

**Supplementary Table S1. Associations of the OPN expression scores.**

| Variable  | OPN expression |       |       | p values |
|---|----------------|-------|-------|----------|
|   | 1+             | 2+    | 3+    |          |
| <i>Demographic and lifestyle variables</i>                    |                |       |       |          |
| Age (Q3/Q1)   | 16/13          | 9/12  | 7/8   | 0.842    |
| Gender (f/m)  | 14/43          | 15/21 | 8/18  | 0.221    |
| Smoking (yes/no)  | 31/26          | 16/20 | 14/12 | 0.618    |
| <i>Disease characteristics and comorbidities</i>              |                |       |       |          |
| Grade of stenosis (Q3/Q1)                                     | 19/13          | 6/11  | 6/6   | 0.275    |
| Carotid atherosclerosis, uni- vs. bilateral (u/b)             | 43/14          | 24/12 | 17/9  | 0.534    |
| Stroke history (y/n)  | 33/24          | 25/11 | 18/8  | 0.429    |
| Occurrence of aphasia (yes/no)                                | 8/49           | 6/30  | 3/23  | 0.847    |
| Occurrence of paresis/plegia (yes/no)                         | 5/52           | 4/32  | 4/22  | 0.668    |
| Hypertension (y/n)  | 54/3           | 34/2  | 22/4  | 0.232    |
| Diabetes (y/n)  | 18/39          | 11/25 | 4/22  | 0.458    |
| Polyvascular disease (3 vs. 1 arterial bed affected)          | 10/33          | 1/28  | 0/19  | 0.037    |
| <i>Plaque calcification</i>                                   |                |       |       |          |
| Extent of calcification (grade 3-4/grade 0-2)                 | 29/28          | 15/21 | 10/16 | 0.497    |
| Superficial/deep calcification                                | 35/22          | 12/24 | 7/19  | 0.003    |
| Microcalcification (yes/no)                                   | 15/42          | 18/18 | 21/5  | <0.001   |
| Spotty/ nodular calcification (yes/no)                        | 32/25          | 24/12 | 15/11 | 0.585    |
| Extended/ confluent calcification (yes/no)                    | 23/34          | 10/26 | 8/18  | 0.418    |
| Metaplasia (yes/no)   | 19/38          | 10/26 | 4/22  | 0.288    |
| <i>Biological variables of plaque vulnerability</i>           |                |       |       |          |
| Inflammatory infiltrate (INF <sup>+</sup> /INF <sup>-</sup> ) | 21/36          | 29/7  | 25/1  | 0.142    |
| Revascularization (yes/no)                                    | 38/19          | 26/10 | 15/11 | 0.488    |
| Lipid core (yes/no)   | 23/34          | 25/11 | 22/4  | <0.001   |
| Ulceration (yes/no)   | 17/40          | 20/16 | 14/12 | 0.022    |
| Thrombosis (yes/no)   | 7/50           | 5/31  | 4/22  | 0.924    |
| Hemorrhage (yes/no)   | 15/42          | 15/21 | 9/17  | 0.299    |

*Binomial variables are represented as absolute numbers. Comparison of variables with discrete values was performed by the Pearson  $\chi^2$  test (3x2 groups). The level of statistical significance has been set to  $p=0.05$ . Q1-quartile 1, Q3-quartile 3.*