

Survey Finds Half of Heart Stent Patients Don't Take Their Oral Antiplatelet Medication As Prescribed Clinical Studies Have Shown Stopping Medication Early Puts Patients at a Greater Risk of Another Heart Event and Death^{1,2}

PARSIPPANY, NJ and INDIANAPOLIS, April 28, 2015 – People with acute coronary syndrome (ACS) who undergo an angioplasty procedure and receive a heart stent are prescribed an oral antiplatelet (OAP) therapy and aspirin to help prevent a heart attack, a blood clot in their heart stent (stent thrombosis), or even death. ³ Yet, a recent survey conducted by Harris Poll found that 52 percent of 275 ACS patients who were currently taking an OAP have missed taking or changed the way they take their prescribed OAP therapy, even though most of them were informed by their doctors of the importance of the therapy to their heart health. ⁴ Of these respondents, those under age 65 (194 participants) were much more likely not to follow their OAP therapy regimen as prescribed than older respondents, even though they were more concerned about their health, according to the survey findings. ⁴

To address this critical issue, the Preventive Cardiovascular Nurses Association (PCNA), Society for Cardiovascular Angiography and Interventions (SCAI) and Mended Hearts, with support from Daiichi Sankyo, Inc. and Eli Lilly and Company, urge health care professionals to increase their efforts to help ACS patients stick to their prescribed OAP therapy following an angioplasty or cardiac stent procedure. As the survey found: 12 percent of the total survey respondents said they do not recall being informed by their health care professionals that they faced serious health risks if they did not adhere to their OAP therapy.⁴

"For people who have recently received a heart stent for ACS, changing, skipping or discontinuing OAP therapy increases the risk of serious heart problems or even death," said Jeffrey Cavendish MD, FSCAI, FACC, lead interventional cardiologist for Kaiser Permanente San Diego and director of the cardiac catheterization laboratory at the Scripps Prebys Cardiovascular Institute in La Jolla, California.

To help ACS patients prevent recurrent heart events after an angioplasty procedure, SCAI, PCNA and Mended Hearts are introducing the "After the Stent: Follow Your Action PlanTM" campaign. The campaign aims to mobilize cardiovascular health care professionals to improve ACS patients' knowledge and practices related to OAP adherence.

Annually, about 610,000 people with ACS, which includes heart attack and a type of chest pain called unstable angina (UA), undergo an angioplasty procedure to open a blocked coronary artery.^{5,6,7} Clinical research shows that up to 16 percent of these patients stop taking their prescribed OAP therapy in the first 30 days,^{1,8} which leaves them more vulnerable to another heart event and increases by 10-fold their risk of death at one year.¹

"Patients may stop taking their OAP medication for a variety of reasons, such as mistakenly believing their heart condition is 'fixed' or not understanding why or how long they need to take the medication," said Lola Coke, PHD, ACNS-BC, RN-BC, FAHA, FPCNA, associate professor of nursing and cardiovascular clinical nurse specialist at Rush University Medical Center in Chicago, Illinois, and member of the board of directors of PCNA. "Identifying and correcting these misunderstandings is a first step health care professionals can take to ensure medication adherence. Health care professionals need to make sure that ACS patients and caregivers have the right information and support to follow their medication regimens."

To launch the "After the Stent: Follow Your Action PlanTM" campaign, PCNA and SCAI published a position paper that demonstrates the need for increased attention to OAP medication and highlights practical, research-based solutions to address nonadherence through education, mobilization, personalization and teamwork. The paper can be viewed at http://www.healio.com/cardiology/education-lab/2015/04 april/spotlight/spotlight.

Additionally, the groups have developed an OAP nonadherence risk Assessment for health care professionals to use with their patients. The Assessment includes the 8-question Morisky Medication Adherence Screener, widely used in other disease categories to assess medication adherence, ^{9,10,11,12} six questions specific to ACS patients who have undergone an angioplasty procedure, and a Conversation Guide to help health care professionals tailor conversations with individual patients based on the risk factors identified in the Assessment questionnaires.

Survey Reveals Education and Support Gap, Particularly for Younger Patients⁴

The survey also found that of the 296 respondents who visited a health care professional within the 12 months following their angioplasty procedure, 20 percent said they had questions about their prescribed OAP medication that were not addressed by their health care team. Most likely to have questions were those under age 65 (209 participants). Additionally, those under age 65 were less aware than those 65 years or older that not taking their OAP medication as prescribed could lead to future cardiac events (74 percent vs 88 percent of total respondents respectively). Moreover, only 54 percent of the total respondents overall said they remember being asked during a follow-up visit with their physician if they filled their OAP medication prescription.

^{*} Finding is directional in nature as 65+ sample is <100.

"Coping with a heart event is an overwhelming experience for patients and their families, which makes it especially important that health care professionals take the time to explain what occurred and what needs to happen after the angioplasty procedure to help prevent another heart event," said Donnette Smith, executive vice president of Mended Hearts. "It is also equally important that patients and caregivers ask their health care team questions if they have concerns or are not clear why or how they should follow their new medication regimen. There are excellent support programs and tools available to help patients to successfully manage their OAP medication routine. We encourage ACS patients and caregivers to ask for help and support resources."

About Acute Coronary Syndrome (ACS)

ACS, which includes heart attack and a type of chest pain called unstable angina (UA), was responsible for the hospitalization of more than one million people in the United States in 2010.⁵ The annual incidence of new heart attacks is estimated to be approximately 620,000 and about 295,000 people will have a recurrent attack.⁵ There are two main types of heart attack: non-ST-segment elevation, or NSTEMI, and ST-segment elevation, or STEMI. STEMI heart attacks are often considered more severe as the artery is often fully blocked, preventing blood flow to the heart.

Each year, approximately 610,000 people undergo PCI, which typically includes the implantation of a stent that restores blood flow to blocked arteries in the heart. ^{5,6,7} The number of UA or NSTEMI ACS patients worldwide who are managed without acute coronary interventions, such as PCI, has ranged from 32 percent to almost 60 percent over the last few years. ^{13,14}

ACS may result in heart attack, stroke and death, costing Americans more than \$150 billion each year. ¹⁵ Nearly 60 percent of the U.S healthcare costs of ACS are due to re-hospitalization. ¹⁵ Strategies to prevent recurrent heart attacks and re-hospitalization are important to improve patient outcomes and reduce the cost burden of ACS.

About the Survey

The survey was conducted online by Harris Poll on behalf of Daiichi Sankyo, Inc. and Eli Lilly and Company from February 13 - April 10, 2014 among 305 adults in the Unites States between the ages of 35 to 74 who underwent an angioplasty procedure with or without a stent within a year of participating in the survey and were prescribed an OAP medication. At the time of the survey, 214 participants were under 65 years old and 91 were 65 years old or older. Of the total participants, 275 were currently using a prescribed OAP medication and 30 had discontinued their prescribed OAP therapy before a year. For a full methodology, please contact Tim Coulom at tim.coulom@lilly.com.

About PCNA

The Preventive Cardiovascular Nurses Association (PCNA) is the leading nursing organization dedicated to preventing cardiovascular disease (CVD) through assessing risk, facilitating lifestyle changes, and guiding individuals to achieve treatment goals. The mission of PCNA is to promote nurses as leaders in the prevention and management of cardiovascular disease. PCNA does this by educating and supporting nurses through the development of professional and patient education, leadership, and advocacy. For more information call 1-608-250-2440 or visit www.pcna.net.

About SCAI

The Society for Cardiovascular Angiography and Interventions is a 4,200-member professional organization representing invasive and interventional cardiologists in approximately 70 nations. SCAI's mission is to promote excellence in invasive/interventional cardiovascular medicine through physician education and representation, and advancement of quality standards to enhance patient care. SCAI's public education program, Seconds Count, offers comprehensive information about cardiovascular disease. For more information about SCAI and Seconds Count, visit http://www.SCAI.org/ or www.SecondsCount.org. Follow @SCAI.org/ and @SCAI.org/ or www.SecondsCount.org. Follow

About Mended Hearts

Mended Hearts is the largest heart patient support network in the world. 20,000 members operate through 300 chapters across the U.S. Recognized for its role in facilitating a positive patient-care experience, Mended Hearts partners with 460 hospitals and rehabilitation clinics and offers services to heart patients through visiting programs, support group meetings and educational forums. The Mended Hearts is dedicated to inspiring hope in heart disease patients and their families.

About Daiichi Sankyo

The Daiichi Sankyo Group is dedicated to the creation and supply of innovative pharmaceutical products to address the diversified, unmet medical needs of patients in both mature and emerging markets. While maintaining its portfolio of marketed pharmaceuticals for hypertension, hyperlipidemia, and bacterial infections, the Group is engaged in the development of treatments for thrombotic disorders and focused on the discovery of novel oncology and cardiovascular-metabolic therapies. Furthermore, the Daiichi Sankyo Group has created a "Hybrid Business Model," which will respond to market and customer diversity and optimize growth opportunities across the value chain. For more information, please visit www.daiichisankyo.com. Daiichi Sankyo, Inc., headquartered in Parsippany, New Jersey, is a member of the Daiichi Sankyo Group. For more information on Daiichi Sankyo, Inc., please visit www.dai.com.

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¹ Spertus JA, Kettelkamp R, Vance C, et al. Prevalence, predictors, and outcomes of premature discontinuation of thienopyridine therapy after drug-eluting stent placement: results from the PREMIER registry. *Circulation*. 2006;113:2803–2809.

² Rothberg MB, Sivalingam SK, Ashraf J, et al. Patients' and Cardiologists' Perceptions of the Benefits of Percutaneous Coronary Intervention for Stable Coronary Disease. *Ann Intern Med.* 2010;153:307-313.

³ Levine GN, Bates ER, Blankenship JC, et al. 2011 ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention: Executive Summary: A Report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines and the Society for Cardiovascular Angiography and Interventions. *Circulation*. 2011;124:2574-2609.

⁴Study conducted online by Harris Poll on behalf of Daiichi Sankyo, Inc. and Eli Lilly and Company from February 13 – April 10, 2014 among 305 respondents in the US. Qualifying respondents were between the ages of 35-74, had an angioplasty procedure in the previous 12 months and were prescribed oral antiplatelet therapy.

⁵ Go AS, Mozaffarian D, Roger VL, et al. for the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics – 2014 update. *Circulation*. Published online December 18, 2013.

⁶ Gibson CM, Pride YB, Frederick PD, et al. Trends in Reperfusion Strategies, Door-to-Needle and Door-to-Balloon Times, and In-Hospital Mortality Among Patients with ST-Segment Elevation Myocardial Infarction Enrolled in the National Registry of Myocardial Infarction from 1990 to 2006. *American Heart Journal*. 2008;156:1035-44.

⁷ Roe MT, Chen AY, Cannon CP, et al. Temporal Changes in the Use of Drug-Eluting Stents for Patients with Non–ST-Segment–Elevation Myocardial Infarction Undergoing Percutaneous Coronary Intervention from 2006 to 2008. *Circulation: Cardiovascular Quality Outcomes*. 2009;2:414-420.

⁸ Quadros A, Welter D, Camozzatto F. Identifying Patients at Risk for Premature Discontinuation of Thienopyridine After Coronary Stent Implantation. *American Journal of Cardiology* 2011;107(5):685-9.

⁹ Morisky DE, Ang A, Krousel-Wood M, Ward H. Predictive Validity of a Medication Adherence Measure for Hypertension Control. *Journal of Clinical Hypertension*. 2008;10(5):348-354.

¹⁰ Trindade AJ, Ehrlich A, Kornbluth A, Ullman T. Are Your Patients Taking Their Medicine? Validation of a New Adherence Scale in Patients with Inflammatory Bowel Disease and Comparison with Physician Perception of Adherence. *Inflamm Bowel Dis.* 2011;17:599-604.

¹¹ Reynolds K, Viswanathan HN, O'Malley CD, et al. Psychometric Properties of the Osteoporosis-Specific Morisky Medication Adherence Scale in Postmenopausal Women with Osteoporosis Newly Treated with Bisphosphonate. *Ann Pharmacother*. May 2012;46(5):659-670.

¹² Krousel-Wood MA, Islam T, Webber LS, Re RS, Morisky DE, Muntner P. New Medication Adherence Scale

¹² Krousel-Wood MA, Islam T, Webber LS, Re RS, Morisky DE, Muntner P. New Medication Adherence Scale Versus Pharmacy Fill Rates in Seniors with Hypertension. Am J Manag Care. 2009;15(1):59-66.

¹³ Fox KAA, Steg PG, Eagle KA, et al. Decline in rates of death and heart failure in acute coronary syndromes, 1999-2006. *J Am Med Assoc.* 2007;297:1892-1900.

¹⁴ Chan MY, Mahaffey KW, Sun LJ, et al. Prevalence, predictors, and impact of conservative medical management for patients with non-ST-segment elevation acute coronary syndromes who have angiographically documented significant coronary disease. *J Am Coll Cardiol.* 2008;1:369-378.

¹⁵ Kolansky DM. Acute coronary syndromes: Morbidity, mortality and pharmacoeconomic burden. *Am J Manag Care*. 2009;15:S36-S41.