



LA HEALTH-SYSTEM PHARMACIST

Newsletter of the Louisiana Society of Health-System Pharmacists

Editor: Dana Jamero djamero@xula.edu

www.lshp.org

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FROM THE DESK OF THE PRESIDENT

It is with both excitement and some trepidation that I begin my year at the helm of LSHP. My fears are eased to a great extent by the fact that there is a significant reservoir of human resources available to assist me in having a successful term of office on your behalf. My fellow officers are Treasurer Helen Calmes, Secretary Mike Cockerham, Newsletter Editor Dana Jamero and a yet to be installed President-elect, Keturah Robinson. In addition to our esteemed Board of Directors, we also have the Immediate Past-President Barries Leung and our Technician Representative to the Board, Winona Thomas, that are all there to assist us. I am also blessed to have a number of tenured past-presidents who I plan on having on a regular basis at our conference table, they include: Chris Betz, Mathew Thomas, Tommy Mannino, Jay Schwab, and Mr. Malcolm Broussard. Last, but certainly not least, it is my good fortune to have on board our Executive Director Bland O'Connor and Ms. Kati Craig, Senior Association Coordinator. Both Bland and Kati have provided boundless energy, keen administrative oversight, and sage advice in the daily and annual operations of LSHP. I look to each of these people and countless others who I have left unsung to bring our society forward in the coming year.

My excitement stems from the fact that we have a number of new members who have come to us from both in and out of state. Many of these members have expressed interest in working on our committees and with our state chapters. It is my intent to engage each and every one of those desiring to assist the Society. Also, a number of members have stepped forward and offered to assist with LSHP committee work following my election to steer our Society forward this year. It is my intent to select our LSHP committee chairs and assign a large number of committee members during the week following the July 4th holiday. I hope that we can depend on a number of seasoned members to lead and seed LSHP with new and involved members in the coming year. I intend to serve as an ex-officio member on these committees in the capacity of assisting communication links between the committee members. As it has been done in the past, we will have Board liaisons appointed to serve on these committees from the Board of Directors. This should ensure that the Board receives and acts in an informed manner on any and all recommendations placed forward by our committees.

Our next LSHP Retreat and Board of Directors Meeting is scheduled for August 23rd and 24th. We will meet at the Methodist Conference Center in Woodworth,

approximately 10 miles South of Alexandria. For those attending, please watch the speed limit signs as you take the back road into the Conference Center, unless you wish to contribute to the village coffers. Typically we have an afternoon retreat starting after a noon lunch at the facility. We then have an early dinner on site and in the past have taken in a movie in downtown Alexandria. I am going to speak to Mr. O'Connor and see if we may change the evening outing to be held at the Tiger Lanes which is a small bowling facility located on the former England Airforce Base in Alexandria. It lends itself to a more convivial grouping and allows everyone new and "seasoned" to mingle.

In addition to our officers, Board of Directors, and State Chapter Officers in attendance, I would like to encourage invitations to be extended to our Faculty LSHP advisors, student LSHP leaders, and select industry representatives that have been supporters of our programs to the retreat. Although we would like representatives to attend both days, if you are able to attend only Saturday or Sunday we would be delighted to have your presence in the boardroom. My hope is that we can together address some innovative and successful approaches to growing our membership, assist in the development of our regional chapters, and offer programs that bring pharmacists and pharmacy technicians into our professional society. I look forward to seeing all of you this summer and fall, especially at the 2008 LSHP Mid Year Meeting to be held on Saturday, Oct. 11th in Shreveport.

Marty Steffenson
LSHP President



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**LOUISIANA SOCIETY
OF HEALTH-SYSTEM PHARMACISTS
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(318) 342-1735
Steffenson@ulm.edu

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New Orleans
(504) 520-5049
krobinson1234@bellsouth.net

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(504) 897-8586
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hcalme@lsuhsc.edu

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tommann40@aol.com

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wicker@ulm.edu

MEMBER AT LARGE

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aborghol@xula.edu

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david.loftin@christushealth.org

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rodden@ulm.edu

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tnash@ochsner.org

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gemjim29@aol.com

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sdantonio3@eatel.net

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(318) 742-9506
jhall3@lsuhsc.edu

SOUTHEAST-LSHP

Keturah Robinson
(504) 394-6224
krobinson1234@bellsouth.net

NORTHEAST-LSHP

Marty Steffenson, PharmD
(318) 342-1735
steffenson@ulm.edu

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**To register:**

A brochure will be uploaded soon to the LSHP website. Check www.lshp.org or watch your mailbox.

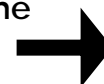
Don't miss Friday's events!

Join other LSHP members for a welcome reception Friday, Oct. 10 at Sam's Town before heading out to the Red River Revel.

Hotel Information:

Call Sam's Town Hotel & Casino at (877) 429-0711 for reservations. Mention the code *S10 LSP 1* when you call to reserve your room in the LSHP block. Rooms are \$125 per night.

For more information on the program, see page 3.

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Please send article submissions to the newsletter editor, Dana Jamero, via email at djamero@xula.edu.



The 2008 LSHP Midyear Meeting Tentative Schedule at a Glance

Saturday, October 11, 2008

- 
- 7:00-8:00 A.M. **Registration/Continental Breakfast**
- 8:00-9:00 A.M. **Automation Pharmacy Processes Containing Costs**
Warren Wood, PharmD
- OR **Anemia**
Robin Covey, PharmD
- 9:00-10:00 A.M **Herbals**
Iman Borghol, PharmD
- OR **Therapy Options for Parkinson's Disease**
Lindsey Orchard, PharmD
- 10:00-11:00 A.M **Improving the Quality of Antithrombotic Therapy through the Use of
National Performance Measure**
Karen Fiumara, PharmD
- OR **Osteoporosis**
Meredith Smith, PharmD
- 11 A.M. -1 P.M. **Lunch and Exhibits**
- 1:00-2:00 P.M. **Anti-Coagulation**
Tony Casanova, PharmD
- OR **Updated Medical Management of Pulmonary Arterial Hypertension**
Hazel Lam, PharmD
- 2:00-3:00 P.M. **Vaccination Update**
Ann Wicker, PharmD
- OR **Improving Medical Safety with Anticoagulation Therapy**
Holly Breaux, PharmD
- 3:00-4:00 P.M **Nutrition Lecture**
Charlie Jastram, PharmD
- OR **Asthma– Taking Control**
Emily Ortego, PharmD
- 4:00-5:00 P.M. **Pediatric Hypertension**
Kelsey Green, PharmD
- 

What's the Problem with all the Educational Grants and CE from the Pharmaceutical Industry?

Helen Calmes, PharmD

LSHP Treasurer and Annual Meeting Co-chair

Many of the LSHP members have noted a change in the number and venues of the pharmacy continuing education programs offered on the local and regional level. The changes are due in part to regulatory changes. However, the largest contributing factor is the standard of ethics that medical professionals are expected to uphold.

The concern regarding the blurring of the lines between the promotion of pharmaceutical products and continuing medical education has been brewing since the early 90's. In 2002 the Pharmaceutical Research and Manufacturers of America (PhRMA) released a *Code on Interactions with Healthcare Professionals*, imposing voluntary restrictions on gifts that companies give. In 2003, the Office of the Inspector General (OIG) of the Department of Health and Human Services released a *Compliance Program Guidance for Pharmaceutical Manufacturers*, explicitly identifying educational grants as areas of potential risk or conflicts. The Accreditation Council on Continuing Medical Education (ACCME) adopted revised *Standards for Commercial Support*, heightening restrictions designed to protect CME programs and lessen commercial support of educational programming. By 2005, the US Senate Finance Committee began to study medical and pharmaceutical industry grant-making practices. This Committee has exclusive jurisdiction over Medicare and Medicaid (expenditures over \$700 billion in 2006) and wanted to make sure program funds were spent appropriately. This group became aware that PhRMA funds for educational programs may have been going exclusively to programs that assist in improving the specific company's market share. The Journal of the American Medical Association (JAMA) published an article in 2006 (January 25) that proposed more stringent treatment of pharmaceutical company grants. In 2007, the US Senate Committee on Finance released their findings which highlighted the encouragement of off-label uses of products resulting in increased expenditures (*The Standards for Commercial Support*-August 2007).

Since these occurrences, many biopharm companies have moved to online grant submission systems with blind reviews by a committee independent of sales. Many have formed separate compliance offices or committees. The government will likely continue to scrutinize funding in order to ensure that grants are not perceived as "kickbacks" or inducements to use specific products.

The American College of Clinical Pharmacy (ACCP) published *Pharmacists and the Pharmaceutical Industry: Guidelines for Ethical Interactions* in 1993 which specifically delineated the acceptable relationships between industry and pharmacists. In March of 2008, ACCP published an updated version of *Pharmacists and Industry: Guidelines for Ethical Interactions* which outlined ten guidelines for pharmacist's dealings with industry. These are

as follows:

1. The welfare of patients should be a pharmacist's primary concern,
2. Do not solicit or accept gifts from industry that might influence or appear to influence professional judgment (currently appropriate gifts per PhRMA are under \$100),
3. Always disclose financial, consulting or other relationships,
4. Pharmacists in any decision-making positions should avoid relationships that appear or constitute conflicts of interest,
5. Institutional Review Board (IRB) members should avoid any real or potential conflicts of interest that may relate to matter before the IRB (a board that deals with research in human subjects),
6. If you participate in industry-associated research, you should only do so if the research is ethical and meets specific scientific and regulatory standards,
7. Only participate as authors for publications that meet accepted ethical and scientific standards,
8. Participate in continuing education programs only if they deliver fair and unbiased data/information,
9. Colleges of pharmacy and any post-graduate training should instruct on professional ethics,
10. Always ensure that patient confidentiality is maintained for all communications and interactions with industry.

In the American Pharmaceutical Association (APhA), Pharmacist's Code of Ethics, several items relate to this issue: A pharmacist acts with honesty and integrity in professional relationships; serves individual, community, and societal needs; maintains professional competence; and seeks justice in the distribution of health resources. No official policy specifically relates to a pharmacist's relationship with industry.

In 1999, the ASHP House of Delegates voted to retire a policy on the relationship with industry. It was believed that the guidelines and policies more completely reflected the concerns of the organization. Though ASHP has not published a guideline specific to the industry relationships with our profession, most of the guidelines and statements used to guide clinical and institutional practice state that "conflicts of interests" should not influence decisions (e.g. Statement on Formulary Management).

CE continued from page 4

The Accreditation Council for Pharmacy Education (ACPE) has accredited certain pharmaceutical and biomedical device manufacturers as continuing education providers. However, in 2005 ACPE no longer recognized manufacturers as accredited providers. All providers needed to meet *ACPE Criteria for Quality and Interpretive Guidelines* and *OIG Guidelines*.

ACPE has many standards that LSHP must adhere to to provide approved credits. One that greatly affects programming is the criterion of “non-commercialism”. The topics and learning activities, which include the venues, must be free of commercialism and must not be intended for the purpose of endorsing a specific product. This does not disqualify speakers from industry or that have received support from industry (e.g. via research, speaking agreements). However, the appropriate disclosure of any conflicts of interest must be offered. The content of the approved presentation must be reviewed by a non-biased, non-affiliated peer reviewer to ensure goals are met.

A second concern is content. ACPE specifies that the content must include one of five core areas: delivering patient-centered care, working as part of a team, practicing

evidence-based medicine, quality improvement, and use of information technology. Education must strive to educate pharmacists and technicians, and maintain and grow their competencies.

Often times employers place restrictions on gifts and inducements that one can receive. These are often more stringent than the policies imposed by the industry and the professional organizations. Be aware of what those are in the work place.

LSHP realizes that it would be difficult to successfully continue to offer quality continuing education programs without industry support. Industry continues to support education. However, the process requires more planning and effort by the local affiliate officers and the Educational Committee of LSHP. The grants cannot be guaranteed. You will also note that, an ACPE approved program may be paired with another non-approved program due to venue. The Education Committee members planning the Midyear and Annual meeting have advanced planned and solicited grants for the past few years. This is new for the local affiliates to have to use the granting processes.

Please remember that “CE” does not mean “come eat.” Rather, it is your way of maintaining your practice knowledge and improving skills to better serve your patients.

ULM Student Chapter Update

Kieu D. Nguyen, Pharm.D.

ULM Immediate Past- President

As the lazy summer days approached, ULM's LSHP Student Chapter was still bustling with activity. With plans finalized, ULM students started their trek to common meeting grounds: the Hilton Riverside in New Orleans. Dalia Abdelhalim (P3), Justin Lui (P3), and Kristian Fruge' (P3) attended the Board of Directors meeting on Thursday of the LSHP Annual Meeting. The remaining students arrived on Friday morning and jumped right into the annual meeting by attending or assisting with the CEs. It was easy to see that all 18 students thoroughly enjoyed lunch, the exhibits, and poster presentations. Many attendees commented on how nice it was to have student participation. It was a sight to see students side-by-side with other attendees visiting industry leaders, engaging in conversation, and grabbing freebies! Students also had a great time having dinner at Harrah's with Linsy Varughese and Gerald Lanclos of CardinalHealth! At Saturday's Award Luncheon,

students congratulated Dr. Roxie Stewart for her poster, and wished Dr. Marty Steffenson the best of luck during his tenure as LSHP President!

Students are now starting their P4 rotations or their early experiential rotations. By the time August comes around, our chapter hopes to have accomplished our goal of becoming an ASHP Recognized Student Society. We are very excited for this upcoming year, as many changes are taking place. There is no doubt that we will see more student involvement as the chapter grows under the guidance of our LSHP Chapter President, Kristian Fruge'. It has been amazing working with LSHP, an honor to be welcomed at the Board of Directors meetings, and a sincere pleasure serving as the student chapter's President. Have an awesome summer and best wishes everyone!

Xavier Student Chapter Update

Geoffrey Gros

Xavier Chapter President

The Louisiana Society of Health-System Pharmacists Student Chapter at Xavier University has much in store for this upcoming year. Our chapter has already begun planning the numerous student body meetings we intend to hold. We are anticipating many interesting topics to be discussed, ranging from pharmacy residency requirements/expectations to an in-depth look at the newly instated MD/PharmD collaboration act and how it applies to our state. Xavier's Student Chapter is also

eagerly anticipating this year's community service opportunities, beginning this October with our participation in Operation Diabetes. Lastly, our chapter has made it a goal to increase our student membership by twenty-five percent over last year's membership. We will begin our recruitment at the Class of 2012 student orientation which will be held in late August.

We look forward to having a GREAT year at Xavier!

Cilostazol and Pentoxifylline for the Treatment of Intermittent Claudication

Heba Hossenally, Pharm.D., Stacey Young, Pharm.D., and Cori M. Brock, Pharm.D.

Intermittent claudication (IC) is one of the symptoms of peripheral arterial disease (PAD) due to atherosclerosis. It is a pain felt in the muscles of the legs due to unmet increased oxygen demands of the muscles during walking. Insufficient blood flows to the muscles because the arteries are narrowed, or have plaques causing a type of chronic limb ischemia. Rest relieves the pain. IC affects mostly adults who are ≥ 60 years old. The majority of patients with IC (70%) see the condition resolve or stabilize, whereas the remaining patients will require medications for their symptoms.

Initially, IC can be treated through modification of risk factors that increase the risk of PAD. Examples of risk factor modification include: smoking cessation; treatment of any associated hypertension, dyslipidemia, or diabetes; and the use of low dose aspirin or clopidogrel for antiplatelet therapy. In addition, exercise, medications, and surgery are alternatives for the treatment of IC.

When IC persists despite risk factor modification, the symptoms are treated with drugs to improve quality of life. The two FDA approved drugs for treating the symptoms of IC are cilostazol and pentoxifylline. Cilostazol is a phosphodiesterase III inhibitor that works by increasing the amounts of cAMP in platelets and blood vessels. This increases vasodilation and decreases platelet aggregation. Cilostazol also decreases triglycerides and increases high density lipoprotein (HDL). Pentoxifylline is a xanthine derivative that increases red blood cell deformability, thus improving blood flow and tissue oxygenation. It also decreases platelet aggregation, blood viscosity, and fibrinogen concentration.

The purpose of this literature review is to compare cilostazol to pentoxifylline in regards to their benefits in the improvement of walking distance and quality of life in patients with IC. The review also seeks to evaluate dosage recommendations, drug interactions, side effects, and contraindications.

Walking Distances and Time of Onset

Both pentoxifylline (400mg three times daily) and cilostazol (100mg twice daily) have demonstrated individual benefit in patients with IC. Maximal walking distance (MWD) increased by 20-25% with pentoxifylline compared to placebo in 24 weeks, but increased 40-60% with cilostazol compared to placebo in 12 to 24 weeks. Other trials show that compared to placebo, cilostazol also improves maximal and pain free walking distances, whereas, pentoxifylline did not. Despite an initial increase in pain free walking distance (PFWD) in both drugs, after 24 weeks pentoxifylline had no change from baseline, but cilostazol had an increase in PFWD of 32-59% from baseline. Most importantly, cilostazol showed superiority over pentoxifylline in the only conducted trial to date concurrently comparing the two agents. This trial, known as the The Claudication Study Group, evaluated 698 patients who were randomly assigned to pentoxifylline, cilostazol, or placebo. The conclusions from that study reveal patients taking cilostazol had favorable gains in walking distance ($p < 0.001$) compared to

placebo and pentoxifylline, while pentoxifylline was comparable to placebo. The time at which a change in walking was observed also differed. This direct comparison of the two drugs showed that change in maximal walking distance begins at week 4 for cilostazol, but did not differ from placebo for pentoxifylline. The data suggest that it may take longer to observe an effect with pentoxifylline.

Quality of Life

Quality of Life (QOL) was also reported to improve more with cilostazol than pentoxifylline in the direct comparison with the Claudication Study Group. QOL was measured by the SF-36 physical functioning scores and Walking Impairment Questionnaire (WIQ). Patients reported better improvement in physical health with cilostazol than with pentoxifylline and 51% of patients in the cilostazol group subjectively felt better compared to placebo as opposed to 39% on pentoxifylline.

Drug Interactions

Another consideration is drug interactions. As a part of therapy, patients' with IC require antiplatelet medication for the cardiovascular risk that is associated with PAD. Aspirin and clopidogrel are the most commonly recommended agents for this purpose. Both proved to be effective treatment options as demonstrated in the Clopidogrel versus Aspirin in Patients at Risk of Ischemic Events (CAPRIE) study. The addition of cilostazol or pentoxifylline to these antiplatelet medications poses the potential risk of increased bleeding. However, in eight randomized, double blind, placebo controlled trials, aspirin at doses ranging from 75-81mg for 137 days and 325mg for 54 days was given together with cilostazol in 201 patients without any significant occurrences of bleeding. On the other hand, there have been reports of bleeding or increased prothrombin time in patients taking pentoxifylline with anticoagulants or antiplatelets. This is important to consider since the majority of patients being treated for IC will be taking an aspirin daily.

Side Effects

An analysis of safety databases in the December 2005 supplement of *Atherosclerosis* showed that headache occurred in 32.2% of patients on cilostazol, compared to 11.3% on pentoxifylline. More patients in the cilostazol group reported diarrhea, abnormal stools, peripheral edema and palpitations than in the pentoxifylline or placebo group. Though more adverse effects were reported with cilostazol, fewer subjects (15.8%) withdrew from the cilostazol group due to adverse events compared to the pentoxifylline group (18.5%).

Contraindications

Cilostazol is contraindicated in patients with class III or class IV CHF. Concerns about the use of cilostazol in patients with congestive heart failure (CHF) are related to the increased mortality associated with the use of phosphodiesterase III inhibitors.

New Third Generation Beta Blocking Agent: Nebivolol

Stacey Young, Pharm.D. Candidate and Amne Borghol, Pharm.D.

Nebivolol (Bystolic®) is a third generation beta blocker that possesses unique properties distinguishing it from its drug class. Beta blockers, in general, have many different clinical purposes. In hypertension, they decrease arterial blood pressure by blocking the action of endogenous catecholamines which reduce cardiac output and heart rate. By reducing oxygen demand through their negative inotropic and chronotropic effects, they lessen the workload of the heart and alleviate pain felt during ischemia which makes them appropriate in the treatment of angina. Beta blockers also balance out the supply and demand of oxygenated blood and have been shown to counteract cardiac remodeling in chronic heart failure patients and improve mortality in myocardial infarction. These pharmacological effects occur through the blockade of beta 1 and beta 2 receptors. Beta receptor selectivity is one feature that differs between the agents of this drug class and gives nebivolol an advantage over the other agents. The primary indications for which nebivolol have been studied include systemic hypertension and heart failure. Clinical trials have demonstrated similar efficacy with this drug in comparison to other beta blockers and have unveiled additional benefits that make nebivolol an ideal beta blocker for the management of hypertension.

The most intriguing quality of nebivolol is its effect on nitric oxide. Nitric oxide is an endogenous vasodilator that plays a vital role in proper endothelial function. The endothelium, which is the interior surface of blood vessels, produces a variety of substances that regulate vascular tone and the integrity of the blood vessels. Under ideal circumstances, nitric oxide is constantly produced which induces vasodilation to maintain sufficient perfusion. In addition, nitric oxide elicits an antithrombotic and anti-inflammatory effect by inhibiting platelet and leukocyte adhesions to the vascular endothelium. Unlike the 1st and 2nd generation beta blockers, nebivolol has been proven to counteract the effects of endothelial dysfunction. In a comparative study versus atenolol, Cockcroft et al studied nebivolol's effects in human forearm vasculature. Nebivolol increased forearm blood flow by an average of 91% while atenolol fell short of producing any vasodilatory response. Subsequently, this effect was blocked with the co-infusion of L-NMMA, a known endothelium dependent nitric oxide antagonist, which demonstrates the association between nebivolol and endothelial mediated nitric oxide synthesis.

Given nebivolol's effect on nitric oxide, some studies have specifically focused on its use as an antihypertensive in African Americans. Ordinarily, beta blocker therapy is not effective in managing hypertension in this patient population without the addition of other antihypertensive agents, especially in comparison to Caucasians. However, in a double-blind, multi-center, placebo-controlled trial, 300 African Americans classified with stage I and II hypertension received nebivolol in doses of 2.5, 5, 10, 20, and 40mg daily as monotherapy for a duration of 12 weeks. Of the 300 patients, 259 who completed the 12 weeks showed significant reductions in sitting systolic ($P < 0.004$ at doses ≥ 10 mg) and sitting diastolic blood pressure ($P < 0.044$ at doses ≥ 5 mg) from baseline. Adverse effects were similar to that of placebo. It is thought that nebivolol's vasodilatory properties may contribute to its efficacy as monotherapy in African

Americans.

Beta receptor selectivity for nebivolol has demonstrated a 321 fold higher affinity for beta 1 versus beta 2. This places it at the top of its drug class in terms of beta receptor selectivity. It is possible that this correlates with nebivolol's safety profile and overall good tolerability. In the largest (909 patients), double-blind, placebo-controlled study conducted in the U.S. that examined the use of nebivolol in hypertensive patients, the agent significantly lowered blood pressure and exhibited similar adverse effects compared to placebo. A meta-analysis comprised of ten trials compared the tolerability of nebivolol against specific cardio-selective beta blockers: atenolol, metoprolol, and bisoprolol. The study measured tolerability in terms of the rate of patients with adverse effects, the total number of adverse effects and adverse effects that were drug related. Efficacy was also observed using the changes in systolic/diastolic pressure from baseline and responder rates. The results showed that blood pressure lowering effects were similar, but nebivolol had a more attractive adverse effect profile. The ratio of the rates of patients with adverse effects treated with nebivolol compared with those treated with the cardioselective beta blockers was 0.63 (95% CI 0.44, 0.91). The ratio of total adverse effects was 0.71 (95% CI 0.62, 0.82), and the ratio of drug-related adverse effects was 0.38 (95% CI 0.29, 0.50). In conclusion, nebivolol demonstrated fewer side effects than did the other beta blockers while maintaining similar efficacy.

Nebivolol has also proven its usefulness in heart failure patients in the SENIORS trial (Study of the Effects of Nebivolol Intervention on Outcomes and Rehospitalization in Seniors with Heart Failure). Only three other beta blockers have demonstrated their mortality benefit in congestive heart failure: metoprolol, carvedilol, and bisoprolol. The SENIORS trial included 2,128 patients ≥ 70 years with a history of heart failure or a documented ejection fraction of $\leq 35\%$. The primary endpoints were a composite of all cause mortality or cardiovascular hospital admission. These endpoints were significantly reduced in the nebivolol group compared to placebo (hazard ratio [HR] 0.86 (0.73, 0.99) $p = 0.039$). In addition, the proportion of patients able to reach treatment doses of 5mg or more of nebivolol was 80% versus 87% for placebo, which further reinforces the drug's overall tolerability even in the elderly. Discontinuation rates were the same for both groups. In conclusion, the SENIORS study shows that treating elderly patients with heart failure with nebivolol reduces the composite risk of all cause mortality or cardiovascular hospital admission compared with placebo. This is significant as it is the first mortality and morbidity study that specifically focused on elderly chronic heart failure patients.

In comparison to other beta blockers, nebivolol has been shown to be as efficacious as the other agents in the management of hypertension while offering additional vasodilation and decreasing many adverse effects that are associated with the beta blocking class. This makes the drug better tolerated in diabetics, asthmatic patients, and perhaps even African Americans who traditionally have reduced nitric oxide levels. The drug has also demonstrated favorable effects in the elderly population with heart failure.

References available upon request.

From Claudication, on page 6

Conclusion

In comparison to pentoxifylline, the data suggests cilostazol may be a better agent in treating intermittent claudication. It improves overall walking distance to a greater degree and at a much faster rate than pentoxifylline. Patient satisfaction and overall perceived benefit was also expressed more with treatment of cilostazol. The twice daily dosing is more convenient for patients as opposed to the three doses with pentoxifylline. The data also suggest that safe administration with aspirin gives cilostazol another advantage over pentoxifylline considering the majority of patients with IC are supplemented with an aspirin daily. While the contraindication to cilostazol in patients with class III or class IV CHF may be alarming, there is not any physical data that suggests fatal outcomes in patients with severe heart failure. Patients at risk should be carefully monitored, but more studies are needed. A disadvantage to cilostazol is the greater prevalence of adverse effects in comparison to pentoxifylline; however, most of them were reported as mild. Our research suggests cilostazol provides more benefit and should be the drug of choice when considering pharmacological agents to manage the symptoms of PAD.

References available upon request.

**Congratulations & welcome
to the newly elected officers of LSHP:**

**Keturah Robinson, Pharm.D.
President-elect**

**David Loftin & Teresa Nash, Pharm.D.
Board Members-Elect**

**Thank you to all who ran for office
and to everyone who voted.**

Congratulations

**to the University of
Louisiana at Monroe
School of Pharmacy & the
Xavier University of
Louisiana College of
Pharmacy student chapters for being
named **2008-09 ASHP Recognized
Student Societies.****

