Recruiting Celebrities to Speak about Lung Cancer Awareness

By Andrew Holtz

By definition, celebrities loom large in popular culture, including popular attitudes toward diseases. “Celebrity involvement gives a disease credibility,” says Janet M. Healy of the Alliance for Lung Cancer Advocacy, Support, and Education (ALCASE).

“It tells the public that this disease matters, that [the celebrity] knows something about it personally, and here is what she or he thinks needs to be done. And usually a celebrity will also mention an organization.”

Ms. Healy said she tries to recruit prominent lung cancer patients, or their friends or relatives, to help raise the profile of the disease and ALCASE’s programs. But she sees that even though celebrities may be trend-setters and opinion leaders, few want to venture too far into the avant-garde by challenging popular notions about lung cancer.

She said she’s approached everyone she knows of who might have a personal stake in the fight against lung cancer. “Mostly we just don’t get responses, we just don’t get replies,” she reports.

Recent efforts include inquiries to former major league baseball player Bobby Bonds (who died in August) and his son, current star slugger Barry Bonds, as well as rock musician Warren Zevon (who died in September).

Pediatric CML

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US Standard

A US oncologist asked about treatment in this country for pediatric and young CML patients considered bone marrow transplantation to still be the standard, although there are those who would try imatinib first.

“The standard is BMT, but some people don’t want to take the chance,” said Thomas G. Gross, MD, Associate Professor and Chair for Pediatric Cancer at Ohio State University.

The decision doesn’t come up often, he said. Ohio State sees only about one child with CML a year.

But the decision is even more difficult because children with CML, unlike those with acute leukemias, are not very sick at diagnosis, he said.

“When [parents and children] are told that with imatinib they might maintain that quality of life for five years or more, compared with the short-term morbidity and mortality of [a potentially curative] transplant, that’s a tough decision to have to make.”

Blunderbuss vs. Rifle

If imatinib’s targeted therapy is the “rifle” approach, then stem cell transplant is the “blunderbuss” treatment, Dr. Roberts said.

“Until we have combination treatments with imatinib that are curative, in children we need to be aiming for cure. Although transplant is a ‘blunderbuss’ approach, we need to employ strategies to reduce the mortality of the only curative regimen—transplant—while at the same time following the data from adult studies with great interest because they probably apply to children.”

Dr. Roberts said it would be ideal if researchers could manage to identify curative drug regimens, which would clearly be preferable, “but I think that’s quite some years away.”
Zevon’s family did not respond to questions for this article that were forwarded through his publicist.

ALCASE wants someone who could do for lung cancer what Elizabeth Taylor did for AIDS or what Christopher Reeve did for spinal cord injury.

“What ALCASE desires to find is a spokesperson who would stand with and for people with lung cancer; and focus on those issues, rather than splitting the focus and addressing smoking and tobacco, because other organizations are doing that,” Ms. Healy explained.

Stigma & Short Survival Times

As with lung cancer advocacy in general, as noted in Part 1 of this report in OT’s Nov. 10 issue, stigma and short survival times impede efforts to recruit celebrities. Ms. Healy said she did manage to get in touch with Walt Disney’s daughter. “She was interested, but she said she’d already committed to working with the American Lung Association to stop smoking. And she actually said to me, ‘Well, you know, my father brought it on himself. He smoked for years and years.’

“I think her comment sums up one of the main obstacles, which is that in the public mind, in the minds of the families, and even in the minds of people who actually have lung cancer, the connection with smoking, the blame and the stigma that brings, is persistent.”

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Lung Cancer Screening Trials…and Tribulations

By Andrew Holtz

When lung cancers are diagnosed, only about one case out of seven is localized. It is appealing to hope that detecting suspected tumors earlier would improve survival rates. However, the Lung Cancer Progress Review Group report noted that “the benefits of lung cancer screening and early detection are mired in controversy.”

Two large clinical trials now under way are intended to add new data to the discussion: the NCI’s National Lung Screening Trial (NLST) and the New York Early Lung Cancer Action Program (NY-ELCAP).

Both trials employ spiral computed tomography (spiral CT). Smaller studies by researchers including Claudia I. Henschke, MD at Weill Cornell Medical Center in New York City indicate that spiral CT detects lesions that are much smaller than those seen on conventional chest x-ray films.

However, the designs of these trials reveal sharply divergent views of the best way to evaluate lung cancer screening technologies.

The NLST (www.cancer.gov/nlst) includes 50,000 current or former smokers in a trial that is expected to last almost a decade and cost about $200 million. The trial randomly assigns participants to screening with either spiral CT or chest x-ray.

Dorothy Sullivan, the trial’s assistant project officer, notes, “Some people are assuming that spiral CT would be a good screening mechanism, but it’s never been proven, so that’s what we are trying to find out, before it does become general practice.”

The NLST is designed to detect a 20% drop in lung cancer mortality from using spiral CT compared with chest x-ray. “For screening, you are looking at healthy, maybe high risk, but generally healthy with no symptoms, so it takes longer for the disease to appear,” she said.

“Although lung cancer is prevalent in smokers, and a large percentage of people who develop lung cancer are smokers, not all smokers develop lung cancer, so it still takes a long time and a lot of people to find the disease and then to track the endpoint.”

But a supporter of NY-ELCAP harshly criticizes the NLST approach. “The study is poorly designed. It is damaging to patients, because they are only being detected, but not properly diagnosed. I think it’s criminal, what they are doing with this study. They should be direct- ing people to, and supporting, Claudia’s [Henschke] study [NY-ELCAP], where they can get good care, be diagnosed and taken care of,” said Margaret McCarthy, who founded ALCASE, but the organization itself does not take a position on the trials.

The NY-ELCAP trial will enroll up 10,000 current and former smokers. The Web site of the study (www.nyelcap.org) says the trial is intended to determine whether spiral CT is an effective screening technique to detect lung cancer in its earliest stages for people at high risk for the disease.

The study will not compare individuals who receive spiral CT with those who do not. All the participants in NY-ELCAP will receive spiral CT screening.

Meanwhile, John C. Ruckdeschel, MD, President of the Barbara Ann Karmanos Cancer Institute, says that while the screening trials go on, other important questions are left hanging.

“We don’t know what to do with these lesions surgically,” he said. “Do we do a smaller operation? Do we do a standard lobectomy? Can they be treated with radiation alone? What size do we do? What’s the algorithm for when we operate and when we don’t operate? Do they get chemo afterwards? None of this stuff is known.”

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The media just doesn’t get the influence health attitudes and behaviors.

In a paper in the July 14 Archives of Internal Medicine (2003;163:1601-1605), the researchers reported what they termed the “Katie Couric effect.” The study measured a jump in colonoscopy rates after the NBC host underwent a live, on-air colonoscopy on the “Today Show” in March 2000.

Lung cancer has not received that kind of star billing. “The first consequence of not having celebrity involvement is the lack of media coverage of lung cancer, distinct from tobacco and smoking,” Ms. Healy noted.

“The media just doesn’t get the extent of this disease. And if they do, they are likely to make an immediate connection with tobacco and smoking and stop there.”

“I think once you bring a celebrity on the scene, all sorts of additional press interest is possible. You get into the family, you personalize the lung cancer stories, and you have a chance to bring in the issues that have not yet been covered.”

Study Documents Lack of Coverage & Absence of Celebrity Advocacy about Lung Cancer

An analysis of 600 randomly selected media stories about cancer, presented in a poster session at the 2001 ASCO annual meeting, documented the lack of coverage and the absence of celebrity advocacy about lung cancer.

Diane Blum, MSW, Executive Director of Cancer Care, reported that most of the stories were about breast cancer and less than one in five was about lung cancer.

In contrast to stories about other common cancers, none of the lung cancer stories mentioned celebrities. The stories about lung cancer were dominated by tobacco and devoid of substantive information about medical research, she found.

Even public relations experts who (continued on page 25)
American Thyroid Association Annual Meeting

Thyroid Cancer: Speculation about Preventive Effect for Selenium

By Ed Susman & Brian Schneiderman

ALM BEACH, FL—Researchers studying the actions of selenium said there is in vitro evidence that selenium may prevent thyroid cancer cell proliferation.

“Treatment of thyroid cancer cell lines with selenium compounds caused a significant decrease in cell proliferation,” said Byrne Lee, MD, a resident in the Department of Surgery at Lenox Hill Hospital in New York City, in his poster presentation here at the 75th annual meeting of the American Thyroid Association.

Dr. Lee noted, however, that the decrease in cell proliferation does not occur due to apoptosis. He suggested that the mechanism of action that has an impact on the cell lines might be due to cell cycle arrest.

“Supplemental selenium significantly reduced thyroid cancer cell growth over 24 to 48 hours in all three cell lines at physiologic concentrations.”

He and his colleagues attempted to find out what effects selenium supplementation has on thyroid cancer cell lines. “Accumulating evidence suggests an anticarcinogenic effect of selenium supplementation in human epithelial cancers, including prostate, lung, and colon carcinoma,” Dr. Lee explained.

Role of Selenoproteins

The exact mechanism of action is not known, he noted, but it is hypothesized that selenoproteins may play a role in the anticarcinogenic effects of selenium.

“Through molecular profiling techniques, we have recently identified a decreased expression of selenoprotein P in human papillary and follicular thyroid cancers,” he said.

Selenoprotein P aids in the reduction of free radicals and prevents oxidative damage in cells and may play a major role in cancer prevention, he noted.

In the study, Dr. Lee and colleagues at New York Presbyterian Hospital, Weill-Cornell Medical School treated three thyroid carcinoma lines with two selenium compounds, methylelsoneprotein and selenomethionine.

The cell lines, FRO, ARO, NPA, which all harbor p53 mutations, were plated in 96 well plates, serum starved for 24 hours, and then were treated with increasing concentrations of methylelsoneprotein and selenomethionine for 24 and 48 hours.

Each experiment was repeated five times. Assays measured cell proliferation and apoptotic rate in the selenium-treated cells. Cell proliferation was compared with control cell lines that were not treated with the selenium compounds.

“Supplemental selenium significantly reduced thyroid cancer cell growth over 24 to 48 hours in all three cell lines at physiologic concentrations,” Dr. Lee said.

At 24 and 48 hours, the FRO cells from anaplastic thyroid cancer, which is particularly aggressive, showed a significant decrease in cell proliferation when treated with methylselenocysteine.

NPA cells cultured from follicular thyroid carcinomas exhibited significant reductions in cell proliferation as well when treated with methylselenocysteine and selenomethionine.

The ARO thyroid cancer cell line also exhibited reduced proliferation when treated with methylselenocysteine and selenomethionine.

The experiments found that selenium treatment was not associated with a significant increase in apoptosis. Instead, treatment of thyroid cancer cell lines with selenium not only caused a significant decrease in cell proliferation, but also strongly indicated that cell cycle arrest may be a possible mechanism of action of selenium supplementation.

Earlier Research

The study builds on earlier research indicating that selenium compounds can have an effect of cancer, Dr. Lee noted. “Recent reports of microarray data as well as quantitative real-time polymerase chain reactions have noted a decrease in selenoprotein P in human prostate cancer samples.”

In addition, other in vitro studies suggest that selenium supplementation induces DNA repair mechanisms in human fibroblasts that have suffered DNA damage after exposure to ultraviolet light.

He also cited additional research that noted the appearance of cell cycle arrest at the G1 phase in human epithelial cell lines as well as apoptosis and G2/M cell cycle arrest in human prostate cancer cell lines after selenium supplementation.

“Recent reports of microarray data as well as quantitative real-time polymerase chain reactions have noted a decrease in selenoprotein P in human prostate cancer samples.”

Selenium supplementation, however, remains controversial, said Simon Yeung, Clinical Coordinator of the Integrative Medicine Service at Memorial Sloan-Kettering Cancer Center.

“Although selenium is a good antioxidant, people using selenium should be aware of its toxicity. The suggested dosage of over-the-counter selenium is 100 to 200 mg a day. People who use supplements of 400 mg or more a day could experience the equivalence of heavy metal poisoning.”

Interest in selenium supplementation as a cancer prevention treatment does remain high, however, he remarked, pointing to the large ongoing SELECT (Selenium and Vitamin E Cancer Prevention Trial) 10-year study.

Celebrities continued from page 20

focus on health and science issues say it’s tougher to pitch lung cancer stories.

“I do encounter different reactions with lung cancer than with, say, breast cancer,” Shelile Byrum of Spectrum Science Public Relations commented by e-mail.

She had been working to drum up interest in Lung Cancer Awareness Week (LCAW), which ran from November 17 to 21. “But sadly, my celebrity interview for this article. Janet Healy at ALCASE keeps plugging away. “I used to gnash my teeth over these things, but the older I get, the more I sigh and accept life’s dilemmas,” she said.

And she cherishes any successes. For example, at this summer’s Annual Conference of Mayors she got several big-city mayors to record radio Public Service Announcements about the lung cancer risk among minorities. The spots were scheduled to air this month.

Tobacco Advertising Stifling Coverage?

She said she also suspects that tobacco industry advertising stifles coverage by major magazines. Her suspicion is supported by analyses of popular women’s magazines for the American Council on Science and Health, which indicate that although these publications are check full of stories about health, the magazines that carry cigarette advertising rarely, if ever, mention lung cancer.

Even when there is media interest, getting celebrities to follow through isn’t a sure thing. For example, Ms. Byrum offered S. Epathe Merkerson (star of Law & Order), singer Richard Marx, and model Christy Turlington as “celebrity spokespersons” for Lung Cancer Awareness Week, all of whom have a personal connection to the disease. However, more than four weeks of effort failed to deliver a single celebrity interview for this article.

Despite many disappointments, Janet Healy at ALCASE keeps plugging away. “I used to gnash my teeth over