

# AU InforMed

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## Key Inforbits

- New drug, Nexavar<sup>®</sup> by Bayer
- Several health surveys and report cards
- Flu and West Nile virus updates
- Obesity drug going OTC? If not ...
- There is always surgery.
- Merry Christmas and Happy New Year!

## NEW DRUGS, and other related stuff ...

**New Drug** ... The FDA approved Nexavar<sup>®</sup> (sorafenib tosylate) on December 20, 2005. It is a new anti-cancer drug for treatment of adults with advanced renal cell carcinoma, the most common type of kidney cancer. In the U.S., kidney cancer accounts for approximately 3% of all adult cancers. According to the American Cancer Society, about 32,000 new cases are diagnosed and about 12,000 people die from the disease annually. Kidney cancer occurs most often in people between the ages of 50 and 70, affects men almost twice as often as women and, if detected early enough, may be curable surgically. However, tumors that are advanced (i.e., cannot be surgically removed or have spread to other parts of the body) are difficult to treat. Some common temporary side effects reported with Nexavar<sup>®</sup> are rash, diarrhea, increases in blood pressure, and redness, pain swelling, or blisters on the palms of the hands or soles of the feet. Nexavar<sup>®</sup> will be distributed and marketed by Bayer Pharmaceuticals Corp.

<http://www.fda.gov/bbs/topics/NEWS/2005/NEW01282.html> (FDA News)

<http://www.nexavar.com/> (Bayer Pharmaceuticals site, with prescribing information)

## FROM THE MEDICAL LITERATURE ...



**Health Report Card – 2005** ... From the United Health Foundation's annual report; it is a comprehensive assessment of the "relative healthiness" of the U.S. While the overall health of the nation has improved 18.4% over the 16 years of this report, progress has leveled off. The past five years has seen an annual rate of aggregate improvement of only 0.3% as compared to the 1.5% improvement noted in the 1990s. The report takes into account a wide variety of factors including smoking, obesity, motor vehicle accidents, immunization rates and total mortality. The good news is **Alabama** is not the least healthy state, as Mississippi has that distinction; the bad news is we are #45 out of 50.

United Health Foundation. *America's Health Rankings*, 2005 edition.

<http://www.unitedhealthfoundation.org/shr2005/index.html>



**Teen drug use down** ... In a study released December 19, 2005, the group Monitoring the Future released their annual survey of licit and illicit drug use in adolescents; the sample group comprised 49,347 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students. The study is performed by the University of

Michigan and funded by the National Institute on Drug Abuse (NIDA). Overall, drug use by teens is down; this includes cigarette smoking, alcohol use and methamphetamine use. Unfortunately, the recent trends also show increases in prescription drug abuse (mostly narcotics and sedative/hypnotics). To access these and supporting surveys, go to:  
<http://www.nida.nih.gov/newsroom/05/NR12-19a.html>



**Ghosts of Christmas Future** ... A cross-sectional cohort study of over 5000 people aged 12 to 49 years has revealed startling information; if you are out of shape, you have more cardiovascular disease risk factors!! This study looked at 3110 adolescents (ages 12-19 years) and 2205 adults (ages 20-49) and measured fitness via treadmill testing and matched data for blood pressure, cholesterol, BMI, etc. By study criteria, low cardiorespiratory fitness was measured in 33.6% of adolescents (males and females equal) and 13.9% of adults (more females than males). BMI and waist circumference were inversely proportional to fitness as were other cardiovascular risk measures. Please pass those Christmas carrot sticks.  
Carnethon MR, Gulati M, Greenland P. Prevalence and cardiovascular disease correlates of low cardiorespiratory fitness in adolescents and adults. *JAMA* 2005 Dec 21;294(23):2981-88.

**Free issue from the *Lancet*** ... Every year, *The Lancet* publishes a 'bonus' themed issue. This year the theme is '**Medicine and Sport**', prompted by 2005 being declared by the United Nations to be The International Year of Sport and Physical Education with the aim to promote sport as a way to help reach the Millennium Development Goals. Click on the link below and you will be taken to a digital edition of the special issue.  
<http://www.thelancet.com/journals/lancet/supplement?volume=366&issue=9999s1>

**West Nile virus** ... WNV is the leading cause of arboviral encephalitis in the U.S. Originally discovered in Africa in 1937, WNV was first detected in the western hemisphere in 1999 in New York City and has spread nationwide; the bulk of cases are in the midsection of the country, from the north to south borders. During 11 months of 2005, 2,744 cases of WNV disease in humans were reported; an increase from 2,359 during 2004. This report summarizes provisional WNV surveillance data through December 1, 2005, and highlights the need for ongoing surveillance, mosquito control, promotion of personal protection from mosquito bites, and research into additional prevention strategies.  
CDC. West Nile virus activity – United States, January 1 – December 1, 2005. *MMWR*. 2005 Dec 16;54(49):1253-6.  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5449a1.htm>

**Flu update** ... So far, so good. During October 2 to December 3, the U.S. influenza activity has been very low. Only Nebraska has reported local influenza activity; other states vary in reports from none to sporadic. The CDC emphasizes that vaccination is the best way to prevent influenza and that it is not too late; vaccination in December and beyond is still beneficial since influenza activity usually does not peak until December to March. Sporadic cases of avian influenza A (H5N1) in humans continue to be reported in Asia, but the majority of cases appear to have been acquired from direct contact with infected poultry. No evidence of sustained human-to-human transmission of H5N1 has been detected, although rare cases of human-to-human transmission likely have occurred. However, a recent case report may indicate that resistance to a common antiviral drug by the H5N1 virus, oseltamivir (Tamiflu<sup>®</sup>), is possible. If the “bird flu” does come to the U.S., simple drug therapy may not be enough.  
CDC. Update: Influenza activity – United States, October 2-December 3, 2005. *MMWR*. 2005 Dec 16;54(49):1256-59.

de Jong MD, Thanh TT, Khanh TH, Hien VM, Smith GJD, Chau NV, et al. Oseltamivir resistance during treatment of influenza A (H5N1) infection. *N Engl J Med*. 2005 Dec 22;353(25):2667-72.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5449a2.htm>

### **Reviews of Note ...**

- Santos CA, Boullata JI. An approach to evaluating drug-nutrient interactions. *Pharmacotherapy*. 2005 Dec;25(12):1789-1800.
- Guay DRP. Ibandronate: A new oral bisphosphonate for postmenopausal osteoporosis. *Consultant Pharm*. 2005 Dec;20(12):1036-55.
- Martin SM, Cooper TY, Sterling J. Guide to extravasation management in adult patients. *Hosp Pharm*. 2005 Dec;20(12): Insert.
- Griffiths MJD, Evans TW. Inhaled nitric oxide therapy in adults. *N Engl J Med*. 2005 Dec 22;353(25):2683-95.
- Bamias G, Nyce MR, De La Rue SA, Cominelli F. New concepts in the pathophysiology of inflammatory bowel disease. *Ann Intern Med*. 2005 Dec 20;143(12):895-904.
- Zammitt NN, Frier BM. Hypoglycemia in Type 2 diabetes: Pathophysiology, frequency, and effects of different treatment modalities. *Diabetes Care*. 2005 Dec;28(12):2948-61.

### **FROM THE LAY LITERATURE about medicine ...**



**Rx-to-OTC switch for Xenical®??** ... Next month, one of the FDA's advisory council's will review GlaxoSmithKline's application to move Xenical® (orlistat) to over-the-counter status. Its primary mechanism is to block fat absorption from the intestines. The general consensus appears to be that the drug is safe and effective and would be as safe as many other OTC products. However, due to the "Vioxx®" issues lately and uneasiness about drug safety as a whole, the smart money is betting against an approval with first application.

Rubin R, Hellmich N. Anti-obesity drug gets first shot at OTC. *USA Today* 2005 Dec 14.

[http://www.usatoday.com/news/health/2005-12-14-xenical-obesity-usat\\_x.htm](http://www.usatoday.com/news/health/2005-12-14-xenical-obesity-usat_x.htm)

**Hope for the holidays ...** If weight gain is a big concern. Although one of the more extreme measures for weight loss, **bariatric surgery** (eg, gastric bypass) increased in popularity, as measured by procedures done, 450% from 1998 to 2002. These results were published in the December *Archives of Surgery* and reported in *USA Today*. The increase in demand is partially attributed to improvements in surgical technique, particularly a laparoscopic technique, and the celebrity factor (eg, Al Roker and Carnie Wilson). Perhaps a gift card under the Christmas Tree from your local surgical center for the \$26,000 average price tag.

Hellmich N. Gastric bypass surgery seeing big increase. *USA Today* 2005 Dec 19.

[http://www.usatoday.com/news/health/2005-12-19-gastric-bypass-surgery\\_x.htm](http://www.usatoday.com/news/health/2005-12-19-gastric-bypass-surgery_x.htm)

### **AUBURN HSOP FACULTY in the literature ...**

- Fox BJ, Felkey BG. Interesting developments in the PDA operating system world. *Hosp Pharm*. 2005 Dec;40(12):1088, 1090.
- Felkey BG, Berger BA, Krueger KP. The pharmacist's role in treatment adherence: Part 6: The role of e-health systems and technology in treatment adherence intervention and evaluation. *US Pharm* 2005 Dec;30(12):48-50,53-4.



The last “dose” ...



Merry  Christmas

*An electronic bulletin of drug and health-related news highlights, a service of ...  
Auburn University, Harrison School of Pharmacy, Drug Information Center  
• Phone 334-844-4400 • Fax 334-844-8366 • <http://www.pharmacy.auburn.edu/dilrc/dilrc.htm>  
Bernie R. Olin, Pharm.D., Director*