

Thesis Title	The Comparative Study of Ejection Fraction Percentage Between ES Teck and Echocardiography
Author	Mom Luang Tannapat Devakula
Degree	Master of Science (Anti-Aging and Regenerative Medicine)
Advisor	Dr. Karnt Wongsuphasawat

ABSTRACT

The objective of this study was to measure the correlation between ES Teck and echocardiography in the ejection fraction percentage to evaluate the accuracy and precision of new technology medical device of ES Teck. 75 Male and Female subjects with the age of 35 years or above who attended gold package for health check up at Vejthani Hospital were recruited. The data was kept for three months to record the ejection fraction percentage of ES Teck and echocardiography in the same day.

Correlation of the data obtained were analyzed by using Pearson correlation test. The correlation of all ejection fraction percentage (%EF) between ES Teck and echocardiography were significantly correlated ($p < 0.05$, $r = 0.312$) at confident interval of 95%. Moreover in normal %EF (55-75%), result showed very significant correlated ($p < 0.01$, $r = 0.482$) at confident interval of 99% whereas the result in abnormal %EF was also correlated with statistical significant but in different confident interval.

ES Teck was a medical device that give an accurate %EF as compared with echocardiography. It had a very strong reliable in the normal range of %EF. Therefore, ES Teck was a beneficial device to determine the heart failure by the screening of %EF. ES Teck concluded to be the pre-screening device to evaluate the heart condition before the patients face the symptoms of heart diseases accordingly. Also, ES Teck can be used as a guideline to assist the physician in selecting the proper management for the patient.

Keywords: ES Teck/Echocardiography/%Ejection Fraction (%EF)