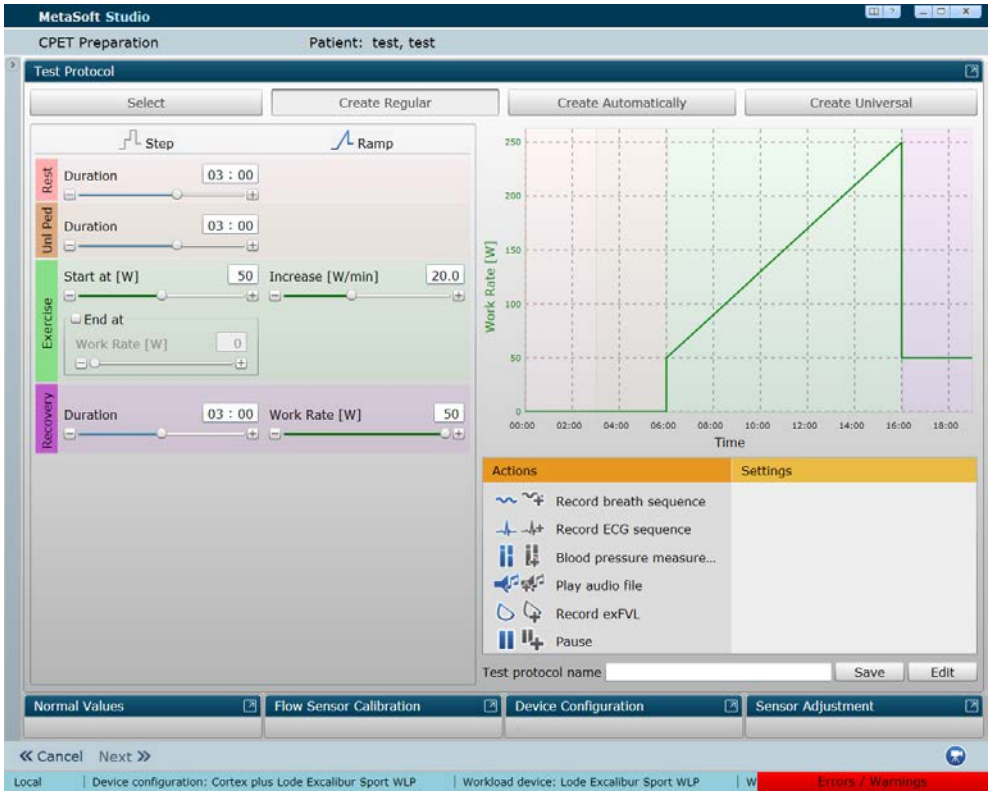
UNIVERSITY OF EXETER

New Cortex Software and Lode Programmer

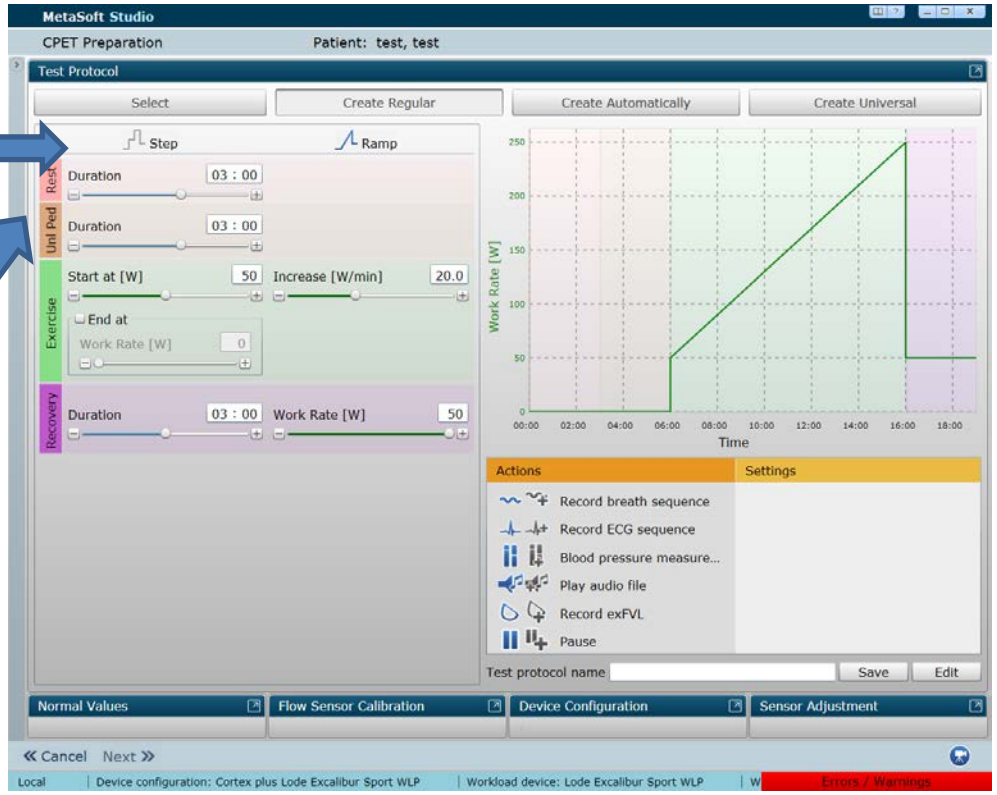
Creating a protocol

- Load Metasoft Studio and input a subject by clicking new on the right hand side of start screen
- Select Testing on the left hand side and click on the subject
- Click next



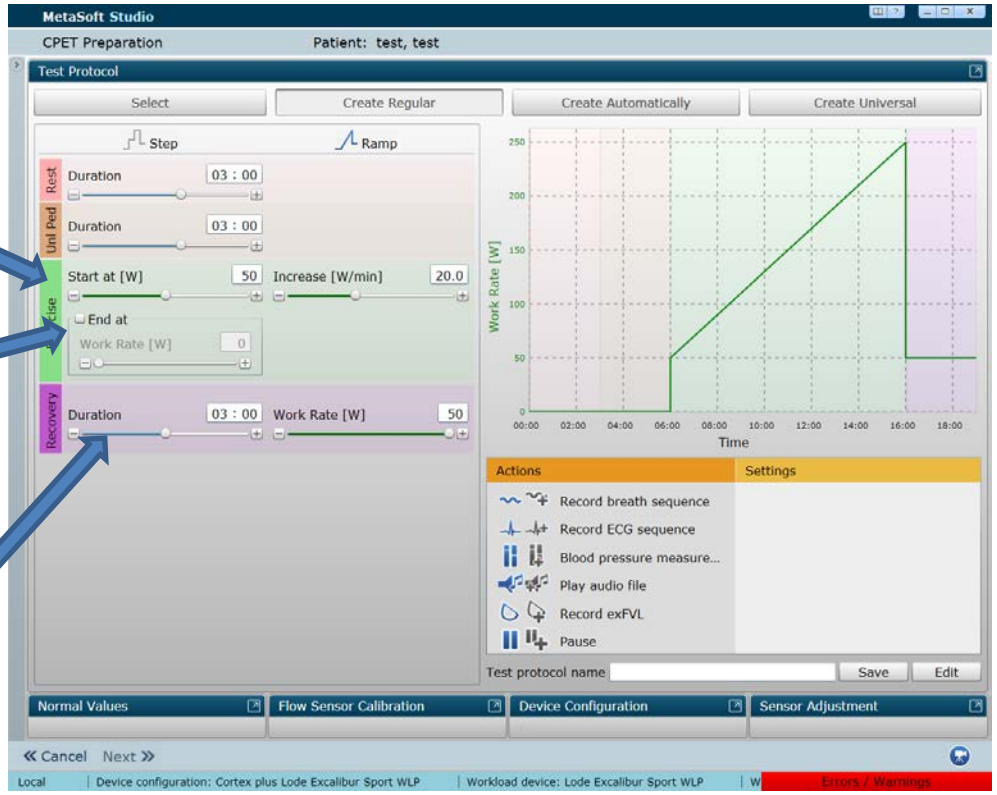
Creating a protocol

- Two types of protocol can be created – step or ramp, simply click the one you wish to create
- Next you can alter the duration of the rest and unloaded pedalling duration phases



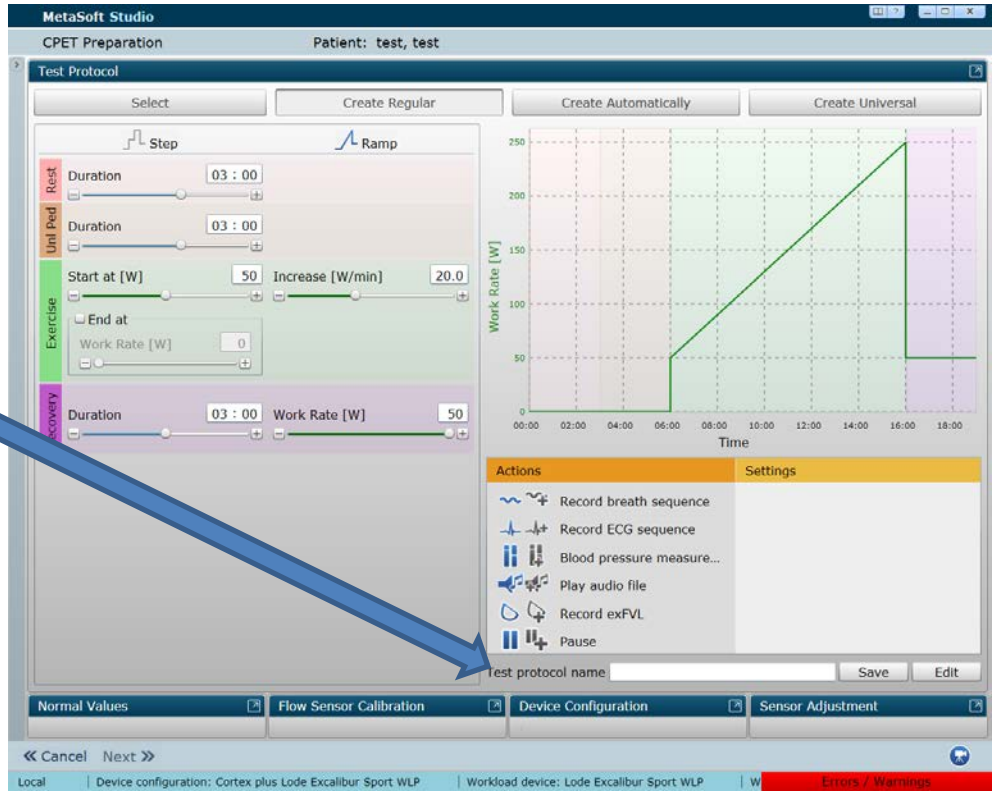
Creating a protocol

- If you are creating a ramp (shown right) you can choose the starting power (W) and the ramp rate (W/min)
- Choose a end at work rate (W) – N.B. choose a figure above what they are likely to achieve e.g. 600W
- Set the recovery duration and a low power once they complete the test



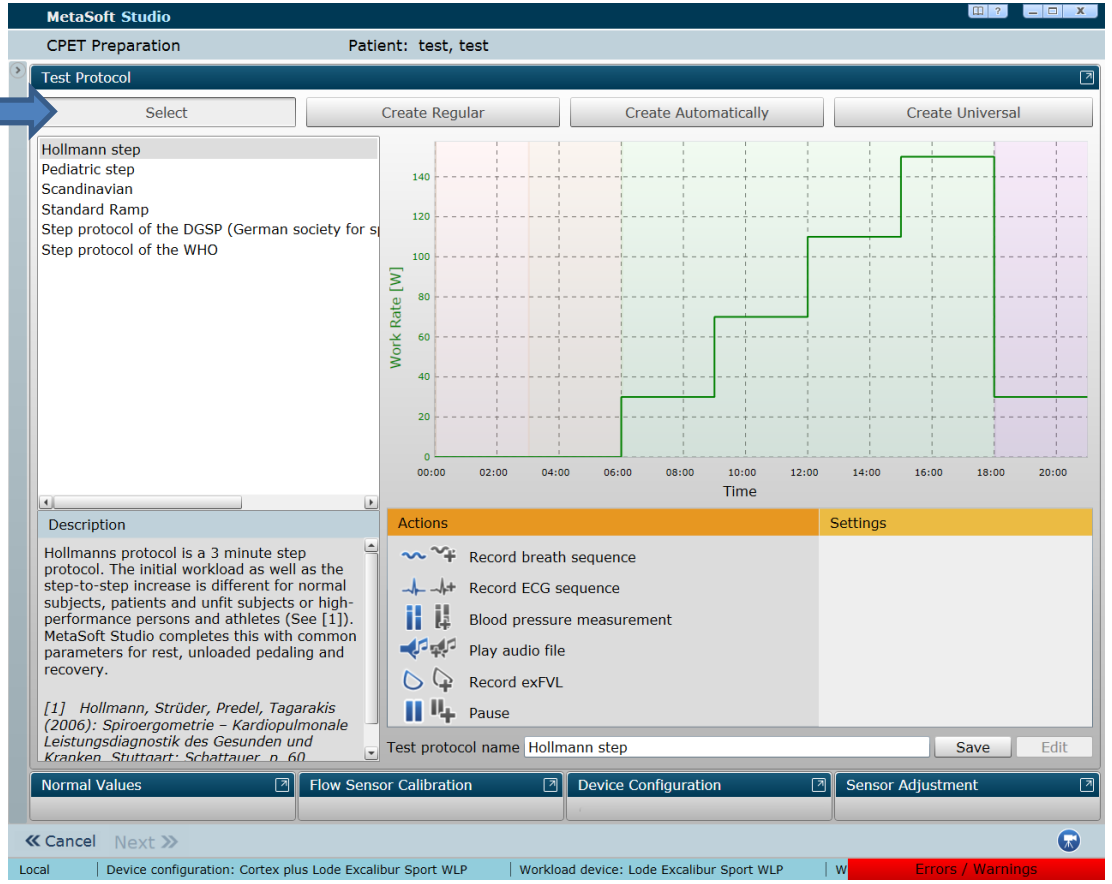
Saving and naming the protocol

- Once the protocol has been created, go to test protocol name and save
- For a step protocol enter in the number of stages you need and power (W) as required



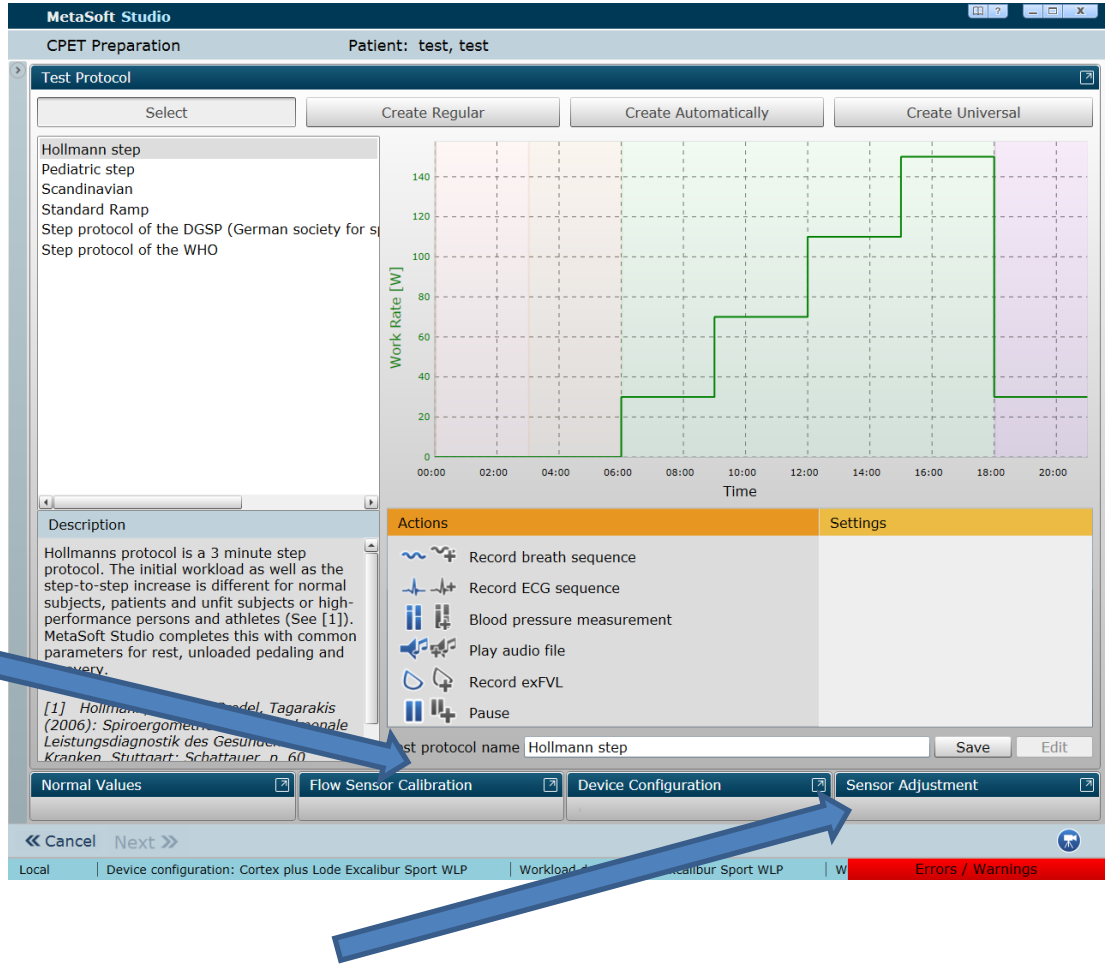
Select a protocol

- Alternatively a protocol may already exist, choose the select tab and select the one you want from the list



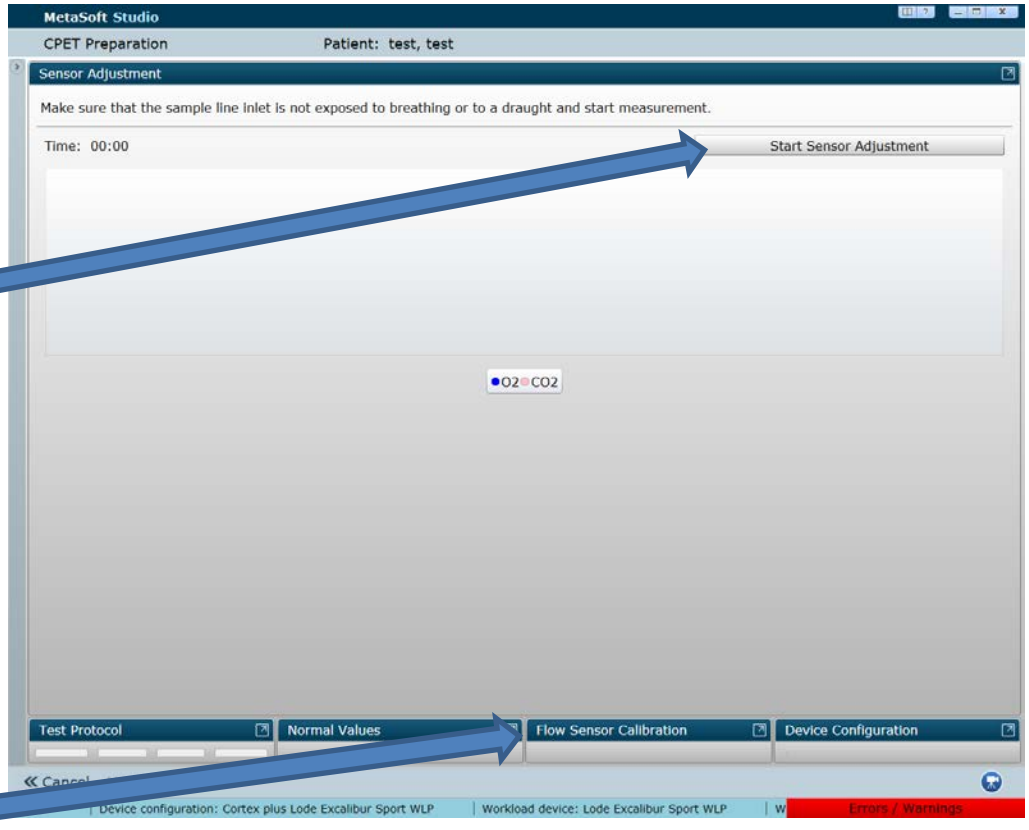
Calibration

- Once the protocol is selected you will need to perform a sensor adjustment and flow sensor calibration
- Simply click on the tabs at the bottom to expand these



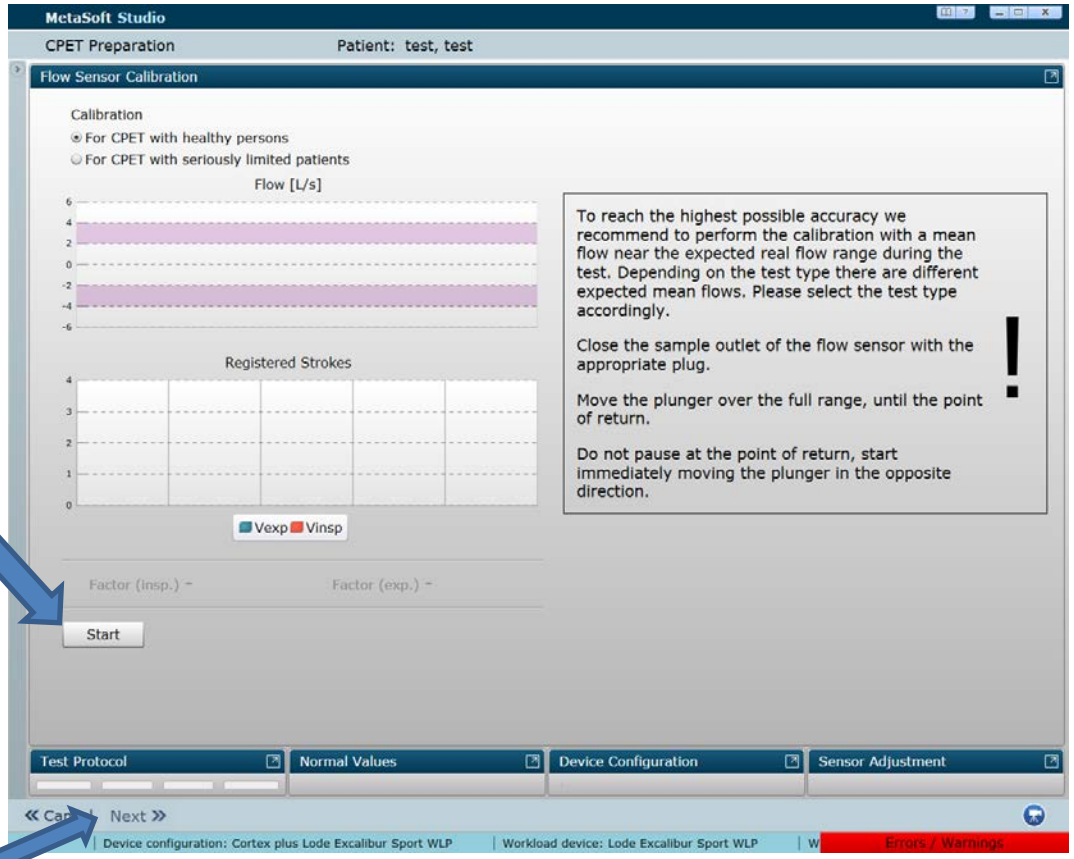
Sensor adjustment

- Ensure that the sample line is clear and not plugged in and click start sensor adjustment
- Allow to run through until it says calibration successful
- Then click flow sensor calibration



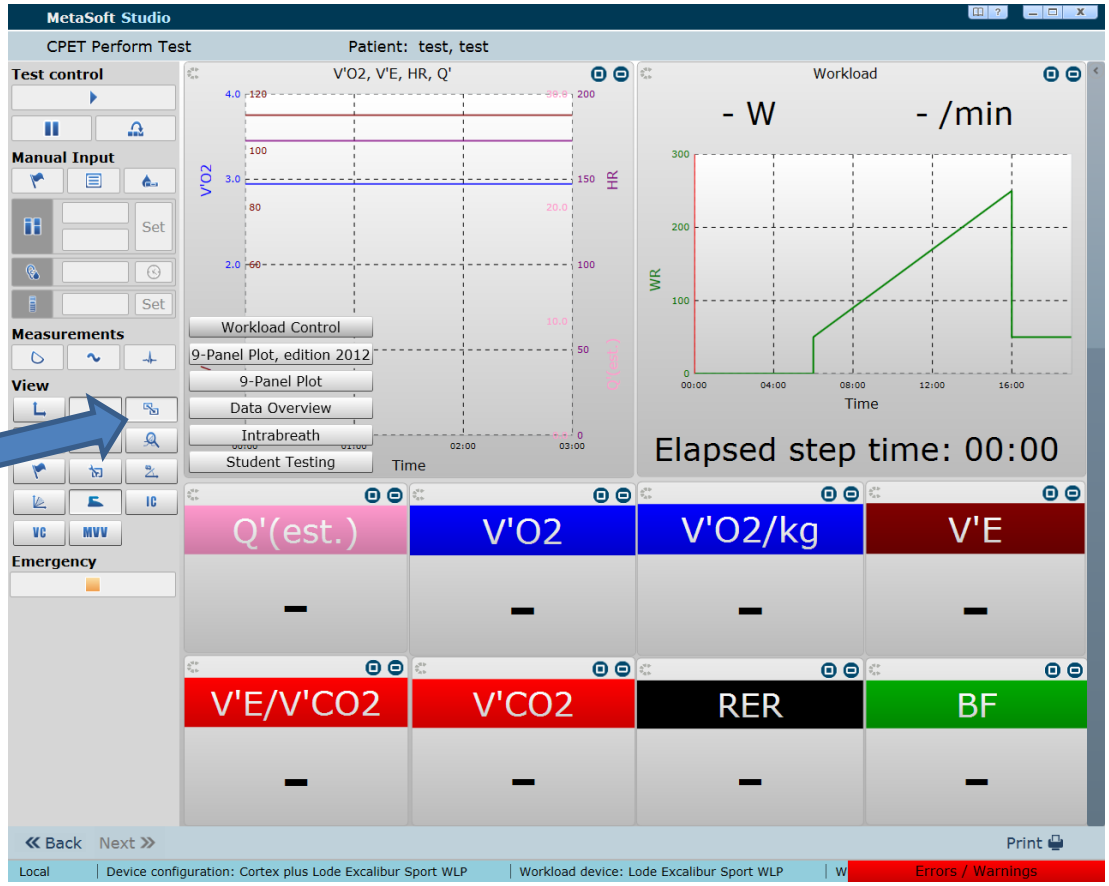
Flow sensor calibration

- Connect the turbine to the volume sensor and put the plug in the hole
- Then put the whole assembly into the syringe (shown bottom right)
- Click start. 5 registered strokes will need to show on the graph before calibration is complete. Note: you will need to keep within the purple boundaries for the in stroke and outstroke
- Once complete, click next



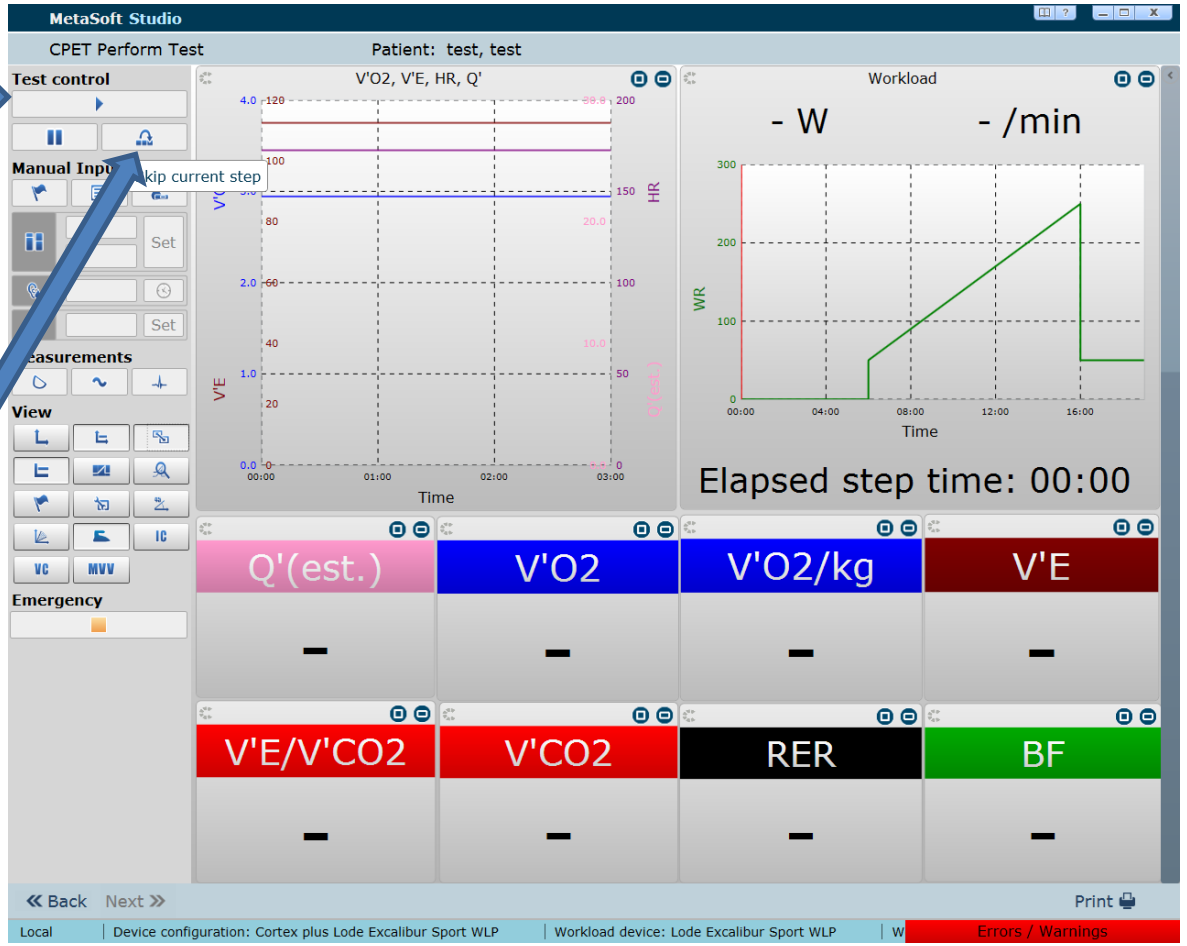
Testing Screen

- You should now be presented with the test screen
- You will need to change to workload control
- Click  and select workload control, the screen will change to look like the screenshot



Workload control

- The play button starts the test
- If at any point in the test (e.g. the subject reaches exhaustion) and you need to quickly reduce the workload, click the skip current step button 
- This will take you to the next step, usually recovery phase in the protocol
- You can also pause the test



Exporting data to Excel

- At the end of the test, whilst still on the test screen click next
- Then click 
- Excel will open, simply save as you would a normal file
- Click finish to exit or start another test