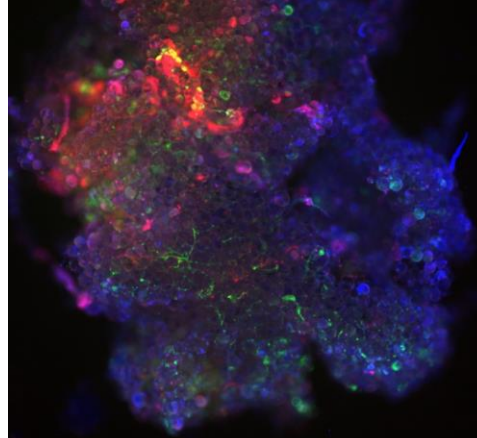


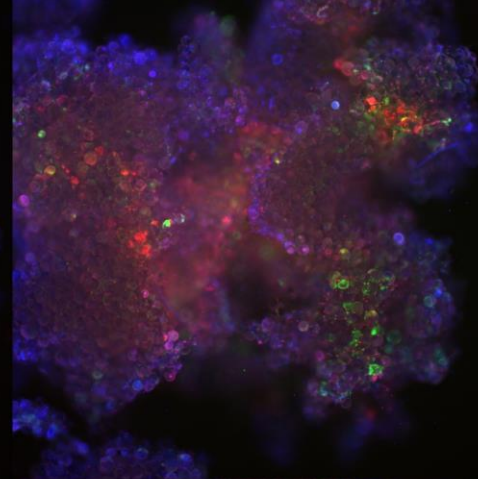
Green: membrane and vessel integrity

Red: red dot indicate dying cells

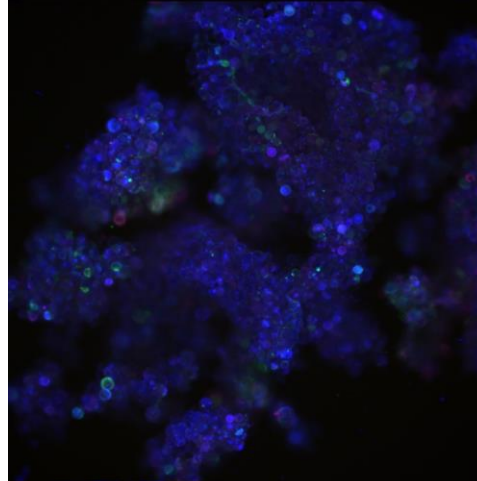
Grezzo



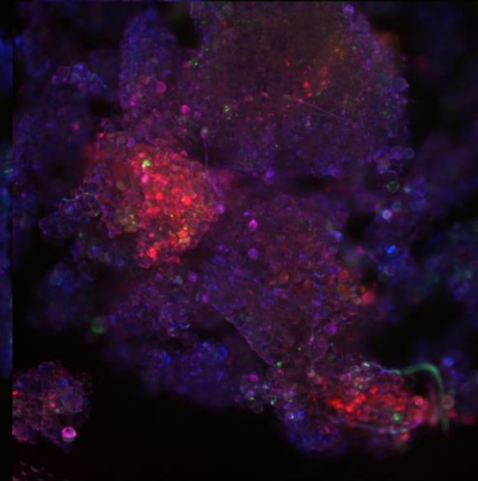
Wash



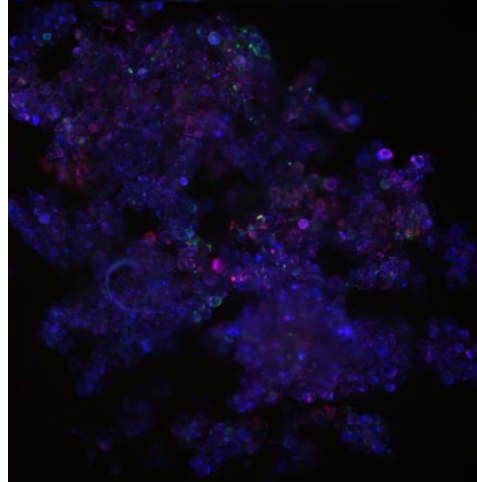
1200

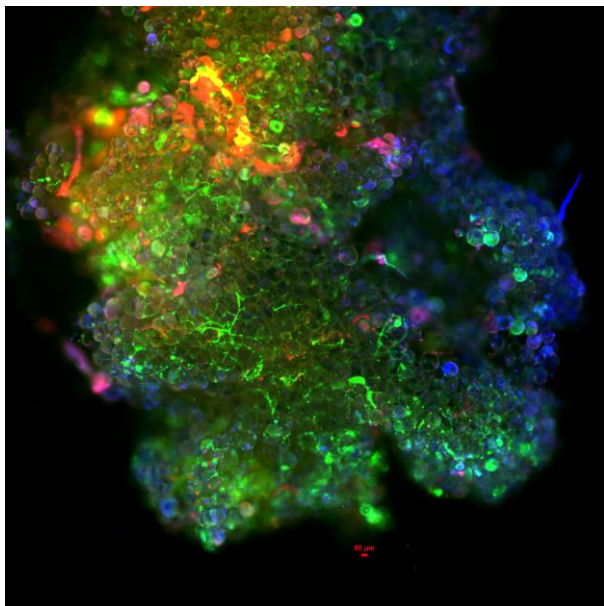


700

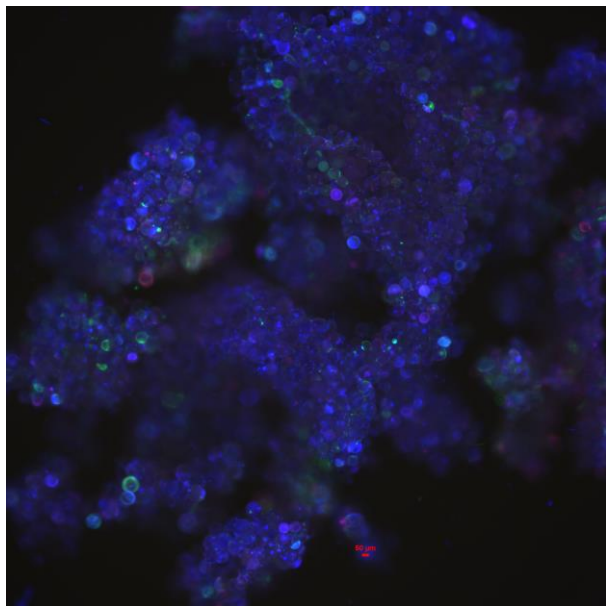


700\700

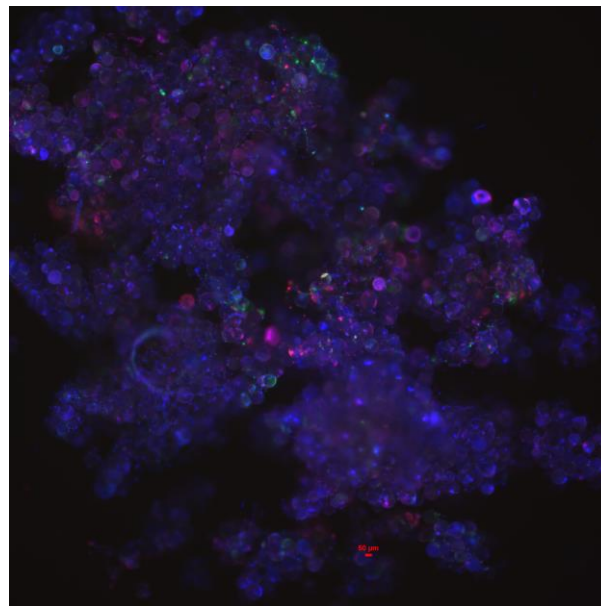




Grezzo

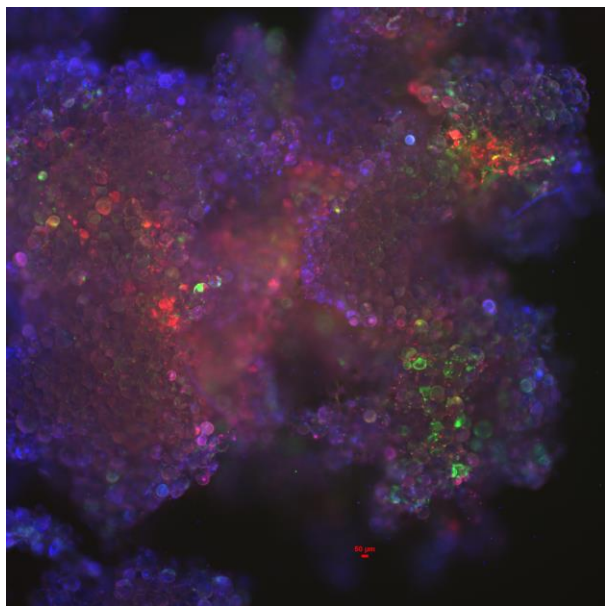


Wash

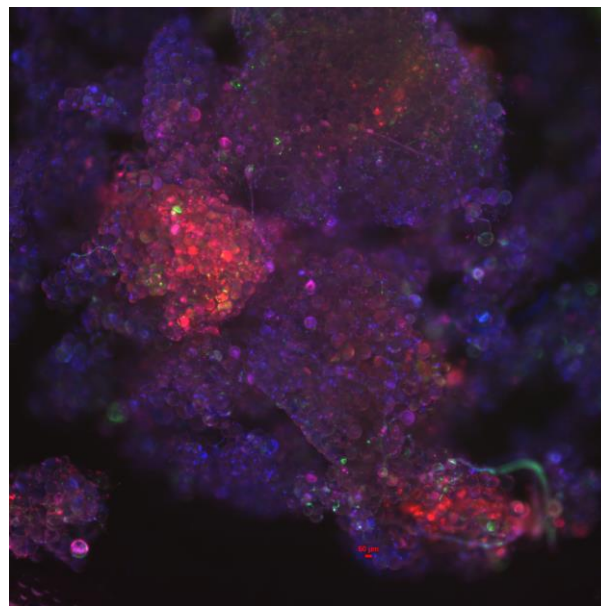


1200

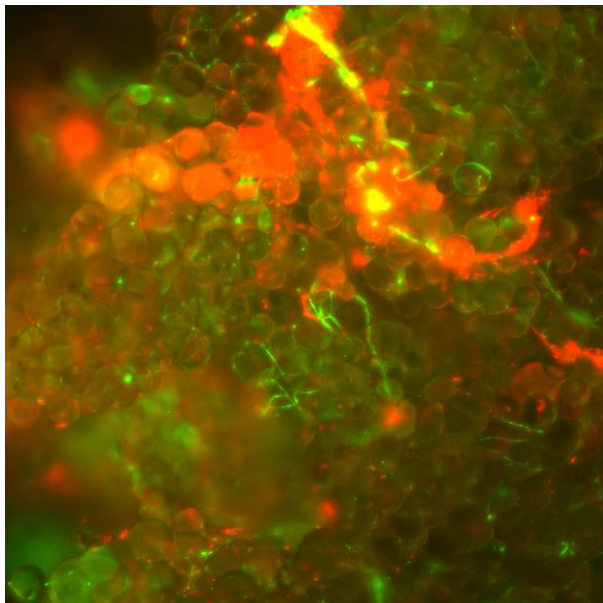
Enhanced
contrast



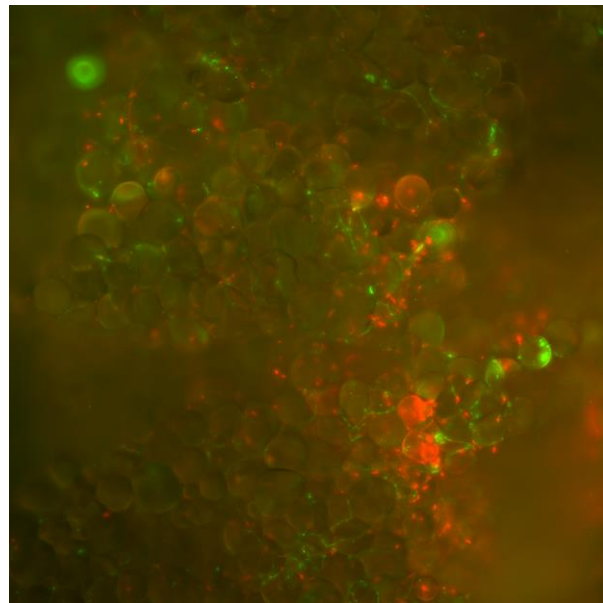
700



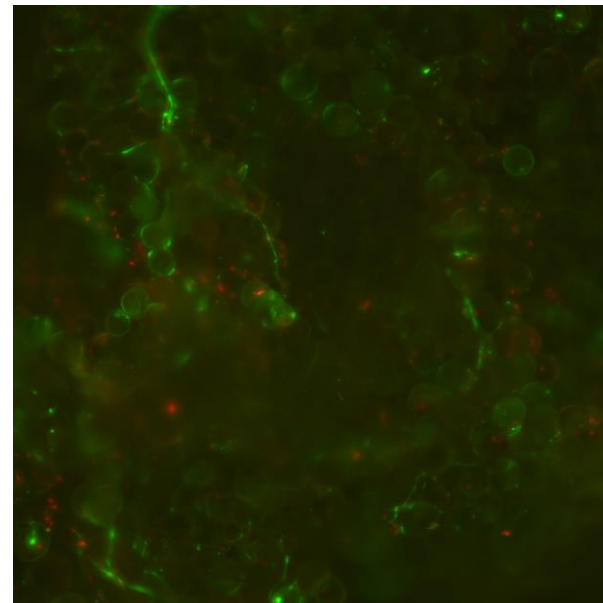
700\700



Grezzo

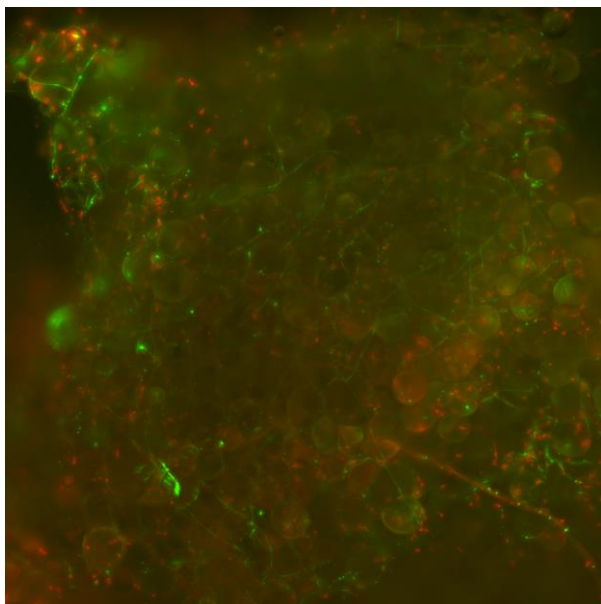


Wash

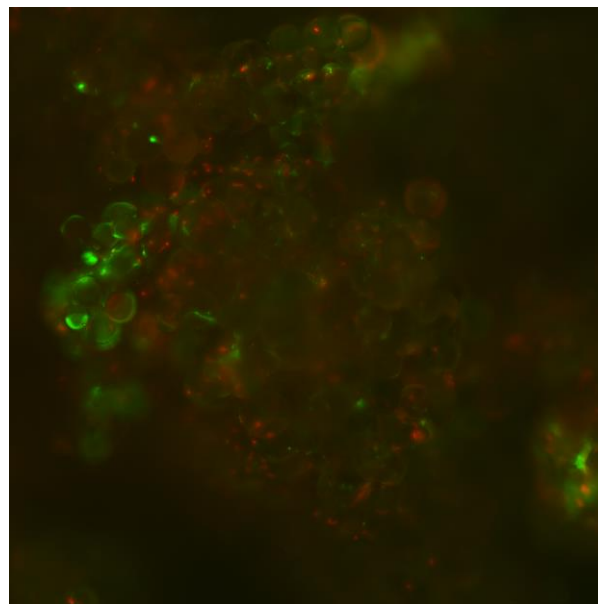


1200

Higher
magnification



700



700\700

Note e considerazioni

- The 'raw' sample is fairly uneven, with portions with high mortality and others in good condition. However, the membranes, in green, are quite intact and in good condition, vessels and capillaries included;
- The first wash already points out a slight loss of the signal in green, or membrane integrity. However, there is no large increase in areas with many red dots, due to cell mortality: this is noted in zones, as well as in the "raw" sample and is therefore poorly indicative.
- The passage at 1200 is fairly enough similar to the wash, showing no added stress if compared to the wash step;
- The two passes at 700, however, point out a degradation of membrane integrity, and at the second step at 700 also cell mortality increase, indicating that there is quite serious damage. The second passage at 700 also breaks down the integrity of the whole tissue a lot, causing damage to the capillary areas.
- Given the high inhomogeneity of the sample, the test will be repeated twice more on the analyzed samples, to verify that it was not only "bad luck" to take into consideration particularly unhappy portions of the filtered sample;
- However, since you notice a trend of green color loss on the membrane, it is quite likely that you will get the same result;
- In light of this and having observed the way in which the sample is processed, in my opinion the problem could be the repeated "instantaneous" high pressure needed to pass through the two filters. The plunger that must be pushed with a fair amount of force probably compresses the sample causing membrane stress.