LOSS OF CHROMOSOME Y AND HIGHER MORTALITY IN MEN

Genomic differences between men and women lead to differential susceptibility to some diseases. Lidia Larizza, a former president of the E.C.A., outlined the difference in susceptibility to Covid-19 (see NL 46¹). One of the most debated differences is the lifespan, which is higher in women than in men. Evolutionary pressures on grandmothers have been invoked, because they are more useful for the fitness of grandchildren. Now, an article in Science by Sano et al., 2022 presents evidence that hematopoietic loss of the Y chromosome leads to cardiac fibrosis and heart failure. The results perfectly match the idea that heart failure is more common in men than in women. It could also help explain the difference in lifespan.

- 1. <u>https://www.e-c-a.eu/files/downloads/Newsletters/NL46-July-2020.pdf</u>
- 2. https://www.science.org/doi/10.1126/science.abn3100