

### Transcript Details

This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: <https://reachmd.com/programs/medical-industry-feature/alternate-ldl-measures-outcomes-tell-story/8390/>

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### Alternate LDL Measures: Outcomes Tell the Story

#### Announcer Introduction:

This is REACHMD. Welcome to this Medical Industry Feature entitled, "Alternate LDL Measures: Outcomes Tell the Story" sponsored by LabCorp. This program is intended for physicians.

#### Dr. Cromwell:

I am Dr. William Cromwell, Medical Director for Cardiovascular Disease at LabCorp. LDL cholesterol has been the customary measure used in clinical practice to estimate LDL quantity, but there are two alternate measures, LDL particle number and apoB which may be more reliable LDL measures for managing at-risk patients. I am going to speak to the clinical utility of these alternate measures, and to do so, both should be evaluated within the context of, first, discordance between the traditional and alternate measures, and second, cardiovascular outcome improvement in patients managed to similarly low values of LDL particle number versus LDL cholesterol.

Differences in cardiovascular events associated with the traditional LDL cholesterol measure and alternate measures, LDL-P and apoB can only be determined when these measures disagree. Importantly, these measures disagree in up to 50% of healthy individuals, and in almost 75% with metabolic syndrome or type 2 diabetes. Ample evidence have demonstrated when traditional and alternate measures are discordant, risk for cardiovascular events tracks with LDL-P or apoB. However, when these measures agree, cardiovascular events are similarly associated with each measure. Clinical utility should also be evaluated in outcomes' improvement in cardiovascular events in patients managed to similarly low values of the alternate measure, LDL-P, versus those of the traditional measure, LDL-C.

Analysis of claims data from the Health Corp Integrated Research Database was conducted on the impact of low LDL-P versus low LDL-C in incident cardiovascular events among persons at high risk for cardiovascular events. These include: patients with established coronary heart disease, stroke, transient ischemic attack, peripheral artery disease and diabetes mellitus. In response to more intensive therapy, patients achieving an LDL-P of less than 1000 with normal medical care, experienced a 22 to 25% reduction in cardiovascular events -- myocardial infarction, revascularization, angina and stroke -- versus patients managed to an LDL cholesterol less than 100 at 12, 24 and 36 months followup. Notably, with the significant cardiovascular event reduction at each time point only 23 individuals needed to be treated to an LDL-P less than 1000 to prevent one cardiovascular event at 36 months. This analysis provides two key take-homes, first, there is a significant frequency of discordance between LDL cholesterol and particle measures in both healthy patients and type 2 diabetics, and second, in the setting of discordance, risk for cardiovascular events tracks with measures of LDL particle number rather than LDL cholesterol.

In the next episode, we will address existing therapeutic strategies. I look forward to having you join us.

#### Announcer Close:

This is REACHMD. The preceding program was sponsored by LabCorp. If you have missed any part of this discussion, visit [ReachMD.com/ LDLQuantity](https://ReachMD.com/LDLQuantity). Thank you.