## Making Something out of Nothing at All: Statistical Magic in Drug Marketing

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On April 1, 2010, <u>www.newsmaxhealth.com</u> published an article describing how a *flawed* "research" study has been used to get the FDA to approve the statin drug Crestor for use with healthy people in order to "prevent" heart attacks. After all these years of drug companies and medical doctors touting the relationship between high cholesterol levels and heart attacks, the focus has now shifted to inflammation as one of the main causative factors in heart attacks. C-reactive protein (CRP) is the new measure of heart attack risk that is related to inflammation of the arteries. Dr. Paul Ridker, the inventor of the CRP test, did the study of Crestor's effect on "reducing" heart attacks, supposedly by reducing CRP levels. So, a statin drug that was promoted for lowering cholesterol levels now is being touted for its supposed ability to reduce heart attacks by reducing inflammation.

Dr. Ridker claimed that this Astra/Zeneca/Crestor funded study reduced the incidence of heart attacks by 55%. How did Ridker arrive at this amazing statistic? Well, he used a little mathematical magic. You see the actual incidence rates of heart attacks in the study groups were 0.38 per cent for the placebo group, whereas the rate for the Crestor group was 0.17 per cent. Both of these incident rates for heart attacks were below 1%. These are so extremely low incidence rates that they are clinically insignificant. But, there is gold even in such low numbers. All you have to do subtract 0.17 from .038 to get a difference of 0.21. Then, take 0.21 and divide it by .038 and, voila, you have created a very impressive number -55%. Now, that sounds much more impressive than just a plain old difference of 0.21 percent. In fact, you can submit this study touting a 55% reduction in heart attacks among healthy people taking Crestor and you can convince the FDA to "approve" prescribing Crestor to healthy people. This mathematical sleight of hand research method along with FDA's complicity now provides AstraZeneca with an estimated expanded market of 6.5 million Americans for Crestor. With all of the well recognized statin drug hazards to people's health, the FDA continues to play this game of pseudo-science with Big Pharma drug companies at the expense of the health of the American people. It's business as usual when it comes to scientific fraud, the FDA, and Big Pharma whose sales and profits trump everything else. If anything, the data from this study show that the heart attack rates are extremely low in a healthy group of people and that taking Crestor is not worth the health risks that commonly occur with this type of drug. Also, it is interesting to note that Dr. Ridker who invented the CRP test did not compare CRP blood levels of the control group and the Crestor group. This is a very interesting fact in his "research" methodology. But, they want to use CRP levels to justify prescribing Crestor to healthy people.

The cholesterol/heart attack myth has been soundly criticized and undermined. But, many doctors refuse to take a look at this evidence. On the other hand, a wealth of evidence has been accumulating that does establish inflammation of the arteries as a real factor in heart attack risk. Given the fact that magnesium is nature's anti-inflammatory mineral and that magnesium deficiency is at epidemic levels, it would be very safe and effective to recommend magnesium supplementation to most people including healthy people to really reduce their risk of heart attacks.