

## Supplementary Figure 1

## Schematic diagram depicting embryogenesis and gametogenesis.

Depending on the timing of mutations during embryonic development, different types of germline mosaicism can arise; star signs indicate different stages at which mutations can arise and the consequential types of mosaicism. Multiple arrows indicate separation of primordial germ cells (PGCs) from other tissues (suggesting that both blood and germ cell lineages are founded by multiple cells from the embryo). Germline mosaic variants, which were detectable in the parents' blood, were likely established before mesoderm tissue separation from PGCs in the parents (dark green stars). One possible explanation for mosaic mutations that are only shared by siblings—we could not detect any excess of alternative alleles in the parents' blood—is that the mutations occurred after separation of PGCs from mesoderm in the mosaic parents (red stars).