DGAT1 activity synchronises with mitophagy to protect cells from metabolic rewiring by iron depletion

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Supplementary Figure Legends

Appendix Figure S1:
Analysis of LD biogenesis in response to different mitophagy stimuli.
S1a. Representative photomicrographs of ARPE19 cells treated for 24 h with the compound indicated on the image in the following amount; DFP (1mM), CCCP (20 µM), Oligomycin (5 µM), Antimycin A (10 µM), Ivermectin (10 µM). Cells were stained with BODIPY™ and fixed. Nuclei are counterstained with Hoescht33342. Scale bar = 5 µm.
S1b. Associated quantitation for S4a.

Appendix Figure S2:
Aberrant lipid metabolism upon loss of LD biogenesis.
S2a. Comparative modelling of the lipidome between DFP vs. DFP+DGAT1i/2i at 24 h. OPLS-DA OPLS-DA was performed using MetaboAnalyst from LC-MS datasets described above.
S2b. Heatmap showing enrichment and loss of lipid species upon loss of LD biogenesis. Each coloured cell on the map corresponds to a z-score value. Whilst DFP-induced TAGs are depleted upon DGAT1i/2i inhibition, a broad enrichment signature of several other lipid species is evident, including cytotoxic ceramides and glycerophospholipids. All samples from n=3 experiments are shown.
S2c. Average values of S7b shown for simplicity.
Appendix Figure S1

(a) Lipid Droplets

(b) LD area per cell (A.U.)

Legend:
- Control
- DFP
- Ivermectin
- OA
- CCCP
Appendix Figure S2

(a) Scores Plot

(b) Heatmap showing the comparison between DFP and DFP+DGAT1/2i conditions.

(c) Legend for the heatplot indicating the Z score range from -4 to 4.