This is the primary population for efficacy. Subjects will be analyzed under the treatment received.
- **Week 24 Per Protocol Population:** The PP population includes all subjects in the AT population who did not have any major protocol deviations that could affect the assessment of efficacy and had their Week 24 study visit within the protocol-specified window. Subjects will be analyzed under the treatment received.
- **Safety Population:** The Safety population includes all subjects in whom Sham or DMR procedure was attempted. Subjects will be analyzed according to the treatment received.

  The Safety population will be further divided into the following 3 sets based on weeks of follow up:
  - Safety population through 24 weeks post-randomization, by treatment received at the start of study
  - Safety population through 24 weeks post-DMR for both treatment groups; this will include the first 24 weeks of the study for subjects receiving DMR from the start of the study and weeks 24-48 post crossover for subjects switching from Sham to DMR. Results will be presented separately for subjects originally receiving DMR, for subjects originally receiving Sham and receiving DMR at week 24, and for all subjects combined receiving DMR at start of the study or at Week 24.
  - Safety population through 48 weeks post-DMR; this will include the 48 weeks of the study for subjects receiving DMR from the start of the study. Results will be presented separately for the first 24 weeks and for Weeks 24-48

The above 3 sets within the Safety population will be identified by period in the summary tables. Period will be categorized as Baseline – Week 24, Week 24 – Week 48, and Baseline – Week 48.

The Baseline – Week 24 period will include the following treatment group columns: DMR, Sham, crossover DMR, and combined DMR. The DMR and Sham treatment group columns will represent the treatment received at the start of the study while the crossover DMR treatment group column will represent the initial Sham recipients who cross over and receive DMR. The combined DMR treatment group column will include all subjects who receive DMR at the start of the study or once they cross over at Week 24.

The Week 24 – Week 48 period will include one column for DMR treatment group, this includes subjects who received DMR at the start of the study.

The Baseline – Week 48 period will also include one column for all subjects overall.

6. General Issues for Statistical Analysis

6.1. Statistical Definitions and Algorithms

6.1.1. Baseline

The last observation recorded prior to the attempted treatment with index procedure will be used as the baseline observation for all calculations of change from baseline.

6.1.2. Adjustments for Covariates

Not applicable.

6.1.3. Multiple Comparisons

No adjustments will be made for multiple comparisons for other endpoints.

6.1.4. Handling of Dropouts or Missing Data

Subjects who withdraw or are withdrawn during screening will be replaced. Subjects who have received the DMR or Sham procedure will be encouraged to complete the end of study procedures.

No imputation will be made for missing data, given the nature of the pilot study. Analyses will be performed using only available data.

6.1.5. Analysis Visit Windows

Visits will be analyzed as scheduled. If a scheduled visit is missing, and an unscheduled/repeated visit exists, the unscheduled/repeated visit will be used in its place; otherwise unscheduled/repeated visits will not be used in the summaries but will be listed.

6.1.6. Pooling of Sites

Not applicable.

6.1.7. Derived Variables

- **PROMIS® Gastrointestinal Nausea and Vomiting Total Score** = sum of the 4 individual items, with a range of 0 to 20, where higher scores indicate worse and more frequent nausea and vomiting. If an individual item is missing, the total score will be set to missing.

- **PROMIS® Gastrointestinal Gas and Bloating Total Score** = sum of the 13 individual items, with a range of 0 to 65, where higher scores indicate worse and more frequent gas and bloating. If an individual item is missing, the total score will be set to missing.

- **PROMIS® Gastrointestinal Diarrhea Total Score =** sum of the 6 individual items, with a range of 0 to 30, where higher scores indicate worse and more frequent diarrhea. If an individual item is missing, the total score will be set to missing.

- **PROMIS® Belly Pain Total Score =** sum of the 5 individual items, with a range of 0 to 25, where higher scores indicate worse and more frequent belly pain. If an individual item is missing, the total score will be set to missing.

- **SF-36 Scale Scores**[4] = First, precoded numeric values (codelist values) are recoded per the scoring key given in Table 3 where each item is scored on a 0 to 100 range so that the lowest and highest possible scores are 0 and 100, respectively. Higher scores indicate better quality of life. Second, items in the same scale are averaged together to create the 8 scale scores. Table 4 lists the items averaged together to create each scale. Individual items that are missing are not taken into account when calculating the scale scores. Hence, scale scores represent the average for all items in the scale that the subject answered.

Table 3: Recoding SF-36 Items

SF-36 Item numbers	Change original response category *	To recoded value of:
1, 2, 20, 22, 34, 36	1 →	100
	2 →	75
	3 →	50
	4 →	25
	5 →	0

3, 4, 5, 6, 7, 8, 9, 10, 11, 12	1 →	0
	2 →	50
	3 →	100
13, 14, 15, 16, 17, 18, 19	1 →	0
	2 →	100
21, 23, 26, 27, 30	1 →	100
	2 →	80
	3 →	60
	4 →	40
	5 →	20
	6 →	0
24, 25, 28, 29, 31	1 →	0
	2 →	20
	3 →	40
	4 →	60
	5 →	80
	6 →	100
32, 33, 35	1 →	0
	2 →	25
	3 →	50
	4 →	75
	5 →	100

* Precoded response choices (codelist values) as printed in the SF-36 case report form (CRF).

Table 4: Averaging Items to SF-36 Scales

Scale	Number of items	After recoding per Table 3, average the following items
Physical functioning	10	3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Role limitations due to physical health	4	13, 14, 15, 16
Role limitations due to emotional problems	3	17, 18, 19
Energy/fatigue	4	23, 27, 29, 31
Emotional well-being	5	24, 25, 26, 28, 30
Social functioning	2	20, 32
Pain	2	21, 22
General health	5	1, 33, 34, 35, 36

- **Change from baseline** = $value\ at\ current\ time\ point - value\ at\ baseline$
- **Percent change from baseline** = $\left(\frac{Change\ from\ baseline\ value}{value\ at\ basline}\right) * 100$
- **TEAE** = any adverse event with an onset date/time or worsening after index procedure.
- **BMI** =

$$\frac{weight\ (kg)}{\frac{height\ (cm)}{100} * \frac{height(cm)}{100}}$$

- **Follow-up time:** $date\ of\ last\ study\ visit - date\ of\ index\ procedure + 1$
- **Duration of diabetes diagnosis:** *date of index procedure – onset date of first Type 2 diabetes record entered on the medical and diabetic history case report form + 1*

6.1.8. Data Adjustments/Handling/Conventions

All collected data will be presented in listings. Data not subject to analysis according to this plan will not appear in any tables or graphs but will be included only in the data listings.

Adverse events will be coded using the MedDRA version 22.0 thesaurus. Prior and concomitant medications will be coded using the World Health Organization-Drug Dictionary Enhanced (WHO-DDE) (version March 2019) dictionary.

A device- related or procedure-related AE is any AE with a relationship to the study device or procedure of possibly related, probably related, or definitely related.

If partial AE or medication dates occur, the convention for replacing missing dates for the purpose of statistical analysis is as follows:

For partial AE and medication start dates:

- If the year is unknown, then do not impute the date but assign a missing value.
- If the year is known, but the month or month and day is unknown, then:
    - If the year matches the year of index procedure date and the end date (if present) is after index procedure date, then impute as the month and day of the index procedure date.
    - Otherwise, assign 01 January.
- If the year and month are known, but the day is unknown, then:
    - If the month and year match the month and year of the index procedure date, then impute as the day of the index procedure date.
    - Otherwise, assign 01.

For partial AE and medication end dates:

- If the year is unknown, then do not impute the date but assign as missing value.
- If the year is known, but the month or month and day is unknown, then:
    - If the year matches the year of the last date of the study (date of last contact if subject lost to follow-up; date of completion or early termination otherwise), then impute as the month and day of the last date of the study.
    - Otherwise, assign 31 December.

- If the year and month are known, but the day is unknown, then:
    - If the month and year match the month and year of the last date of the study, then impute as the day of the last date of the study.
    - Otherwise, assign the last day of the month.

If partial times occur, the convention is as follows:

- if the missing time occurs on the day of the index procedure and both the hour and minute are missing then the time assigned is the time of the index procedure, otherwise if both the hour and minute are missing and the date is not the date of index procedure the time assigned is 12:00;
- if the date is the same as the date of the index procedure and
    - only hour is missing the hour assigned is 12 or the hour of index procedure, whichever is later;
    - only the minute is missing the minute assigned is 30 or the minute of index procedure, whichever is later;
- Otherwise if the date is not the same as the date of the index procedure, the hour assigned is 12 if the hour is missing and the minute assigned is 30 if the minute is missing.

7. Study Subjects and Demographics

7.1. Disposition of Subjects and Withdrawals

Disposition will include tabulations of the number of subjects randomized into each treatment group, the number of subjects who received treatment (for subjects randomized to the Sham, that will include subjects who received Sham as well as subjects who received DMR at Week 24), tabulated reasons for discontinuation from the study, and number of subjects in each analysis population. Additionally, summary statistics of follow-up time will be provided. The derivation of follow-up time is provided in Section 6.1.7. The number of subjects completing each follow up visit will also be tabulated.

These summaries will be based on the ITT population.

Inclusion criteria not met and exclusion criteria met and reasons for screen failures will be listed.

7.2. Protocol Violations and Deviations

Protocol deviations (both major and minor), including those due to the impact of COVID-19, as determined by a Sponsor blinded review of the data before database lock and unblinding of the study, may result in the removal of a subject's data from the Week 24 Per Protocol population.

Protocol deviations will be listed. Deviations related to COVID-19 will be listed separately.

Definitions and classifications of major and minor protocol deviations can be found in the study protocol deviation guidance plan.

7.3. Demographics and Other Baseline Characteristics

Summary statistics for age, gender, race, ethnicity, height, weight, and body mass index (BMI) will be presented by treatment group using summary statistics or frequencies, as appropriate.

The number and percent of subjects reporting various medical and diabetic histories grouped by MedDRA system organ class and preferred term, will be tabulated. Diabetic history will also be categorized by type of history (diagnosis, symptom, or surgery). The following categories will be used: Type 2 Diabetes, prior therapy, diabetic retinopathy, diabetic nephropathy, diabetic neuropathy, and other. Duration of diabetes diagnosis at baseline will be summarized as part of demographics. The derivation of duration of diabetes diagnosis is provided in Section 6.1.7.

The number of subjects reporting loss of consciousness, admission to hospital, and seizure due to hypoglycemic events in the past year will be tabulated by treatment group. Descriptive statistics on the number of events in the past year will be provided. Targeted hypoglycemic events history will also be listed.

Demographics and baseline characteristics analyses will be conducted for the Medication Run-In, ITT, and AT populations. All other analyses will be conducted for the Safety population only.

7.4. Exposure and Compliance

All subjects will receive the DMR or Sham procedure at the study site under the surveillance of appropriate study personnel and, therefore, no compliance will be calculated. The number of initial Sham recipients who choose to cross-over and receive DMR at Week 24 will be tabulated as part of the disposition summary.

DMR and Sham pre-op and procedure details will be listed separately.

Device use, device malfunctions, and discharge information will be listed.

7.4.1. Endoscopy and Endoscopic Evaluation

On the day of the procedure, subjects will undergo endoscopy with an assessment of the esophagus, stomach, duodenum, and associated structures in order to ensure there are no conditions that would exclude the subject from receiving the index procedure (DMR or Sham). For subjects initially treated with DMR, a follow up endoscopic evaluation to visually examine the treatment site and adjacent tissues will be conducted after all Week 24 Visit assessments are complete and within 7 days of Week 24. During the 24 week follow-up endoscopy, ablation site biopsies will be taken to evaluate the mucosal tissue that has regrown post DMR procedure. For initial Sham subjects who accept the offer to crossover, the endoscopy and DMR procedure will be scheduled within 21 days of the Week 24 Visit.

Endoscopic evaluation results will be tabulated overall. This summary will include presence and grade of esophagitis, duodenum accession and furthest location accessed, abnormalities that would preclude the completion of the DMR procedure, and upper gastrointestinal (GI) conditions. The number of subjects in which the endoscopy procedure was successfully

completed and the number of subjects excluded based on endoscopic findings will also be presented.

Presence and location of ulcers as well as the presence, location, and length of luminal narrowing will be tabulated by treatment group. Visual appearance findings at each location will also be summarized.

All endoscopic evaluation, endoscopy, and duodenal biopsy sample results will be listed.

8. Efficacy Analysis

All efficacy endpoints will be summarized using the AT population as the primary analysis population and repeated on the ITT population. The primary efficacy analysis will also be repeated in the Week 24 Per Protocol population. All efficacy data, regardless of population, will be presented in data listings.

8.1. Primary Efficacy Analysis

The primary efficacy endpoint is the change in HbA1c at Week 24. Descriptive statistics of observed, change from baseline, and percent change from baseline to Week 24 HbA1c values will also be provided by treatment group. 95% CI of the mean will also be presented.

8.2. Secondary Efficacy Analysis

8.2.1. HbA1c Over Time

Descriptive statistics of observed, change from baseline, and percent change from baseline to each study visit through Week 24 HbA1c will also be provided by treatment group and study visit. 95% CI of the mean will also be presented.

The proportion of subjects with an HbA1c improvement from baseline at Week 24 that maintain an HbA1c improvement at Week 48 will be presented for DMR treatment group subjects. An improvement in HbA1c is defined as any value lower than baseline.

Descriptive statistics of the end-of-Run-In-phase HbA1c for all Medication Run-In subjects will also be presented overall.

8.2.2. Fasting Plasma Glucose (FPG)

Descriptive statistics of observed, change from baseline, and percent change from baseline to each study visit through Week 24 FPG will also be provided by treatment group and study visit. 95% CI of the mean will also be presented.

8.2.3. Urine Albumin Creatinine Ratio (UACR)

Descriptive statistics of observed, change from baseline, and percent change from baseline to each study visit through Week 24 UACR will also be provided by treatment group and study visit. 95% CI of the mean will also be presented.

8.2.4. Alanine Aminotransferase (ALT) and Aspartate Aminotransferase (AST)

Descriptive statistics of observed, change from baseline, and percent change from baseline to each study visit through Week 24 ALT and AST will also be provided by treatment group and study visit. 95% CI of the mean will also be presented.

8.3. Additional Endpoints of Interest

The above secondary analyses of HbA1c, FPG, UACR, ALT, and AST will also be repeated from baseline through Week 48 for the DMR treatment group by study visit.

For initial Sham recipients, descriptive statistics of observed, change from Week 24 (pre-DMR) to Week 48, and percent change from Week 24 (pre-DMR) to Week 48 will also be displayed for HbA1c and FPG. 95% CI of the mean will be presented.

8.3.1. Short Form (36) Health Survey (SF-36)

Subjects will complete an assessment of health status and quality of life, the SF-36 Questionnaire, at Baseline, Week 12, Week 24 and Week 48. These measures rely upon subject self-reporting. The SF-36 asks 36 questions to measure functional health and well-being from the subject's point of view and taps eight health concepts: physical functioning, bodily pain, role limitations due to physical health problems, role limitations due to personal or emotional problems, emotional well-being, social functioning, energy/fatigue, and general health perceptions. It also includes a single item that provides an indication of perceived change in health. Derivations for each of the scale scores are described in Section 6.1.7.

Change from baseline to study visit in the physical functioning, role limitations due to physical health, role limitations due to emotional problems, energy/fatigue, emotional well-being, social functioning, pain, and general health scale scores will be summarized by treatment group and study visit.

8.3.2. Patient Reported Outcomes Measurement Information System (PROMIS®)

Subjects will complete the PROMIS® at Baseline, Week 12, Week 24 and Week 48. PROMIS® is a set of person-centered measures that will be used to evaluate and monitor physical health in subjects. For the purposes of this study, the gastrointestinal symptom domains were chosen including nausea/vomiting, gas/bloating, diarrhea, and belly pain. Derivations for each of the total scores are described in Section 6.1.7.

Change from baseline to study visit in the PROMIS® Gastrointestinal Nausea and Vomiting Total Score, Gastrointestinal Gas and Bloating Total Score, Gastrointestinal Diarrhea Total Score, and Belly Pain Total Score will be summarized by treatment group and study visit.

9. Safety and Tolerability Analysis

Safety variables include AEs, SAEs, UADEs, vital sign measurements, weight, physical exam findings, laboratory test results, 12-lead ECG findings, and MRE findings. No formal inferential analyses are planned for the safety endpoints.

9.1. Adverse Events

All AEs that start or worsen after the time of index procedure will be considered TEAEs. Events meeting this definition will be those events that are a change from the subject's baseline conditions, including an increase in frequency or severity (these will be entered as new AEs). For AEs occurring on the date of index procedure, if the time of onset is missing, the AE will be assumed to be treatment emergent.

All AEs, TEAEs, and SAEs will be coded using the MedDRA Version 22.0 or higher coding dictionary. The AE analyses will focus on those that are treatment emergent, however any AEs that are reported after consent has been signed and before initial dosing will included in the listings.

The causal relationship of the AE to the study device and the study procedure is determined by the investigator as Not Related, Possibly Related, Probably Related, or Definitely Related. These can be mapped to Not Related (*Not Related*) and Related *(Possibly Related, Probably Related* and *Definitely Related*). Adverse event summaries will be repeated for treatment related TEAEs.

Adverse events severity grades are reported as mild, moderate, or severe.

Summaries of incidence rates (frequencies and percentages) of individual TEAEs will be presented by SOC, PT, period, and treatment group. Period is defined in Section 5. Such summaries will be displayed for all TEAEs, TEAEs by maximum severity, and TEAEs by relationship to device and/or procedure. Incidence of TEAEs during the Medication Run-In phase will also be presented by SOC and PT for the Medication Run-In population.

Each subject will be counted only once within each summation level (SOC and PT). If a subject experiences more than 1 TEAE within each summation level only, the TEAE with the strongest relationship or the maximum severity, as appropriate, will be included in the summaries of relationship and severity. If a particular event is missing the severity and/or relationship, then the strongest possible severity or relationship will be assumed for analysis (severity = severe, relationship = definitely related). If a subject has separate AEs with the same SOC/PT with one starting in the double-blind period and the other starting after Week 24, they are counted once within each period.

Incidences will be presented by descending frequency of SOC and PT within SOC, and then alphabetically within PT where the incidence is the same; this is based on overall subjects then alphabetically in case of a tie.

Missing and partially missing AE start and/or stop dates will be imputed, for the purpose of statistical analysis, according to the specifications described in Section 6.1.8.

In the AE data listings, all AEs will be displayed. AEs that are treatment emergent will be flagged.

9.1.1. Adverse Events Leading to Withdrawal

A summary of incidence rates (frequencies and percentages) of TEAEs leading to withdrawal from the study, by period, treatment group, SOC, and preferred term will be prepared for the

Safety Population. TEAEs leading to withdrawal will also be tabulated by relationship to device and procedure.

A data listing of AEs leading to withdrawal from the study will also be provided, displaying details of the event(s) captured on the CRF.

9.1.2. Deaths and Serious Adverse Events

Any deaths that occur during the study will be listed.

Serious adverse events will be listed and also tabulated by system organ class and preferred term and presented by period and treatment group. SAEs will also be tabulated by relationship to device and procedure.

9.1.3. Other Significant Adverse Events

A review of AEs will be performed prior to database lock and those related to COVID-19 will be flagged separately and summarized by SOC, PT and treatment group.

9.1.3.1. Unanticipated Adverse Device Effects (UADEs)

A summary of incidence rates (frequencies and percentages) of UADEs by period, treatment group, SOC, and preferred term will be prepared for the Safety Population. UADEs will also be tabulated by relationship to device and procedure.

Unanticipated adverse device effects will be flagged in the AE listing.

9.1.3.2. Adverse Events of Special Interest (AESIs)

Adverse events of special interest include the following:

- Hypoglycemia
- Diarrhea
- Abdominal pain
- Nausea
- Vomiting
- Gastrointestinal bleeding
- Unexplained fever

A summary of AESIs by period, treatment group, SOC, and preferred term will be prepared for the Safety Population. All AESIs will be flagged in the AE listing.

Episodes of diarrhea will be recorded both as events and as incidence.

Descriptive statistics on the blood glucose values and duration of episode reported on the hypoglycemia form will be provided as will summaries of treatment and symptoms. Additionally, the incidence and event rates of hypoglycemia will be tabulated by severity of the hypoglycemia: severe hypoglycemic event, defined as hypoglycemia requiring third-party assistance; or any clinically significant hypoglycemic event, defined as self-monitored or laboratory plasma glucose level < 54 mg/dL (3.0 mmol/L); or glucose alert values ≤70 mg/dL

(3.9 mmol/L).

All hypoglycemia cases will be listed.

Patient contact regarding hypoglycemia will also be listed as will blood glucose and glycemia diary details. Hyperglycemia rescue data will be listed separately.

9.2. Clinical Laboratory Evaluations

Laboratory test results (complete blood count, blood chemistry, liver panel, pancreatic enzymes, thyroid stimulating hormone [TSH], fasting lipid panel, FPG, HbA1c, fasting C-Peptide, and fasting insulin) will be summarized descriptively by treatment group and study visit as both observed values and change from baseline values. H. Pylori results will only be listed as it is only collected at screening.

The number of subjects with clinical laboratory values below, within, or above normal ranges, by study visit, will be tabulated (shift tables) for each clinical laboratory analyte by period and treatment group.

Laboratory values will be displayed in the data listings, and those that are outside the normal range will be flagged and presented, along with corresponding normal ranges (if available).

A separate listing of abnormal laboratory values, including renal function, will be provided. All study visits within an analyte for a subject will be presented if at least 1 study visit within that analyte has an abnormal result.

Pregnancy test results will be listed separately.

9.3. Vital Signs

Vital signs will be collected at Screening, Baseline, Week 4, Week 12, Week 18, Week 24, Week 36, and Week 48.

Descriptive summaries of observed values and changes from baseline will be calculated for weight (kg), sitting systolic blood pressure (mmHg), sitting diastolic blood pressure (mmHg), and pulse rate (bpm).

Vital signs measurements will also be listed.

9.4. Electrocardiograms

12-Lead electrocardiograms will be obtained at Screening and Week 24.

Descriptive summaries will be presented for ECG measures of PR interval (msec), RR interval (msec), ventricular rate (bpm), QRS interval (msec), uncorrected QT interval (ms), QTcB interval (ms), and investigator interpretation. These summaries will be presented by study visit and treatment group.

12-lead ECG results will also be listed.

9.5. Further Safety Evaluations

9.5.1. MRI Enterography

Clinically relevant abnormal findings from the central MRE reader will be listed.

9.5.2. Lifestyle Counseling and Evaluation

Lifestyle counseling and evaluation data will be listed.

9.6. Concomitant Medication

Prior and concomitant medications, coded using World Health Organization drug dictionary (WHO-DDE) (March 2019), will be summarized descriptively by Anatomical Therapeutic Chemical (ATC) classification Level 4 and PT (i.e., ATC classification Level 5), if applicable, and by period and treatment group using counts and percentages.

Prior medications will be presented separately from concomitant medications. The assignment of medications as prior and/or concomitant will be done as follows:

- **Prior medications:** Medications that started before the index procedure will be considered prior medications whether or not they were stopped before the index procedure.
- **Concomitant medications:** Any medications continuing or starting after the index procedure through the end of study will be considered to be concomitant.

If a medication starts prior to the index procedure and continues after the index procedure it will be considered both prior and concomitant. Prior and concomitant medications will also be listed.

9.7. Physical Exam

A full physical examination will be performed at Screening to assess the following organ systems: general appearance, cardiovascular, respiratory, lymph nodes, neurological, skin, head, eyes, ears, nose, and throat, extremities, musculoskeletal, genitourinary, funduscopic exam, thyroid palpation, abdominal exam, heart and lung auscultation, deep tendon reflex and sensation (vibration, pinprick) assessment in distal lower extremities. A targeted physical exam will be performed at Baseline Week 4, Week 12, Week 18, Week 24, Week 36, and Week 48 to assess the following systems: funduscopic exam, thyroid palpation, abdominal exam, heart and lung auscultation, deep tendon reflex and sensation (vibration, pinprick) assessment in distal lower extremities.

All physical exam results will be listed by body system and both abnormal and clinically significant results will be flagged.

10. Changes from Planned Analysis

The Screened and Medication Run In analysis populations were not defined in the protocol; thus, they are defined in this SAP.

An additional analysis population, the Week 24 Per Protocol population was added, to determine the impact of protocol deviations, especially those that are a result of the COVID-19 pandemic, and out of window visits on primary efficacy results.

Significance testing and statistical modeling will be omitted due to the small sample size. The results of this pilot study will be used to establish the safety and efficacy profile of the DMR procedure and to evaluate the effect size for powering future clinical investigations, therefore no formal comparisons within or beteween treatment groups will be performed.

11. Other Planned Analysis

Not Applicable.

12. References

1. US Federal Register. (1998) International Conference on Harmonization; Guidance on Statistical Principles for Clinical Trials. Department of Health and Human Services: Food and Drug Administration [Docket No. 97D-0174]. Federal Register Volume 63, Number 179, pages 49583-49598. September 16, 1998.
2. ASA. (2016) Ethical Guidelines for Statistical Practice. Prepared by the Committee on Professional Ethics, April 2016. http://www.amstat.org/about/ethicalguidelines.cfm
3. RSS. (2014) The Royal Statistical Society: Code of Conduct, 2014. http://www.rss.org.uk/Images/PDF/join-us/RSS-Code-of-Conduct-2014.pdf.
4. SF-36 Scoring https://www.rand.org/health-care/surveys_tools/mos/36-item-short-form/scoring.html

13. Tables, Listings, and Figures

All listings, tables, and figures will have a header showing the sponsor company name and protocol and a footer showing the version of SAS, the file name and path, and the source of the data (CRF page or listing number).

The following reporting conventions will be adopted for the presentation of study data. These conventions will enhance the review process and help to standardize the presentation with common notations.

General Reporting Conventions

- All tables and data listings will be developed in landscape orientation.
- Specialized text styles, such as bolding, italics, borders, shading, and superscripted and subscripted text will not be used in tables, figures, and data listings unless they add significant value to the table, figure, or data listing.
- Only standard keyboard characters should be used in tables and data listings. Special characters, such as nonprintable control characters, printer-specific characters, or font specific characters, will not be used on a table, figure, or data listing.
- Adverse events with missing MedDRA coding will have their system organ class and/or preferred term presented as “Not Coded” in the tables. The “Not Coded” frequencies will be sorted to the end of the tables. This will only be applicable for any deliveries sent before database lock (e.g., for dry runs on blinded data).
- Programming notes may be inserted into the shells, these notes will not appear in the final output.

Population Summary Conventions

- Population sizes may be presented for each classification factor as totals in the column header as (N=xxx), where appropriate.
- All population summaries for categorical variables will include all categories that were planned and for which the subjects may have had a response. Percentages corresponding

to null categories (cells) will be suppressed; however, counts and percentages of missing values may be needed.

- All population summaries for continuous variables will include: N, mean, SD, median, quartiles, IQR, minimum, and maximum. Other summaries (e.g., number missing or 95% CIs) may be used as appropriate.
- See Section 4.1 for specifications for rounding.

13.1. Planned Table Descriptions

The following are planned summary tables for protocol number C-40000. The table numbers and page numbers are place holders only and will be determined when the tables are produced.

Table 5: Demographic Data Summary Tables and Figures

Number	Population	Title	Unique/Non-Unique	Provide at Topline?
Table 14.1.1.1	ITT	Summary of Subject Disposition and Follow Up Compliance	Unique	
Table 14.1.1.2		Summary of Analysis Population Eligiblities	Unique	
Table 14.1.2.1	Medication Run-In	Demographics and Baseline Characteristics	Unique	
Table 14.1.2.2	ITT	Demographics and Baseline Characteristics	Non-Unique	
Table 14.1.2.3	AT	Demographics and Baseline Characteristics	Non-Unique	X
Table 14.1.3.1	Safety	Summary of Medical History by SOC, PT, and Treatment	Unique	
Table 14.1.3.2	Safety	Summary of Diabetic History by SOC, PT, and Treatment	Non-Unique	
Table 14.1.3.3	Safety	Summary of Targeted Hypoglycemic Events History by Treatment	Unique	
Table 14.1.4	Safety	Summary of Prior Medications by ATC Class Level 4, PT, and Treatment	Unique	
Table 14.1.5.1	Medication Run-In	Summary of Endoscopic Evaluation	Unique	
Table 14.1.5.2	Safety	Summary of Endoscopy Results	Unique	

13.2. Efficacy Data

Table 6: Efficacy Data

Number	Population	Title	Unique/Non-Unique	Provide at Topline?
Table 14.2.1.1	AT	Summary of Change from Baseline in HbA1c by Study Visit and Treatment	Unique	X
Table 14.2.1.2	ITT	Summary of Change from Baseline in HbA1c by Study Visit and Treatment	Non-Unique	
Table 14.2.1.3	Week 24 Per Protocol	Summary of Change from Baseline in HbA1c by Study Visit and Treatment	Non-Unique	
Table 14.2.1.4	Medication Run-In	Summary of HbA1c During Medication Run-In	Non-Unique	
Table 14.2.1.5	AT	Summary of Change from Week 24 in HbA1c by Study Visit and Treatment	Non-Unique	
Table 14.2.1.6	ITT	Summary of Change from Week 24 in HbA1c by Study Visit and Treatment	Non-Unique	

Number	Population	Title	Unique/Non-Unique	Provide at Topline?
Table 14.2.1.7	AT	Summary of HbA1c Improvement by Study Visit and Treatment	Unique	
Table 14.2.1.8	ITT	Summary of HbA1c Improvement by Study Visit and Treatment	Non-Unique	
Table 14.2.1.9	Week 24 Per Protocol	Summary of HbA1c Improvement by Study Visit and Treatment	Non-Unique	
Table 14.2.2.1	AT	Summary of Change from Baseline in FPG by Study Visit and Treatment	Non-Unique	X
Table 14.2.2.2	ITT	Summary of Change from Baseline in FPG by Study Visit and Treatment	Non-Unique	
Table 14.2.2.3	AT	Summary of Change from Week 24 in FPG by Study Visit and Treatment	Non-Unique	
Table 14.2.2.4	ITT	Summary of Change from Week 24 in FPG by Study Visit and Treatment	Non-Unique	
Table 14.2.3.1	AT	Summary of Change from Baseline in UACR by Study Visit and Treatment	Non-Unique	X
Table 14.2.3.2	ITT	Summary of Change from Baseline in UACR by Study Visit and Treatment	Non-Unique	
Table 14.2.4.1	AT	Summary of Change from Baseline in ALT by Study Visit and Treatment	Non-Unique	X
Table 14.2.4.2	ITT	Summary of Change from Baseline in ALT by Study Visit and Treatment	Non-Unique	
Table 14.2.5.1	AT	Summary of Change from Baseline in AST by Study Visit and Treatment	Non-Unique	X
Table 14.2.5.2	ITT	Summary of Change from Baseline in AST by Study Visit and Treatment	Non-Unique	
Table 14.2.6.1	AT	Summary of Change from Baseline in SF-36 Scale Scores by Study Visit and Treatment	Non-Unique	
Table 14.2.6.2	ITT	Summary of Change from Baseline in SF-36 Scale Scores by Study Visit and Treatment	Non-Unique	
Table 14.2.7.1	AT	Summary of Change from Baseline in PROMIS Scores by Study Visit and Treatment	Non-Unique	
Table 14.2.7.2	ITT	Summary of Change from Baseline in PROMIS Scores by Study Visit and Treatment	Non-Unique	

13.3. Safety Data

Table 7: Safety Data

Number	Population	Title	Unique/Non-Unique	Provide at Topline?
14.3.1 Displays of Adverse Events				
Table 14.3.1.1	Safety	Summary of Adverse Events by Treatment	Unique	
Table 14.3.1.2	Safety	Incidence of Treatment Emergent Adverse Events by SOC, PT, and Treatment	Unique	X
Table 14.3.1.3	Safety	Incidence of Treatment Emergent Adverse Events by Maximum Severity, SOC, PT, and Treatment	Unique	
Table 14.3.1.4	Safety	Incidence of Treatment Emergent Adverse Events by Relationship, SOC, PT, and Treatment	Unique	
14.3.2 Summary of Deaths, Other Serious and Significant Adverse Events				
Table 14.3.2.1	Safety	Incidence of Adverse Events Leading to Withdrawal by SOC, PT, and Treatment	Non-Unique	
Table 14.3.2.2	Safety	Incidence of Adverse Events Leading to Withdrawal by Relationship, SOC, PT, and Treatment	Non-Unique	
Table 14.3.2.3	Safety	Incidence of Serious Adverse Events by SOC, PT, and Treatment	Non-Unique	
Table 14.3.2.4	Safety	Incidence of Serious Adverse Events by Relationship, SOC, PT, and Treatment	Non-Unique	
Table 14.3.2.5	Safety	Incidence of Unanticipated Adverse Device Effects by SOC, PT, and Treatment	Non-Unique	
Table 14.3.2.6	Safety	Incidence of Unanticipated Adverse Device Effects by Relationship, SOC, PT, and Treatment	Non-Unique	
Table 14.3.2.7	Safety	Incidence of Adverse Events of Special Interest by SOC, PT, and Treatment	Non-Unique	
Table 14.3.2.8	Safety	Incidence of COVID-19 Adverse Events by SOC, PT, and Treatment	Non-Unique	
Table 14.3.2.9	Safety	Summary of Hypoglycemic Events by Treatment	Unique	
Table 14.3.2.10	Safety	Summary of Diarrhea by Treatment	Unique	
14.3.3 Narratives of Deaths, Other Serious and Certain Other Significant Adverse Events				
Table 14.3.3.1	Safety	Listing of Adverse Events Leading to Withdrawal	Unique	
Table 14.3.3.2	Safety	Listing of Serious Adverse Events	Non-Unique	
Table 14.3.3.3	Safety	Listing of Deaths	Non-Unique	

Number	Population	Title	Unique/Non-Unique	Provide at Topline?
Table 14.3.3.4	Safety	Listing of Unanticipated Adverse Device Effects	Non-Unique	
Table 14.3.3.5	Safety	Listing of Adverse Events of Special Interest	Non-Unique	
14.3.4 Abnormal Laboratory Value				
14.3.4.1	Safety	Listing of Abnormal Laboratory Data	Unique	
14.3.5 Laboratory Data Summary Tables				
Table 14.3.5.1.1	Safety	Summary of Complete Blood Count Laboratory Results by Study Visit and Treatment	Unique	
Table 14.3.5.1.2	Safety	Shift from Baseline in Complete Blood Count Laboratory Results by Study Visit and Treatment	Unique	
Table 14.3.5.2.1	Safety	Summary of Blood Chemistry Laboratory Results by Study Visit and Treatment	Non-Unique	
Table 14.3.5.2.2	Safety	Shift from Baseline in Blood Chemistry Laboratory Results by Study Visit and Treatment	Non-Unique	
Table 14.3.5.3.1	Safety	Summary of Urinalysis Laboratory Results by Study Visit and Treatment	Non-Unique	
Table 14.3.5.3.2	Safety	Shift from Baseline in Urinalysis Laboratory Results by Study Visit and Treatment	Non-Unique	
14.3.6 Other Safety Data Summary Tables				
Table 14.3.6.1.1	Safety	Summary of Vital Signs by Study Visit and Treatment	Non-Unique	X
Table 14.3.6.2.1	Safety	Summary of 12-Lead Electrocardiogram Results by Study Visit and Treatment	Non-Unique	
Table 14.3.6.2.2	Safety	Summary of 12-Lead Electrocardiogram Interpretation by Study Visit and Treatment	Unique	
Table 14.3.6.3.1	Safety	Summary of Concomitant Medications by ATC Class Level 4, PT, and Treatment	Unique	

13.4. Planned Listing Descriptions

The following are planned data and patient/subject data listings for protocol number C-40000.

In general, one listing will be produced per CRF domain. All listings will be sorted by treatment, site, and subject number. Listings will also be sorted by date and time of assessment, if applicable. Screen failures will only be presented in Listings 16.2.2.1 and 16.2.3.

All calculated variables will be included in the listings.

In all listings a blank line will be placed between each subject. Within a data listing, if an item appears line after line (e.g., repetition of subject number), then only the first occurrence will be displayed.

In data listings, the information for one subject will be kept on one page if at all possible, rather than splitting a subject's information across pages.

Table 8: Planned Listings

Number	Dataset	Title / Summary	Unique/Non-Unique
16.2.1 Subject Discontinuations/Completions			
Listing 16.2.1	All Subjects	Subject Disposition	Unique
16.2.2 Protocol Deviations			
Listing 16.2.2.1	All Subjects	Inclusion and Exclusion Criteria Not Met	Unique
Listing 16.2.2.2.1	All Subjects	Protocol Deviations	Unique
Listing 16.2.2.2.2	All Subjects	COVID-19 Protocol Deviations	Non-nique
16.2.3 Subjects Excluded from the Efficacy Analyses			
Listing 16.2.3	All Subjects	Analysis Populations	Unique
16.2.4 Demographic Data and Other Baseline Characteristics			
Listing 16.2.4.1	All Subjects	Demographics and Baseline Characteristics	Unique
Listing 16.2.4.2.1	All Subjects	Diabetic History	Unique
Listing 16.2.4.2.2	All Subjects	Medical History	Unique
Listing 16.2.4.2.3	All Subjects	Targeted Hypoglycemic Events History	Unique
16.2.5 Compliance and/or Drug Concentration Data			

Number	Dataset	Title / Summary	Unique/Non-Unique
Listing 16.2.5.1.1	All Subjects	DMR Procedure Pre-Op	Unique
Listing 16.2.5.1.2	All Subjects	DMR Procedure Lift and Ablation Details	Unique
Listing 16.2.5.2.1	All Subjects	Sham Procedure Pre-Op	Unique
Listing 16.2.5.2.2	All Subjects	Sham Procedure Details	Unique
Listing 16.2.5.3.1	All Subjects	Device Use Summary	Unique
Listing 16.2.5.3.2	All Subjects	Device Malfunction	Unique
Listing 16.2.5.4.1	All Subjects	Endoscopic Evaluation	Unique
Listing 16.2.5.4.2	All Subjects	Endoscopy	Unique
Listing 16.2.5.4.3	All Subjects	Biopsy	Unique
Listing 16.2.5.5.1	All Subjects	Discharge Information	Unique
16.2.6 Individual Efficacy Response Data			
Listing 16.2.6.1	All Subjects	HbA1c	Unique
Listing 16.2.6.2	All Subjects	Fasting Plasma Glucose (FPG)	Non-Unique
Listing 16.2.6.3	All Subjects	Urine Albumin Creatinine Ratio (UACR)	Non-Unique
Listing 16.2.6.4	All Subjects	Alanine Aminotransferase (ALT)	Non-Unique
Listing 16.2.6.5	All Subjects	Aspartate Aminotransferase (AST)	Non-Unique
Listing 16.2.6.6	All Subjects	SF-36 Quality of Life Questionnaire	Unique
Listing 16.2.6.7	All Subjects	PROMIS Scores	Unique
16.2.7 Adverse Event Listings (by Subject)			
Listing 16.2.7.1	All Subjects	Adverse Events	Non-Unique

Number	Dataset	Title / Summary	Unique/Non-Unique
Listing 16.2.7.2	All Subjects	Hypoglycemia Form	Non-Unique
16.2.8 Laboratory Values and Other Clinical Observations and Measurements (by Subject)			
Listing 16.2.8.1.1	All Subjects	Laboratory Data: Complete Blood Count	Non-Unique
Listing 16.2.8.1.2	All Subjects	Laboratory Data: Blood Chemistry	Non-Unique
Listing 16.2.8.1.3	All Subjects	Laboratory Data: Urinalysis	Non-Unique
Listing 16.2.8.1.4	All Subjects	Urine Pregnancy Test	Unique
Listing 16.2.8.1.5	All Subjects	Self Monitoring Blood Glucose and Glycemia Diary	Unique
Listing 16.2.8.2.1	All Subjects	Vital Signs	Unique
Listing 16.2.8.3	All Subjects	12-Lead Electrocardiogram (ECG) Results	Unique
Listing 16.2.8.4	All Subjects	MRI Enterography (MRE)	Unique
Listing 16.2.8.5.1	All Subjects	Lifestyle Counseling	Unique
Listing 16.2.8.5.2	All Subjects	Lifestyle Evaluation	Unique
Listing 16.2.8.6	All Subjects	Prior and Concomitant Medications	Unique
Listing 16.2.8.7.1	All Subjects	Physical Examination	Unique
Listing 16.2.8.7.2	All Subjects	Targeted Physical Examination	Non-Unique
Listing 16.2.8.8.1	All Subjects	Patient Contact	Unique
Listing 16.2.8.8.2	All Subjects	Day 7 Telephone Contact	Unique
Listing 16.2.8.8.3	All Subjects	Day 14 Telephone Contact	Unique
Listing 16.2.8.8.4	All Subjects	Telephone Contact	Unique

Number	Dataset	Title / Summary	Unique/Non-Unique
Listing 16.2.8.8.5	All Subjects	Follow Up Office Visit	Unique

14. Tables, Listings, and Listing Shells

14.1. Standard Layout for all Tables, Listings, and Figures

The following standard layout will be applied to all Tables, Listings, and Figures in support of this study. Note that programming notes may be added if appropriate after each TLF shell.

Figure 1: Standardized Layout

Fractyl Laboratories — Page xx of xx

Protocol: C-40000 — Version

<Table, Listing, Figure> xx.x.x

<Title of Table, Listing, or Figure>

<Study Population and if applicable subgroup Description>

Body of Table, Listing or Figure

<Note: If directly Applicable>

Footnote 1 <if applicable> Recommendation is to keep footnotes to a minimum

Footnote 2 <if applicable>

Footnote n <if applicable>

Footnote n+1 <pgm path and name>, <date>

14.2. Planned Table Shells

See Figure 2 below.

Figure 2: Planned Table Shells

Table 14.1.1.1
Summary of Subject Disposition and Follow-up Compliance by Treatment
ITT Population

Status	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)
Completed	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Early Termination	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Reason for Early Termination:			
Adverse Event	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Death	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Lost to Follow-up	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Physician Decision	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Protocol Violation	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Study Terminated by Sponsor	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Withdrawal by Subject	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Other	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Crossed Over to DMR at Week 24		XX (XX.X%)	XX (XX.X%)
Completed Week 4 Visit	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Completed Week 12 Visit	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Completed Week 18 Visit	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Completed Week 24 Visit	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Completed Week 36 Visit	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Completed Week 48 Visit	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Follow-up Time (days)			
n	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
Median	XX.X	XX.X	XX.X
Q1, Q3	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
IQR	XX.X	XX.X	XX.X
Min, Max	XX, XX	XX, XX	XX, XX

Abbreviations: DMR = duodenal mucosal resurfacing; IQR = interquartile range; ITT = intent to treat.
Note: Percentages are n/Number of subjects in the ITT population*100. Subjects are summarized by randomized treatment and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. Follow-up time is derived as the date of last study visit – date of index procedure + 1. IQR = Q3 – Q1.
SOURCE: Listing 16.2.1

Table 14.1.1.2
Summary of Analysis Population Eligibilities by Treatment

Status	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)
Study Population [1]			XX
Screened Population [2]			XX
Medication Run-In Population [3]			XX
ITT Population [4]	XX	XX	XX
As-Treated Population [5]	XX	XX	XX
Week 24 Per-Protocol Population [6]	XX	XX	XX
Safety Population [7]	XX	XX	XX

Abbreviations: DMR = duodenal mucosal resurfacing; ITT = intent to treat; PP = per-protocol.
Note: Subjects are summarized by randomized treatment and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. Follow-up time is derived as the date of last study visit – date of index procedure + 1.
[1] The Study Population includes all subjects consented at the site.
[2] The Screened population includes all subjects who completed Visit 1.
[3] The Medication Run-In population includes all subjects who entered the Run-In Phase.
[4] The ITT Population includes all subjects who were randomized after the Medication Run-In phase.
[5] The As-Treated Population is a subset of ITT subjects who received at least one ablation or underwent the randomized Sham procedure.
[6] The PP population includes all subjects in the AT population who did not have any major protocol deviations that could affect the assessment of efficacy and had their Week 24 study visit within the protocol-specified window.
[7] The Safety Population includes all subjects in whom Sham or DMR was attempted.
SOURCE: Listing 16.2.1

Table 14.1.2.1
Summary of Demographics and Baseline Characteristics
Medication Run-In Population

Variable Statistic or Category	Overall (N=XX)
Age (years)	
n	XX
Mean (SD)	XX.X (XX.XX)
Median	XX.X
Q1, Q3	XX.X, XX.X
IQR	XX.X
Min, Max	XX, XX
Sex	
Male	XX (XX.X%)
Female	XX (XX.X%)
Child-bearing Age? [1]	XX (XX.X%)
Ethnicity	
Hispanic or Latino	XX (XX.X%)
Not Hispanic or Latino	XX (XX.X%)
Not Reported	XX (XX.X%)
Unknown	XX (XX.X%)
Race	
American-Indian or Alaska Native	XX (XX.X%)
Asian	XX (XX.X%)
Black or African-American	XX (XX.X%)
Native Hawaiian or Other Pacific Islander	XX (XX.X%)
White	XX (XX.X%)
More than One Race	XX (XX.X%)
Race not Provided	XX (XX.X%)

Abbreviations: DMR = duodenal mucosal resurfacing; IQR = interquartile range.
Note: Percentages are n/Number of subjects in the Medication Run-In Population*100. Subjects are summarized overall. IQR = Q3 – Q1.
[1] Only captured for female subjects; percentages are based on the number of female subjects in the Safety Population.
SOURCE: Listing 16.2.4.1

Table 14.1.2.1 (cont.)
Summary of Demographics and Baseline Characteristics
Medication Run-In Population

Variable Statistic or Category	Overall (N=XX)
Height (cm)	
n	XX
Mean (SD)	XX.X (XX.XX)
Median	XX.X
Q1, Q3	XX.X, XX.X
IQR	XX.X
Min, Max	XX, XX
Weight (kg)	
n	XX
Mean (SD)	XX.X (XX.XX)
Median	XX.X
Q1, Q3	XX.X, XX.X
IQR	XX.X
Min, Max	XX, XX
Body Mass Index (kg/m^2)	
n	XX
Mean (SD)	XX.X (XX.XX)
Median	XX.X
Q1, Q3	XX.X, XX.X
IQR	XX.X
Min, Max	XX, XX

Abbreviations: DMR = duodenal mucosal resurfacing; IQR = interquartile range.
Note: Percentages are n/Number of subjects in the Medication Run-In Population*100. Subjects are summarized overall. Duration of Type 2 Diabetes diagnosis is derived as the date of index procedure – onset date of first Type 2 diabetes record entered on the medical and diabetic history case report form + 1. IQR = Q3 - Q1.
[1] Only captured for female subjects; percentages are based on the number of female subjects in the Safety Population.
SOURCE: Listing 16.2.4.1

Table 14.1.2.1 (cont.)
Summary of Demographics and Baseline Characteristics
Medication Run-In Population

Variable Statistic or Category	Overall (N=XX)
HbA1c (mmol/mol)	
n	XX
Mean (SD)	XX.X (XX.XX)
Median	XX.X
Q1, Q3	XX.X, XX.X
IQR	XX.X
Min, Max	XX, XX
Duration of Type 2 Diabetes Diagnosis	
n	XX
Mean (SD)	XX.X (XX.XX)
Median	XX.X
Q1, Q3	XX.X, XX.X
IQR	XX.X
Min, Max	XX, XX

Abbreviations: DMR = duodenal mucosal resurfacing; IQR = interquartile range.
Note: Percentages are n/Number of subjects in the Medication Run-In Population*100. Subjects are summarized overall. Duration of Type 2 Diabetes diagnosis is derived as the date of index procedure – onset date of first Type 2 diabetes record entered on the medical and diabetic history case report form + 1. IQR = Q3 - Q1.
[1] Only captured for female subjects; percentages are based on the number of female subjects in the Safety Population.
SOURCE: Listing 16.2.4.1

Table 14.1.2.2
Summary of Demographics and Baseline Characteristics by Treatment
ITT Population

Same shell as Table 14.1.2.1

Programing note: *Add ITT (Intent-to-Treat) to abbreviations. Update footnote to read "Note: Percentages are n/Number of subjects in the ITT Population*100. Subjects are summarized by randomized treatment and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment." Include two columns for DMR and Sham and display them before the Overall column, as shown below.*

Variable Statistic or Category	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)

Table 14.1.2.3
Summary of Demographics and Baseline Characteristics by Treatment
AT Population

Same shell as Table 14.1.2.1

Programing note: *Add AT (As-Treated) to abbreviations. Update footnote to read "Note: Percentages are n/Number of subjects in the AT Population*100. Subjects are summarized by initial treatment received and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment." Include two columns for DMR and Sham and display them before the Overall column, as shown below.*

Variable Statistic or Category	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)

Table 14.1.3.1
Summary of Medical History by SOC, PT, and Treatment
Safety Population

System Organ Class Preferred Term	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)
Subjects with at least 1 Recorded Non-DiabeticMedical History	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
System Organ Class 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
System Organ Class 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: DMR = duodenal mucosal resurfacing; MedDRA = medical dictionary for regulatory activities; PT = Preferred Term; SOC = System Organ Class.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. Medical histories were coded using MedDRA version 22.0. Subjects were counted once for each system organ class (SOC) and once for each preferred term (PT). Medical history terms are displayed by descending frequency of SOC, then PT within SOC, and then alphabetically by PT.
SOURCE: Listing 16.2.4.2.2

Programming note: *Ensure proper MedDRA version is displayed in footnote.*

Table 14.1.3.2
Summary of Diabetic History by SOC, PT, and Treatment
Safety Population

System Organ Class Preferred Term	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)
Subjects with at least 1 Recorded Diabetic History	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Type 2 Diabetes	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Prior Therapy	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Diabetic Retinopathy	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Diabetic Nephropathy	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Diabetic Neuropathy	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Other	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
System Organ Class 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
System Organ Class 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: DMR = duodenal mucosal resurfacing; MedDRA = medical dictionary for regulatory activities; PT = Preferred Term; SOC = System Organ Class.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. Diabetic histories were coded using MedDRA version 22.0. Subjects were counted once for each system organ class (SOC) and once for each preferred term (PT). Diabetic history terms are displayed by descending frequency of SOC, then PT within SOC, and then alphabetically by PT.
SOURCE: Listing 16.2.4.2.1

Table 14.1.3.3
Summary of Targeted Hypoglycemic Events History by Treatment
Safety Population

Hypoglycemic Event Number of Events in Past Year Statistic	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)
Subjects with at least 1 hypoglycemic event in the past year	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Loss of consciousness			
n	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
Median	XX.X	XX.X	XX.X
Q1, Q3	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
IQR	XX.X	XX.X	XX.X
Min, Max	XX, XX	XX, XX	XX, XX
Admission to hospital			
n	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
Median	XX.X	XX.X	XX.X
Q1, Q3	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
IQR	XX.X	XX.X	XX.X
Min, Max	XX, XX	XX, XX	XX, XX
Seizure			
n	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
Median	XX.X	XX.X	XX.X
Q1, Q3	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
IQR	XX.X	XX.X	XX.X
Min, Max	XX, XX	XX, XX	XX, XX

Abbreviations: DMR = duodenal mucosal resurfacing; IQR = interquartile range.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. IQR = Q3 – Q1.
SOURCE: Listing 16.2.4.2.3

Table 14.1.4
Summary of Prior Medications by ATC Class Level 4, PT, and Treatment
Safety Population

ATC Class Level 4 Preferred Term (ATC Class Level 5)	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)
Subjects with at least 1 Prior Medication	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with at least 1 Prior Diabetic Medication	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with at least 1 Prior Rescue Medication	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with at least 1 Prior Non-Drug Therapy	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
ATC Class 1			
Preferred Term 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
ATC Class 2			
Preferred Term 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: ATC = Anatomical Therapeutic Chemical; DMR = duodenal mucosal resurfacing; PT = Preferred Term; WHO-DD = World Health Organization drug dictionary.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. All medications (concomitant medications, diabetic medications, rescue medications, and non-drug therapies) were coded using WHO-DD version March 2019. Prior medications are all medications (including diabetic medications, rescue medications, and non-drug therapies) that were started before the index procedure whether or not they were stopped before the index procedure. Medications are displayed by descending frequency of ATC Level 4 classification, by PT within ATC, and then alphabetically. Subjects were counted only once for each ATC and PT.
SOURCE: Listing 16.2.8.6

Programming note: *Ensure proper WHO-DD version is displayed in footnote.*

Table 14.1.5.1
Summary of Endoscopic Evaluation
Medication Run-In Population

Visit: Baseline

Variable Statistic or Category	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)
Grade of Esophagitis			
None	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Grade 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Grade 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Grade 3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Duodenum Accessed			
Yes	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
No	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Furthest Location Accessed			
D1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
D2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
D3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
D4	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Abnormalities of GI Tract Preventing Access to Duodenum			
Yes	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
No	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Anatomic abnormalities Precluding Completion of DMR Procedure			
Yes	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
No	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: DMR = duodenal mucosal resurfacing; GI = gastrointestinal.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.
SOURCE: Listing 16.2.5.3.3

Programming note: *Repeat for Week 24 for cross-over subjects. Only Sham and Overall columns will be included at this visit.*

Table 14.1.5.1 (cont.)
Summary of Endoscopic Evaluation
Medication Run-In Population

Visit: Baseline

Variable Statistic or Category	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)
GI Conditions			
Bleeding	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Ulcer(s)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Varices()	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Stricture(s)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Telangiectasia	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Malignancy	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Endoscopy Successfully Completed			
Yes	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
No	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Excluded Based on Endoscopic Findings			
Yes	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
No	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: DMR = duodenal mucosal resurfacing; GI = gastrointestinal.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.
SOURCE: Listing 16.2.5..3.3

Programming note: *Repeat for Week 24 for cross-over subjects. Only Sham and Overall columns will be included at this visit.*

Table 14.1.5.2
Summary of Endoscopy Results
Safety Population

Visit: Baseline

Variable Statistic or Category	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)
Ulcers Present	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
D1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
D2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
D3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
D4	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Luminal Narrowing Present	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
D1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
D2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
D3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
D4	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Length of Luminal Narrowing			
n	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
Median	XX.X	XX.X	XX.X
Q1, Q3	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
IQR	XX.X	XX.X	XX.X
Min, Max	XX, XX	XX, XX	XX, XX
Diameter of Luminal Narrowing			
n	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
Median	XX.X	XX.X	XX.X
Q1, Q3	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
IQR	XX.X	XX.X	XX.X
Min, Max	XX, XX	XX, XX	XX, XX

Abbreviations: DMR = duodenal mucosal resurfacing; IQR = interquartile range.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. IQR = Q3 – Q1.
SOURCE: Listing 16.2.5.3.4

Table 14.1.5.2 (cont.)
Summary of Endoscopy Results
Safety Population

Visit: Baseline

Variable Statistic or Category	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)
Visual Appearance D1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Normal	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Partial Regrowth	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Reduction in Height and/or Width of Plicae	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Bleeding Present	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Other Mucosal Abnormality	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Visual Appearance D2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Normal	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Partial Regrowth	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Reduction in Height and/or Width of Plicae	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Bleeding Present	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Other Mucosal Abnormality	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Continue for D3 and D4 Findings

Abbreviations: DMR = duodenal mucosal resurfacing; IQR = interquartile range.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. IQR = Q3 – Q1.
SOURCE: Listing 16.2.5.3.4

Programming note: *Repeat for Week 24 for cross-over subjects. Only Sham and Overall columns will be included at this visit.*

Table 14.2.1.1
Summary of Change from Baseline in HbA1c by Study Visit and Treatment
AT Population

Study Visit	DMR (N=XX)			Sham (N=XX)		
Statistic	Observed	CFB	%CFB	Observed	CFB	%CFB
Baseline [1]						
n	XX			XX		
Mean (SD)	XX.X (XX.XX)			XX.X (XX.XX)		
95% CI of the Mean	(XX.X, XX.X)			(XX.X, XX.X)		
Median	XX.X			XX.X		
Q1, Q3	XX, XX			XX, XX		
IQR	XX.X			XX.X		
Min, Max	XX, XX			XX, XX		
Repeat for Week 4, Week 12, and Week 18.						
Week 24						
n	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
95% CI of the Mean	(XX.X, XX.X)	(XX.X, XX.X)	(XX.X, XX.X)	(XX.X, XX.X)	(XX.X, XX.X)	(XX.X, XX.X)
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Q1, Q3	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX
IQR	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX
Repeat for Week 36 and Week 48 for DMR only. Repeat for Crossover Week 4, Crossover Week 12, Crossover Week 18, and Crossover Week 24 for Sham only.						

Abbreviations: AT = as treated; CFB = change from baseline; IQR = interquartile range.
Note: Subjects are summarized by initial treatment received. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. IQR = Q3 – Q1.
[1] Baseline is defined as the last observation recorded prior to the attempted treatment with index procedure.
SOURCE: Listing 16.2.6.1

Programming note: *Check normality per Section 8 of the SAP. If the data are non-normal, use the Wilcoxon signed-rank test and update the footnote accordingly.*

Table 14.2.1.2
Summary of Change from Baseline in HbA1c by Study Visit and Treatment
ITT Population

Same shell as 14.2.1.1

Programming note: *Add ITT (Intent-to-Treat) to abbreviations. Update Note: to read "Subjects are summarized by randomized treatment. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment."*

Table 14.2.1.3
Summary of Change from Baseline in HbA1c by Study Visit and Treatment
Weel 24 Per Protocol Population

Same shell as 14.2.1.1

Table 14.2.1.4
Summary of HbA1c During Medication Run-In
Medication Run-In Population

Same shell as 14.2.1.1

Programming note: *Remove AT from abbreviations. Update Note: to read "Subjects are summarized overall." Only one treatment group column, Overall, will be displayed. Only Screening and Baseline visits will be displayed and only the observed values will be displayed, no CFB or %CFB columns.*

Table 14.2.1.5
Summary of Change from Week 24 in HbA1c by Study Visit and Treatment
AT Population

Study Visit	Sham (N=XX)		
Statistic	Observed	Change [1]	% Change [1]
Week 24 [2]			
n	XX		
Mean (SD)	XX.X (XX.XX)		
95% CI of the Mean	(XX.X, XX.X)		
Median	XX.X		
Q1, Q3	XX, XX		
IQR	XX.X		
Min, Max	XX, XX		
Crossover Week 4			
n	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
95% CI of the Mean	(XX.X, XX.X)	(XX.X, XX.X)	(XX.X, XX.X)
Median	XX.X	XX.X	XX.X
Q1, Q3	XX, XX	XX, XX	XX, XX
IQR	XX.X	XX.X	XX.X
Min, Max	XX, XX	XX, XX	XX, XX

Repeat for Crossover Week 12, Crossover Week 18, and Crossover Week 24.

Abbreviations: AT = as treated; IQR = interquartile range.
Note: Subjects are summarized by initial treatment received. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. Only Sham cross-over subjects are presented. IQR = Q3 – Q1.
[1] Change from Week 24
[2] The Week 24 value is the value recorded prior to the attempted treatment with the cross-over procedure.
SOURCE: Listing 16.2.6.1

Programming note: *Check normality per Section 8 of the SAP. If the data are non-normal, use the Wilcoxon signed-rank test and update the footnote accordingly.*

Table 14.2.1.6
Summary of Change from Week 24 in HbA1c by Study Visit and Treatment
ITT Population

Same shell as 14.2.1.5

Programming note: *Add ITT (Intent-to-Treat) to abbreviations. Update Note: to read "Subjects are summarized by randomized treatment. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. Only sham cross-over subjects are presented."*

Table 14.2.1.7
Summary of HbA1c Improvement by Study Visit and Treatment
AT Population

Study Visit Statistic [1]	DMR (N=XX)	Sham (N=XX)
Baseline to Week 4		
Improvement	XX (XX.X%)	XX (XX.X%)
No Improvement	XX (XX.X%)	XX (XX.X%)
Baseline to Week 8		
Improvement	XX (XX.X%)	XX (XX.X%)
No Improvement	XX (XX.X%)	XX (XX.X%)
Baseline to Week 12		
Improvement	XX (XX.X%)	XX (XX.X%)
No Improvement	XX (XX.X%)	XX (XX.X%)
Baseline to Week 24		
Improvement	XX (XX.X%)	XX (XX.X%)
No Improvement	XX (XX.X%)	XX (XX.X%)
Baseline to Week 36		
Improvement	XX (XX.X%)	XX (XX.X%)
No Improvement	XX (XX.X%)	XX (XX.X%)
Baseline to Week 48		
Improvement	XX (XX.X%)	XX (XX.X%)
No Improvement	XX (XX.X%)	XX (XX.X%)
Week 24 to Week 48		
Improvement	XX (XX.X%)	
No Improvement	XX (XX.X%)	

Abbreviations: AT = as treated.
Note: Subjects are summarized by initial treatment received. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. An improvement in HbA1c is defined as any value lower than baseline. The proportion of subjects with an HbA1c improvement from baseline at Week 24 that maintain an HbA1c improvement at Week 48 is presented for DMR subjects only.
SOURCE: Listing 16.2.6.1

Table 14.2.1.8
Summary of HbA1c Improvement by Study Visit and Treatment
ITT Population

Same shell as 14.2.1.7

Programming note: *Add ITT (Intent-to-Treat) to abbreviations. Update Note: to read "Subjects are summarized by randomized treatment. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment."*

Table 14.2.1.9
Summary of HbA1c Improvement by Study Visit and Treatment
Week 24 PP Population

Same shell as 14.2.1.7

Table 14.2.2.1
Summary of Change from Baseline in FPG by Study Visit and Treatment
AT Population

Same shell as 14.2.1.1

Programming note: *Add FPG (fasting plasma glucose) to abbreviations. Update SOURCE to Listing 16.2.6.2*

Table 14.2.2.2
Summary of Change from Baseline in FPG by Study Visit and Treatment
ITT Population

Same shell as 14.2.1.1

Programming note: *Add FPG (fasting plasma glucose) and ITT (Intent-to-Treat) to abbreviations. Update Note: to read "Subjects are summarized by randomized treatment. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment." Update SOURCE to Listing 16.2.6.2*

Table 14.2.2.3
Summary of Change from Week 24 in FPG by Study Visit and Treatment
AT Population

Same shell as 14.2.1.5

Programming note: *Add FPG (fasting plasma glucose) to abbreviations. Update SOURCE to Listing 16.2.6.2*

Table 14.2.2.4
Summary of Change from Week 24 in FPG by Study Visit and Treatment
ITT Population

Same shell as 14.2.1.5

Programming note: *Add FPG (fasting plasma glucose) and ITT (Intent-to-Treat) to abbreviations. Update Note: to read "Subjects are summarized by randomized treatment. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. Only Sham cross-over subjects are presented." Update SOURCE to Listing 16.2.6.2*

Table 14.2.3.1
Summary of Change from Baseline in UACR by Study Visit and Treatment
AT Population

Same shell as 14.2.1.1

Programming note: *Add UACR (Urine Albumin-to-Creatinine Ratio) to abbreviations. Update SOURCE to Listing 16.2.6.3*

Table 14.2.3.2
Summary of Change from Baseline in UACR by Study Visit and Treatment
ITT Population

Same shell as 14.2.1.1

Programming note: *Add UACR (Urine Albumin-to-Creatinine Ratio) and ITT (Intent-to-Treat) to abbreviations. Update Note: to read "Subjects are summarized by randomized treatment. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment." Update SOURCE to Listing 16.2.6.3*

Table 14.2.4.1
Summary of Change from Baseline in ALT by Study Visit and Treatment
AT Population

Same shell as 14.2.1.1

Programming note: *Add ALT (Alanine Aminotransferase) to abbreviations. Update SOURCE to Listing 16.2.6.4*

Table 14.2.4.2
Summary of Change from Baseline in ALT by Study Visit and Treatment
ITT Population

Same shell as 14.2.1.1

Programming note: *Add ALT (Alanine Aminotransferase) and ITT (Intent-to-Treat) to abbreviations. Update Note: to read "Subjects are summarized by randomized treatment. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment." Update SOURCE to Listing 16.2.6.4*

Table 14.2.5.1
Summary of Change from Baseline in AST by Study Visit and Treatment
AT Population

Same shell as 14.2.1.1

Programming note: *Add AST (Aspartate Aminotransferase) to abbreviations. Update SOURCE to Listing 16.2.6.5*

Table 14.2.5.2
Summary of Change from Baseline in AST by Study Visit and Treatment
ITT Population

Same shell as 14.2.1.1

Programming note: *Add AST (Aspartate Aminotransferase) and ITT (Intent-to-Treat) to abbreviations. Update Note: to read "Subjects are summarized by randomized treatment. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment." Update SOURCE to Listing 16.2.6.5*

Table 14.2.6.1
Summary of Change from Baseline in SF-36 Scale Scores by Study Visit and Treatment
AT Population

Same shell as 14.2.1.1

Programming note: *Update footnote [1] to replace HbA1c with scale score. Include a row at the top of the table "Scale Score: XXXXX". Scale scores will be: physical functioning, role limitations due to physical health, role limitations due to emotional problems, energy/fatigue, emotional well-being, social functioning, pain, and general health. Study visits will include Baseline, Week 12, Week 24, and Week 48 for DMR and Baseline Week 12, Week 24, Crossover week 12 and Crossover Week 24 for Sham. Update SOURCE to Listing 16.2.6.6*

Table 14.2.6.2
Summary of Change from Baseline in SF-36 Scale Scores by Study Visit and Treatment
ITT Population

Same shell as 14.2.1.1

Programming note: *Add ITT (Intent-to-Treat) to abbreviations. Update Note: to read "Subjects are summarized by randomized treatment. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment." Update footnote [1] to replace HbA1c with scale score. Include a row at the top of the table "Scale Score: XXXXX". Scale scores will be: physical functioning, role limitations due to physical health, role limitations due to emotional problems, energy/fatigue, emotional well-being, social functioning, pain, and general health. Study visits will include Baseline, Week 12, Week 24, and Week 48 for DMR and Baseline Week 12, Week 24, Crossover week 12 and Crossover Week 24 for Sham. Update SOURCE to Listing 16.2.6.6*

Table 14.2.7.1
Summary of Change from Baseline in PROMIS Scores by Study Visit and Treatment
AT Population

Same shell as 14.2.1.1

Programming note: *Update footnote [1] to replace HbA1c with score. Include a row at the top of the table "Parameter: XXXXX". Parameters will be: Gastrointestinal Nausea and Vomiting Total Score, Gastrointestinal Gas and Bloating Total Score, Gastrointestinal Diarrhea Total Score, and Belly Pain Total Score. Study visits will include Baseline, Week 12, Week 24, and Week 48 for DMR and Baseline Week 12, Week 24, Crossover week 12 and Crossover Week 24 for Sham. Update SOURCE to Listing 16.2.6.7*

Table 14.2.7.2
Summary of Change from Baseline in PROMIS Scores by Study Visit and Treatment
ITT Population

Same shell as 14.2.1.1

Programming note: *Add ITT (Intent-to-Treat) to abbreviations. Update Note: to read "Subjects are summarized by randomized treatment. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment." Update footnote [1] to replace HbA1c with score. Include a row at the top of the table "Parameter: XXXXX". Parameters will be: Gastrointestinal Nausea and Vomiting Total Score, Gastrointestinal Gas and Bloating Total Score, Gastrointestinal Diarrhea Total Score, and Belly Pain Total Score. Study visits will include Baseline, Week 12, Week 24, and Week 48 for DMR and Baseline Week 12, Week 24, Crossover week 12 and Crossover Week 24 for Sham. Update SOURCE to Listing 16.2.6.7*

Table 14.3.1.1
Summary of Adverse Events by Treatment
Safety Population

Period: Day 1 - Week 24

Category	DMR (N=XX)	Sham (N=XX)	Crossover DMR [2] (N=XX)	Combined DMR [3] (N=XX)
Subjects with at least 1 TEAE	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with an SAE	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Maximum Severity of TEAE				
Mild	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Moderate	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Severe	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with a TEAE Related to Study Procedure [1]	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with a TEAE Related to Study Device [1]	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with a TEAE Leading to Discontinuation of Study	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with a TEAE leading to Death	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with a SAE Related to Study Procedure [1]	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with a SAE Related to Study Device [1]	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with an UADE	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with an AESI	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: AESI = adverse event of special interest; CI = confidence interval; CRF = case report form; DMR = duodenal mucosal resurfacing; MedDRA = medical dictionary for regulatory activities; TEAE = treatment emergent adverse event; SAE = serious adverse event; UADE = unanticipated adverse device effect.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received and by crossover treatment received. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. AEs were coded using MedDRA version 22.0. A TEAE is any AE with an onset date/time or worsening after DMR or sham procedure.
[1] Related TEAEs are those marked as Possibly Related, Probably Related, or Definitely Related on the CRF.
[2] Subjects who initially received the Sham procedure but received the DMR at Week 24 (relative to index procedure); Day 1 to Week 24 is based on the second procedure.
[3] Subjects who initially received the DMR procedure combined with subjects who initially received the Sham procedure but crossed over to receive the DMR procedure.
SOURCE: Listing 16.2.7.1

Programming note: *Repeat for Period: Week 24 – Week 48 where only DMR treatment group column will be displayed and repeat for Day 1 – Week 48 where only Overall treatment group column will be displayed. Ensure proper MedDRA version is printed in the footnote.*

Table 14.3.1.2
Incidence of Treatment Emergent Adverse Events by SOC, PT, and Treatment
Safety Population

System Organ Class Preferred Term	Day 1 - Week 24 DMR (N=XX)	Day 1 - Week 24 Sham (N=XX)	Day 1 - Week 24 Crossover DMR [1] (N=XX)	Day 1 - Week 24 Combined DMR [2] (N=XX)	Week 24 - Week 48 DMR (N=XX)	Day 1 - Week 48 Overall (N=XX)
Subjects with at least 1 TEAE	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
System Organ Class 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
System Organ Class 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: DMR = duodenal mucosal resurfacing; MedDRA = medical dictionary for regulatory activities; TEAE = treatment emergent adverse event.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received, by crossover treatment received, and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. AEs were coded using MedDRA version 22.0. A TEAE is any AE with an onset date/time or worsening after DMR or sham procedure. Subjects are counted once for each system organ class (SOC) and once for each preferred term (PT). AEs are displayed by descending frequency of SOC, then PT within SOC, and then alphabetically by PT. If a subject has separate AEs with the same SOC/PT with one starting in the double-blind period and the other starting after Week 24, they are counted once within each period.
[1] Subjects who initially received the Sham procedure but received the DMR at Week 24 (relative to index procedure); Day 1 to Week 24 is based on the second procedure.
[2] Subjects who initially received the DMR procedure combined with subjects who initially received the Sham procedure but crossed over to receive the DMR procedure.
SOURCE: Listing 16.2.7.1

Programming note: *SOC & PT text should be in proper case. Ensure correct MedDRA version is printed in footnote. If columns are too wide, repeat table by period.*

Table 14.3.1.3
Incidence of Treatment Emergent Adverse Events by Maximum Severity, SOC, PT, and Treatment
Safety Population

System Organ Class Preferred Term Maximum Severity	Day 1 - Week 24 DMR (N=XX)	Day 1 - Week 24 Sham (N=XX)	Day 1 - Week 24 Crossover DMR [1] (N=XX)	Day 1 - Week 24 Combined DMR [2] (N=XX)	Week 24 - Week 48 DMR (N=XX)	Day 1 - Week 48 Overall (N=XX)
Subjects with at least 1 TEAE	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Any Event (Total)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Mild	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Moderate	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Severe	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
System Organ Class 1						
Any Event (Total)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Mild	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Moderate	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Severe	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Mild	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Moderate	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Severe	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: DMR = duodenal mucosal resurfacing; MedDRA = medical dictionary for regulatory activities; TEAE = treatment emergent adverse event.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received, by cross-over treatment received, and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. AEs were coded using MedDRA version 22.0. A TEAE is any AE with an onset date/time or worsening after DMR or sham procedure. Subjects are counted once for each system organ class (SOC) and once for each preferred term (PT). AEs are displayed by descending frequency of SOC, then PT within SOC, and then alphabetically by PT. If a subject has separate AEs with the same SOC/PT with one starting in the double-blind period and the other starting after Week 24, they are counted once within each period.
[1] Subjects who initially received the Sham procedure but received the DMR at Week 24 (relative to index procedure); Day 1 to Week 24 is based on the second procedure.
[2] Subjects who initially received the DMR procedure combined with subjects who initially received the Sham procedure but crossed over to receive the DMR procedure.
SOURCE: Listing 16.2.7.1

Programming note: *SOC & PT text should be in proper case. Ensure correct MedDRA version is printed in footnote. If columns are too wide, repeat table by period.*

Table 14.3.1.4
Incidence of Treatment Emergent Adverse Events by Relationship, SOC, PT, and Treatment
Safety Population

System Organ Class Preferred Term Maximum Severity	Day 1 - Week 24 DMR (N=XX)	Day 1 - Week 24 Sham (N=XX)	Day 1 - Week 24 Crossover DMR [1] (N=XX)	Day 1 - Week 24 Combined DMR [2] (N=XX)	Week 24 - Week 48 DMR (N=XX)	Day 1 - Week 48 Overall (N=XX)
Subjects with at least 1 TEAE	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Any Event (Total)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Related to Device	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Not Related to Device	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Related to Procedure	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Not Related to Procedure	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
System Organ Class 1						
Any Event (Total)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Related to Device	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Not Related to Device	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Related to Procedure	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Not Related to Procedure	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Related to Device	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Not Related to Device	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Related to Procedure	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Not Related to Procedure	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: CRF = case report form; DMR = duodenal mucosal resurfacing; MedDRA = medical dictionary for regulatory activities; TEAE = treatment emergent adverse event.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received, by cross-over treatment received, and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. AEs were coded using MedDRA version 22.0. A TEAE is any AE with an onset date/time or worsening after DMR or sham procedure. Related TEAEs are those marked as Possibly Related, Probably Related, or Definitely Related on the CRF. Subjects are counted once for each system organ class (SOC) and once for each preferred term (PT). AEs are displayed by descending frequency of SOC, then PT within SOC, and then alphabetically by PT. If a subject has separate AEs with the same SOC/PT with one starting in the double-blind period and the other starting after Week 24, they are counted once within each period.
[1] Subjects who initially received the Sham procedure but received the DMR at Week 24 (relative to index procedure); Day 1 to Week 24 is based on the second procedure.
[2] Subjects who initially received the DMR procedure combined with subjects who initially received the Sham procedure but crossed over to receive the DMR procedure.
SOURCE: Listing 16.2.7.1

Programming note: *SOC & PT text should be in proper case. Ensure correct MedDRA version is printed in footnote. If columns are too wide, repeat table by period.*

Table 14.3.2.1
Incidence of Adverse Events Leading to Withdrawal by SOC, PT, and Treatment
Safety Population

Same shell as 14.3.1.2

Programming note: *Change first row to read "Subjects with at least 1 TEAE Leading to Withdrawal"*

Table 14.3.2.2
Incidence of Adverse Events Leading to Withdrawal by Relationship, SOC, PT, and Treatment
Safety Population

Same shell as 14.3.1.4

Programming note: *Change first row to read "Subjects with at least 1 TEAE Leading to Withdrawal"*

Table 14.3.2.3
Incidence of Serious Adverse Events by SOC, PT, and Treatment
Safety Population

Same shell as 14.3.1.2

Programming note: *Change first row to read "Subjects with at least 1 SAE" Add SAE (serious adverse event) to abbreviations.*

Table 14.3.2.4
Incidence of Serious Adverse Events by Relationship, SOC, PT, and Treatment
Safety Population

Same shell as 14.3.1.4

Programming note: *Change first row to read "Subjects with at least 1 SAE" Add SAE (serious adverse event) to abbreviations.*

Table 14.3.2.5
Incidence of Unanticipated Adverse Device Effects by SOC, PT, and Treatment
Safety Population

Same shell as 14.3.1.2

Programming note: *Change first row to read "Subjects with at least 1 UADE" Add UADE (unanticipated adverse device effect) to abbreviations.*

Table 14.3.2.6
Incidence of Unanticipated Adverse Device Effects by Relationship, SOC, PT, and Treatment
Safety Population

Same shell as 14.3.1.4

Programming note: *Change first row to read "Subjects with at least 1 UADE" Add UADE (unanticipated adverse device effect) to abbreviations.*

Table 14.3.2.7
Incidence of Adverse Events of Special Interest by SOC, PT, and Treatment
Safety Population

Same shell as 14.3.1.2

Programming note: *Change first row to read "Subjects with at least 1 AESI" Add AESI (adverse event of special interest) to abbreviations.*

Table 14.3.2.8
Incidence of COVID-19 Adverse Events by SOC, PT, and Treatment
Safety Population

Same shell as 14.3.1.2

Programming note: *Change first row to read "Subjects with at least 1 COVID-19 Related AE" Add COVID-19 (coronavirus 2019) to abbreviations. A footnote will be added after AE review occure prior to lock to define the MedDRA preferred terms included in this summary.*

Table 14.3.2.9
Summary of Hypoglycemic Events by Treatment
Safety Population

Variable Statistic or Category	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)
Reporting Type			
Patient	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Physician	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Blood Glucose Value			
n	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
Median	XX.X	XX.X	XX.X
Q1, Q3	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
IQR	XX.X	XX.X	XX.X
Min, Max	XX, XX	XX, XX	XX, XX
Fasting			
Yes	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
No	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Resolved			
Yes	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
No	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Ongoing			
Yes	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
No	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Duration of Episode			
n	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
Median	XX.X	XX.X	XX.X
Q1, Q3	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
IQR	XX.X	XX.X	XX.X
Min, Max	XX, XX	XX, XX	XX, XX

Abbreviations: DMR = duodenal mucosal resurfacing; IQR = interquartile range; SAE = serious adverse event.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. IQR = Q3 – Q1.
SOURCE: Listing 16.2.7.2

Table 14.3.2.9 (cont.)
Summary of Hypoglycemic Events by Treatment
Safety Population

Variable Statistic or Category	DMR (N=XX)	Sham (N=XX)	Overall (N=XX)
Treated			
Yes	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
No	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Treated with			
Snack or Meal	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Glucose Tablets	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Glucagon	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
IV Glucose	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Medical Attention	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Other	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Symptoms			
Glucose Alert Value (≤70 mg/dL)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Serious, Clinically Important Hypoclycemia (<54 mg/dL)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Hypoglycemia requiring third-party assistance	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Meet Crtieria for SAE			
Yes	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
No	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: DMR = duodenal mucosal resurfacing; IQR = interquartile range; SAE = serious adverse event.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. IQR = Q3 – Q1.
SOURCE: Listing 16.2.7.2

Table 14.3.2.10
Summary of Diarrhea by Treatment
Safety Population

Period: Day 1 – Week 24

Study Visit	DMR (N=XX)		Sham (N=XX)		Crossover DMR [1] (N=XX)		Combined DMR [2] (N=XX)	
Category	Freq	n (%)	Freq	n (%)	Freq	n (%)	Freq	n (%)
Subjects with at least 1 Diarrhea AESI	XX	XX (XX.X%)	XX	XX (XX.X%)	XX	XX (XX.X%)	XX	XX (XX.X%)
Diarrhea Characteristics								
Bloody	XX	XX (XX.X%)	XX	XX (XX.X%)	XX	XX (XX.X%)	XX	XX (XX.X%)
Steatorrhea	XX	XX (XX.X%)	XX	XX (XX.X%)	XX	XX (XX.X%)	XX	XX (XX.X%)
Other Clinical Symptoms								
Fever	XX	XX (XX.X%)	XX	XX (XX.X%)	XX	XX (XX.X%)	XX	XX (XX.X%)
Abdominal Pain	XX	XX (XX.X%)	XX	XX (XX.X%)	XX	XX (XX.X%)	XX	XX (XX.X%)
Other	XX	XX (XX.X%)	XX	XX (XX.X%)	XX	XX (XX.X%)	XX	XX (XX.X%)

Abbreviation: AESI = adverse event of special interest; DMR = duodenal mucosal resurfacing.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. Freq represents the number of events and n and % represents the number of subjects.
[1] Subjects who initially received the Sham procedure but received the DMR at Week 24 (relative to index procedure); Baseline to Week 24 is based on the second procedure.
[2] Subjects who initially received the DMR procedure combined with subjects who initially received the Sham procedure but crossed over to receive the DMR procedure.
SOURCE: Listing 16.2.7.1

Programming note: *Repeat for Period: Week 24 – Week 48 where only DMR treatment group column will be displayed and repeat for Day 1 – Week 48 where only Overall treatment group column will be displayed.*

Table 14.3.3.1
Listing of Adverse Events Leading to Withdrawal
All Subjects

Subject ID	Randomized Treatment [1]	System Organ Class/ Preferred Term/ Verbatim Term	Start Date/Time (Study Day)/ End Date/Time (Study Day)	Severity/ Relationship to Procedure/ Relationship to Device	Outcome/ Action Taken with Device/ Other Action Taken	Serious?	TEAE?	UADE? / Medical History Relevant to SAE/UADE	Caused Subject to be discontinued from the study?
XXXXX	XXXXX	XXXXXXXXXXXXXX/ XXXXXXXXXXXXX XXXXXXXXXXX	DDMMMYYYY/HH:MM (X) / DDMMMYYYY/HH:MM (X)	XXXXXXXX/ XXXXXXXX/ XXXXXXXX	XXXXXXXXX/ XXXXXXXXXX/ XXXX	XX	XX	XX/ XXX	XX
XXXXX	XXXXX	XXXXXXXXXXXXXX/ XXXXXXXXXXXXX XXXXXXXXXXX	DDMMMYYYY/HH:MM (X) / Ongoing	XXXXXXXX/ XXXXXXXX/ XXXXXXXX	XXXXXXXXX/ XXXXXXXXXX/ XXXX	Yes: XXXXXX	XXX	XX/ XXX	XXX
	XXXXX	XXXXXXXXXXXXXX/ XXXXXXXXXXXXX XXXXXXXXXXX	DDMMMYYYY/HH:MM (X) / DDMMMYYYY/HH:MM (X)	XXXXXXXXX/ XXXXXXXX/ XXXXXXXX	XXXXXXXXX/ XXXXXXXXXX/ XXXX	XX	XX	XX/ XXX	XX

Abbreviations: DMR = duodenal mucosal resurfacing; GI = gastrointestinal; MedDRA = medical dictionary for regulatory activities; TEAE = treatment emergent adverse event; UADE = unanticipated adverse device effect.
Note: Study day is calculated relative to the date of index procedure. Adverse events were coded using MedDRA version 22.0. A TEAE is any AE that starts or worsens after the start of DMR or Sham procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If time missing, display "- -:- -". If Other Action Taken? is Other or Concomitant Medication, concatenate all specify fields with a semicolon. If Serious? is Yes, concatenate all serious criteria marked as Yes with a semicolon. If no events meet the criteria for display, present "No events are reported." Ensure correct MedDRA version is printed in footnote.*

Table 14.3.3.1 (cont.)
Listing of Adverse Events Leading to Withdrawal
All Subjects

Subject ID	Randomized Treatment [1]	System Organ Class/ Preferred Term/ Verbatim Term	Start Date/Time (Study Day)/ End Date/Time (Study Day)	AESI?	Time from DMR/Sham Procedure (Days, Hours)	Duration of Episode (Days, Hours)	If Diarrhea, Characteristics/Other Clinical Symptoms	If GI Bleeding, Add'l Lab or Diagnostic Tests Conducted?	Cause for Fever/Add'l Symptoms	Other Additional Symptoms
XXXXX	XXXXX	XXXXXXXXXXXXXX/ XXXXXXXXXXXXX XXXXXXXXXXX	DDMMMYYYY/HH:MM (X) / DDMMMYYYY/HH:MM (X)	XX	XX, XX	XX, XX	XXXXX/XXXXX	XX	XXXXX/XXXXX	XXXXX
XXXXX	XXXXX	XXXXXXXXXXXXXX/ XXXXXXXXXXXXX XXXXXXXXXXX	DDMMMYYYY/HH:MM (X) /Ongoing	XXX;XXXXXX	XX, XX	XX, XX	XXXXX	XXX	XXXXX	XXXXX
	XXXXX	XXXXXXXXXXXXXX/ XXXXXXXXXXXXX XXXXXXXXXXX	DDMMMYYYY/HH:MM (X) DDMMMYYYY/HH:MM (X)	XX	XX, XX	XX, XX	XXXXX/XXXXX	XX	XXXXX/XXXX	XXXXX

Abbreviation: AESI = adverse event of special interest; DMR = duodenal mucosal resurfacing; GI = gastrointestinal; TEAE = treatment emergent adverse event; UADE = unanticipated adverse device effect.
Note: Study day is calculated relative to the date of index procedure. Adverse events were coded using MedDRA version 22.0. A TEAE is any AE that starts or worsens after the start of DMR or Sham procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *Ensure proper MedDRA version is displayed in footnote.*

Table 14.3.3.2
Listing of Serious Adverse Events
Safety Population

Same shell as 14.3.3.1

Table 14.3.3.3
Listing of Deaths
Safety Population

Same shell as 14.3.3.1

Table 14.3.3.4
Listing of Unanticipated Adverse Device Effects
Safety Population

Same shell as 14.3.3.1

Table 14.3.3.5
Listing of Adverse Events of Special Interest
Safety Population

Same shell as 14.3.3.1

Table 14.3.4.1
Listing of Abnormal Laboratory Data
Safety Population

Subject ID	Randomized Treatment [1]	Parameter (unit)	Study Visit	Date of Collection (Study Day)	Standard Results	Change from Baseline [3]	Reference Range [4]	Reference Range Flag	Accession Number	Abnormally Clinically Significant?
XXXXX	XXXXX	Hematocrit (unit)	XXXXXX	DDMMMYYYY (X)	XX		XX – YY		XXXXXXX	
			XXXXXX	DDMMMYYYY (X)	XX	XX	XX – YY	XXX	XXXXXXX	XX
			XXXXXX	DDMMMYYYY (X)	XX	XX	XX – YY		XXXXXXX	
			XXXXXX		ND					
			XXXXXX	DDMMMYYYY (X)	XX	XX	XX – YY		XXXXXXX	

Abbreviations: A = abnormal; DMR = duodenal mucosal resurfacing; H = high; L = low.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.
[2] Baseline is the last measurement taken before the index procedure.
[3] Reference range is used to identify potentially clinically significant laboratory values.

Table 14.3.5.1.1
Summary of Complete Blood Count Laboratory Results by Study Visit and Treatment
Safety Population

Period: Baseline – Week 24

Parameter (unit) Study Visit	DMR (N=XX)		Sham (N=XX)		Crossover DMR [2] (N=XX)		Combined DMR [3] (N=XX)	
Statistic	Observed	CFB	Observed	CFB	Observed	CFB	Observed	CFB
Hematocrit (unit)								
Baseline [1]								
n	XX		XX		XX		XX	
Mean (SD)	XX.X (XX.XX)		XX.X (XX.XX)		XX.X (XX.XX)		XX.X (XX.XX)	
Median	XX.X		XX.X		XX.X		XX.X	
Q1, Q3	XX, XX		XX, XX		XX, XX		XX, XX	
IQR	XX.X		XX.X		XX.X		XX.X	
Min, Max	XX, XX		XX, XX		XX, XX		XX, XX	
Week 4								
n	XX	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Q1, Q3	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX
IQR	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX

Abbreviation: CFB = change from baseline; DMR = duodenal mucosal resurfacing; IQR = interquartile range.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received, by cross-over treatment received, and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. IQR = Q3 – Q1.
[1] Baseline is defined as the last observation recorded prior to the attempted treatment with index procedure.
[2] Subjects who initially received the Sham procedure but received the DMR at Week 24 (relative to index procedure); Baseline to Week 24 is based on the second procedure.
[3] Subjects who initially received the DMR procedure combined with subjects who initially received the Sham procedure but crossed over to receive the DMR procedure.
[4] For subjects with index Sham procedure; relative to crossover DMR procedure, which occurred within 21 days from Week 24.
SOURCE: Listing 16.2.8.1.1

Programming Note: *Continue for Visits: Week 12, Week 18, Week 24, Week 36, Week 48 and all other parameters. Repeat for period: Week 24 - Week 48 where only the DMR treatment group column will be displayed and for Period: Baseline – Week 48, where only Overall treatment group column will be displayed. For the Baseline – Week 48 table, first column of shell will be further divided by idex/crossover procedure.Shell will be as follows:*

Table 14.3.5.1.1 (cont.)
Summary of Complete Blood Count Laboratory Results by Study Visit and Treatment
Safety Population

Period: Baseline – Week 48

Parameter (unit) Study Visit Statistic	Overall (N=XX) Observed	 CFB
Hematocrit (unit)		
Index DMR or Sham		
Baseline [1]		
n	XX	
Mean (SD)	XX.X (XX.XX)	
…	XX.X	
Week 24		
n	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)
…		
Index DMR		
Week 36		
n	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)
…		
Week 48		
n	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)
…		
Crossover DMR [4]		
Crossover Week 4		
n	XX	XX
…		

…

Abbreviation: CFB = change from baseline; DMR = duodenal mucosal resurfacing; IQR = interquartile range.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received, by cross-over treatment received, and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. IQR = Q3 – Q1.
[1] Baseline is defined as the last observation recorded prior to the attempted treatment with index procedure.
[2] Subjects who initially received the Sham procedure but received the DMR at Week 24 (relative to index procedure); Baseline to Week 24 is based on the second procedure.
[3] Subjects who initially received the DMR procedure combined with subjects who initially received the Sham procedure but crossed over to receive the DMR procedure.
[4] For subjects with index Sham procedure; relative to crossover DMR procedure, which occurred within 21 days from Week 24.
SOURCE: Listing 16.2.8.1.1

Table 14.3.5.1.2
Shift from Baseline in Complete Blood Count Laboratory Results by Study Visit and Treatment
Safety Population

Period: Baseline - Week 24

Parameter	Baseline [1]			
	DMR (N=XX)			
Study Visit Category	Low n (%)	Normal n (%)	High n (%)	Missing n (%)
Hematocrit (unit)				
Week 4				
Low	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Normal	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
High	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Missing	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Week 12				
Low	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Normal	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
High	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Missing	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: DMR = duodenal mucosal resurfacing.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received, by cross-over treatment received, and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.
[1] Baseline is defined as the last observation recorded prior to the attempted treatment with index procedure
[2] Subjects who initially received the Sham procedure but received the DMR at Week 24 (relative to index procedure); Baseline to Week 24 is based on the second procedure.
[3] Subjects who initially received the DMR procedure combined with subjects who initially received the Sham procedure but crossed over to receive the DMR procedure.
SOURCE: Listing 16.2.8.1.1

Programming Note: *Continue for Visits: Week 18, Week 24, Week 36, Week 48 and all other parameters. Repeat for DMR, Sham, Crossover DMR [2], and Combined DMR [3] treatment groups for period: Baseline – Week 24. Repeat for period: Week 24 - Week 48 where only the DMR treatment group column will be displayed and for Period: Baseline – Week 48, where only Overall treatment group column will be displayed and the first column will be further divived by index/crossover procedure. Sort alphabetically by parameter.*

Table 14.3.5.2.1
Summary of Blood Chemistry Laboratory Results by Study Visit and Treatment
Safety Population

Same shell as 14.3.5.1.1

Programming note: *Update SOURCE to Listing 16.2.8.1.2.*

Table 14.3.5.2.2
Shift from Baseline in Blood Chemistry Laboratory Results by Study Visit and Treatment
Safety Population

Same shell as 14.3.5.1.2

Programming note: *Update SOURCE to Listing 16.2.8.1.2.*

Table 14.3.5.3.1
Summary of Urinalysis Laboratory Results by Study Visit and Treatment
Safety Population

Same shell as 14.3.5.1.1

Programming note: *Update SOURCE to Listing 16.2.8.1.3.*

Table 14.3.5.3.2
Shift from Baseline in Urinalysis Laboratory Results by Study Visit and Treatment
Safety Population

Same shell as 14.3.5.1.2

Programming note: *Update SOURCE to Listing 16.2.8.1.3.*

Table 14.3.6.1.1
Summary of Vital Signs by Study Visit and Treatment
Safety Population

Same shell as 14.3.5.1.1

Programming note: *Visits include Screening, Baseline, Week 4, Week 12, Week 18, Week 24, Week 36, and Week 48. Parameters include weight (kg), sitting systolic blood pressure (mmHg), sitting diastolic blood pressure (mmHg), and pulse rate (bpm). Update SOURCE: to Listing 16.2.8.2*

Table 14.3.6.2.1
Summary of 12-Lead Electrocardiogram Results by Study Visit and Treatment
Safety Population

Same shell as 14.3.5.1.1

Programming note: *Visits include Screening and Week 24. Parameters include PR interval (msec), RR interval (msec), ventricular rate (bpm), QRS interval (msec), uncorrected QT interval (ms), and QTcB interval (ms). Update SOURCE: to Listing 16.2.8.3*

Table 14.3.6.2.2
Summary of 12-Lead Electrocardiogram Interpretation by Study Visit and Treatment
Safety Population

Study Visit Category	Baseline - Week 24 DMR (N=XX)	Baseline - Week 24 Sham (N=XX)	Baseline - Week 24 Crossover DMR [2] (N=XX)	Baseline - Week 24 Combined DMR [3] (N=XX)	Week 24 - Week 48 DMR (N=XX)	Baseline - Week 48 Overall (N=XX)
Screening						
Normal	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Abnormal, NCS	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Abnormal, CS	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Week 24	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Normal	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Abnormal, NCS	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Abnormal, CS	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: CS = clinically significant; DMR = duodenal mucosal resurfacing; NCS = not clinically significant.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received, by cross-over treatment received, and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.
[1] Subjects who initially received the Sham procedure but received the DMR at Week 24 (relative to index procedure); Baseline to Week 24 is based on the second procedure.
[2] Subjects who initially received the DMR procedure combined with subjects who initially received the Sham procedure but crossed over to receive the DMR procedure.
SOURCE: Listing 16.2.8.3

Table 14.3.6.3.1
Summary of Concomitant Medications by Treatment
Safety Population

ATC Class Level 4 Preferred Term (ATC Class Level 5)	Day 1 - Week 24 DMR (N=XX)	Sham (N=XX)	Cross-over DMR [1] (N=XX)	Combined DMR [2] (N=XX)
Subjects with at least 1 Concomitant Medication	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with at least 1 Diabetic Medication	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with at least 1 Rescue Medication	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Subjects with at least 1 Non-Drug Therapy	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
ATC Class 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
ATC Class 2				
Preferred Term 1	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 2	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)
Preferred Term 3	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)	XX (XX.X%)

Abbreviations: ATC = Anatomical Therapeutic Chemical; DMR = duodenal mucosal resurfacing; PT = Preferred Term; WHO-DD = World Health Organization drug dictionary.
Note: Percentages are n/Number of subjects in the Safety Population*100. Subjects are summarized by initial treatment received, cross-over treatment received, and overall. Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment. All medications (concomitant medications, diabetic medications, rescue medications, and non-drug therapies) were coded using WHO-DD version March 2019. Concomitant medications are all medications (including diabetic medications, rescue medications, and non-drug therapies) that were continuing or starting after the index procedure. Medications are displayed by descending frequency of ATC Level 4 classification, by PT within ATC, and then alphabetically. Subjects were counted only once for each ATC and PT.
[1] Subjects who initially received the Sham procedure but received the DMR at Week 24 (relative to index procedure); Day 1 to Week 24 is based on the second procedure.
[2] Subjects who initially received the DMR procedure combined with subjects who initially received the Sham procedure but crossed over to receive the DMR procedure.SOURCE: Listing 16.2.8.6

Programming note: *Repeat for period: Week 24 - Week 48 where only the DMR treatment group column will be displayed and for Period: Baseline – Week 48, where only Overall treatment group column will be displayed.*

14.3. Planned Listing Shells

Listing 16.2.1
Subject Disposition
All Subjects

Subject ID	Randomized Treatment [1]	Date of Informed Consent (Study Day)	Subject's Status	Date of Discontinuation/ Completion (Study Day)	Reason for Early Termination	Blind Broken?	Was the Subject Unblinded?	Crossover and undergo DMR procedure?
XXXXXX	XXXXXX	DDMMMYYYY (XX)	XXXXXX	DDMMMYYYY (XX)	XXXXXX	XX	XXX	XX
XXXXXX	XXXXXX	DDMMMYYYY (XX)	XXXXXX	DDMMMYYYY (XX)	Other: XXXXXXXX	XX	XXX	XX
XXXXXX	XXXXXX	DDMMMYYYY (XX)	XXXXXX	DDMMMYYYY (XX)	XXXXXX	Yes: DDMMMYYYY, XXXXXX	XXX	XXX
XXXXXX	XXXXXX	DDMMMYYYY (XX)	XXXXXX	DDMMMYYYY (XX)	Lost to Follow-up: DDMMMMYYYY	XX	XXX	XXX
XXXXXX	XXXXXX	DDMMMYYYY (XX)	XXXXXX	DDMMMYYYY (XX)	XXXXXX	XX	XX; XXXXX	XX

Abbreviation: DMR = duodenal mucosal resurfacing.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming Note: *If reason for early termination is Other, concatenate the specify text as shown with a semicolon. If reason for early termination is Lost to Follow-up, concatenate date of last contact as shown with a semicolon. If the Blind was broken, concatenate date the blind was broken and reason for breaking the blind as shown with a semicolon. If the subject was not unblinded, concatenate the Why field with a semicolon.*

Listing 16.2.2.1
Inclusion and Exclusion Criteria Not Met
All Subjects

Subject ID	Randomized Treatment [1]	Date of Informed Consent (Study Day)	Visit	Visit Date (Study Day)	All Inclusion Criteria Met? [2]	Any Exclusion Criteria Met? [3]
XXXXXX	XXXXXX	DDMMMYYYY (-X)	Screening	DDMMMYYYY (-X)		
		DDMMMYYYY (-X)	Baseline		No: 02	No
XXXXXX	XXXXXX	DDMMMYYYY (-X)	Screening	DDMMMYYYY (-X)	No: 02	No
		DDMMMYYYY (-X)	Baseline		Yes	Yes: 02
XXXXXX	XXXXXX	DDMMMYYYY (-X)	Screening	DDMMMYYYY (-X)	Yes	No
		DDMMMYYYY (-X)	Baseline		Yes	No

Abbreviations: DMR = duodenal mucosal resurfacing; IE = inclusion/exclusion.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.
IE Description:

Inclusion Criteria:
02 = Diagnosed with T2D for at least 3 years.
Exclusion Criteria:
02 = History of diabetic ketoacidosis or hyperosmolar nonketotic coma.

Programming note: *If more than 1 inclusion or exclusion criterion number exists, concatenate with a comma as shown above. Decode any relevant criteria in the footnotes as shown in the example. If no criteria are present for a column, remove the [2] and/or [3] from the column header.*

Listing 16.2.2.2.1
Protocol Deviations
All Subjects

Subject ID	Randomized Treatment [1]	Event Relationship	Violation Level	Description	Event Date (Visit)	Date Identified	Action/ Resolution	Reportable to IRB	IRB Submission Date	IRB Submission Comments
XXXXXX	XXXXXX	XXXXXXXXXXX	MAJOR	XXXXXXX	DDMMMYYY (XXXXX)	DDMMMYYY	XXXXXXX	XX	DDMMMYYY	XXXXX
		XXXXXXXXXXXXX	MINOR	XXXXXXXXXXXXXX	DDMMMYYY (XXXXX)	DDMMMYYY	XXXXXXX	XX	DDMMMYYY	XXXXX
XXXXXX	XXXXXX	XXXXXXXXXXX	MINOR	XXXXXXXXXXXXXXXXXX	DDMMMYYY (XXXXX)	DDMMMYYY	XXXXXXX	XX	DDMMMYYY	XXXXX
		XXXXXXXXXXXXXXX	MINOR	XXXXXXXXXXX						
XXXXXX	XXXXXX	XXXXXXXXXXX	MAJOR	XXXXXXXXXXXXXXXXXXX	DDMMMYYY (XXXXX)	DDMMMYYY	XXXXXXX	XX	DDMMMYYY	XXXXX

Abbreviation: DMR = duodenal mucosal resurfacing.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects have the opportunity to crossover and receive DMR treatment.

Programming note: *The structure of this listing may change depending on the information in the protocol deviations file.*

Listing 16.2.2.2.2
COVID-19 Protocol Deviations
All Subjects

Same shell as listing 16.2.2.2.1

Programming note: *Add COVID-19 (coronavirus 2019) to abbreviatons.*

Listing 16.2.3
Analysis Populations
All Subjects

Subject ID	Randomized Treatment [1]	Study [2]	Screened [3]	Medication Run-In [4]	ITT [5]	AT [6]	Reason(s) for Exclusion
XXXXXX	XXXXXX	Yes	Yes	Yes	No	No	ITT; Was not randomized
XXXXXX	XXXXXXX	Yes	Yes	Yes	Yes	Yes	
XXXXXX	XXXXXX	No	No	No	No	No	AT; Did not receive the index procedure

Abbreviations: AT = as treated; ITT = Intent-to-Treat.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects have the opportunity to crossover and receive DMR treatment.
[2] The study population includes all subjects consented at the site.
[3] The Screened population includes all subjects who completes Visit 1.
[4] The Medication Run-In population includes all subjects who entered the Run-In Phase.
[5] The ITT population includes all subjects who were randomized after the Medication Run-In phase.
[6] The AT population includes a subset of ITT subjects who received at least one ablation or undergo the randomized sham procedure.

Programming note: *Concatenate all reasons for exclusion with a semicolon.*

Listing 16.2.4.1
Demographics and Baseline Characteristics
All Subjects

Subject ID	Randomized Treatment [1]	Date IC Signed (Study Day)/ Re-consent Date (Study Day)	IC Version/ Protocol Version/Verify taking 2 or 3 OADs?	Sex	Child-Bearing Age?	Date of Birth/ Age (years)	Ethnicity	Race	Weight (kg)	Height (cm)	BMI (kg/m^2)	Instructed to Begin 4-Week Run-In?	Nutrition and Exercise Guidance/ Glycemia Diary/Glucose Meter
XXXXXX	XXXXXX	DDMMMYYYY (XX)	XXX/ XXXX/ XX	XXXX	XX	DDMMMYYY/ XX	XXXXXXX	XXXXXXX	XX.X	XX.X	XX.X	XX	XXX/ XXX/ XXX
XXXXXX	XXXXXX	DDMMMYYYY (XX)/ DDMMMYYYY (XX)	XXX/ XXXX/ XX	XXXXXX	XX	DDMMMYYY/ XX	XXXXXXX	XXXXXX	XX.X	XX.X	XX.X	XX	XXX/ XXX/ XXX
XXXXXX	XXXXXX	DDMMMYYYY (XX)	XXX/ XXXX/ XX	XXXXXX	XX	DDMMMYYY/ XX	XXXXXXX	XXXXXX	XX.X	XX.X	XX.X	XX	XXX/ XXX/ XXX

Abbreviations: BMI = body mass index; DMR = duodenal mucosal resurfacing; IC = informed consent; OAD = oral antidiabetic medication.
Note: Study day is calculated relative to the date of index procedure. Height and weight are the values at Screening.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming Note: *If a subject was re-consented, concatenate the date and study day, otherwise leave blank. If subject has multiple races, concatenate them. If a subject was enrolled under protocol version 1 concatenate the answer to "Verified that the Subject is taking two OADs (metformin plus one additional OAD) at least at half maximum labeled dose (or highest tolerated dose) and details have been recorded on the ConMed CRF." in the cell. If a subject was enrolled under protocol version 2, concatenate the answer to "Verified that the Subject is taking two or three OADs (metformin plus two Additional OAD) at least at half maximum labeled dose (or highest tolerated dose) and details have been recorded on the ConMed CRF." in the cell.*

Listing 16.2.4.2.1
Diabetic History
All Subjects

Subject ID	Randomized Treatment [1]	History	System Organ Class/ Preferred Term/ Verbatim Term	If Prior Therapy, Describe	Onset Date (Study Day)/ End Date (Study Day)/
XXXXXX	XXXXXX	XXXXXX	XXXXXXXXXXXXXXX/ XXXXXXXXXXXXXX/ XXXXXXXXXXXX	XXXXXX	DDMMMYYYY (X)/ DDMMMYYYY (X)
		XXXXXX	XXXXXXXXXXXXXXX/ XXXXXXXXXXXXXX/ XXXXXXXXXXXX	XXXXXX	MMMYYYY (X)/ Ongoing
		XXXXXX	XXXXXXXXXXXXXXX/ XXXXXXXXXXXXXX/ XXXXXXXXXXXX	XXXXXX	DDMMMYYYY (X)/ Ongoing
XXXXXX	XXXXXX	XXXXXX	XXXXXXXXXXXXXXXXX/ XXXXXXXXXXXXXXXX/ XXXXXXXXXXXXXX	XXXXXX	DDMMMYYYY (X)/ DDMMMYYYY (X)

Abbreviations: DMR = duodenal mucosal resurfacing; MedDRA = medical dictionary for regulatory activities.
Note: Study day is calculated relative to the date of index procedure. Diabetic history was coded using MedDRA version 22.0. Only subjects with diabetic history recorded are listed.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Listing 16.2.4.2.2
Medical History
All Subjects

Subject ID	Randomized Treatment [1]	System	Status	System Organ Class/ Preferred Term/ Verbatim Term	If Prior Therapy, Describe	Start Date (Study Day)/ End Date (Study Day)/
XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXXXXXXXXXXX/ XXXXXXXXXXXXXX/ XXXXXXXXXXXXX	XXXXXX	DDMMMYYYY (X)/ DDMMMYYYY (X)
		XXXXXX; XXXXXXXXXX	XXXXXX;	XXXXXXXXXXXXXXX/ XXXXXXXXXXXXXX/ XXXXXXXXXXXXX	XXXXXX	MMMYYYY (X)/ Ongoing
		XXXXXX	XXXXXX	XXXXXXXXXXXXXXX/ XXXXXXXXXXXXXX/ XXXXXXXXXXXXX	XXXXXX	DDMMMYYYY (X)/ Ongoing
XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXXXXXXXXXXXXX/ XXXXXXXXXXXXXXX/ XXXXXXXXXXXXXX	XXXXXX	DDMMMYYYY (X)/ DDMMMYYYY (X)

Abbreviations: DMR = duodenal mucosal resurfacing; MedDRA = medical dictionary for regulatory activities.
Note: Study day is calculated relative to the date of index procedure. Medical history was coded using MedDRA version 22.0. Only subjects with medical history recorded are listed.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *Concatenate 'Specify Other System' field with a semicolon.*

Listing 16.2.4.2.3
Targeted Hypoglycemic Events History
All Subjects

Subject ID	Randomized Treatment [1]	Experienced Hypoglycemic Events in the Past Year?	Event	Check if None	Number of Events in Past Year
XXXXXX	XXXXXX	XXX	Loss of consciousness		X
			Admission to hospital	NONE	
			Seizure	NONE	
XXXXXX	XXXXXX	XXX	Loss of consciousness		X
			Admission to hospital		X
			Seizure		X

Abbreviation: DMR = duodenal mucosal resurfacing.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Listing 16.2.5.1.1
DMR Procedure Pre-Op
All Subjects

Subject ID	Randomized Treatment [1]	DMR Procedure Performed?	Administered Paracetamol, Acetaminophen or Equivalent Prior to Procedure?	Procedure Timepoint	Type of Anesthesia/Sedation	Date DMR Procedure Performed (Study Day)	Start Time/End Time
XXXXXX	XXXXXX	XXX	XXX	XXXXXX	XXXXXXX	DDMMMYYY (XX)	HH:MM/HH:MM
XXXXXX	XXXXXX	XX; XXXXXX					

Abbreviation: DMR = duodenal mucosal resurfacing.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If DMR procedure was not performed, concatenate reason with a semicolon.*

Listing 16.2.5.1.2
DMR Procedure Lift and Ablation Details
All Subjects

Subject ID	Randomized Treatment [1]	Start Location/ End Location	Time Scope In/ Time Scope out	Number of Injections/Mucosal Lifts	Number of Ablations	Distance from Papilla to Proximal Edge of First Completed Ablation (cm)	Procedure Successfully Completed?	Fluoroscopy Exposure Duration (minutes)	Radiation due to Fluoroscopy Exposure (unit)
XXXXXX	XXXXXX	XXXX/XXX	HH:MM / HH:MM	X	X	XXX	XXX	XX	XXX (XXX)
XXXXXX	XXXXXX	XXXX/XXX	HH:MM / HH:MM	X	X	XXX	XX; XXXXX; XXXXXX	XX	XXX (X)

Abbreviation: DMR = duodenal mucosal resurfacing.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If the procedure was not successfully completed, concatenate the 'No, why?' field in the cell with a semicolon. If the reason was other, also concatenate the 'Specify' field and 'Detail' with a semicolon. Concatenate the Radiation due to Fluoroscopy exposure unit in the cell in parenthesis.*

Listing 16.2.5.2.1
Sham Procedure Pre-Op
All Subjects

Subject ID	Randomized Treatment [1]	Sham Procedure Performed?	Administered Paracetamol, Acetaminophen or Equivalent Prior to Procedure?	Date DMR Procedure Performed (Study Day)	Type of Anesthesia/Sedation
XXXXXX	XXXXXX	XXX	XXX	DDMMMYYY (XX)	XXXXXXX
XXXXXX	XXXXXX	XX; XXXXXX			

Abbreviation: DMR = duodenal mucosal resurfacing.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If Sham procedure was not performed, concatenate reason with a semicolon.*

Listing 16.2.5.2.2
Sham Procedure Details
All Subjects

Subject ID	Randomized Treatment [1]	Start Time of Procedure	Time of Insertion of Revita Catheter	Time of Removal of the Revita Catheter	Total time Catheter Indwelling	End Time of Procedure	Fluoroscopy Exposure Duration (minutes)	Radiation due to Fluoroscopy Exposure (unit)
XXXXXX	XXXXXX	HH:MM	HH:MM	HH:MM	HH:MM	HH:MM	XX	XXX (XX)
XXXXXX	XXXXXX	HH:MM	HH:MM	HH:MM	HH:MM	HH:MM	XX	XXX (XX)

Abbreviation: DMR = duodenal mucosal resurfacing.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *Concatenate the 'Radiation due to Fluoroscopy Exposure Unit' in the cell in parenthesis.*

Listing 16.2.5.3.1
Device Use Summary
All Subjects

Subject ID	Randomized Treatment [1]	Type of Procedure	Date of Procedure (Study Day)	Device Type	Not Used	Lot/Serial Number	Device Disposition
XXXXXX	XXXXXX	XXXXX	DDMMMYYY (XX)	Console		XX-XXXX	XXXXXXXXXX
				Revita Catheter		XX-XXXX	XXXXXXXXXX
				Line Set		XX-XXXX	XXXXXXXXXX
				HF Umbilical		XX-XXXX	XXXXXXXXXX
XXXXXX	XXXXXX	XXXXX	DDMMMYYY (XX)	Console		XX-XXXX	XXXXXXXXXX
				Revita Catheter		XX-XXXX	XXXXXXXXXX
				Line Set		XX-XXXX	XXXXXXXXXX
				HF Umbilical	Not used		

Abbreviation: DMR = duodenal mucosal resurfacing.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Listing 16.2.5.3.2
Device Malfunction
All Subjects

Subject ID	Randomized Treatment [1]	Any Device Malfunctions	Date of Malfunction (Study Day)	Which Component Malfunctioned?	Lot/Serial Number	At What Point Did the Malfunction Occur?	Describe the Specific Malfunction	Result in AE?	Final Disposition of Malfunctioning Device
XXXXXX	XXXXXX	XXX	DDMMMYYY (XX)	XXXXX	XX-XXXX	XXXXX	XXXXXX	XX	XXXXX;XXXXX
XXXXXX	XXXXXX	XXXXX	DDMMMYYY (XX)	XXXXX	XX-XXXX	XXXXX; XXXXX	XXXXXX	XX	XXXXX

Abbreviation: DMR = duodenal mucosal resurfacing.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If the point the malfunction occurred was Other, concatenate the specify field in the cell with a semicolon. If the final disposition is other, concatenate the specify field in the cell with a semicolon.*

Listing 16.2.5.4.1
Endoscopic Evaluation
All Subjects

Subject ID	Randomized Treatment [1]	Endoscopic Evaluation Performed?	Date /Time Performed (Study Day)	Presence of Esophagitis/Grade	Duodenum Accessed?/Furthest Location Accessed	Abnormalities Preventing Endoscopic Access?	Abnormalities Precluding Completion of DMR?	Upper GI Conditions?	Endoscopy Successfully Completed?	Excluded Based on Findings?
XXXXXX	XXXXXX	XXX	DDMMMYYY/ HH:MM (XX)	XXX / X	XXX / XX	XX	XX	XXX; XXXX, XXXXX	XXX	XX
XXXXXX	XXXXXX	XX; XXXXX	DDMMMYYY/ HH:MM (XX)	XXX / X	XXX / XX	XXX; XXXX	XXX;XXXX	XX	XX; XXXX	

Abbreviation: DMR = duodenal mucosal resurfacing.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If the abnormality preventing endoscopic access to the duodenum is Other, concatenate the specify field in the cell with a semicolon. If the abnormality precluding completion of DMR is other, concatenate the specify field in the cell with a semicolon. If GI conditions were identified, concatenate all that apply in the cell separated by a comma. If the GI condition is other, concatenate specify field in cell. If the endoscopy procedure was not successfully completed, concatenate the 'No, explain' field in the cell. If the subject was excluded based on endoscopic findings, concatenate the 'Yes, explain' field in the cell with a semicolon.*

Listing 16.2.5.4.2
Endoscopy
All Subjects

						Visual Appearance				
Subject ID	Randomized Treatment [1]	Endoscopy Performed?	Date of Procedure (Study Day)	Location of Endoscopy	Ulcer(s)? / Location	Luminal Narrowing? / Length (mm) / Diameter (mm)	D1 Done? / Findings	D2 Done? / Findings	D3 Done? / Findings	D4 Done? / Findings
XXXXXX	XXXXXX	XXX	DDMMMYYY (XX)	XX, XX, XX,XX	XXX / XXXX	XXX / XXX / XXX	XXX / XXXXXX	XXX / XXXXXX	XXX / XXXXXX	XXX / XXXXXX
XXXXXX	XXXXXX	XX; XXXXX	DDMMMYYY (XX)	XX, XX, XX,XX	XXX / XXXX	XXX / XXX / XXX	XXX / XXXXXX	XXX / XXXXXX	XXX / XXXXXX	XXX / XXXXXX

Abbreviation: DMR = duodenal mucosal resurfacing.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Listing 16.2.5.4.3
Biopsy
All Subjects

				Abnormal-Appearing Mucosa Biopsy Samples				Circumferential 4 Quadrant Biopsy Samples					
Subject ID	Randomized Treatment [1]	Endoscopy Performed?	Date/Time Biopsy Performed (Study Day)	Biopsy Sample Number	Location	Successful Completion	D1 – CONTROL Biopsy performed	Q1 Biopsy Performed from Ablated Zone?	Q2 Biopsy Performed from Ablated Zone?	Q3 Biopsy Performed from Ablated Zone?	Q4 Biopsy Performed from Ablated Zone?	Reason Not Performed	Comments
XXXXXX	XXXXXX	XXX	DDMMMYYY (XX)	A1	XX	X	X	X	X	X	X	XXXXX	
				A2	XX	X	X	X	X	X	X		
				A3	XX	X	X	X	X	X	X		XXXXXX
				A4	XX	X	X	X	X	X	X		
XXXXXX	XXXXXX	XX; XXXXX	DDMMMYYY (XX)	A1	XX	X	X	X	X	X	X		
				A2	XX	X	X	X	X	X	X		
				A3	XX	X	X	X	X	X	X		
				A4	XX	X	X	X	X	X	X		

Abbreviations: DMR = duodenal mucosal resurfacing; Q = quadrant.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Listing 16.2.5.5.1
Discharge Information
All Subjects

Subject ID	Randomized Treatment [1]	Date of Discharge (Study Day)	Procedure Timepoint	Date of First Oral Intake (Study Day)	Any Hypoglycemic events?	Any AEs?	Instructions for 14 Day Post-Procedure Diet?	Reminded to Conduct Blood Glucose Monitoring 4x per Day?	Use of OAD Medications Reviewed?
XXXXXX	XXXXXX	DDMMMYYY (XX)	XXXXX	D DMMMYYY (XX)	XX	XX	XXX	XXX	XXX

Abbreviations: AE = adverse event; DMR = duodenal mucosal resurfacing.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Listing 16.2.6.1
HbA1c
All Subjects

Subject ID	Randomized Treatment [1]	Parameter (unit)	Study Visit	Date of Collection (Study Day)	Standard Results	Change from Baseline [3]	Reference Range [4]	Reference Range Flag	Accession Number	Abnormally Clinically Significant?
XXXXX	XXXXX	Hem (unit)	XXXXXX	DDMMMYYYY (X)	XX		XX – YY		XXXXXXX	
			XXXXXX	DDMMMYYYY (X)	XX	XX	XX – YY	XXX	XXXXXXX	XX
			XXXXXX	DDMMMYYYY (X)	XX	XX	XX – YY		XXXXXXX	
			XXXXXX		ND					
			XXXXXX	DDMMMYYYY (X)	XX	XX	XX – YY		XXXXXXX	

Abbreviations: A = abnormal; DMR = duodenal mucosal resurfacing; H = high; L = low.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.
[2] Baseline is the last measurement taken before the index procedure.
[3] Reference range is used to identify potentially clinically significant laboratory values.

Listing 16.2.6.2
Fasting Plasma Glucose (FPG)
All Subjects

Same shell as 16.2.6.1

Listing 16.2.6.3
Urine Albumin Creatinine Ratio (UACR)
All Subjects

Same shell as 16.2.6.1

Listing 16.2.6.4
Alanine Aminotransferase (ALT)
All Subjects

Same shell as 16.2.6.1

Listing 16.2.6.5
Aspartate Aminotransferase (AST)
All Subjects

Same shell as 16.2.6.1

Listing 16.2.6.6
SF-36 Quality of Life Questionnaire
All Subjects

Subject ID	Randomized Treatment [1]	Study Visit	Question	Result
XXXXXX	XXXXXX	XXXXX	In general, would you say your health is:	XXXXX
			Compared to one year ago, how would you rate your health in general now?	XXXXX
			Vigorous Activities, such as running, lifting heavy objects, participating in strenuous sports	XXXXX
			…	
			Physical functioning scale score	XXXXX
			Bodily pain scale score scale score	XXXXX
			Role limitations due to physical health problems scale score	XXXXX
			Role limitations due to personal or emotional problems scale score	XXXXX
			Emotional well-being scale score	XXXXX
			Social functioning scale score	XXXXX
			Energy/fatigue scale score	XXXXX
			General health perceptions scale score	XXXXX

Abbreviation: DMR = duodenal mucosal resurfacing.
Note: Derivations for each of the scale scores are described in Section 6.1.7 of the statistical analysis plan.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Listing 16.2.6.7
PROMIS Scores
All Subjects

Subject ID	Randomized Treatment [1]	Was Assessment Completed?	Date of Assessment (Study Day)	Question	Result
XXXXXX	XXXXXX	XXX	XXXXX	How often did you have nausea-that is, a feeling like you could vomit?	XXXXX
				How often did you know that you would have nausea before it happened?	XXXXX
				How often did you have a poor appetite?	XXXXX
				How often did you throw up or vomit?	XXXXX
				Gastrointestinal Nausea and Vomiting Total Score	XXXXX
				….	

Abbreviations: DMR = duodenal mucosal resurfacing; Patient Reported Outcomes Measurement Information System.
Note: Study day is calculated relative to the date of index procedure.
PROMIS Gastrointestinal Nausea and Vomiting Total Score = sum of the 4 individual items, with a range of 0 to 20, where higher scores indicate worse and more frequent nausea and vomiting.
PROMIS Gastrointestinal Gas and Bloating Total Score = sum of the 13 individual items, with a range of 0 to 65, where higher scores indicate worse and more frequent gas and bloating
PROMIS Gastrointestinal Diarrhea Total Score = sum of the 6 individual items, with a range of 0 to 30, where higher scores indicate worse and more frequent diarrhea.
PROMIS Belly Pain Total Score = sum of the 5 individual items, with a range of 0 to 25, where higher scores indicate worse and more frequent belly pain.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If assessment was not completed, concatenate reason in the cell with a semicolon.*

Listing 16.2.7.1
Adverse Events
All Subjects

Subject ID	Randomized Treatment [1]	System Organ Class/ Preferred Term/ Verbatim Term	Start Date/Time (Study Day)/ End Date/Time (Study Day)	Severity/ Relationship to Procedure/ Relationship to Device	Outcome/ Action Taken with Device/ Other Action Taken	Serious?	TEAE?	UADE? / Medical History Relevant to SAE/UADE	Caused Subject to be discontinued from the study?
XXXXX	XXXXX	XXXXXXXXXXXXXX/ XXXXXXXXXXXXX XXXXXXXXXXX	DDMMMYYYY/HH:MM (X) / DDMMMYYYY/HH:MM (X)	XXXXXXXX/ XXXXXXXX/ XXXXXXXX	XXXXXXXXX/ XXXXXXXXXX/ XXXX	XX	XX	XX/ XXX	XX
XXXXX	XXXXX	XXXXXXXXXXXXXX/ XXXXXXXXXXXXX XXXXXXXXXXX	DDMMMYYYY/HH:MM (X) / Ongoing	XXXXXXXX/ XXXXXXXX/ XXXXXXXX	XXXXXXXXX/ XXXXXXXXXX/ XXXX	Yes: XXXXXX	XXX	XX/ XXX	XXX
	XXXXX	XXXXXXXXXXXXXX/ XXXXXXXXXXXXX XXXXXXXXXXX	DDMMMYYYY/HH:MM (X) / DDMMMYYYY/HH:MM (X)	XXXXXXXX/ XXXXXXXX/ XXXXXXXX	XXXXXXXXX/ XXXXXXXXXX/ XXXX	XX	XX	XX/ XXX	XX

Abbreviations: AESI = adverse event of special interest; COVID-19 = coronavirus 2019; DMR = duodenal mucosal resurfacing; GI = gastrointestinal; MedDRA = medical dictionary for regulatory activities; TEAE = treatment emergent adverse event; UADE = unanticipated adverse device effect.
Note: Study day is calculated relative to the date of index procedure. Adverse events were coded using MedDRA version 22.0. A TEAE is any AE that starts or worsens after the start of DMR or Sham procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.
[2] COVID-19 related AEs include the following MedDRA preferred terms:

Programming note: *If time missing, display "- -:- -". If Other Action Taken? is Other or Concomitant Medication, concatenate all specify fields with a semicolon. If Serious? is Yes, concatenate all serious criteria marked as Yes with a semicolon. If no events meet the criteria for display, present "No events are reported." Ensure correct MedDRA version is printed in footnote.*

Listing 16.2.7.1 (cont.)
Adverse Events
All Subjects

Subject ID	Randomized Treatment [1]	System Organ Class/ Preferred Term/ Verbatim Term	Start Date/Time (Study Day)/ End Date/Time (Study Day)	AESI?	Time from DMR/Sham Procedure (Days, Hours)	Duration of Episode (Days, Hours)	If Diarrhea, Characteristics/Other Clinical Symptoms	If GI Bleeding, Add'l Lab or Diagnostic Tests Conducted?	Cause for Fever/Add'l Symptoms	Other Additional Symptoms	COVID-19 Related? [2]
XXXXX	XXXXX	XXXXXXXXXXXXX/ XXXXXXXXXXXXX XXXXXXXXXXX	DDMMMYYYY/HH:MM (X) / DDMMMYYYY/HH:MM (X)	XX	XX, XX	XX, XX	XXXXX/XXXXX	XX	XXXXX/XXXXX	XXXXX	XX
XXXXX	XXXXX	XXXXXXXXXXXXX/ XXXXXXXXXXXXX XXXXXXXXXXX	DDMMMYYYY/HH:MM (X) /Ongoing	XXX;XXXXXX	XX, XX	XX, XX	XXXXX	XXX	XXXXX	XXXXX	XX
	XXXXX	XXXXXXXXXXXXX/ XXXXXXXXXXXXX XXXXXXXXXXX	DDMMMYYYY/HH:MM (X) DDMMMYYYY/HH:MM (X)	XX	XX, XX	XX, XX	XXXXX/XXXXX	XX	XXXXX/XXXX	XXXXX	XX

Abbreviation: AESI = adverse event of special interest; COVID-19 = coronavirus 2019; DMR = duodenal mucosal resurfacing; GI = gastrointestinal; TEAE = treatment emergent adverse event; UADE = unanticipated adverse device effect.
Note: Study day is calculated relative to the date of index procedure. Adverse events were coded using MedDRA version 22.0. A TEAE is any AE that starts or worsens after the start of DMR or Sham procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.
[2] COVID-19 related AEs include the following MedDRA preferred terms:

Programming note: *Ensure proper MedDRA version is displayed in footnote. If diarrhea other clinical symptoms or if fever addition symptoms is Other, concatenate specify field with a semicolon. Include the PTs upon AE review prior to lock.*

Listing 16.2.7.2
Hypoglycemia Form
All Subjects

Subject ID	Randomized Treatment [1]	FPG >220 mg/dL through Week 12 or FPG > 200 mg/dL Week 12-24?	Reporting Type / Fasting?	FPG #1 Value (unit) / Date (Study Day)	FPG #2 Value (unit) / Date (Study Day)	Clinic Lab Value (unit) / Date (Study Day)	Fasting for Clinic Lab Value?	Rescue Criteria Met?	Rescue Medication Started?	Was Rescue Medication a GLP-1?	Nausea? / Vomiting? / Pre-Existing Diarrhea?	Additional Symptoms?
XXXXXX	XXXXXX	XXX	XXXXXXX / XX	XXXXX (xxx) DDMMMYYYY (XX)	XXXXX (xxx) DDMMMYYYY (XX)	XXXXX (xxx) DDMMMYYYY (XX)	XXX	XXX	XXX	XX	XX / XX / XX	XXXXXX
XXXXXX	XXXXXX	XX;XXXXXXXX	XXXXXXX / XXX	XXXXX (xxx) DDMMMYYYY (XX)	XXXXX (xxx) DDMMMYYYY (XX)	XXXXX (xxx) DDMMMYYYY (XX)	XXX	XXX	XXX	XX	XX / XX / XX	XXXXXX

Abbreviations: DMR = duodenal mucosal resurfacing; FPG = fasting plasma glucose; SAE = serious adverse event.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If rescue medication was not started, concatenate the Why field with a semicolon. If rescue medication was not a GLP-1, concatenate reason with a semicolon. Concatenate the specify and other additional symptom fields with a semicolon in the cell.*

Listing 16.2.8.1.1
Laboratory Data: Complete Blood Count
All Subjects

Subject ID	Randomized Treatment [1]	Parameter (unit)	Study Visit	Date of Collection (Study Day)	Standard Results	Change from Baseline [3]	Reference Range [4]	Reference Range Flag	Accession Number	Abnormally Clinically Significant?
XXXXX	XXXXX	Hematocrit (unit)	XXXXXX	DDMMMYYYY (X)	XX		XX – YY		XXXXXXX	
			XXXXXX	DDMMMYYYY (X)	XX	XX	XX – YY	XXX	XXXXXXX	XX
			XXXXXX	DDMMMYYYY (X)	XX	XX	XX – YY		XXXXXXX	
			XXXXXX		ND					
			XXXXXX	DDMMMYYYY (X)	XX	XX	XX – YY		XXXXXXX	

Abbreviations: A = abnormal; DMR = duodenal mucosal resurfacing; H = high; L = low.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.
[2] Baseline is the last measurement taken before the index procedure.
[3] Reference range is used to identify potentially clinically significant laboratory values.

Listing 16.2.8.1.2
Laboratory Data: Blood Chemistry
All Subjects

Same shell as 16.2.8.1.1

Listing 16.2.8.1.3
Laboratory Data: Urinalysis
All Subjects

Same shell as 16.2.8.1.1

Listing 16.2.8.1.4
Urine Pregnancy Test
All Subjects

Subject ID	Randomized Treatment [1]	Was Sample Collected?	Collection Date (Study Day)	Result
XXXXXX	XXXXXX	XXX	DDMMMYYYY (XX)	XXXXXXX
XXXXXX	XXXXXX	XX;XXXXXXXX	DDMMMYYYY (XX)	XXXXXXX

Abbreviation: DMR = duodenal mucosal resurfacing.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If a sample was not collected, concatenate reason in the cell with a semicolon.*

Listing 16.2.8.1.5
Self Monitoring Blood Glucose and Glycemia Diary
All Subjects

Subject ID	Randomized Treatment [1]	Study Visit	Assessment Date/Time (Study Day)	Timepoint	Was Assessment Performed?	Blood Glucose Result (mg/dL)	Were OADs Taken?	Was Subject Fasting?
XXXXXX	XXXXXX	XXXXXXX	DDMMMYYYY / HH:MM (XX)	XXXXXXX	XXX	XXXXXXX	XXX	XXX
XXXXXX	XXXXXX	XXXXXXX	DDMMMYYYY / HH:MM (XX)	XXXXXXX	XX; XXXXXX	XXXXXXX	XXX	XXX

Abbreviation: DMR = duodenal mucosal resurfacing; OAD = oral antidiabetic medication.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If an assessment was not performed or if OADs were not taken, concatenate reason in the cell with a semicolon. Data from the BDG4 case report form will be the Pre-Breakfast and Pre-Dinner Assessments.*

Listing 16.2.8.2
Vital Signs
All Subjects

Subject ID	Randomized Treatment [1]	Parameter (unit)	Study Visit	Date of Measurements (Study Day)	Standard Results	Change from Baseline [2]
XXXXX	XXXXX	Weight (kg)	XXXXXX	DDMMMYYYY (X)	XX	
			XXXXXX	DDMMMYYYY (X)	XX	XX

Abbreviation: DMR = duodenal mucosal resurfacing.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.
[2] Baseline is the last measurement taken before the index procedure.

Programming note: *Parameters include: Height (cm), Weight (kg), BMI (kg/m^2), Pulse Rate (bpm), Sitting Systolic BP (mmHg), Sitting Diastolic BP .mmHg)*

Listing 16.2.8.3
12-Lead Electrocardiogram (ECG) Results
All Subjects

Subject ID	Randomized Treatment [1]	Was ECG Performed?	Date/Time of ECG (Study Day)	RR Interval (bpm)	Ventricular Rate (bpm)	PR Interval (bpm)	QRS Interval (msec)	QTc Interval (msec)	QTcB Interval (msec)	Overall Interpretation	Abnormality	Significance of Finding
XXXXXX	XXXXXX	XXX	DDMMMYYYY/ HH:MM (XX)	XXX	XXX	XXX	XXX	XXX	XXX	XXXXXXX		
		XX	DDMMMYYYY/ HH:MM (XX)	XXX	XXX	XXX	XXX	XXX	XXX	XXXXXXXXXX	XXXXXX	XXXXX
		XXX	DDMMMYYYY/ HH:MM (XX)	XXX	XXX	XXX	XXX	XXX	XXX	XXXXXXXXX		
		XXX	DDMMMYYYY/ HH:MM (XX)	XXX	XXX	XXX	XXX	XXX	XXX	XXXXXXX		
		XXX	DDMMMYYYY/ HH:MM (XX)	XXX	XXX	XXX	XXX	XXX	XXX	XXXXXXXXXX		
		XX	DDMMMYYYY/ HH:MM (XX)	XXX	XXX	XXX	XXX	XXX	XXX	XXXXXXXXX		
		XXX	ND									
XXXXXX	XXXXXX	XXX	DDMMMYYYY/ HH:MM (XX)	XXX	XXX	XXX	XXX	XXX	XXX	XXXXXXX		
		XXX	DDMMMYYYY/ HH:MM (XX)	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXXXXXXXX		

Abbreviations: CS = clinically significant; DMR = duodenal mucosal resurfacing; NCS = not clinically significant; ND = not done.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If ECG was not performed, concatenate with reason.*

Listing 16.2.8.4
MRI Enterography (MRE)
All Subjects

Subject ID	Randomized Treatment [1]	Was MRE Done?	Study Visit	Date/Time of MRE (Study Day)	Clinically Relevant Abnormal Findings?	Test Name	Result
XXXXXX	XXXXXX	XXX	XXXXXX	DDMMMYYYY / HH:MM (XX)	XXXXXXX	Scan Evaluable	Y/N
						Duodenum Distended	Y/N
						Duodenal Wall Thickness Measurement	XX.X
						Duodenal Wall Thickening	Y/N
						Duodenal Wall Enhancement	Y/N
						Duodenal Wall Enhancement Description	XXXXXX
						Duodenal Wall Edema	Y/N
						Mucosal Hypoenhancement	Y/N
						Delayed Hyperenhancement	Y/N
						Duodenal Wall Restricted Diffusion	Y/N
						Luminal Narrowing	Y/N
						Active Inflammation of Fibrosis	
						Periduodenal Edema and Inflammatory Changes	Y/N
						Severe Periduodnal Inflammatory Changes	Y/N
						Periduodenal Fluid Collections	Y/N
						Safety Monitoring Findings	Y/N

Abbreviation: DMR = duodenal mucosal resurfacing.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Listing 16.2.8.5.1
Lifestyle Counseling
All Subjects

Subject ID	Randomized Treatment [1]	Was Lifestyle Counseling Performed?	Study Visit	Date of Performed (Study Day)	Compliant with Diabetic Diet?	Compliant with Lifestyle and Exercise?	Compliant with Diabetics Medications?
XXXXXX	XXXXXX	XXX	XXXXXX	DDMMMYYYY (XX)	XXXXXXX	XXXXXXX	XXXXXXX

Abbreviation: DMR = duodenal mucosal resurfacing.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Listing 16.2.8.5.2
Lifestyle Evaluation
All Subjects

Subject ID	Randomized Treatment [1]	Study Visit	AEs Since Last Visit?	Glycemia Diary Reviewed?	Glycemic Events Since Last Visit?	Change in Medications Since Last Visit?	Change in Non-Study Surgical Treatment Since Last Visit?	Instructed to Continue OAD Medication w/o Changes in Regimen?
XXXXXX	XXXXXX	XXXXXX	XX	XX	XXXXXXX	XX	XX	XXX; XXXXX

Abbreviations: AE = adverse event; DMR = duodenal mucosal resurfacing.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If subject was not instructed to continue anti-diabetic medication without any changes in the prescribed regimen until the Visit 3 procedure, concatenate the reason not instructed with a semicolon.*

Listing 16.2.8.6
Prior and Concomitant Medications
All Subjects

Subject ID	Randomized Treatment [1]	Prior/ Concomitant [2]	ATC Class (Level 4)/ Preferred Term (ATC Level 5)/ Verbatim Term	Type of Medication or Therapy/ Indication	Start Date (Study Day)/ Stop Date (Study Day)	Dose (unit)	Route	Frequency
XXXXXX	XXXXX	Prior	XXXXXXXXXXXXXXXXX/ XXXXXXXXXXXXXX/ XXXXXXXXXXXXX	XXXXX	--MMMYYYY (-XX)/ DDMMMYYYY (-X)	XXXX unit	XXXXXXXXX	XXXXX
		Both	XXXXXXXXX/ XXXXXXXXXXXXXXX/ XXXXXXXXXXX	XXXXX	--MMMYYYY (-X)/ Ongoing	XXXX unit	XXXXXXXXX	XXXXX
		Concomitant	XXXXXXXXX/ XXXXXXXXXXXXXX/ XXXXXXXXXXXXXXXXX	XXXXX	DDMMMYYYY (X)/ DDMMMYYYY (XX)	XXXX unit	XXXXXXXXX	XXXXX

Abbreviations: ATC = anatomic therapeutic chemical; DMR = duodenal mucosal resurfacing; N/A = Not applicable; WHO-DD = World Health Organization drug dictionary.
Note: Study day is calculated relative to the date of index procedure. Medications were coded using WHO-DD version March 2019.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.
[2] Prior medications are all medications (including diabetic medications, rescue medications, and non-drug therapies) that were started before the index procedure whether or not they were stopped before the index procedure. Concomitant medications are all medications (including diabetic medications, rescue medications, and non-drug therapies) that were continuing or starting after the index procedure. Both indicates medication that was started prior to the index procedure and continued after the index procedure.

Programming note: *Concatenate specify field for indication. If Dose unit, Route or Frequency is Other, display other specify text only (i.e., do not display "Other: XXXXXX" but just "XXXXXX "). Sort by subject, start date/time, end date/time, ATC level 4 & PT. Ensure proper WHO-DDE version is printed in footnote.*

Listing 16.2.8.7.1
Physical Examination
All Subjects

Subject ID	Randomized Treatment [1]	Was Physical Exam Performed?	Exam Date (Study Day)	Body System	Result	If Abnormal, Describe	Clinically Significant?
XXXXXX	XXXXXX	XXX	DDMMMYYYY (XX)	XXXXXXX	Normal		
		XX	DDMMMYYYY (XX)	XXXXXXXXXXX	Abnormal	XXXXXXXXXXX	XX
		XXX	DDMMMYYYY (XX)	XXXXXXXXX	XXXXXXXXX		
		XXX	DDMMMYYYY (XX)	XXXXXXX	XXXXXXXXX		
		XXX	DDMMMYYYY (XX)	XXXXXXXXXXX	XXXXXXXXX		
		XX	DDMMMYYYY (XX)	XXXXXXXXX	XXXXXXXXX		
		XXX	ND		Not Done		
XXXXXX	XXXXXX	XXX	DDMMMYYYY (XX)	XXXXXXXXXXXX	XXXXXXXXX		
		XXX	DDMMMYYYY (XX)	XXXXXXXXXXX	XXXXXXXXX		

Abbreviations: DMR = duodenal mucosal resurfacing; ND = not done.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Listing 16.2.8.7.2
Targeted Physical Examination
All Subjects

Same shell as 16.2.8.7.1.

Programming note: *Body Systems will be: Fundoscopic exam, thyroid palpation, abdominal exam, heart and lung, deep tendon reflex and sensation skin. Add a column before 'Was Physical Exam Performed' labeled 'Reported Signs or Symptoms Since Last Visit.'*

Listing 16.2.8.8.1
Patient Contact
All Subjects

Subject ID	Randomized Treatment [1]	Did Subject Contact Site?	Date of Contact (Study Day)	Experienced 2 or More Occurrences of Hypoglycemia?	Was Diary Reviewed?	Was a Follow-Up Visit Scheduled? / Date of Visit (Study Day)	Clinic Lab Value (FPG) (unit) / Clinical Lab Value Date (Study Day)	Was Subject Fasting?	Were Changes in Medication Made?	Any other Action Taken?	Experienced an AE/SAE?
XXXXXX	XXXXXX	XXX	DDMMMYYYY (XX)	XXX	XXX	XXX / DDMMMYYYY (XX)	XXXXXXX (xxx) / DDMMMYYYY (XX)	XXX	XXX	XXX	XXX
XXXXXX	XXXXXX	XXX	DDMMMYYYY (XX)	XXX	XX;	XXX / DDMMMYYYY (XX)	XXXXXXX (xxx) / DDMMMYYYY (XX)	XXX	XXX	XXX	XXX

Abbreviation: AE = adverse event; DMR = duodenal mucosal resurfacing; FPG = fasting plasma glucose; SAE = serious adverse event.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *If no changes in medication were made, concatenate reason in the cell with a semicolon.*

Listing 16.2.8.8.2
Day 7 Telephone Contact
All Subjects

Subject ID	Randomized Treatment [1]	Was the Subject Contacted by Phone?	Date of Contact (Study Day)	Experience Hypoglycemic Events Since Discharge?	Experience FPG meeting Hypoglycemic Rescue Threshold Since Discharge?	Experience AEs Since Discharge?	Pre-Planned Non-Study Surgical Treatment Since Last Call?	Change in Medication Since Discharge?	Compliant with Post-Procedure Diet Over Last 7 Days?	Reminded About Specific 14 Day Post-Procedure Diet?	Provided Instructions and Reminded to conduct Blood Glucose Monitoring 4x per Day for 7 Days?
XXXXXX	XXXXXX	XXXXXXX	DDMMMYYYY (XX)	XXX	XXX	XXX	XXX; XXXXXX	XXX	XXX	XXX	XXX
XXXXXX	XXXXXX	XXXXXXX	DDMMMYYYY (XX)	XXX	XXX	XX	XX	XXX	XXX	XXX	XXX

Abbreviation: AE = adverse event; DMR = duodenal mucosal resurfacing; FPG = fasting plasma glucose.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *if the subject was not contacted by phone, concatenate reason with a semicolon. If the subject had pre-planned non-study surgical treatment, concatenate specify field in the cell with a semicolon.*

Listing 16.2.8.8.3
Day 14 Telephone Contact
All Subjects

Subject ID	Randomized Treatment [1]	Was the Subject Contacted by Phone?	Date of Contact (Study Day)	Experience Hypoglycemic Events Since Day 7 Call?	Experience FPG Meeting Rescue Threshold Since Day 7 Call?	Experience AEs Since Day 7 Call?	Pre-Planned Non-Study Surgical Treatment Since Day 7 Call?	Change in Medication Since Day 7 Call?	Compliant with Post-Procedure Diet Over Last 7 Days?	Reminded to Start Standard Diabetic Diet and Exercise?	Reminded to Measure Blood Sugar and Complete the Glycemia Diary?
XXXXXX	XXXXXX	XXXXXXX	DDMMMYYYY (XX)	XXX	XXX	XXX	XXX; XXXXXX	XXX	XXX	XXX	XXX
XXXXXX	XXXXXX	XXXXXXX	DDMMMYYYY (XX)	XXX	XXX	XX	XX	XXX	XXX	XXX	XXX

Abbreviation: AE = adverse event; DMR = duodenal mucosal resurfacing; FPG = fasting plasma glucose.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *if the subject was not contacted by phone, concatenate reason with a semicolon. If the subject had pre-planned non-study surgical treatment, concatenate specify field in the cell with a semicolon.*

Listing 16.2.8.8.4
Telephone Contact
All Subjects

Subject ID	Randomized Treatment [1]	Was the Subject Contacted by Phone?	Date of Contact (Study Day)	Experience Hypoglycemic Events Since Last Visit?	Experience FPG Meeting Rescue Threshold Since Discharge	Experience AEs Since Last Visit?	Pre-Planned Non-Study Surgical Treatment Since Last Call?	Change in Medication Since Last Visit?	Compliant with Standard Diet Since Last Visit?	Was Lifestyle Counseling Provided?	Reminded to Measure Blood Sugar and Complete the Glycemia Diary?
XXXXXX	XXXXXX	XXXXXXX	DDMMMYYYY (XX)	XXX	XXX	XXX	XXX; XXXXXX	XXX	XXX	XXX	XXX
XXXXXX	XXXXXX	XXXXXXX	DDMMMYYYY (XX)	XXX	XXX	XX	XX	XXX	XXX	XXX	XXX

Abbreviation: AE = adverse event; DMR = duodenal mucosal resurfacing; FPG = fasting plasma glucose.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *if the subject was not contacted by phone, concatenate reason with a semicolon. If the subject had pre-planned non-study surgical treatment, concatenate specify field in the cell with a semicolon.*

Listing 16.2.8.8.5
Follow Up Office Visit
All Subjects

Subject ID	Randomized Treatment [1]	Was the Follow Up Office Visit Performed?	Date of Visit (Study Day)	Experience Hypoglycemic Events / FPG Meeting Rescue Threshold / AEs Since Last Call?	Pre-Planned Non-Study Surgical Treatment Since Last Call?	Change in Medication Since Last Call?	Compliant with Prescribed Diabetes Medications / Diabetic Diet / Lifestyle and Exercise Since Last Call?	Was Lifestyle Counseling Provided?	Reminded to Measure Blood Sugar and Complete Diary / Maintain Diabetes Medication Regimen?	Which Treatment Does Subject Think He/She Received?	How Confident is the Subject of the Guess?	What are the Reasons for This Guess?
XXXXXX	XXXXXX	XXXXXXX	DDMMMYYYY (XX)	XXX	XXX; XXXXXX	XXX	XXX / XXX / XXX	XXX	XXX	XXX	XXX	XXX
XXXXXX	XXXXXX	XXXXXXX	DDMMMYYYY (XX)	XXX	XX	XXX	XXX / XXX / XXX	XXX	XXX	XXX	XXX	XXX

Abbreviation: AE = adverse event; DMR = duodenal mucosal resurfacing; FPG = fasting plasma glucose.
Note: Study day is calculated relative to the date of index procedure.
[1] Subjects were randomized to either DMR or Sham procedure in the double-blind period. After Week 24, Sham subjects had the opportunity to crossover and receive DMR treatment.

Programming note: *if the follow up office visit was not performed, concatenate reason with a semicolon. If the subject had pre-planned non-study surgical treatment, concatenate specify field in the cell with a semicolon.*

14.4. Planned Figure Shells

Not Applicable.

Appendix 1: Premier Research Library of Abbreviations

Abbreviation	Definition
AE	Adverse event
AESI	Adverse events special interest
ALT	Alanine Aminotransferase
AST	Aspartate Aminotransferase
AT	As treated
ATC	Anatomical therapeutic chemical
BMI	Body mass index
CEC	Central ethics committee
CFR	Code of federal regulations
CI	Confidence intervals
COVID-19	Coronavirus 2019
CRF	Case report form
CS	Clinically significant
CSR	Clinical study report
DBP	Diastolic blood pressure
DMC	Data monitoring committee
DMR	Duodenal Mucosal Resurfacing
EC	Ethics committee
ECG	Electrocardiogram

Abbreviation	Definition
eCRF	Electronic case report form
EMA	European medicines agency
EU	European Union
FDA	Food and drug administration
FPG	Fasting plasma glucose
GCP	Good clinical practice
HbA1c	Hemoglobin A1c
HR	Heart rate
IC or ICF	Informed consent or informed consent form
ICH	International council for harmonization
ID	Identification
IQR	Interquartile range
ITT	Intent-to-treat
MedDRA	Medical dictionary for regulatory activities
MMRM	Mixed effect model repeat measurement
MRE	Magnetic resonance imaging enterography
N	Number
NA	Not applicable
NCS	Non-clinically significant
OAD	Oral antidiabetic medication
PD	Protocol deviation

Abbreviation	Definition
PE	Physical examination
PI	Principal investigator
PROMIS	Patient-Reported Outcomes Measurement Information
QOL	Quality of life
RR	Respiratory rate or relative rate
SAE	Serious adverse event
SAP	Statistical analysis plan
SAS®	A software system used for data analysis
SBP	Systolic blood pressure
SD	Standard deviation
SF	Screen failure
SF-36	Short Form Health Survey (36)
SOC	System organ class
T2D	Type II Diabetes
TEAE	Treatment-emergent adverse event
UACR	Urine Albumin-to-Creatinine Ratio
UADE	Unanticipated adverse device effect
US	United States
USA	United States of America
WHO	World health organization
WHO-DD	World health organization drug dictionary