

## Description of Additional Supplementary Files

**File name:** Supplementary Data 1

**Description:** Patients with mCAs.

**File name:** Supplementary Data 2

**Description:** Patients with LOY/XCM.

**File name:** Supplementary Data 3

**Description:** Individuals with germinal line.

**File name:** Supplementary Data 4

**Description:** Genes located on the human Y chromosome with homologs on X and a possible role in immunity.

**File name:** Supplementary Data 5

**Description:** Additional genes located on the human Y chromosome with homologs on X and no known role in immunity.

**File name:** Supplementary Data 6

**Description:** Top 30 differentially expressed genes in blood of individuals with mCAs.