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		the end of life of the sensor, rather than a protocol-specified time.
7.	Are patient demographics and medical history collected?	No. Patient demographics and medical history are not collected, but such information may be provided by centers to describe and evaluate patient-related adverse events.
8.	Is there a reporting schedule for the RWD?	Yes. There is a reporting schedule for the EPR, including timeframes and date of data cut-off for analysis presented here.
9.	Are the collected data sufficient for assessing outcomes?	Yes. Specific CRF designed to document adverse events is utilized in the study; adverse events are adjudicated by a medical monitor for reporting consistency. Information on CGM system use, such as sensor insertion and removal dates, are recorded via Senseonics electronic Data Management System (DMS).
<i>Reliability and data quality factors for consideration</i>		
10.	Are the sites prepared and qualified for RWD collection?	Yes. Sites participating in the EPR are selected based upon their qualifications. The physicians must undergo training in the use, insertion and removal of the CGM system.
11.	Are common data capture forms and definitions used?	Yes. Sensor insertion and use are recorded via Senseonics electronic Data Management System (DMS). Sensor removal is also documented for each patient. Patient safety outcomes are documented using registry-specific case report forms (CRFs). Common definitions for adverse events are provided to the sites.
12.	Is there an adherence to a common timeframe for patient evaluation and data collection?	Yes. The EPR protocol specifies common timeframes for patient visits that are related to the end of sensor life, rather than based upon a calendar timeframe. Patient follow-up visits are scheduled according to the end of life of the sensor, rather than a protocol-specified time, to facilitate removal and insertion of a new Sensor consistent with its use in the commercial, post-market setting.
13.	Are standard scientific methods followed for clinical research?	Yes. The EPR protocol and analysis plan followed standard scientific methods; both the protocol and analysis plan were prospectively developed.
14.	Do the patient selection and enrollment procedures minimize bias?	Yes. The EPR is an all-comer's design at the participating sites, minimizing bias.
15.	Are the data ethically derived, and have patient protection measures been put in place?	Yes. The data are ethically derived, and patient protection measures have been put in place. Procedures are in place to protect patient privacy in that the Sponsor remains

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	masked to any patient identifiers, meeting the country-specific requirements for a post-market patient registry.
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Table 2: Comparability Assessment between the US Pivotal Studies and the EPR Study

Parameter	US	Europe	Comparability Assessment
Medical Practice – Standard of Care	Patients with Type I and Type II diabetes require regulated and frequent monitoring of blood glucose levels. In addition to the use of self-monitoring blood glucose values through hand-held devices, patients may also use CGM systems.	Patients with Type I and Type II diabetes require regulator and frequent monitoring of blood glucose levels. In addition to the use of self-monitoring blood glucose values through hand-held devices, patients may also use CGM systems.	Comparable. Monitoring blood glucose levels is critical to the management of diabetes in both geographies. In both geographies, CGM systems are recognized to provide a valuable tool to aid in monitoring blood glucose levels.
Target Patient Population	Adults with Type I or Type II diabetes who wish to use a CGM System.	Adults with Type I or Type II diabetes who wish to use a CGM System.	Comparable. Both studies evaluate the safety of the CGM system in the same target patient population.
Clinician Skill	Investigators in the US clinical studies underwent a training program to use, insert and remove the Eversense CGM System.	All inserting physicians in Europe underwent a training program to use, insert and remove the Eversense CGM System.	Comparable. The same training program is used in both geographies.
Study Outcome Measures	Adverse events associated with device use, and Sensor insertion and removal were recorded.	Adverse events associated with device use, and Sensor insertion and removal were recorded.	Comparable. Both studies measured the same safety endpoints.
Device Design	The US studies utilized the device design for which the Sponsor is seeking approval.	In Europe, an earlier design of the Sensor may have been in some of the initial patients. The earlier design had a marginally shorter Sensor that contained the same DXA collar in a different position.	Comparable. These minor changes are expected to have negligible effects on the safety of the device, and studies using this design provide direct evidence of device safety.

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4. Objective

The primary objective of the registry is to demonstrate the long-term safety of the Eversense CGM System. The rate of serious device-related, procedure-related, or drug (dexamethasone acetate) related adverse events through approximately 4 sensor insertion/removal cycles.

The secondary endpoints are the following;

- The rate of all serious device, procedure, or drug related AEs over time at each sensor placement cycle through 4 sensor insertion/removal cycles
- The absence of plasma dexamethasone after 4 sensor insertion/removal cycles
- The rate of serious adverse events attributed to the low dose exposure of dexamethasone acetate over time at each sensor placement cycle through 4 sensor insertion/removal cycles

5. Methods

Safety is evaluated by examination of the sensor sites at each in-clinic visit and documentation of adverse events (AEs) occurring in the clinic and during home use. At each visit, adverse events that occur during the visit and that occurred during home use since the previous visit are recorded and reported. Patients are asked to provide information on any hospitalizations and any change in systemic immune function (e.g., problem with wound healing) that may have occurred. Assessments of the sensor implantation and explant sites take place by the physician at each placement with physical exam and documentation. The exam includes current and all previous sensor sites, as well as the surrounding area, to capture any skin reactions resulting from attachment of the transmitter to the skin. De-identified patient data are sent to Senseonics and entered into an electronic database.

The list of key device and procedure-related anticipated adverse events is provided below.

- Adhesive Patch Location Site – Irritation including redness, excoriation or ulceration
- Sensor Location Site – Pain/Discomfort
- Sensor Location Site – Redness
- Sensor Location Site – Infection
- Skin atrophy (thinning of the skin as compared to adjacent skin) over the Sensor
- Skin depigmentation (loss of coloration as compared to adjacent skin) over the Sensor
- Prolonged wound healing of incision after insertion or removal (beyond expected 5-7 days)

An AE is designated as a Serious Adverse Event (SAE) if it meets the following criteria.

- Led to death
- Led to serious deterioration in the health of the patient, that either resulted in
 - a life-threatening illness or injury, or

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The registry will continue to monitor the clinical performance and safety of the Eversense CGM System.

8. Revision History

Revision	Revision Author	Revision Description
01	Haritha Haridas	Initial release
02	Haritha Haridas	Updated results with recent data from PMCF (February 2, 2018)

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