



## The Florida ESRD Network

### *FDA warning regarding glucose testing for PD Patients*

The FDA continues to receive reports of adverse events, including fatalities, related to a drug-device interaction associated with the use of icodextrin (Extraneal), a peritoneal dialysis solution, and certain point-of-care glucose monitoring devices that do not use a glucose-specific test strip.

When patients receive icodextrin (Extraneal) peritoneal dialysis solution, blood glucose values obtained using point-of-care blood glucose monitors may be falsely elevated. Icodextrin is metabolized to maltose in vivo, and the presence of maltose in blood can cause readings to be falsely elevated when using some portable glucose monitors. Some test strips used with portable glucose meters cannot differentiate between maltose, glucose and other sugars as they use methods that are not glucose-specific.

The test strips associated with this drug-device interaction use glucose dehydrogenase pyrroloquinolinequinone (GDH-PQQ) or glucose-dye-oxidoreductase (GDO) as reagents. Examples of meters currently using these types of test strips include the Accu-Chek (manufactured by Roche) and FreeStyle (manufactured by Abbott) models.

Healthcare providers should refer to test strip package inserts or consult the glucose monitoring device and test strip manufacturer(s) to confirm the glucose methodology in any system that is to be used for monitoring patients receiving icodextrin. A list of toll free numbers for glucose monitor and test strip manufacturers is available at the Baxter Renal Clinical Help Line (1-888-RENAL-HELP).

As indicated in the *Warning* section of Extraneal's label, blood glucose measurement in patients receiving Extraneal must be done with a glucose-specific method (monitor and test strips) to avoid interference by maltose released from Extraneal.

Glucose-specific methods (i.e., methods that are *not* affected by this interaction) include those that use glucose oxidase, glucose hexokinase, glucose dehydrogenase nicotinic adenine dinucleotide (GDH-NAD), or flavin adenine dinucleotide glucose dehydrogenase (FAD-GDH) based reagents.

Additional information on this drug-device interaction, including detailed case reports can be found at <http://www.ismp.org/newsletters/acutecare/articles/20080619.asp>.

#### Relevant Links and Related Information:

<http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/psn/transcript.cfm?show=55#2>

[FDA Center for Biologics Evaluation and Research \(Fatal Iatrogenic Hypoglycemia: Falsely Elevated Blood Glucose Readings with a Point-of-Care Meter Due to a Maltose-Containing Intravenous Immune Globulin Product\)](#)

[ISMP Medication Safety Alert \(Be aware of false glucose results with point-of-care testing\)](#)

The Florida ESRD Network (Network 7) is providing this fax blast as a technical assistance activity for the Florida renal community.

FMQAI: The Florida ESRD Network  
5201 West Kennedy Boulevard, Suite 900 • Tampa, Florida 33609  
813-383-1530 • 813-354-1514 Fax