

Supplement

**Supplement Table 1. Summary of autoantibody (aAb)+ among study populations**

|                                | <b>RA<br/>N=98</b> | <b>At-Risk<br/>N=67</b> |
|--------------------------------|--------------------|-------------------------|
| <b>Individual aAbs</b>         |                    |                         |
| Anti-CCP3+: % yes              | 65.31              | 100.00                  |
| RF IgM+: % yes                 | 61.22              | 20.90                   |
| RF IgA+: % yes                 | 40.82              | 11.94                   |
| <b>Combination aAbs</b>        |                    |                         |
| Any RF isotype (IgM/IgA): %yes | 67.35              | 23.88                   |
| aAb-                           | 21.43              | n/a                     |
| RF isotype+ only               | 13.27              | n/a                     |
| Anti-CCP3+ only                | 11.22              | 76.12                   |
| RF isotype+ and Anti-CCP3+     | 54.08              | 23.88                   |
| <b># aAbs+: % yes</b>          |                    |                         |
| All 3 aAbs+                    | 33.67              | 8.96                    |
| 2 aAbs+                        | 21.43              | 14.93                   |
| 1 aAbs+                        | 23.47              | 76.12                   |
| 0 aAbs+                        | 21.43              | n/a                     |

n/a: not applicable because at-risk participants selected based on anti-CCP3 positivity.