*Impact of simulator-based training in focused transesophageal echocardiography – a randomized controlled trial -* Electronic supplement

*Supplemental table 1: Detailed contents of study lectures*

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|  | Contents | | time allocated to topic |
| lecture 1 | introduction (why TEE, indications, contraindications) | | 10 minutes |
|  | physics of ultrasound, Doppler modes, artefacts, instrumentation (gain, focus, depth adjustments) | | 15 minutes |
|  | TEE probe (handling, manoeuvres, safety) | | 15 minutes |
|  | the basic perioperative toe examination encompassing 11 views | | 5 minutes |
| lecture 2 | discussion and demonstration of every view including anatomy and acquisition | | 75 minutes |
|  | view quiz |  | 10 minutes |
| lecture 3 | left ventricular function and dimension (eyeballing, Simpson method, FAC, regional wall motion abnormalities) | | 15 minutes |
|  | right ventricular function and dimension (FAC, TAPSE, eyeballing) | | 10 minutes |
|  | aortic valve stenosis and aortic valve regurgitation | | 15 minutes |
|  | mitral valve regurgitation | | 10 minutes |
| lecture 4 | tricuspid valve regurgitation (measurement of RV/RA gradient using continuous wave Doppler) | | 10 minutes |
|  | how to perform a standardized toe examination | | 5 minutes |
|  | clinical cases with toe loops | | 45 minutes |
|  |  | pericardial tamponade / pericardial effusion |  |
|  |  | hypovolemia |  |
|  |  | pulmonary embolus |  |
|  |  | regional wall motion abnormalities |  |
|  |  | aortic dissection |  |
|  |  | aortic ulcera |  |
|  |  | intracardiac thrombi |  |
|  |  | mitral valve regurgitation |  |
|  |  | echo guided placement of catheters into right atrium |  |
|  |  | aortic valve stenosis and aortic valve regurgitation |  |
|  |  | left ventricular failure |  |

FAC, fractional area change; LV, left ventricle; RA, right atrium; RV, right ventricle; TAPSE,

tricuspid annular plane systolic excursion, TEE, transesophageal echocardiography