Ciągły poziom glikemii – na razie niedostępny w OIT

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Continuous Glucose Monitoring in the Hospital
Ready for Prime Time ?

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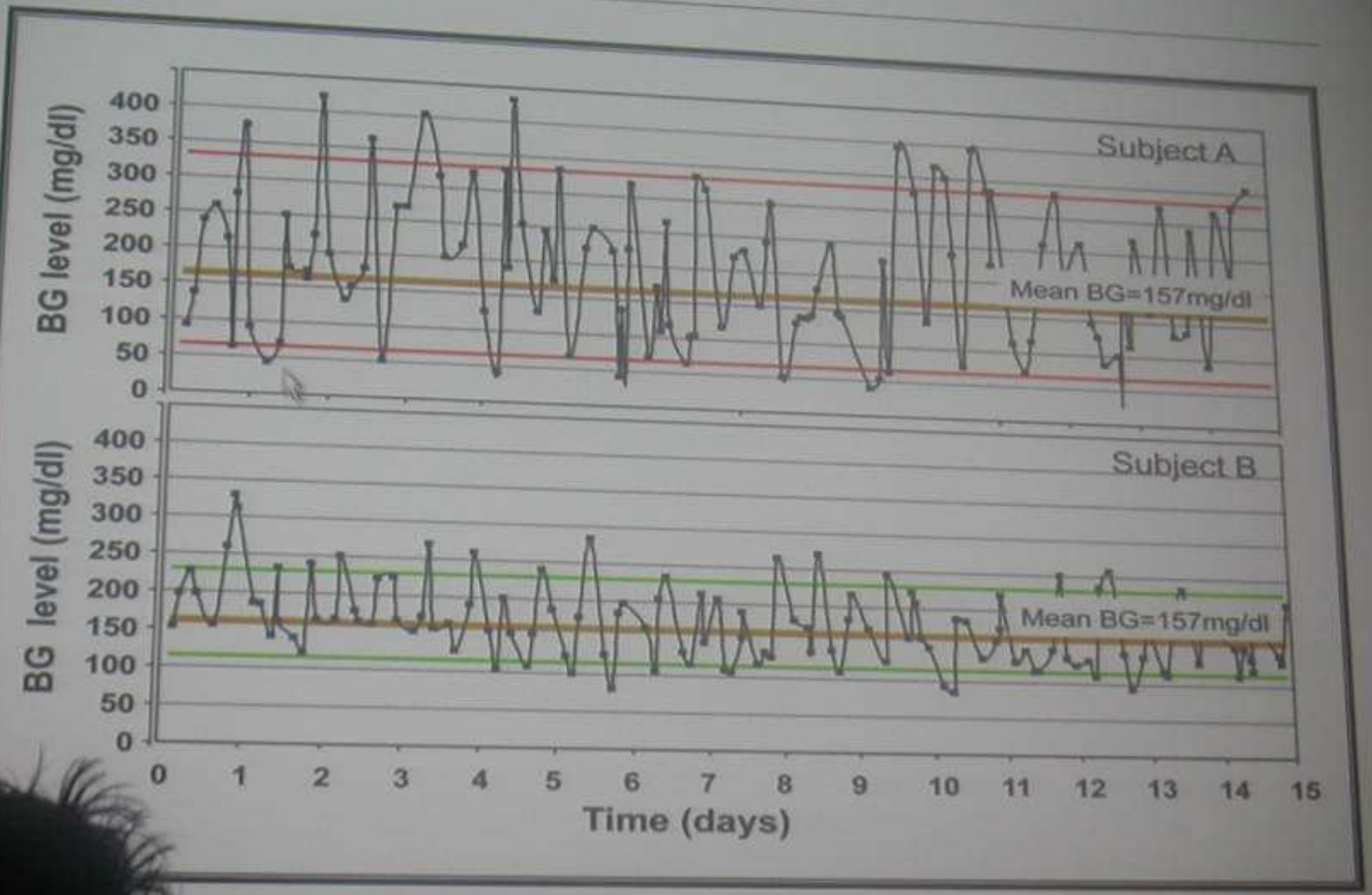
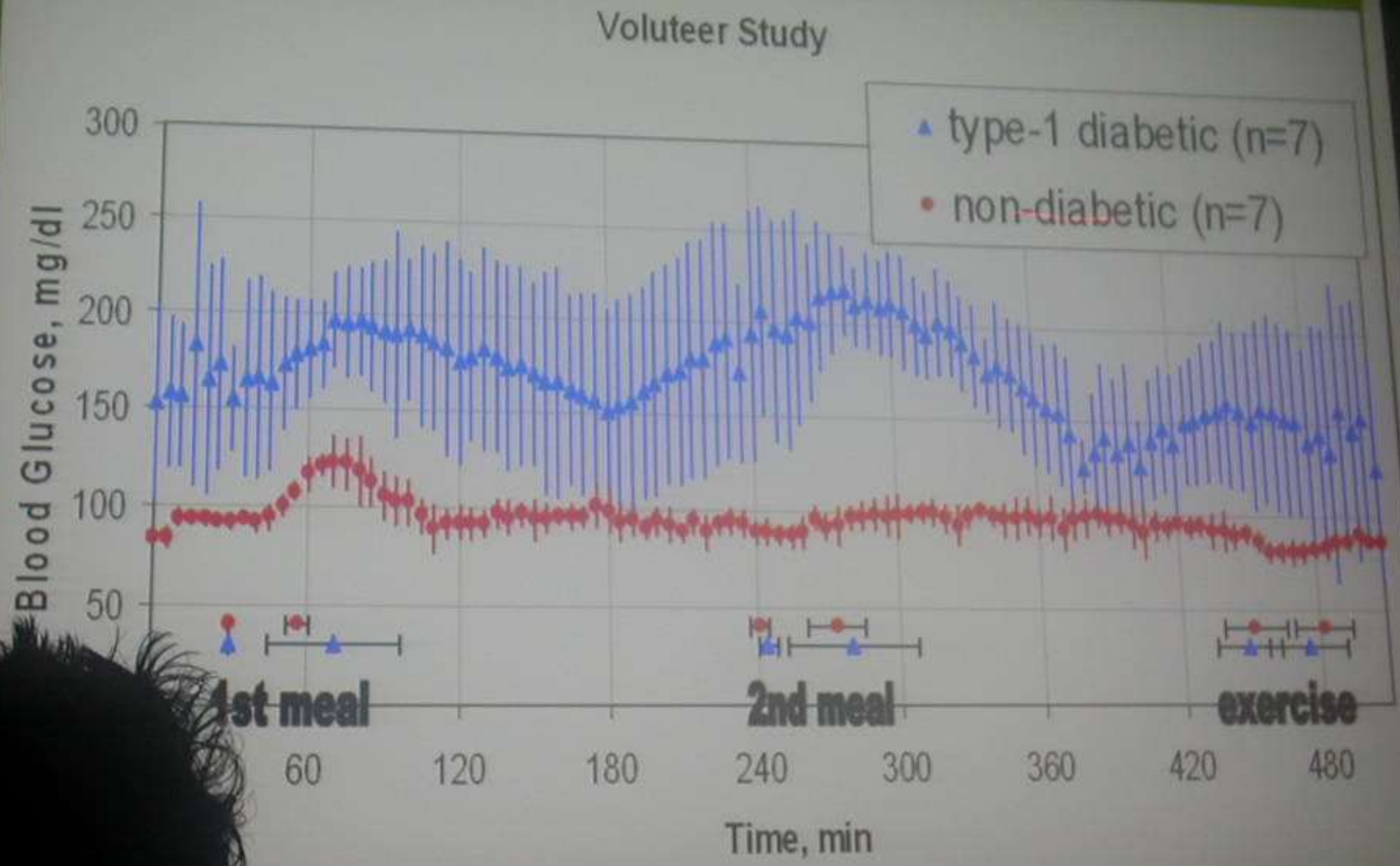
2009- ESICM- European Society Intensive Care Medicine

Concept of Blood Glucose Variability



What is Normal BG Control ?



IVBG System*

Edwards Lifesciences & DexCom Collaboration

- 72 hours of continuous blood glucose monitoring
- Surgical and medical intensive care units, OR, ED
- Minimal nursing time due to automated sampling and calibration
- Large bedside display for rapid BG trend analysis
- Alerts & alarms

Intravenous Glucose Sensor In Peripheral Vein

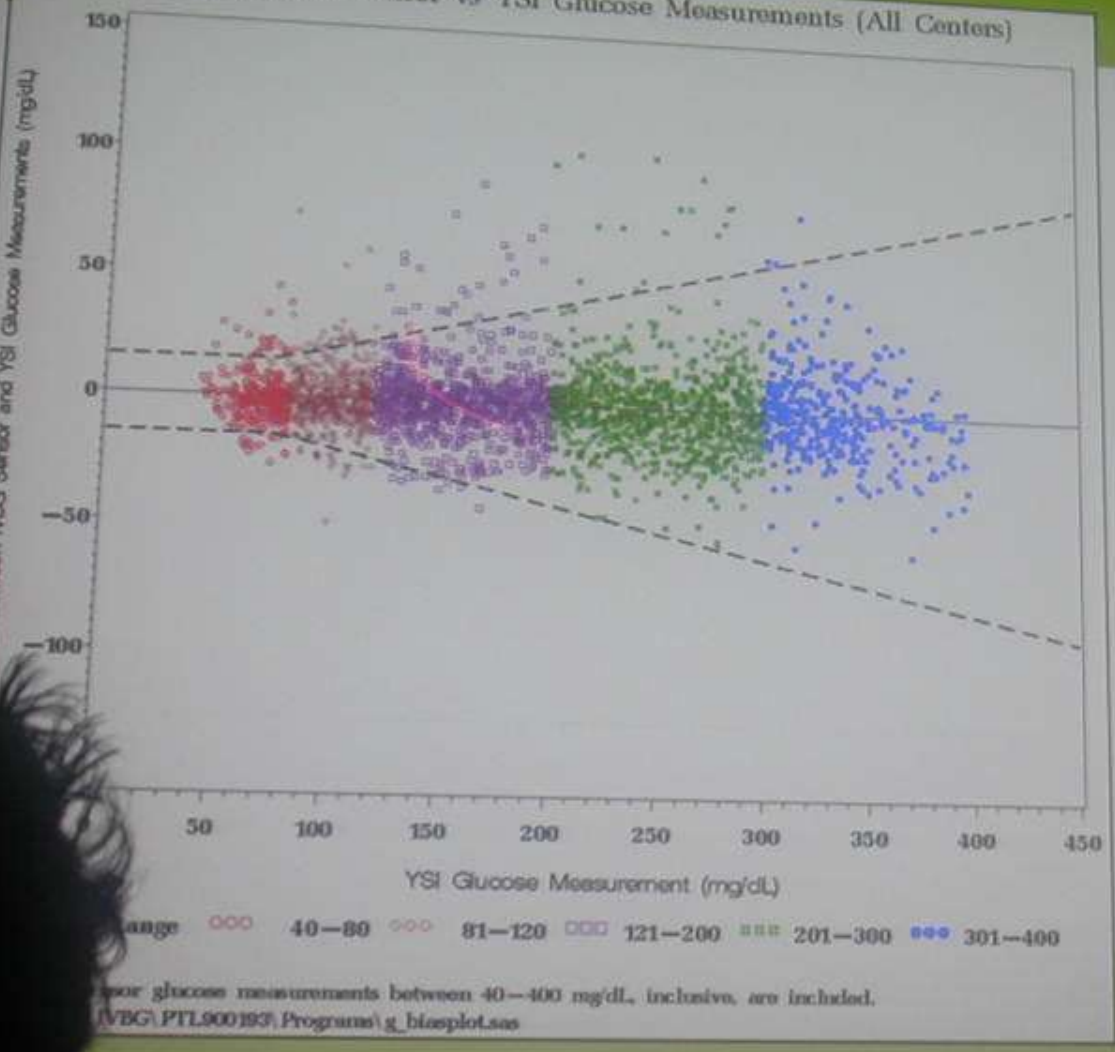
Edwards Lifesciences

dexcom

estigational Use Only

IVBG -GlucoClear

72-hour Clinical Trial in CRU -50 Subjects
Difference Plot- IVBG Sensor minus YSI



- 95% ISO (n=2815) OVERALL

Site	Accuracy % ISO
A	97.7%
B	88.8%
C	95.7%

Training issues experienced at site "B"

IVBG -GlucoClear

IVBG System For Investigational Use Only

Future Clinical Outcome Studies Require More Data, Accurate Data, & Standardized Methods

- Frequent glucose measurements
  - Glucose concentration
  - Duration of hyperglycemia
  - Duration of hypoglycemia
  - Glucose rate of change
  - Glucose variability
- Insulin delivery
- Nutrition
  - Kcal
  - % carbohydrate, fat, protein
  - nteral vs. parenteral delivery
  - ent physiology, disease, and stress

Opportunities & Challenges
In-hospital Continuous Glucose Monitoring

- Improved control of hyperglycemia and prevention of hypoglycemia may improve clinical outcome, decrease LOS, & cost.
- Frequent and accurate glucose monitoring is the key to safe and effective BG control.
- Future in-hospital CGM technologies have great promise to facilitate glycemic control while eliminating the risk for hypoglycemia.
- Future clinical trials must use CGM data to dose insulin