

## **JUPITER Study Findings Hardly Exciting Crestor Results Revealed**

When data from the [JUPITER study](#) was released at the American Heart Association (AHA)

Scientific Sessions, a bang of excitement was heard round the world with headlines that blazed

**“Heart Attack Risk Lowered More than 50% By Taking Crestor,”** a statin drug made by AstraZenica.

Reported widely by the *New York Times*, the *Associated Press*, the *Washington Post*, *CNN*, and

*Time*, among others is attributable to the marketing strategy of Crestor’s manufacturer,

AstraZenca rather than any significance in the findings.

### **The JUPITER Study**

**Before anyone rushes to add statin drugs** to lower the risk of heart attacks when their heart

shows no sign of disease, let’s take a close look at the findings for they reveal a more important

discovery, one I saw in 5,000 heart surgery patients, inflammation, the real cause of heart disease.

The study intended to assess whether prescribing statin therapy to apparently healthy

individuals with normal LDL cholesterol but elevated C-reactive protein levels (CRP 2.0 mg/L)

was advisable. **C-reactive protein** is a marker that determines the **level of inflammation** in the body.

### **1.9 Years, 17,802 Men And Women**

To qualify for the study patients had to be apparently healthy, have normal cholesterol but with

an elevated CRP. Over 1.9 years, 17,802 men over 60 and women over 50 were treated with

one-half receiving 20 mg. of Crestor daily and the other half receiving a placebo. AstraZenica,

the manufacturer of Crestor, funded the study when Pfizer declined to do so.

As many [noted](#) after release of the findings, even though patients were classified as healthy,

many had a number of cardiovascular risk factors such as overweight with the median bodymass

index (BMI) of 28.3 kg/m<sup>2</sup>. It would be unfair to say these patients had no other risk

factors.

Very few individuals have ideal risk factors, including LDL-cholesterol levels. Many have suggested ideal LDL-cholesterol levels, based on hunter-gatherer societies and non-human primates are likely in the range of 50 to 60 mg/dL. The benefit to treatment of patients as well as any changes to public-health policy depends on the absolute benefit and not the relative risk reduction. This is very important in assessing the significance of the results. The risk of having a heart attack in the placebo group was 1.8%. The risk in the group treated with Crestor was .09% for a real reduction of .9% also called the absolute risk deduction.

### **Conclusion**

While this is a 50% reduction in relative risk, the actual real difference is less than 1%. This does not mean 50% reduced the risk of heart disease as many headlines stated. [emphasis added] Despite the marketing madness that went on across the internet, media, radio and news stations attesting to the magnificence of the findings, only one person out of 120 patients treated over 1.9 years avoided a heart attack. I want to repeat that for emphasis-only one person out of 120 avoided a heart attack. If it takes treating 120 people with a drug to prevent one heart attack, there is nothing in this study to generate this much excitement or use statin therapy preventatively unless you are the drug company anticipating astronomical sales.

### **New England Journal Of Medicine**

[Dr. Mark Hlatky](#) reporting in the New England Journal of Medicine, wrote, "The relative risk reductions achieved with the use of statin therapy in JUPITER were clearly significant. How the absolute difference in risk are more clinically important than relative reductions in risk in deciding whether to recommend drug therapy since the absolute benefits of treatment must be large enough to justify the associated risks and costs. The proportion of participants with hard cardiac events in JUPITER was reduced from 1.8% (157 of 8,901 subjects) in the placebo group to .09% (83 of 8,901 subjects) in the rosuvastatin group;

**thus, 120 participants were treated for 1.9 years to prevent one event.”** [emphasis added]

### **The Exorbitant Cost**

The cost for treating 120 people with Crestor is \$3.45 a day or \$266,616.00 for 1.9 years-an

exorbitant amount of money to prevent one event.

In addition to this cost, there would be the cost of 2,520 doctor's visits with 2,520 cholesterol

tests. What JUPITER revealed is only one person avoided a heart attack and there were

significant side effects in the increase in people who developed diabetes and other

complications.

The patients all began with normal cholesterol and markers for inflammation.

The finding in

the study that has far more significance is the reduction shown in

inflammation. Cholesterol in

the patients began within normal range so reducing it further is not the reason there was a

small reduction in risk; rather, the reduction in inflammation was

accountable for the small

difference in heart attack rates.

I am all in favor of prevention and do not want anyone to have a heart attack but once again,

***medicine, under the influence of drug companies, takes the wrong and most expensive***

*approach.* AstraZenica stock is up 45% since the news and they expect to double the sales of

Crestor from 3 billion to 6 billion dollars annually in the next few years-great news if you hold

the stock, not so great for really preventing heart disease or controlling costs of health care.

### **Let's Be Truthful**

If Astra were honest, they would ask the FDA for permission to market

Crestor as an antiinflammatory

for the blood vessels-a much better use of statin drugs but expensive.

Although

this study showed only a small benefit, it does re-confirm that **inflammation is the cause of**

**heart disease.** The cholesterol theory, while exceedingly false, is the dogma of the day and it is

**time for truth and fact in medicine.**

There are alternatives to statin therapy to reduce inflammation and in turn, prevent and cure

heart disease; alternatives that do not involve drug therapy and yet have a higher absolute

reduction in cardiac deaths. The medical community fails to acknowledge the simple alternatives that are much more effective than drugs, less remunerative of course, but with astounding reductions in cardiac deaths through treating inflammation.

### **Alternatives**

The [DART](#) trial showed a 62% reduction in cardiac deaths by taking fish oil. Fish oil has proven repeatedly to reduce CRP and other signs of inflammation. Another trial, [The Physicians Healthy Study](#) showed a 90% reduction in sudden cardiac death with fish oil; once again, not risk but actual reduction. Another, *the [GISSI](#)* trial, showed an absolute reduction in deaths by taking fish oil and a 47% reduction in sudden cardiac deaths. These are not risk numbers but real reductions.

The most significant and overlooked results of the JUPITER study that confirms the findings in *DART, GISSI* and *The Physicians Health Study* is that the reduction in inflammation was responsible for decreasing the risk of heart disease. The patients' all had normal cholesterol when the study began; reduction in cholesterol was not responsible for the small decrease in risk.

As a physician who performed 5,000 heart surgeries and saw inflammation in the arteries of every patient, it is maddening when medicine ignores simple things such as fish oil that are much more effective than drugs. In terms of cost, the simple alternatives that are highly effective range from \$50 to \$100 per month.

There is no comparison to health, or to the wallet, in terms of these alternatives and the exorbitant cost of statin therapy for cholesterol when cholesterol is not the cause of heart disease. However, it is noteworthy there is a benefit to statin therapy in that it has some impact upon inflammation but at a much higher cost than fish oil. Treat inflammation and the absolute risk of heart disease not only decreases, heart disease is preventable and curable.

Dr. Dwight Lundell

## **Cardiovascular And Thoracic Surgeon**