

Calculation of volumetric densities

In many cases, cell counts were reported as numbers per square millimeter. To obtain a volumetric density and facilitate comparison with other density estimates, we converted these numbers. For the numbers that had not been corrected for double-counting, we applied a correction as follows:

$$N = \frac{n \times T}{T + D}$$

Where N is the cell number, n is the number of counted profiles, T is the thickness of the sections, and D is the mean diameter of the profiles. As we could not know the diameter of cells counted for each study, we used $15 \mu\text{m}$ as an approximation.

The corrected 2D cell counts were then used to calculate the volumetric density as follows:

$$vN = \frac{n}{T}$$

Where vN is the volumetric density, n is the corrected 2D cell count, and T is the thickness of the sections.