Figure S1. Measurement of fundus autofluorescence changes in areas of drusen resolution 24 months after nanosecond laser treatment.
Fundus autofluorescence (FAF) was used to assess outer retinal / RPE change in areas of drusen resolution in a subset of AMD patients. Data were analysed as published (42). Fundus images taken 24 months post-treatment were registered and digitally subtracted from baseline images (A, D). For background measurements (A), specific areas free from drusen and or pigmentary changes were manually chosen, while areas of drusen change were identified after baseline subtraction (D). These specific areas were superimposed on the corresponding FAF image (B, E) and the greyscale distribution within these regions plotted as a histogram (C, background; F, drusen regression). Pixels with levels greater than the mean of the background + 3 S.D. were considered to be increased (shaded upper shoulder in F), while pixels with lower levels (mean background – 3 S.D.) were decreased (lower shaded shoulder in F).

Figure S2. Drusen resolution following nanosecond laser treatment.
Multi-modal image analysis was performed on a 65 year old female with intermediate AMD using a Cirrus SD-OCT. Images were taken of the right eye before (A, C, E, G) and 12 months after (B, D, F, H) nanosecond laser treatment. Colour fundus photographs were taken (A, B) and the extent of drusen (pale yellow deposits in central retina, A) imaged using OCT (C, D), a segmented RPE map (E, F) and a drusen elevation heat map (G, H). At 12 months following laser treatment there is a reduction in the extent of drusen in this participant.

Figure S3. Assessment of outer retinal structure after low energy nanosecond laser treatment using spectral domain OCT.
An 83 year old individual had six laser spots (0.3mJ; clinical dose) delivered to the macula under the superior vascular arcade (A), while six suprathreshold spots (0.6mJ) followed the inferior vascular arcade (B). While the low energy laser spots are difficult to discern in the fundus image, they are more evident in the higher dose treatment. Specific regions of the infrared fundus image are shown for the clinical (C) and suprathreshold (D) doses to better observe the treated areas. A particular laser spot has been identified in the fundus images (boxed areas) and that area incorporating the laser spot shown using SD-OCT (E and F). The clinical dose produced no alteration in the OCT image, including the photoreceptor outer segments (arrow in E), whilst the suprathreshold treatment resulted in a minor disruption in the photoreceptor outer segments (arrow in F).