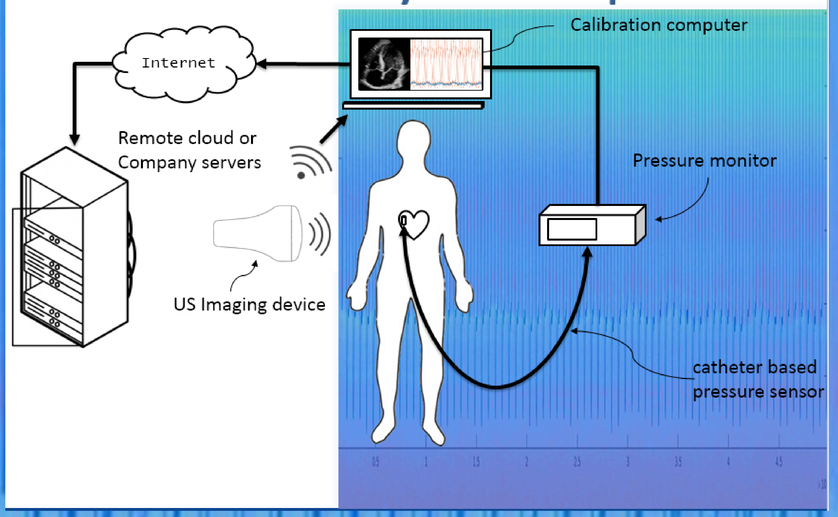
Pi-Harvest presents game changing approach to cardiology diagnostics

Intra-cardiac blood pressure monitoring non-invasive system (ICPM)

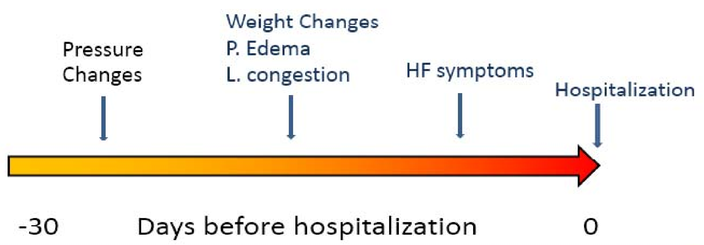
Dr. Alexander Brenner
Dr. Majdi Halabi
Prof. Avraham Lorber

ICPM Calibration System Components



Challenge: Cardiac Pressure monitoring for HF prevention

Physiological progression of ADHF

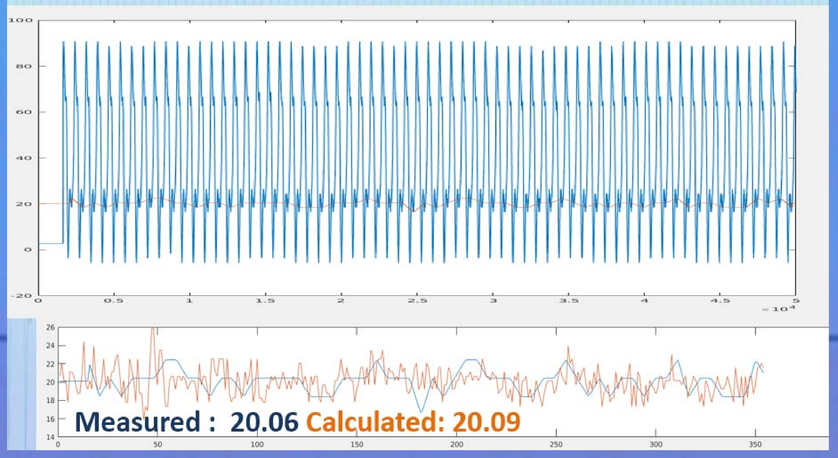


Hemodynamic Information is critical:

Cardiac pressure changes occur long before other HF symptoms become visible

	Calibration	Heart Failure Parameters that can be Monitored	Remarks
Left heart Catheterization	• LAP, LVP • ECG • Additionally: Aortic Pressure	• **LAP** • **LVEDP**, LVSP • **RVEDP, RVSP**	• LVEDP, LVSP are calculated from LAP, LVP and ECG data
Right heart Catheterization	• PAP, RAP, RVP • ECG • PCWP	• **PAP** • **RVEDP,RVSP** • **LAP** • **LVEDP**, LVSP • RVEDP, RVSP	• RVEDP, RVSP are calculated from RAP, RVP and ECG data • LVEDP, LVSP are calculated from PCWP, RVSP and ECG data

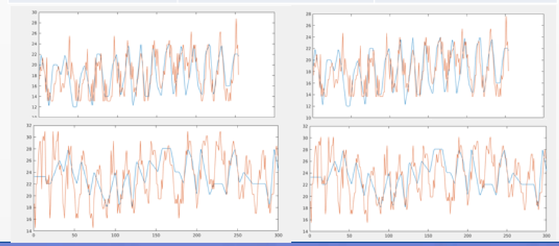
In ZIV Hospital 17-Jan-2019: Assessing LVEDP



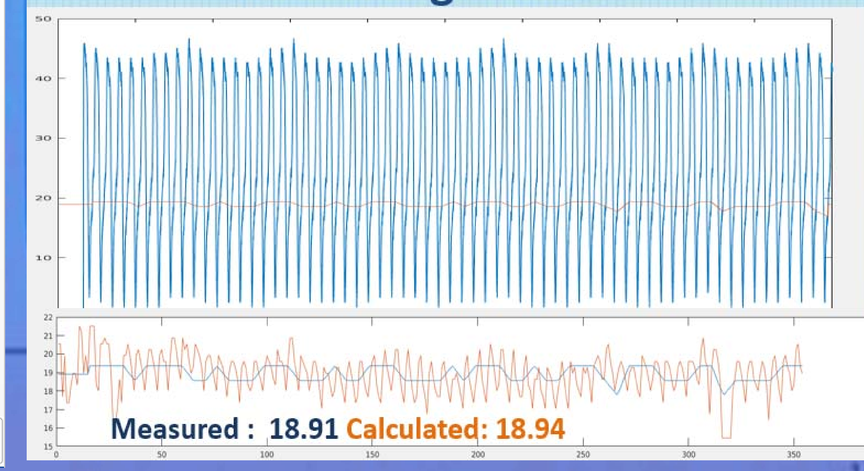
In ZIV Hospital 24-Mar-2019 :

Assessing LVEDP with large differences before and after catheterization

Average	Before	After
Measured	18.24	23.45
In mmHg	Calibrated to Before	Calibrated to After
US Before	18.24	18.28
US After	23.36	23.49



In ZIV Hospital 17.01.2019: Assessing RVEDP



Pressure sensor accuracy 1mmHg