

<b>Name *</b>	Rachel Skoff, Pharm.D.
<b>Email *</b>	<a href="mailto:rachel.skoff@va.gov">rachel.skoff@va.gov</a>
<b>Educational Level *</b>	Other
<b>If Selected Other</b>	PGY1
<b>College *</b>	College of Pharmacy
<b>Department *</b>	Pharmacy
<b>Title of Research *</b>	Glycemic Control in Veterans Converted from Glyburide to Glipizide
<b>Other Authors *</b>	Nancee Waterbury, Pharm.D. Robert Shaw, Pharm.D., MPH, BCPS Jason Egge, Pharm.D., MS, BCPS
<b>Introduction &amp; Purpose *</b>	In 2009 the Veterans Health Administration released a national bulletin regarding the risk of severe hypoglycemia associated with the use of glyburide in elderly patients with renal dysfunction. Providers were encouraged to avoid glyburide in patients with a calculated creatinine clearance (CrCl) of < 50 mL/min and use glipizide instead. The purpose of this study is to identify whether hemoglobin A1c (A1C) remained equivalent in patients converted from glyburide to glipizide.
<b>Experimental Design *</b>	A retrospective cohort of veterans converted from glyburide to glipizide was identified. Patients with an A1C reflecting a stable dose of glyburide and glipizide were included in the primary analysis. Dosing conversion ratios, hypoglycemia, and renal function were also analyzed. A two-sided equivalence trial using Schuirmann OST/TOST was used for the primary analysis. Equivalence was defined as a change in mean A1C of $\pm 0.2$ .
<b>Results *</b>	We identified 298 subjects for electronic medical record review and data for 141 subjects (99.3% male, 53.9% CrCl < 50 mL/min) met inclusion criteria. The average change in A1C (+0.34) was non-equivalent after conversion from glyburide to glipizide (7.08% versus 7.42%, respectively). Hypoglycemia occurred less frequently during treatment with glipizide than glyburide (12.1% versus 29.1%, $p < 0.001$ ).
<b>Conclusions *</b>	Conversion from glyburide to glipizide was associated with a slight increase in A1C and reduced incidence of hypoglycemia. Results of this study support switching patients from glyburide to glipizide to reduce adverse effects. Patients converted to glipizide should be monitored closely to adjust therapy as appropriate to maintain glycemic control.

Created <b>5 Apr 2011</b> 2:34:23 PM	<b>152.131.11.8</b> IP Address
<b>PUBLIC</b>	