# SUPPLEMENTAL MATERIAL

**Table S1. Characteristics of the non-culprit plaques of the culprit vessel.**

| | DM group (n=29) | Non-DM group (n=79) | *P* Value # |
|---|---|---|---|
| Maximal lipid arc, degree | 248.9 ± 83.9 | 179.9 ± 58.3 | **0.006** |
| Mean lipid arc, degree | 190.8 ± 50.3 | 144.1 ± 35.3 | **0.001** |
| Lipid length, mm | 7.6 ± 6.6 | 5.7 ± 4.0 | 0.253 |
| Lipid index | 1400.0 ± 1061.9 | 865.9 ± 744.2 | **0.025** |
| Thinnest FCT, μm | 103.3 ± 56.2 | 140.7 ± 70.0 | **0.013** |
| Minimal lumen area, $mm^2$ | 2.34 ± 0.86 | 2.81 ± 1.30 | 0.066 |
| Reference lumen area, $mm^2$ | 7.07 ± 3.23 | 7.68 ± 3.14 | 0.196 |
| Area stenosis, % | 64.4 ± 12.0 | 63.3 ± 8.7 | 0.978 |
| Lipid-rich plaque | 15 (51.7) | 34 (43.0) | 0.295 |
| TCFA | 5 (17.2) | 5 (6.3) | **0.031** |
| Plaque rupture | 1 (3.4) | 5 (6.3) | 0.687 |
| Macrophage accumulation | 18 (62.1) | 39 (49.4) | 0.434 |
| Microvessels | 12 (41.4) | 27 (34.2) | 0.515 |
| Cholesterol crystals | 9 (31.0) | 15 (19.0) | 0.288 |
| Calcification | 16 (55.2) | 35 (44.3) | 0.920 |
| Spotty calcium | 6 (20.7) | 17 (21.5) | 0.810 |
| Thrombus | 6 (20.7) | 13 (16.5) | 0.507 |

Generalized estimating equations were applied for fitting general- and generalized linear models. Data are presented as count (%) or mean ± SD. #Adjusted for differences in baseline characteristics.

FCT = fibrous cap thickness; TCFA = thin-cap fibroatheroma.

**Table S2. Comparison of culprit plaque characteristics based on HbA1C level.**

| | A) High HbA1C DM (A1C ≥8%) (n=31) | B) Low HbA1C DM (A1C <8%) (n=51) | C) Non-DM (n=227) | *P* Value # | | | |
|---|---|---|---|---|---|---|---|
| | | | | Overall | A vs B | A vs C | B vs C |
| Maximal lipid arc, degree | 233.9 ± 93.4 | 275.5 ± 70.0 | 246.9 ± 91.7 | 0.430 | | | |
| Mean lipid arc, degree | 181.2 ± 73.7 | 200.6 ± 49.0 | 184.6 ± 59.6 | 0.734 | | | |
| Lipid length, mm | 8.7 ± 6.1 | 7.9 ± 3.7 | 8.1 ± 6.4 | 0.944 | | | |
| Lipid index | 1777.9 ± 1529.9 | 1544.4 ± 707.8 | 1581.6 ± 1337.9 | 0.845 | | | |
| Thinnest FCT, μm | 103.7 ± 79.3 | 90.9 ± 48.8 | 97.9 ± 64.0 | 0.590 | | | |
| Minimal lumen area, $mm^2$ | 1.75 ± 1.86 | 1.60 ± 1.05 | 1.85 ± 1.45 | 0.779 | | | |
| Reference lumen area, $mm^2$ | 6.75 ± 2.85 | 6.59 ± 2.92 | 7.33 ± 3.09 | 0.359 | | | |
| Area stenosis, % | 73.8 ± 20.6 | 75.4 ± 12.0 | 73.9 ± 16.8 | 0.899 | | | |
| Lipid-rich plaque | 20 (64.5) | 31 (60.8) | 102 (44.9) | **0.042** | 0.798 | 0.062 | 0.052 |
| TCFA | 13 (41.9) | 12 (23.5) | 55 (24.2) | 0.179 | | | |
| Plaque rupture | 10 (32.3) | 18 (35.3) | 69 (30.4) | 0.803 | | | |
| Macrophage accumulation | 20 (64.5) | 33 (64.7) | 102 (44.9) | **0.025** | 0.975 | 0.064 | 0.026 |
| Microvessels | 9 (29.0) | 18 (35.3) | 78 (34.4) | 0.878 | | | |

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|---|---|---|---|---|
| Cholesterol crystals | 7 (22.6) | 20 (39.2) | 64 (28.2) | 0.465 |
| Calcification | 15 (48.4) | 30 (58.8) | 97 (42.7) | 0.500 |
| Spotty calcium | 7 (22.6) | 10 (19.6) | 35 (15.4) | 0.487 |
| Thrombus | 17 (54.8) | 30 (58.8) | 116 (51.1) | 0.352 |

Generalized linear model for categorical variables and general linear model for continuous variables were applied. Data are presented as number (%) or mean ± SD. Thirteen patients in DM group were excluded from the analysis due to lack of HbA1C data.

#Adjusted for differences in baseline characteristics.

FCT = fibrous cap thickness; TCFA = thin-cap fibroatheroma.

**Table S3. Comparison of non-culprit plaque characteristics of the culprit vessel based on HbA1C level.**

| | A) High HbA1C DM (A1C ≥8%) (n=9) | B) Low HbA1C DM (A1C <8%) (n=18) | C) Non-DM (n=79) | *P* Value # | | | |
|---|---|---|---|---|---|---|---|
| | | | | Overall | A vs B | A vs C | B vs C |
| Maximal lipid arc, degree | 304.7 ± 79.2 | 221.1 ± 74.6 | 179.9 ± 58.3 | **<0.001** | 0.038 | <0.001 | 0.089 |
| Mean lipid arc, degree | 228.8 ± 39.8 | 171.9 ± 45.2 | 144.1 ± 35.3 | **<0.001** | 0.016 | <0.001 | 0.054 |
| Lipid length, mm | 7.4 ± 4.2 | 7.6 ± 7.8 | 5.7 ± 4.0 | 0.598 | | | |
| Lipid index | 1813.8 ± 1165.6 | 1193.2 ± 1003.7 | 865.9 ± 744.2 | 0.079 | | | |
| Thinnest FCT, μm | 90.6 ± 41.1 | 109.6 ± 63.5 | 140.7 ± 70.0 | 0.056 | | | |
| Minimal lumen area, $mm^2$ | 2.42 ± 1.54 | 2.31 ± 0.87 | 2.81 ± 1.30 | 0.143 | | | |
| Reference lumen area, $mm^2$ | 7.06 ± 3.22 | 7.04 ± 3.51 | 7.68 ± 3.14 | 0.591 | | | |
| Area stenosis, % | 63.9 ± 14.5 | 64.1 ± 11.6 | 63.3 ± 8.7 | 0.975 | | | |
| Lipid-rich plaque | 5 (55.6) | 10 (55.6) | 34 (43.0) | 0.288 | | | |
| TCFA | 2 (22.2) | 3 (16.7) | 5 (6.3) | 0.144 | | | |
| Plaque rupture | 1 (11.1) | 0 (0.0) | 5 (6.3) | 0.322 | | | |
| Macrophage accumulation | 4 (44.4) | 13 (72.2) | 39 (49.4) | 0.183 | | | |
| Microvessels | 4 (44.4) | 7 (38.9) | 27 (34.2) | 0.684 | | | |

| | | | | |
|---|---|---|---|---|
| Cholesterol crystals | 1 (11.1) | 7 (38.9) | 15 (19.0) | 0.146 |
| Calcification | 4 (44.4) | 10 (55.6) | 35 (44.3) | 0.733 |
| Spotty calcium | 2 (22.2) | 4 (22.2) | 17 (21.5) | 0.987 |
| Thrombus | 1 (11.1) | 5 (27.8) | 13 (16.5) | 0.462 |

Generalized estimating equations were applied for fitting general- and generalized linear models. Data are presented as count (%) or mean ± SD.

#Adjusted for differences in baseline characteristics.

FCT = fibrous cap thickness; TCFA = thin-cap fibroatheroma.