

# St. Jude Medical (STJ)

## Conversation with Dr. Nayak Suggests More to Come in STJ Saga

### Key Takeaway

**We had a conversation with Dr. Hemal Nayak, the EP working with MedSec. He remains confident in the findings that STJ devices are inherently less secure than other companies' and they are vulnerable across the entire communication ecosystem. He also noted that there is more data to come. While the accuracy of the claims remains under intense scrutiny (and STJ has now started litigation against Dr. Nayak and others), the issue continues to weigh on STJ shares.**

**We reached out and were able to talk with Dr. Hemal Nayak last week.** Dr. Nayak is an electrophysiologist at the University of Chicago and is a medical advisor on the board of MedSec, the firm that found alleged security vulnerabilities in St. Jude devices. Dr. Nayak is generally well respected in the EP community and while the way the information was disseminated has come under near universal condemnation, his involvement lends some credibility to the substance of the report.

**Can't unsee what I've seen.** The takeaway from our conversation with Dr. Nayak is that he remains confident in MedSec's findings that St. Jude devices are vulnerable to cyber-attacks—and he confirmed this even after St. Jude has publicly and aggressively refuted the claims and filed suit against him and others at MedSec and Muddy Waters. He noted that MedSec has produced a lot of data and that more would be coming. Dr. Nayak has seen the data produced by MedSec and has witnessed firsthand many of the experiments conducted on the devices. In his own words, he has seen a device affected outside of normal means and researchers at MedSec, who he described as credible and good people, have found a number of issues across the communication ecosystem used by St. Jude devices. His goal in this affair is to bring the issues to light for physicians and patients. While he acknowledged that some could find the method of dissemination through Muddy Waters and with the intention of financial profiteering as less than ideal, it was born out of a distrust of what St. Jude would do with the information. He also noted that he didn't have input into the Muddy Waters decision.

**Putting a device in Safe Mode shows it can be altered.** Dr. Nayak took particular exception to St. Jude's assertion that the video posted by MedSec and Muddy Waters showing a device being manipulated was within normal operating parameters. His view was that when a device is put into Safe Mode it is an indication that something is wrong and MedSec showed it could remotely change the operating parameters of a device. By acknowledging that the device's operating mode had been changed in the video, Dr. Nayak believes St. Jude actually supported the claims that there are vulnerabilities. Moreover, he also noted that it isn't entirely clear that the device can be salvaged from Safe Mode—that is that it can be recovered and reprogrammed back to the intended parameters.

**Implications are unknowable at this point.** Dr. Nayak acknowledged that the implications of being able to remotely alter a device are not knowable at this time. But it is the possibilities that the security vulnerabilities open that concern him—it is not a big deal until something happens. He also raised the issue of medical data theft as a potential risk.

**Still more to come.** As it currently stands, from a market standpoint, the alleged security holes remain unsubstantiated and are unlikely to have any immediate impact on physician behavior. Even the FDA has advised against any change in behavior as it begins its own investigation. But Dr. Nayak did note that more information would be coming, and should the claims prove to have any substance, even if the risk proves to be very, very low, it could compel some patients and physicians to use other companies' devices. Dr. Nayak, MedSec, and other parties in the St. Jude lawsuit will need to respond to the complaint in the coming days and we expect the situation will continue to unfold.

**HOLD**

Bloomberg NYSE: STJ

Price target \$60.00

Price \$79.39^

^Prior trading day's closing price unless otherwise noted.

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St. Jude Medical, headquartered in St. Paul, Minnesota, is a leader in the development and manufacturing of products and technologies for cardiac rhythm management, cardiac surgery, vascular access therapies, and neuromodulation devices.

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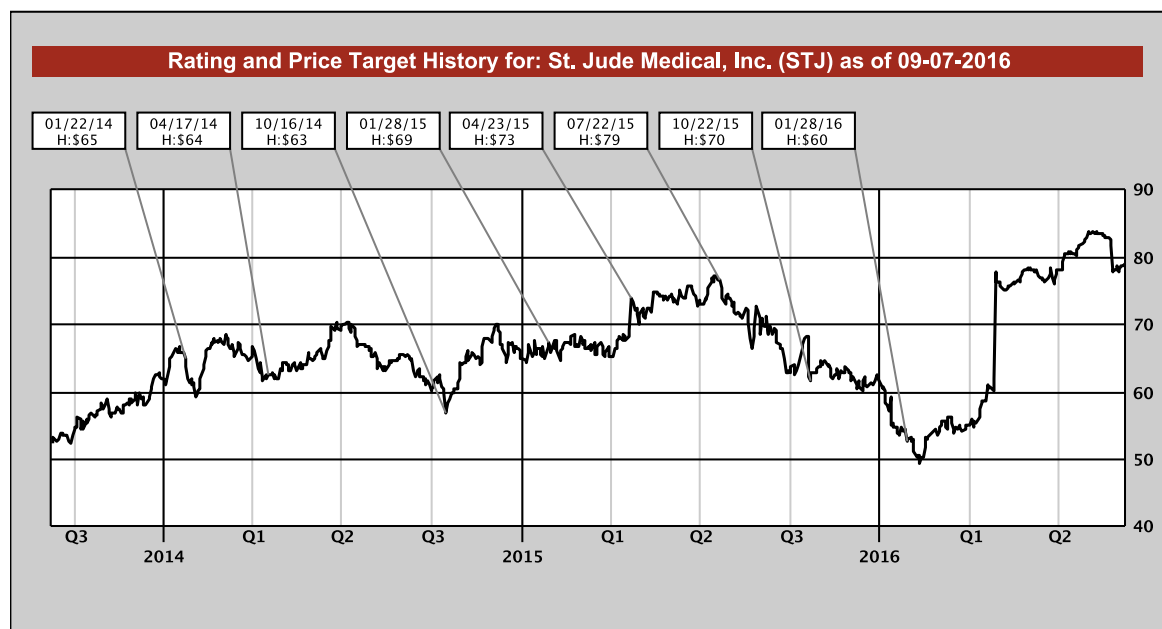
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