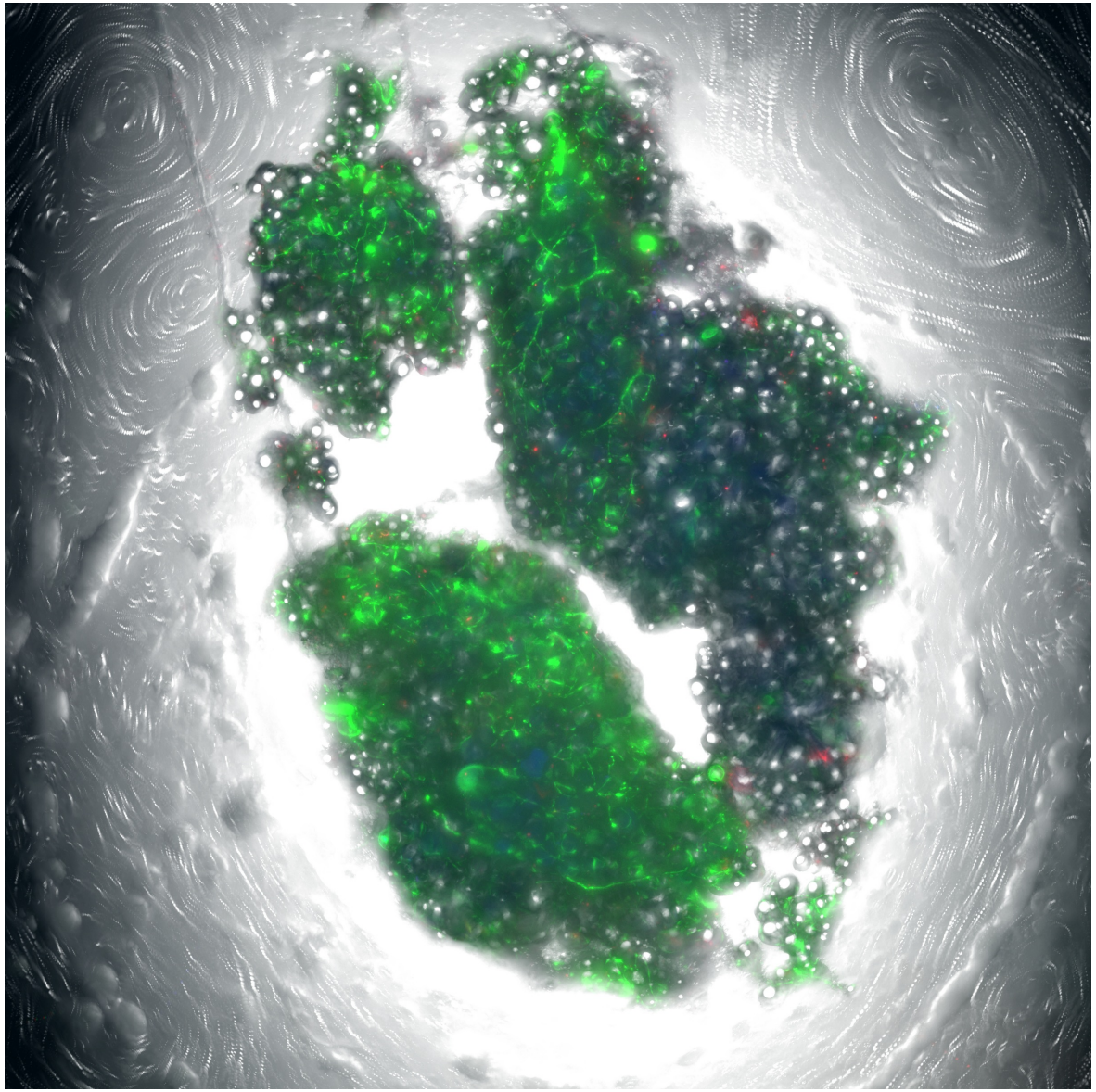
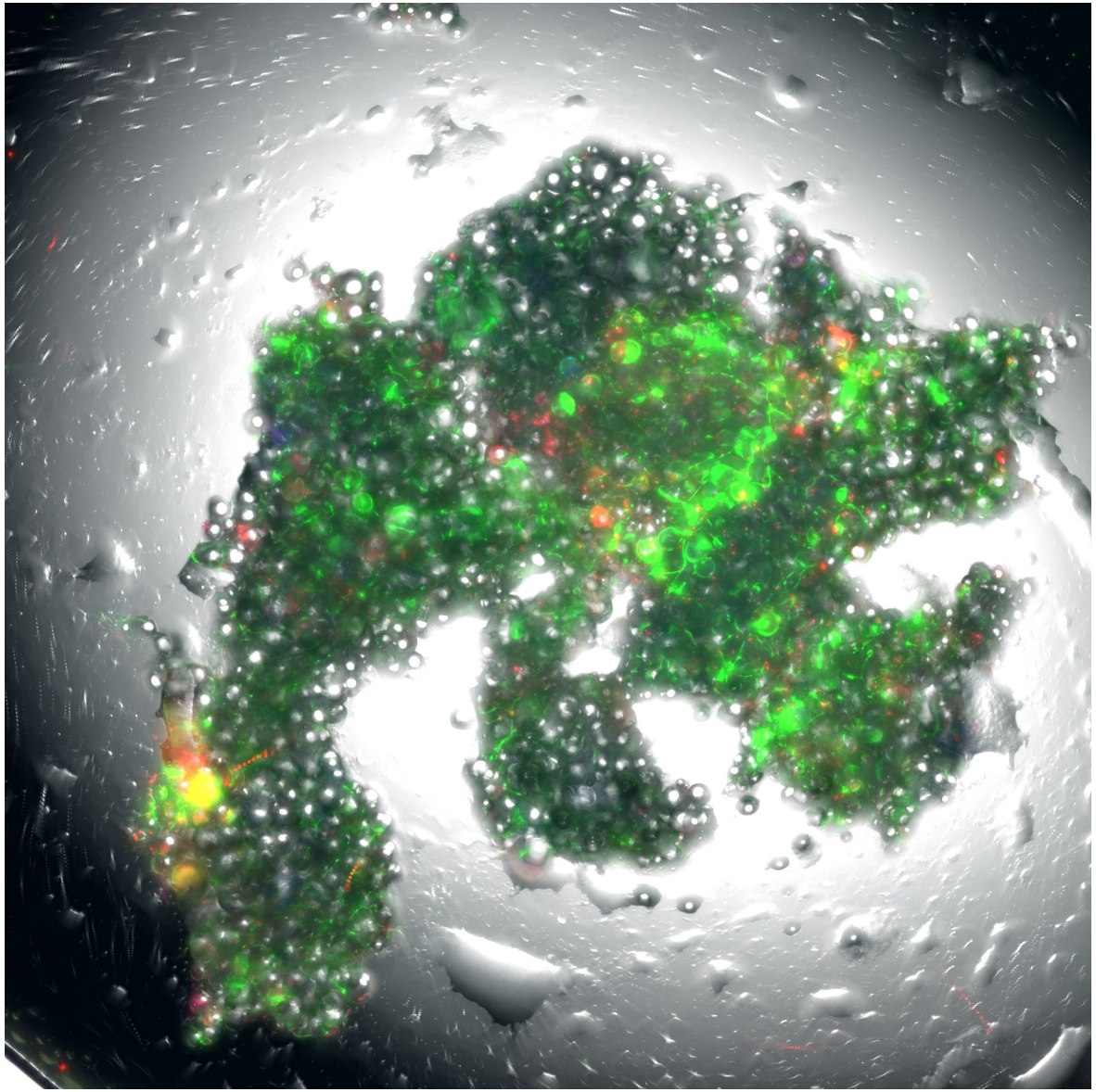
Original Lipoaspirate

LIVE and DEAD

Liposmart Product



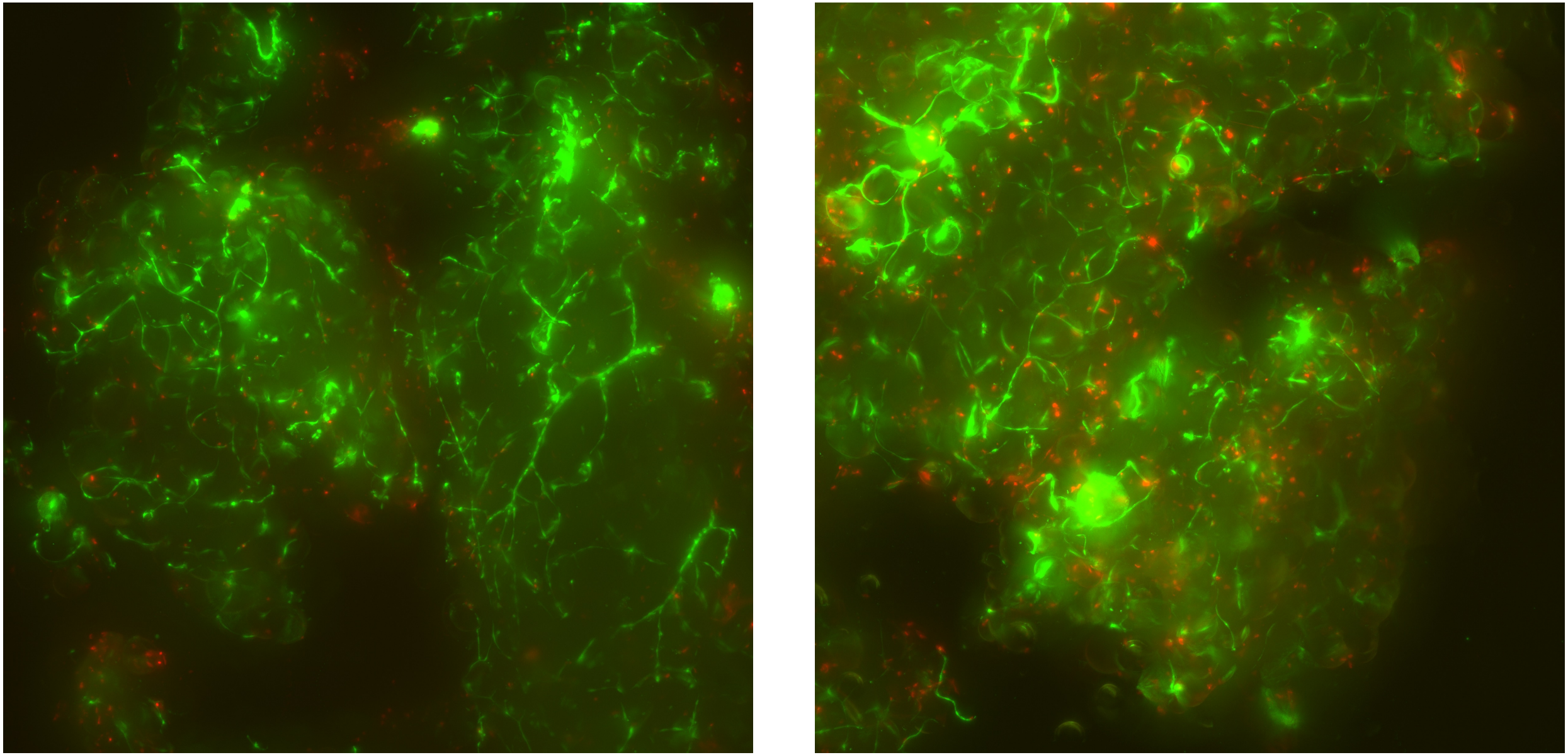


No major difference can be appreciated between the original lipoasirate (Left) nad the Liposmart Product (Right).

Original Lipoaspirate

LIVE and DEAD

Liposmart Product

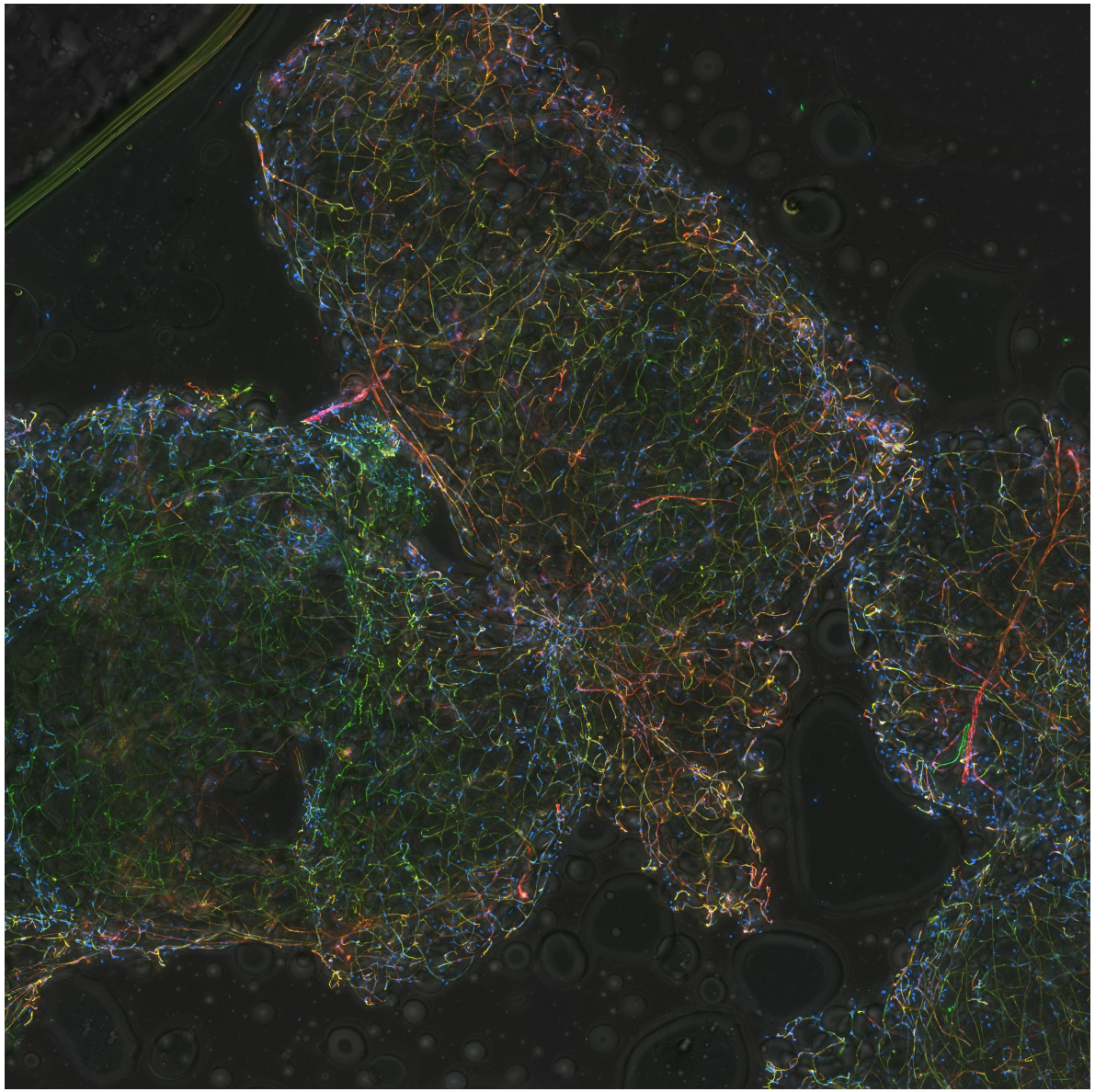


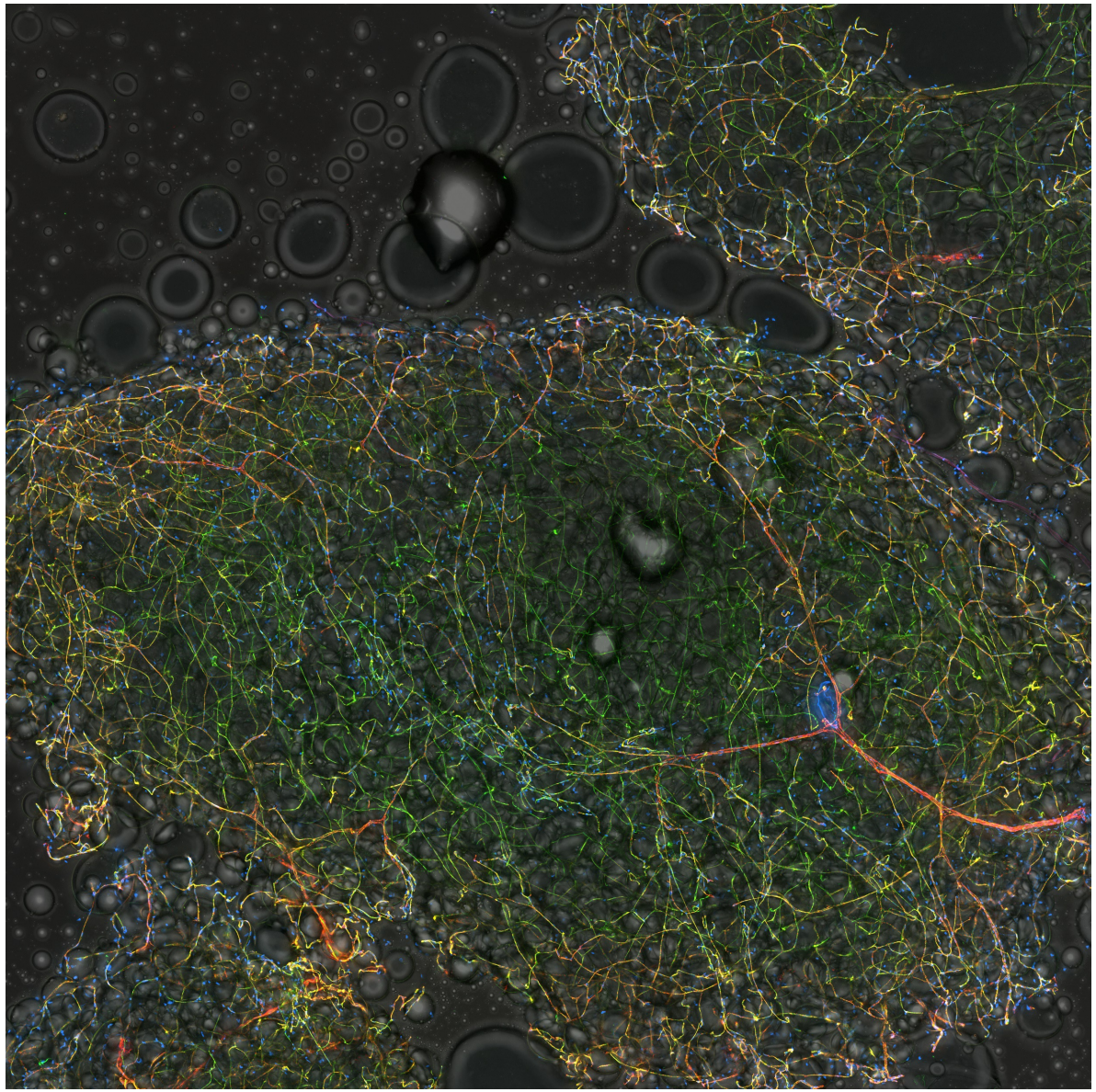
Higher magnification. The good quality (green staining) of the cellular component is evident in both samples. In particular, the vascular network is nicely preserved, embedding highly viable cells (green filamentous structures). Again, the number of suffering cells, stained red with propidium iodide, is not significantly different between the original lipoaspirate and the Liposmart Product.

Original Lipoaspirate

Stained cells: Vascular Cadherin CD31

Liposmart Product



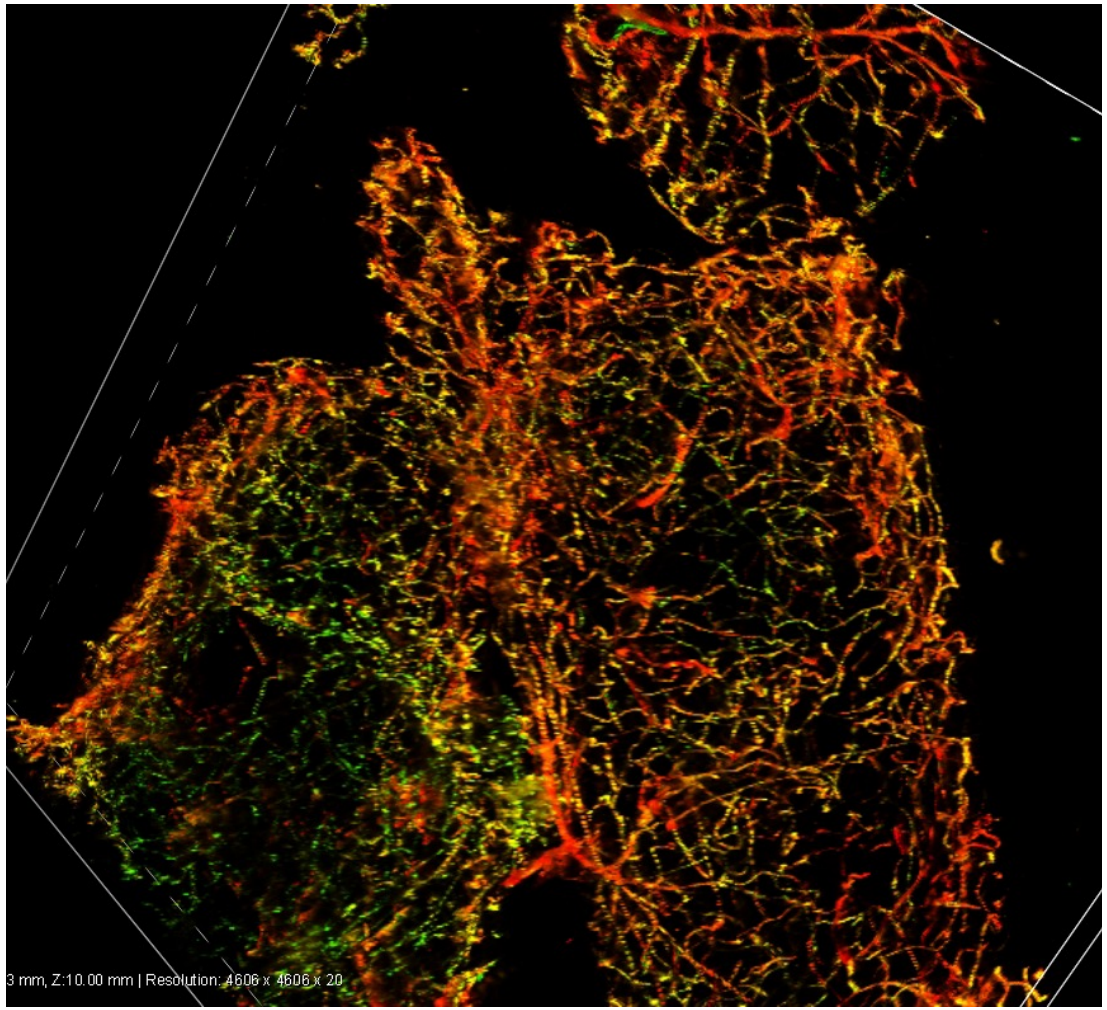


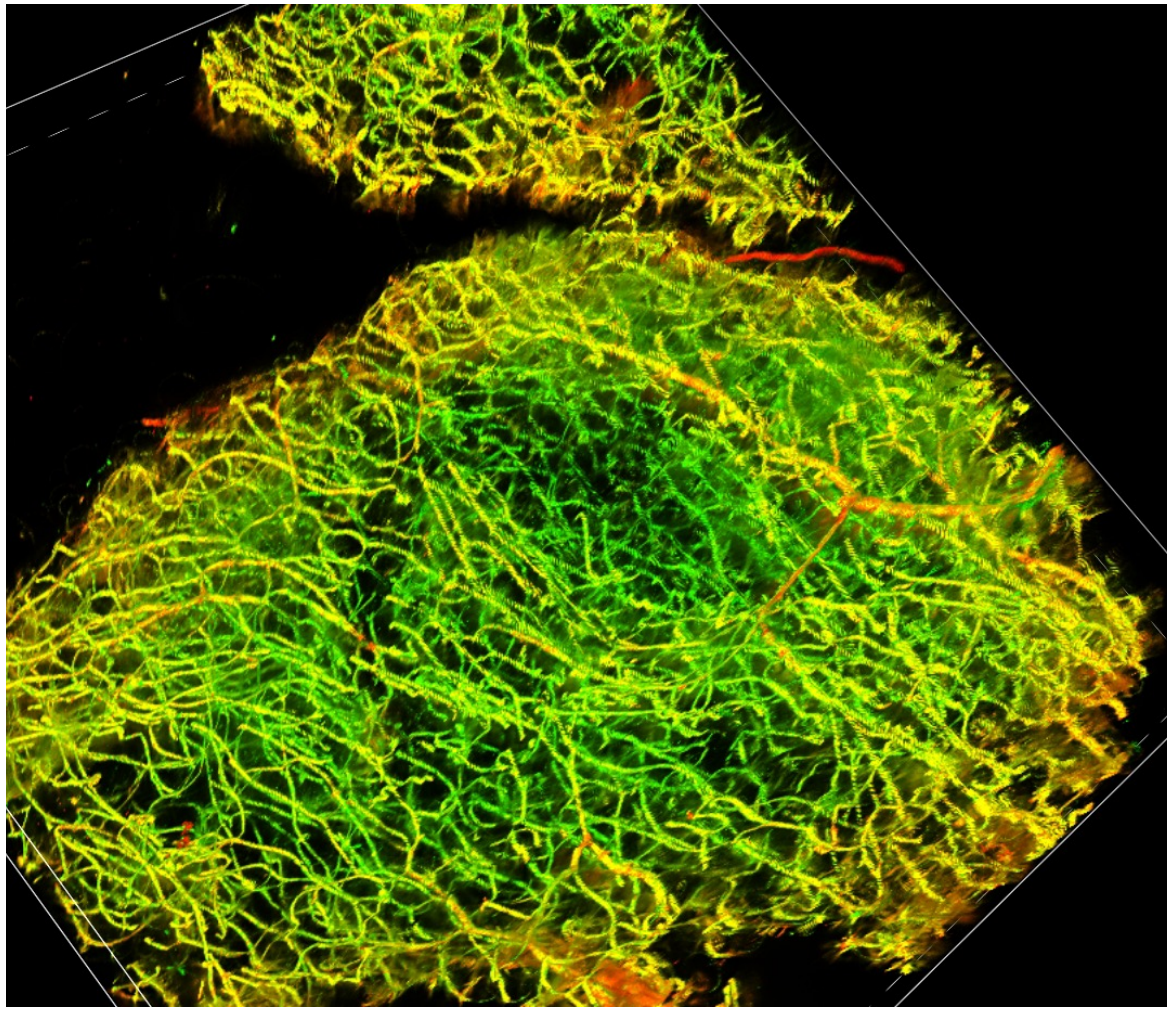
The two markers highlight the vascular network, staining both blood vessels and endothelial glycoproteins. Noteworthy, even the thinner vascular structures have been preserved in the Liposmart Product, providing evidence for the remarkable maintenance of the stromal vascular niche, and essential topography intervening in the actuation of tissue regeneration.

Original Lipoaspirate

Stained cells: Vascular Cadherin CD31

Liposmart Product



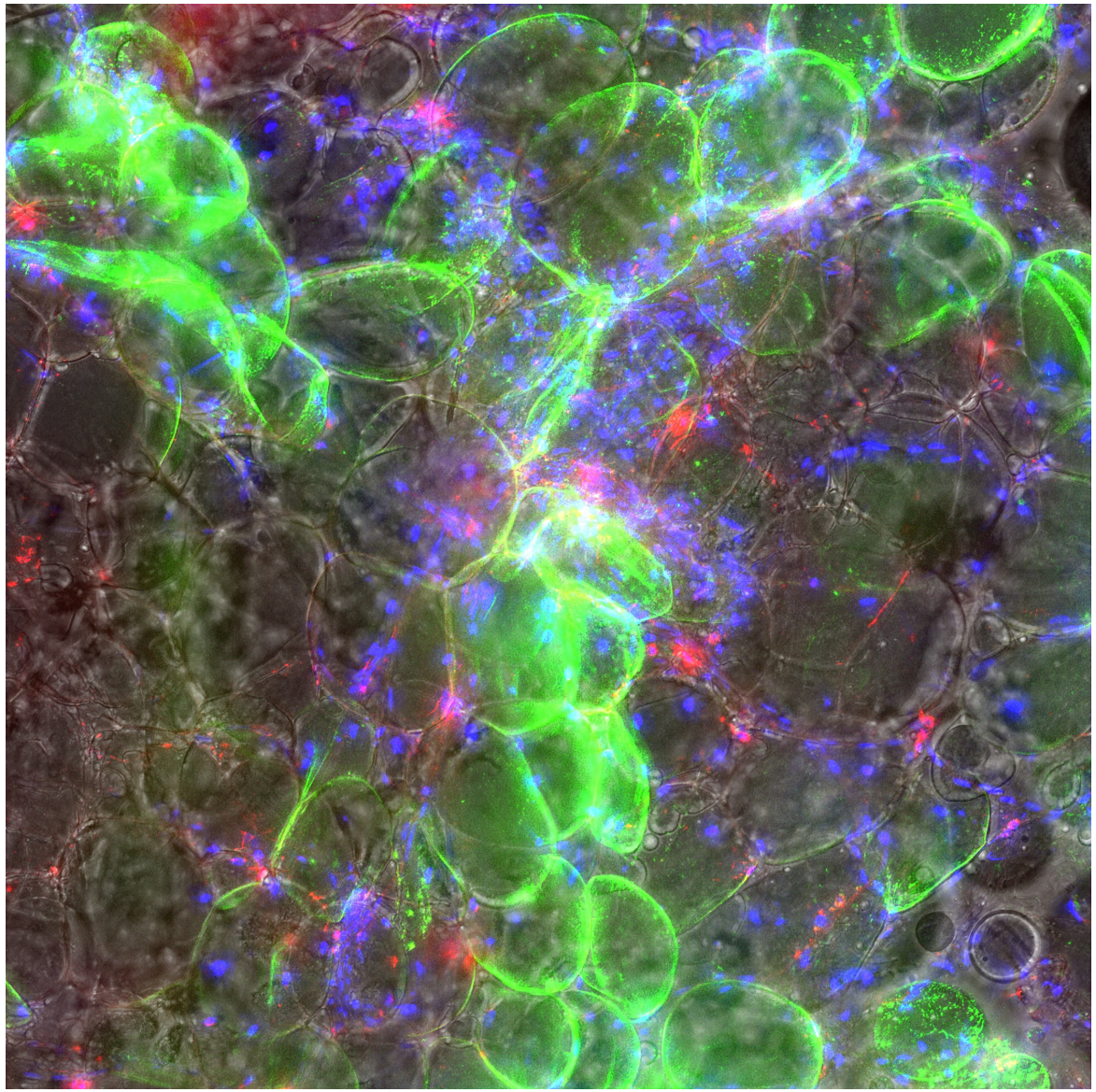


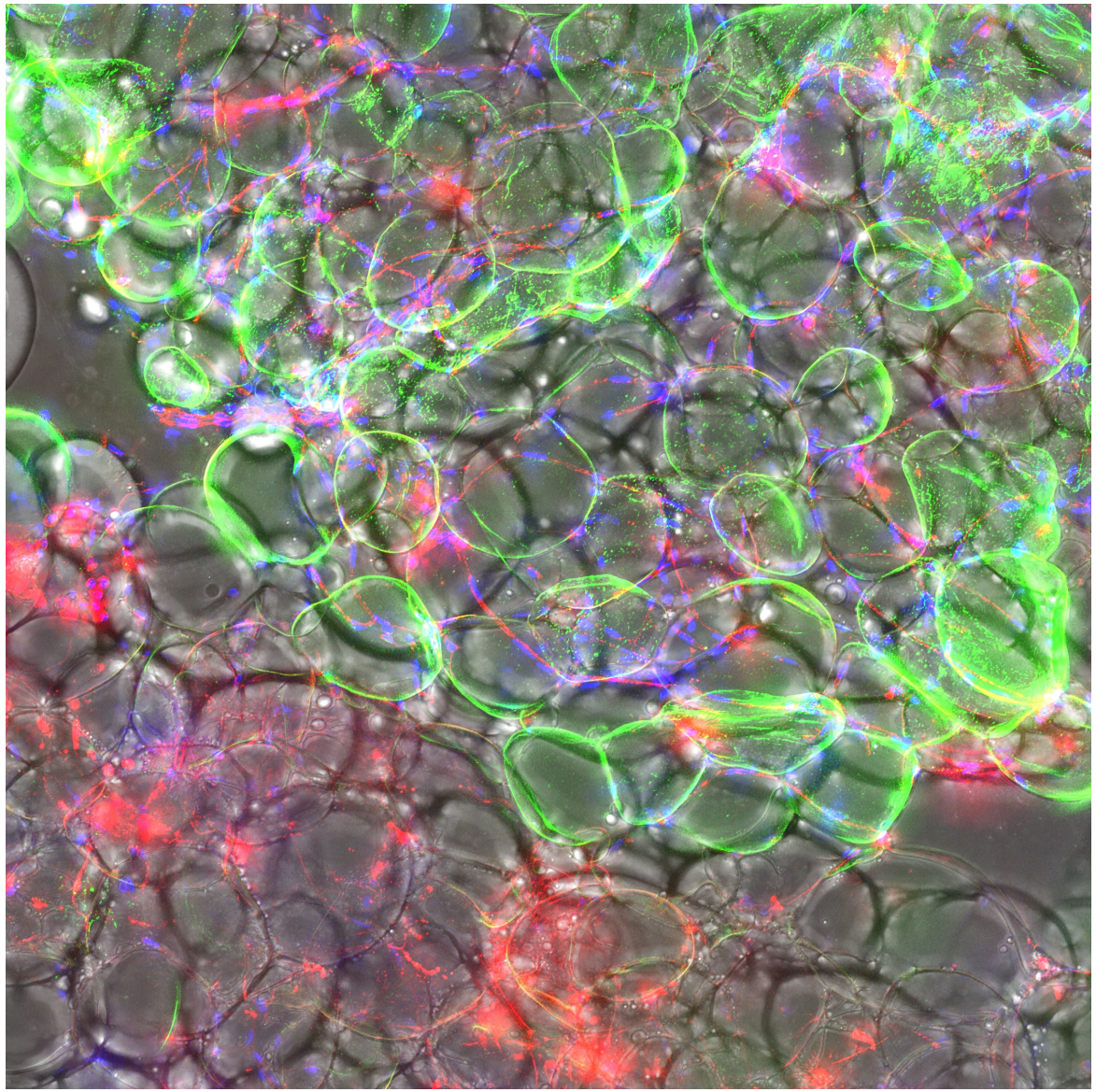
Zoom from the 3D projection of the two samples.

Original Lipoaspirate

Stained cells: Perilipin CD68

Liposmart Product



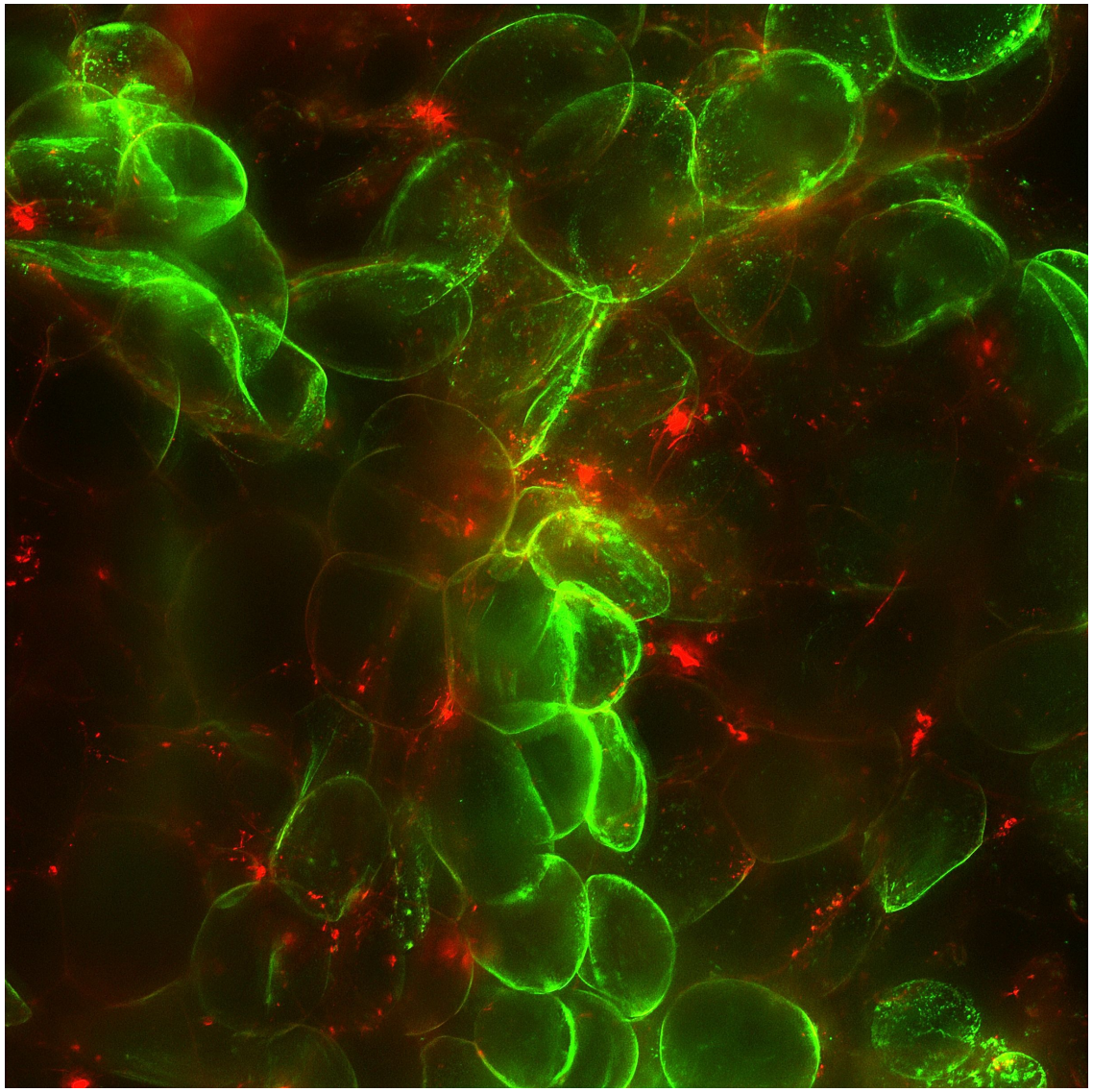


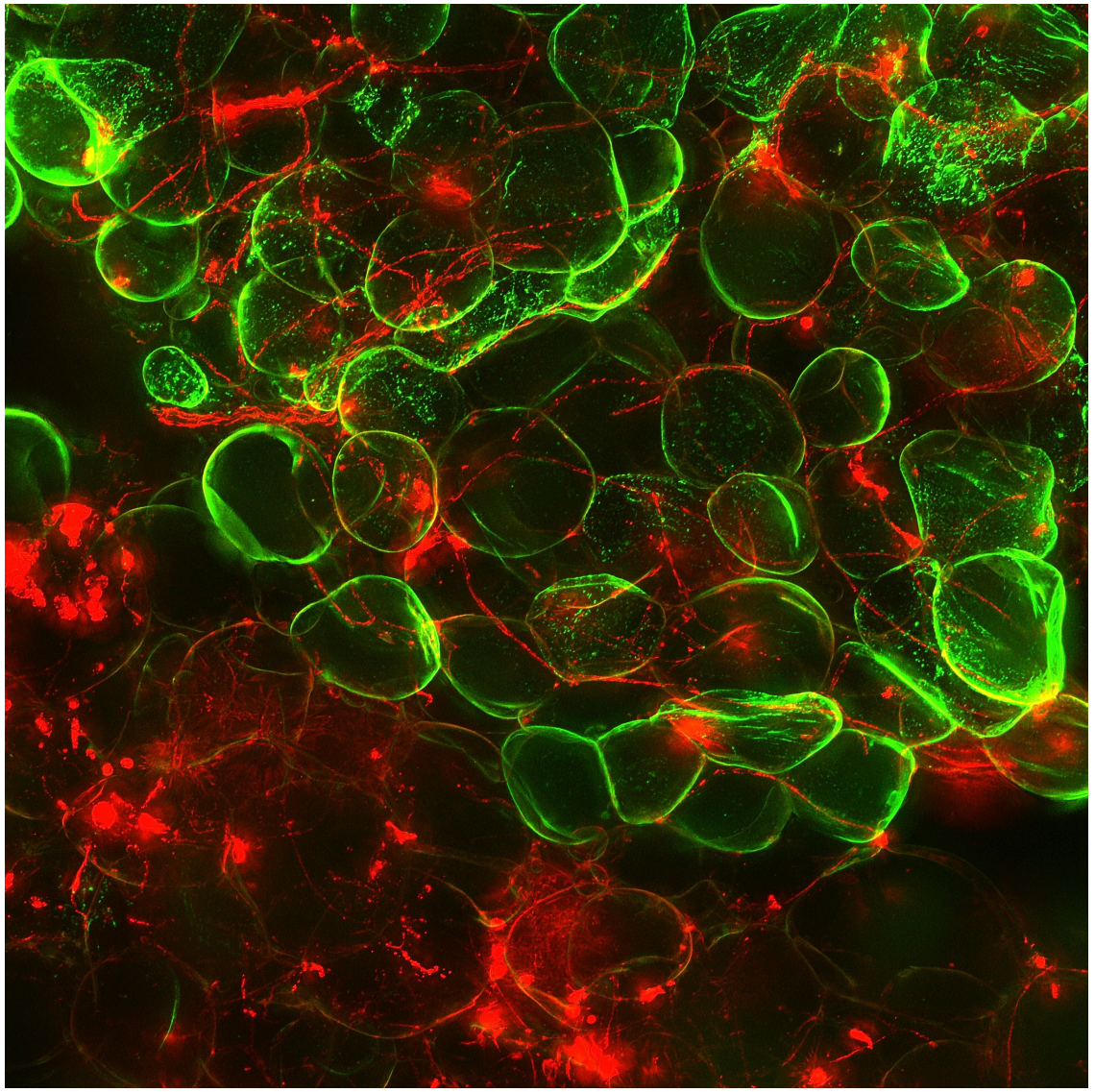
Perilipin staining (green) is a strong indication for preadipocyte structural and functional integrity. CD68 staining (red) is suggestive for the presence of macrophages (key elements in controlling the homing/mobilizing/rescuing properties of stem cells in the niche), and also helps counterstaining the vascular network.

Original Lipoaspirate

Stained cells: Perilipin CD68

Liposmart Product



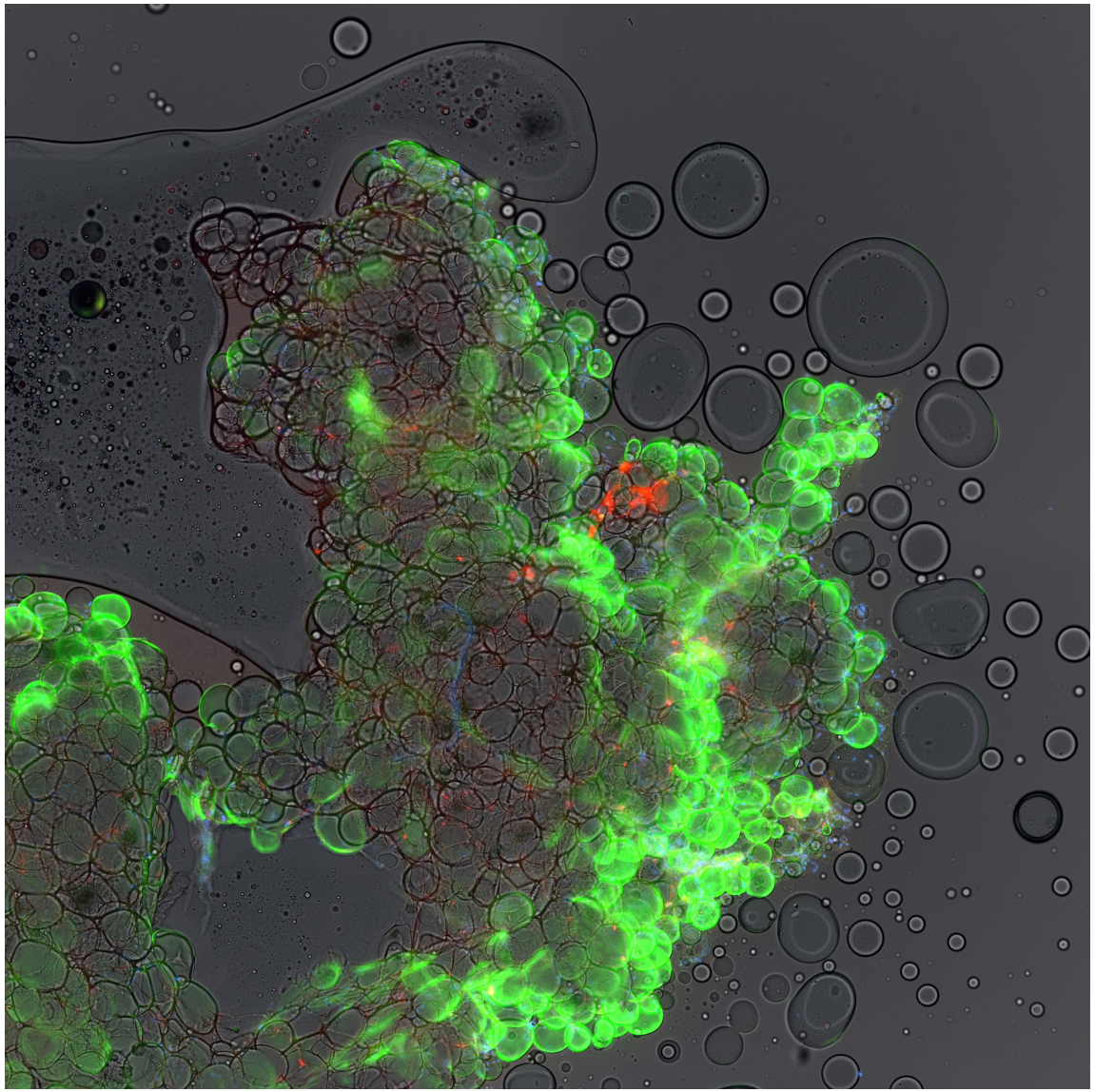


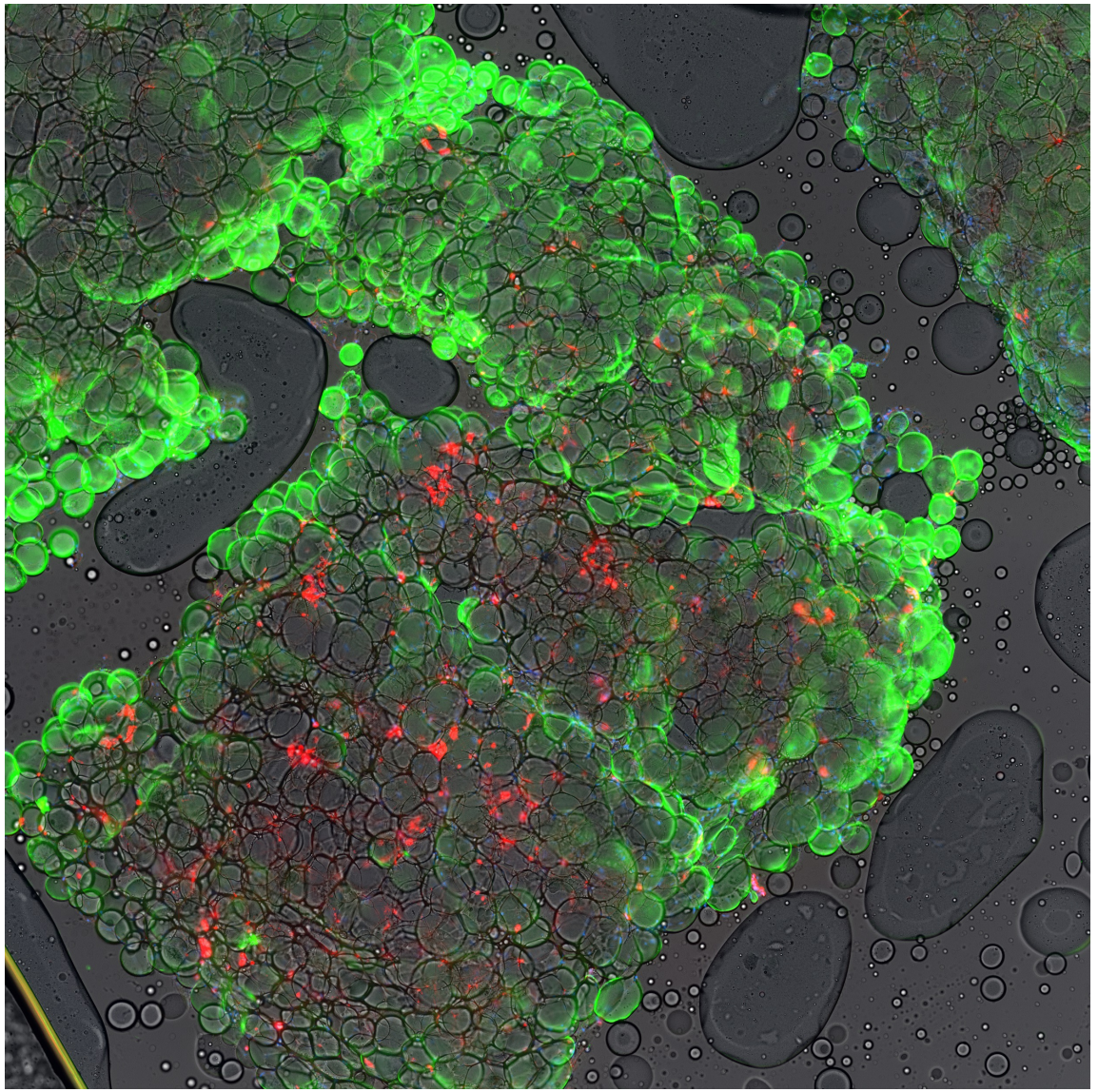
Same image as in the previous slide, but with white field subtraction.

Original Lipoaspirate

Stained cells: Perilipin CD68

Liposmart Product





Larger view, highlighting the remarkable quality of the Liposmart Product.