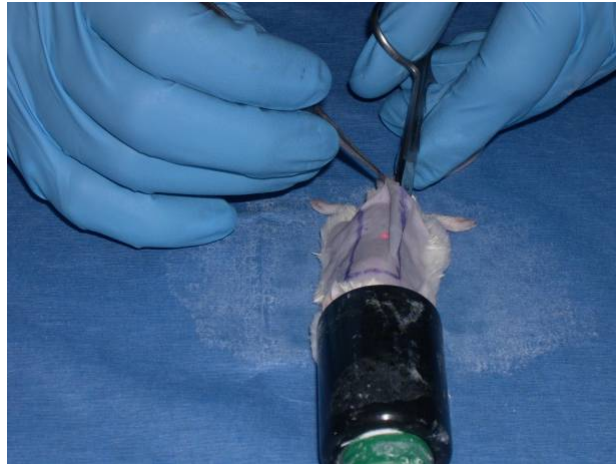


Mouse dorsal skin flap
Model of
Flap Ischemia-Reperfusion

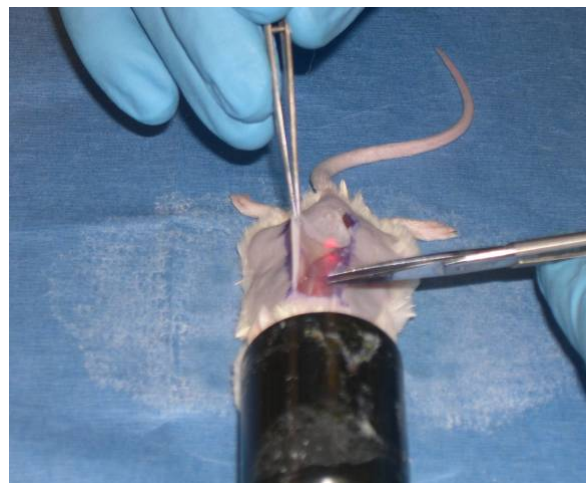
Albino Mouse- Dorsal skin flap
1.5 cm X 4 cm



Flap elevation



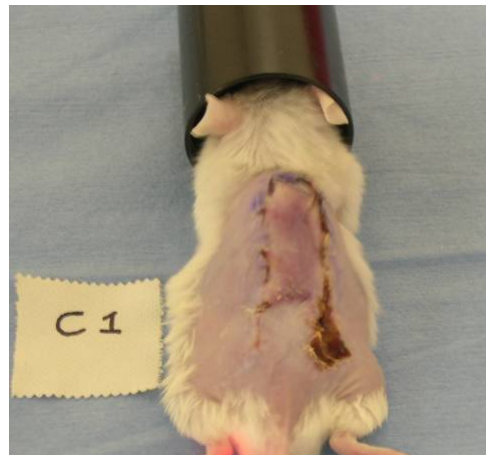
Dissection



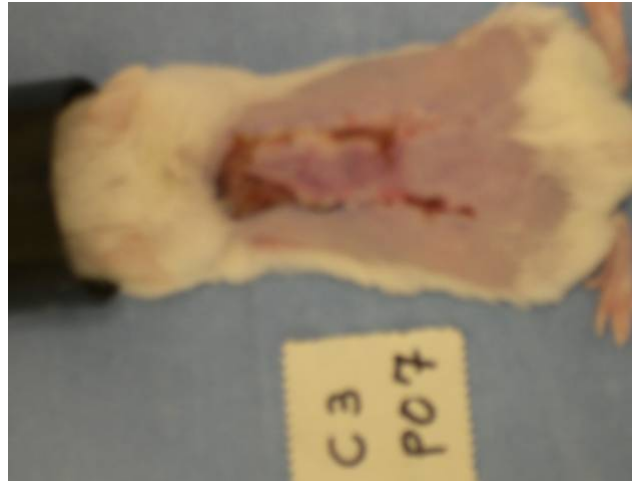
Completed flap



Flap survival on day 7



Flap survival on day 7



LEL treatment- better survival



LEL treatment- less inflammation



Black mouse- same flap less necrosis



Flap loss- mean 30%, range 25-35%



Black mouse- on post-op 4, showing color changes and inflammation



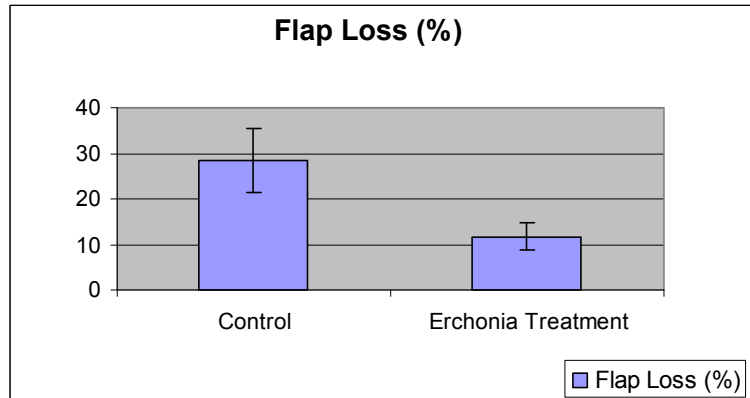
Black mouse- LEL treatment



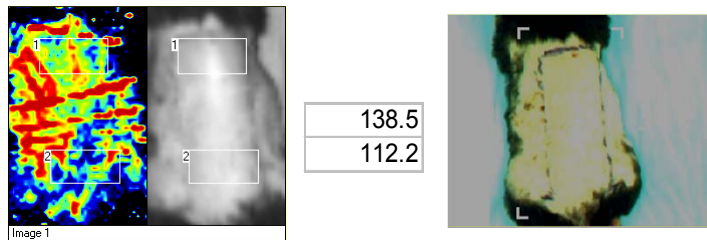
Black mouse- LEL treatment



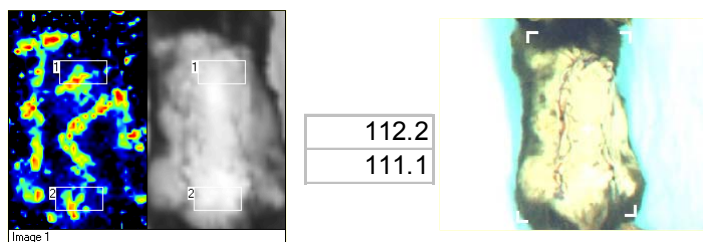
Flap loss- Comparison



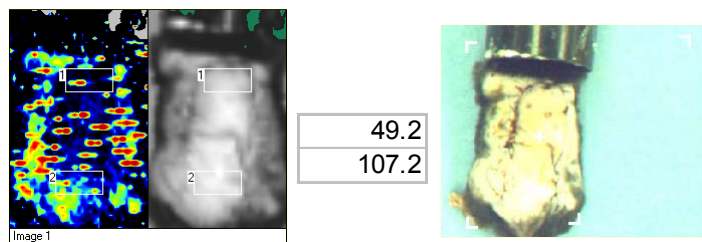
Control animal Laser Doppler Imaging- Baseline



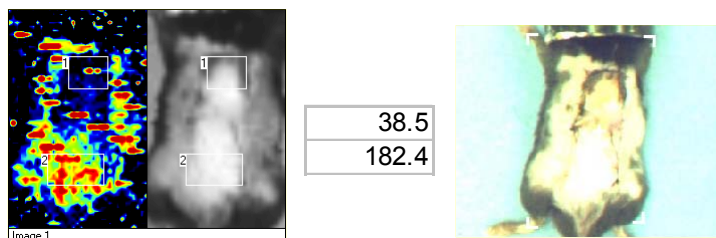
Imm Post Op



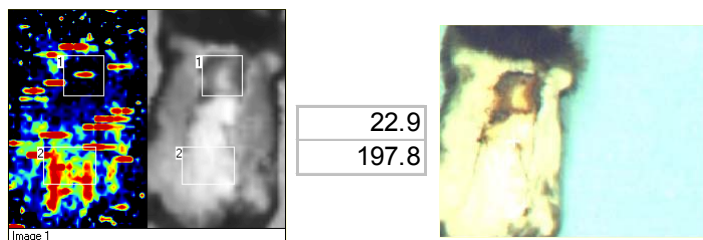
Post Op 1



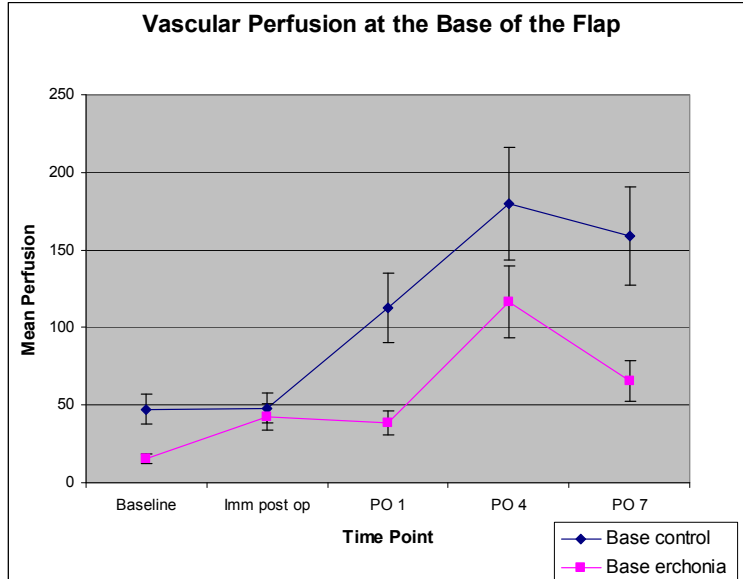
Post Op 4



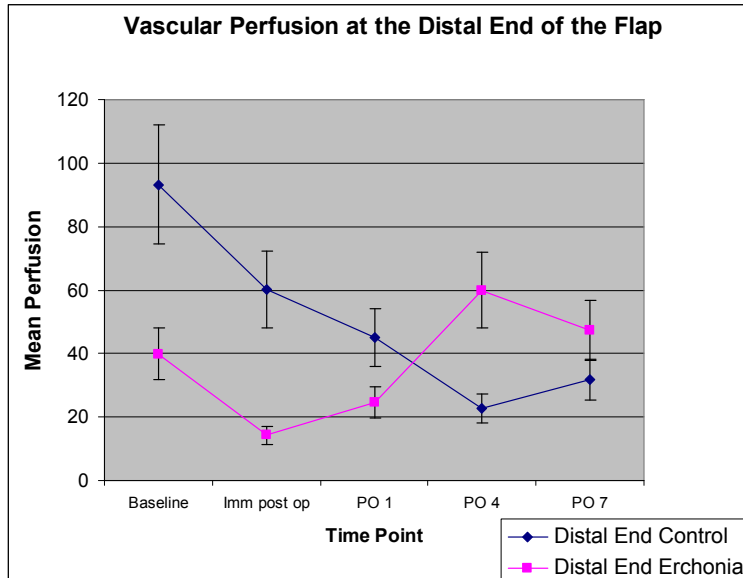
Post Op 7



Mean Perfusion Levels



Mean Perfusion Levels



Important Observations LEL treated group

- Significantly less flap loss
- Visibly reduced inflammatory response
- Significantly more perfusion at the distal end
- Less vasodilatory response at the base

Things to be studied

- How LEL reduces inflammation
- How LEL treated flaps survived better with less vasodilatory response at base
- Why less vasodilatation
- LEL response is not perfusion mediated but metabolism based