FOR MORE THAN A DECADE, HEALTHCARE PROFESSIONALS (HCPs) HAVE BEEN USING STRATEGIES TO REDUCE THE RISK FOR Atherosclerotic Cardiovascular Disease (ASCVD). THE REVOLUTION IN STATIN THERAPY OVER THE PAST DECADE HAS LEAD TO INCREASED TREATMENT STRATEGIES TO REDUCE THE RISK FOR ASCVD. THE MOST RECENT GUIDELINES RECOMMEND INCREDIBLY LOW DAILY LDL-CHOLESTEROL LEVELS FOR THE MANAGEMENT OF ASCVD RISK. THE ACHIEVEMENT OF SUCH LOW LIPID LEVELS REQUIRES THE USE OF PHARMACOTHERAPY IN MOST PATIENTS. NEARLY 70% OF PATIENTS REPORTED STATIN INTOLERANCE, LEADING TO THE USE OF NON-STATION LIPID-ALTERING AGENTS. THE PRESENCE OF STATIN INTOLERANCE HAS INCREASED THE USE OF PCSK9 INHIBITORS.

**THE MEANING OF PCSK9 INHIBITORS**

PCSK9 (Proprotein Convertase Subtilisin/Kexin Type 9) is an enzyme that breaks down the LDL (Low-Density Lipoprotein) receptor. When PCSK9 levels are too high, they can cause enzymes to break down LDL receptors, which leads to lower levels of LDL (Bad) cholesterol and higher levels of HDL (Good) cholesterol. This is why PCSK9 inhibitors are so effective.

**THE SUCCESS OF PCSK9 INHIBITORS**

After 2012, evidence from randomized clinical trials demonstrated that PCSK9 inhibitors were effective in lowering LDL cholesterol. These results led to the availability of multiple statin classes that can be used with PCSK9 inhibitors to lower LDL cholesterol further. This success has led to the development of additional lipid-altering agents.

**THE IMPACT OF COMBINING PCSK9 INHIBITORS WITH STATINS**

Combining PCSK9 inhibitors with statins has demonstrated additional LDL cholesterol lowering compared to statin monotherapy. This is due to the combined effects of PCSK9 inhibition and statin therapy. The combination of these two classes of drugs can lead to greater LDL cholesterol reduction and a lower risk of ASCVD.

**THE HEALTH IMPACT OF PCSK9 INHIBITORS**

The use of PCSK9 inhibitors has been shown to lead to a decrease in the risk of ASCVD. This is because PCSK9 inhibitors lower LDL cholesterol, which in turn decreases the risk of ASCVD. Additionally, PCSK9 inhibitors have been shown to lower the risk of heart attack and stroke.

**THE CHALLENGES OF PCSK9 INHIBITORS**

While PCSK9 inhibitors have demonstrated success in clinical trials, they still present challenges. These include the cost of treatment, the need for monitoring and management, and the potential for side effects. Despite these challenges, PCSK9 inhibitors have become an important tool in the management of ASCVD.

**THE FUTURE OF PCSK9 INHIBITORS**

The future of PCSK9 inhibitors includes the development of new agents and the optimization of existing agents. Additionally, research is ongoing to identify new targets for treatment, such as the development of PCSK9 inhibitors that are more specific to certain patient populations.

**THE TAKEAWAYS OF THIS STUDY**

This study demonstrates the success of targeted educational interventions as part of a curriculum on improving the knowledge and competence of physicians in recognizing and diagnosing PCSK9 inhibitors as an emerging treatment for hyperlipidemia. This form, a video-based roundtable panel discussion, was effective at increasing knowledge, clinical application of data, and mechanism of action of an emerging class of therapeutic agents.

**SOURCES OF SUPPORT**

The CME-certified activity was supported by an independent educational grant from Amgen Inc.

**DISCLOSURE**

Larkin, Healy, Baxi: Nothing to disclose. Toto: Served as an advisor or consultant for Amgen, Amgen/Amgen, AstraZeneca, Alcon Pharmaceuticals, Genentech, Hospira, LipidLogic, Merck, and Novartis.

**THE STATE OF LDL MANAGEMENT: EVALUATING PCSK9 DATA**

The State of LDL Management: Evaluating PCSK9 Data	

**CONCLUSION**

This study demonstrates the success of targeted educational interventions as part of a curriculum on improving the knowledge and competence of physicians in recognizing and diagnosing PCSK9 inhibitors as an emerging treatment for hyperlipidemia.

**METHODS**

Two continuing medical education (CME) activities addressing PCSK9 inhibitor development and lipid management were developed as online roundtable discussions with leading experts in the field. The analysis included participants who had completed at least 1 of the 2 activities.

**RESULTS**

Recognizing Advantages of Fully Humanized PCSK9 Monoclonal Antibodies Over Chimeric Antibodies

Benefits of adding PCSK9 inhibitors to statin therapy

Statistical Analysis

Impact of PCSK9 Inhibition on LDL Levels

Understanding Statin Intolerance

Study Design: Online Roundtable Discussions

The format used to deliver the education included a video-based roundtable panel discussion, conducted by expert faculty using synchronous slides, with built-in peer response to encourage participants’ interaction and feedback. For learners wanting to view the program offline, a transcript and slides were made available for downloadingprinting. In addition, the activity was available on the Medscape Mobile application, ensuring real-time access by the many clinicians who rely on mobile devices for education. The activity launched online on June 25, 2014, and September 25, 2014, and data were collected through September 28, 2014, and November 4, 2014, respectively.

**ASSESSMENT METHOD: LINKED LEARNING ASSESSMENT (LLA)**

An LLA compares individual participants’ responses to questions before exposure to educational content (pre-assessment questions) with responses to the same questions after participation in the educational activity (post-assessment questions). The LLA shows the overall effect of the educational activity. Only participants who answered every assessed question are included in this analysis. Each question in the LLA is directly related to the learning objectives of the educational activity.

**STATISTICAL ANALYSIS**

For all questions combined, the effect size was calculated by comparing pre-assessment means and post-assessment means of linked learners to show the size of the effect of the educational intervention. Effect sizes were calculated using Cohen’s d. Values greater than 0.8 are large, between 0.5 and 0.8 are medium, and less than 0.4 are small. A paired t-test was used to assess whether the mean pre-assessment score was different from the mean post-assessment score, P values are shown as measure of significance; P values less than .05 indicate a statistically significant result.