

Cardiologists See Heart Failure as Huge Unmet Clinical Need

Introduction. Heart failure was described in a 1999 Merrill Lynch “Cardiology Device Update” as a “Huge Unmet Clinical Need”. In view of the scientific data presented in Sections 2 & 3 of “Breakthrough Technology Poised to Control Heart Failure”, Merrill Lynch could hardly have been more prescient.

LVEDP (left ventricular end-diastolic pressure) is the pressure of blood entering the heart from the lungs. It is the single most important determinant of the presence and severity of heart failure. PCWP (pulmonary capillary wedge pressure) is a less invasive surrogate indicator of LVEDP measured by a catheter passed through the heart into the lungs in patients with life-threatening heart failure in hospital ICUs.

How Valuable Would Noninvasive Measurement of LVEDP Be To Cardiologists? Because many practitioners believe that identifying patients with high LVEDP/PCWPs and reducing the elevated levels to the low-risk range may be the key to heart failure control, a questionnaire was circulated to a group of cardiologists to determine how many favored the availability of a noninvasive risk-free measurement of LVEDP to assist them in the management of their heart failure patients.

The questionnaire was circulated to 72 cardiologists and was returned completed by 61. Their answers to the questions dealing with how they would use the VeriCor® monitor are summarized below.

I. Survey Responses from Cardiology Leaders & Practitioners

The frequency with which respondents answered No, Yes or NA to the statements/questions below are shown to the right.

	No	Yes	NA*
Measure of PCWP is essential diagnostic information.		90%	
Importance of accurate measurement of PCWP in 15 mins?		90%	
Would you pay \$15,000 for such a device?	19%	35%	45%
Accurate measurement of PCWP important in unexplained SOB**.		93%	
Accurate measurement of PCWP in heart failure patients important.		93%	
Would the ability to measure PCWP noninvasively be worth \$75/test?		93%	

*No Answer

** Shortness of Breath: SOB.

Comment. The large majority (90 to 93%) of cardiologists responded positively, strongly suggesting that they viewed the inability to measure PCWP/LVEDP as a critical unmet need in their care for heart failure patients. The question regarding payment of \$15,000 for a VeriCor® monitor was not intended to indicate that this would be the selling price of the monitor but to determine the willingness of cardiologists to pay for it.

That one third indicated a willingness to pay for the device sight-unseen suggests that many of the 45% who answered “NA” may also be willing to pay for the service with more information, raising the potential buyers (or lessees) to nearly 80%.

II. Cardiologists as Investors in CVP Diagnostics: Potential Impact

Information above indicates a high level of interest among cardiologists in the VeriCor® monitor: If 2% to 5% of the 16,000 cardiologists in US invested in CVP, financial support would be as follows:

If 2% bought one CVP Investment Unit (\$50k), CVP would receive \$16 million.

If 5% bought one CVP Investment Unit, CVP would receive \$40 million.