Eighty three percent of surveyed members of the Infectious Disease Society of America rejected completely or with reservations the position statement that vancomycin is obsolete for treating MRSA infections. Only 1% agreed with the statement completely.1


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**Survey for graduates of postgraduate year 1 pharmacy residency programs**

The 2005 ASHP accreditation standards for postgraduate year 1 (PGY1) pharmacy residency programs require that programs develop a process to ensure the continued quality of training experience.1 A major component of this quality assurance process is the use of resident feedback that is frequently provided in the form of preceptor and learning-experience evaluation. Programs are also required to have residents perform an end-of-year component where they self-assess their attainment of program goals and objectives. This activity frequently provides residents with the opportunity to reflect upon professional development and provide feedback in the form of suggestions for program improvement. Another potential mechanism that can be used to further identify areas for training improvement is to survey pharmacy residency graduates. Smith and Romanelli2 have recently described their experience with such an approach. In their program, graduate feedback is obtained through the use of a 90-point, web based questionnaire. Responses are used to identify graduate career paths, satisfaction with residency training, and opportunities for program improvement.

Fletcher Allen Health Care (FAHC) is a 562-bed, academic medical center that is affiliated with the University of Vermont College of Medicine. The pharmacy residency program has been in existence at FAHC since 1981. The FAHC program maintains two PGY1 positions. To maintain quality of the training experience, the FAHC program relies on resident feedback that is provided monthly, quarterly, and at the end of the training program. Since 2007, the program has also used a survey tool to elicit feedback from its residency program graduates. The survey tool is a questionnaire that consists of 11 questions that ask the graduates to assess their level of preparation in the following areas: (1) therapeutics, (2) hospital committee participation, (3) practice management, (4) medication dispensing, (5) medication safety, (6) project management skills, (7) drug information, and (8) public speaking. The survey is constructed as a form template using Microsoft Word (Microsoft Corporation, Redmond, WA). The majority of these questions are asked in a yes–no format with the ability to provide comments using a text box. Recipients can type directly into the form. The program director e-mails the survey as an attachment to each program graduate approximately 10–12 months after their program end date. The survey is e-mailed once. Reminder correspondences are not used. The recipient is asked to return the completed survey electronically to the program director. A time period of 10–12 months was chosen to allow sufficient time for the graduates to experience their new positions without allowing too much time to transpire so that their former PGY1 training experiences are difficult to recall.

As of 2008, three of four surveys have been returned to the program director. Feedback from these surveys has been useful in evaluating some of the programmatic changes that have occurred.

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Physical compatibility of metoprolol tartrate injection with selected cardiovascular agents

Intravenous metoprolol tartrate is commonly used to reduce morbidity and mortality in the acute treatment of myocardial infarction in hemodynamically stable patients, especially in the presence of hypertension. Such patients are often receiving other intravenous medications by continuous infusion, which necessitates the Y-site administration of metoprolol. Unfortunately, despite its availability for more than 20 years, minimal data exist regarding the compatibility of metoprolol tartrate injection with other medications. This study was designed to determine metoprolol tartrate injection's physical compatibility with clinically relevant concentrations of 12 other drugs.

Stock solutions of 12 secondary medications were aseptically prepared to the final concentrations listed in the table. Portions of these stock solutions were used to prepare the admixture samples to be examined. Each admixture was prepared in duplicate, with the order of mixing reversed for each member of the pair (secondary medication added to metoprolol, and metoprolol added to the secondary medication). Samples were prepared at 19.2 °C under ambient lighting. Furosemide and sodium nitroprusside admixture samples were protected from light with darkened amber plastic bags. Each sample was evaluated for evidence of precipitation and pH at baseline and at 1, 5, 8, and 24 hours. Visual evidence for precipitation was assessed without magnification against a black and a white background by one investigator. Admixture samples were prepared individually by mixing 2 mL of metoprolol tartrate 1-mg/mL injection with 2 mL of each secondary medication solution, mixing 7 mL of a 1-mg/mL metoprolol solution with 7 mL of a secondary medication in a screw-capped, 50-mL polypropylene, disposable, sterile centrifuge tube. An ion analyzer was used to test pH.

No visual evidence of precipitation for any of the negative controls was observed during this study. The positive phenytoin control demonstrated visual evidence for dense precipitation after 1 hour. No visual evidence of incompatibility at any point in the study was seen with the amiodarone hydrochloride, diltiazem hydrochloride, epifibatide, heparin sodium, milrinone lactate, sodium nitroprusside, furosemide, or procainamide hydrochloride admixtures. Lepirudin, lidocaine hydrochloride, nesiritide, and nitroglycerin admixtures all exhibited visual evidence of precipitation. Trace evidence of precipitation within each lepirudin admixture occurred starting at 5 hours; in one admixture, the precipitation worsened to a slight haze at 24 hours. Each of the nitroglycerin and nesiritide admixtures demonstrated trace evidence of precipitation at 8 hours and 24 hours, respectively. Only one of the two lidocaine admixtures (metoprolol added to the lidocaine) demonstrated trace evidence of precipitation. This was first noted at 8 hours.

No pH change larger than 0.1 unit was observed when metoprolol was mixed with amiodarone hydrochloride (baseline pH of the two samples, 5.05 and 5.08), epifibatide (5.26 and 5.23), lepirudin (5.98 and 6.00), lidocaine hydrochloride (5.11 and 5.09), milrinone lactate (4.08 and 4.07), and procainamide hydrochloride (5.83 and 5.94). Heparin sodium (baseline pH, 5.38 and 5.37) also did not indicate any