

Quality improvement projects like this one offer hospitals the opportunity to improve performance, share best practices, and analyze further opportunities for improving patient care. Our study found that an educational program significantly improved compliance with SIP performance indicators.

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## Look-alike, sound-alike drug errors with Reminyl and Amaryl

Since Reminyl (galantamine hydrobromide, Janssen Pharmaceutica Products, L.P.) was introduced in the United States in 2001 for the treatment of mild to moderate Alzheimer's disease, at least 10 Reminyl prescriptions have been incorrectly filled with Amaryl (glimepiride, Aventis Pharmaceuticals), a drug indicated for type 2 diabetes mellitus. These medication errors have resulted in adverse events, including severe hypoglycemia and hypoglycemia-associated complications. Two deaths have been reported where Amaryl was incorrectly dispensed and administered instead of the prescribed Reminyl.

According to reports spontaneously submitted to FDA and the U.S. Pharmacopeia, the confusion between Reminyl and Amaryl stems from the similarity in trade names, the availability of both as 4-mg tablets, and both drugs having gener-

ic names beginning with g. Janssen is launching a multifaceted educational campaign to help prevent further prescribing and dispensing errors between Reminyl and Amaryl. Communications will be directed toward pharmacists, other health care providers, patients, and caregivers. One component of this campaign is to highlight the key differences between Reminyl and Amaryl (table).

Pharmacists are well-positioned to help reduce medication errors and can aid in the prevention of mix-ups between Amaryl and Reminyl by doing the following:

- Place Reminyl and Amaryl apart from one another on the pharmacy shelf.
- Confirm the trade name on written prescriptions.
- Ask the physician to spell the drug name during telephone prescriptions.

- Confirm the drug's indication for both written and telephone prescriptions.
- Counsel patients and caregivers regarding the trade name, indication, and proper use of each medication and advise them to always read the patient information included with each prescription.
- Inform patients to request that their physicians (1) confirm medication names, (2) write clearly on handwritten prescriptions, and (3) provide product brochures.

Comprehensive and targeted educational efforts by the pharmaceutical industry, along with advanced technologies and regulatory oversight, will help reduce the chance of medication errors among drugs with similar names. We hope that physicians, pharmacists, and consumers will work together to achieve our paramount and common goal: the well-being of the patient.

## Comparison of Reminyl and Amaryl Tablets

Characteristic	Reminyl	Amaryl
Indication	Mild to moderate Alzheimer's disease	Type 2 diabetes mellitus
Available tablet strengths	4, 8, and 12 mg	1, 2, and 4 mg
Appearance of 4-mg tablet	Round, off-white, imprinted JANSSEN on one side with G and 4 on the other	Oblong, blue, flat-faced, notched sides at double bisect, imprinted AMA RYL on one side with Hoechst logos on the other
Starting dosage	4 mg orally twice daily	1–2 mg orally once daily

Patients, caregivers, and health care professionals with questions, concerns, or reports of medication errors related to Reminyl should contact Janssen directly at 1-800-JANSSEN (1-800-526-7736). Errors related to Amaryl should be reported directly to Aventis (1-800-633-

1610). Medication errors should also be reported to the USP Medication Errors Reporting Program in cooperation with the Institute for Safe Medication Practices (1-800-23ERROR; 1-800-FAIL-SAF) or MedWatch, FDA's Adverse Event Reporting Program (1-800-FDA-1088).

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## Medications during the perioperative period

We read with interest the update on discontinuation and reinstitution of medications during the perioperative period by Pass and Simpson<sup>1</sup> in the May 1, 2004, issue, particularly since we published a review on the subject in a Spanish journal that same month<sup>2</sup>. Millions of patients around the world undergo surgical procedures every year, many of them (25–50%) are regularly taking medications unrelated to the surgery, and abrupt withdrawal of these drugs is associated with perioperative complications.<sup>1,2</sup> Advances in surgery and anesthesia have made increasingly more procedures available to patients with complex pathologies and to the elderly. It is essential to understand the potential benefits and complications associated with stopping and restarting medications during the perioperative period. In this emerging field, which is progressing to an evidence-based discipline,<sup>3</sup> the pharmacist has an important role collaborating with clinicians in designing, formulating, and publishing guidelines.

Although the authors addressed clinical practice recommendations for the drugs most commonly involved, such as cardiovascular, anticoagulant, and anti-

platelet agents; central nervous system drugs; and herbal products, we believe that a statement on oral antihyperglycemic agents, with special attention to metformin, would be useful. The use of metformin is increasing, and this drug is not without risk when administered in certain situations.<sup>2,4,5</sup> As a general rule, to prevent hypoglycemia, oral antihyperglycemics should not be given on the morning of surgery and should be replaced by insulin until the patient's oral intake is resumed. One exception is metformin, which should be suspended 24 hours before surgery (48–72 hours according to some authors) and restarted only when renal function is normal and there are no postoperative complications or other known contraindications to its use.<sup>2,4,5</sup> This practice is recommended to prevent the development of metformin-associated lactic acidosis, a rare but potentially life-threatening complication in patients with contraindications to this drug with a mortality rate of 50%.<sup>6–8</sup> One may recall that phenformin, a closely related drug, was taken off the market three decades ago after being declared an imminent hazard because of associated lactic acidosis.<sup>8</sup>

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