New study: Reversing aging in the blood stem cells and the immune system

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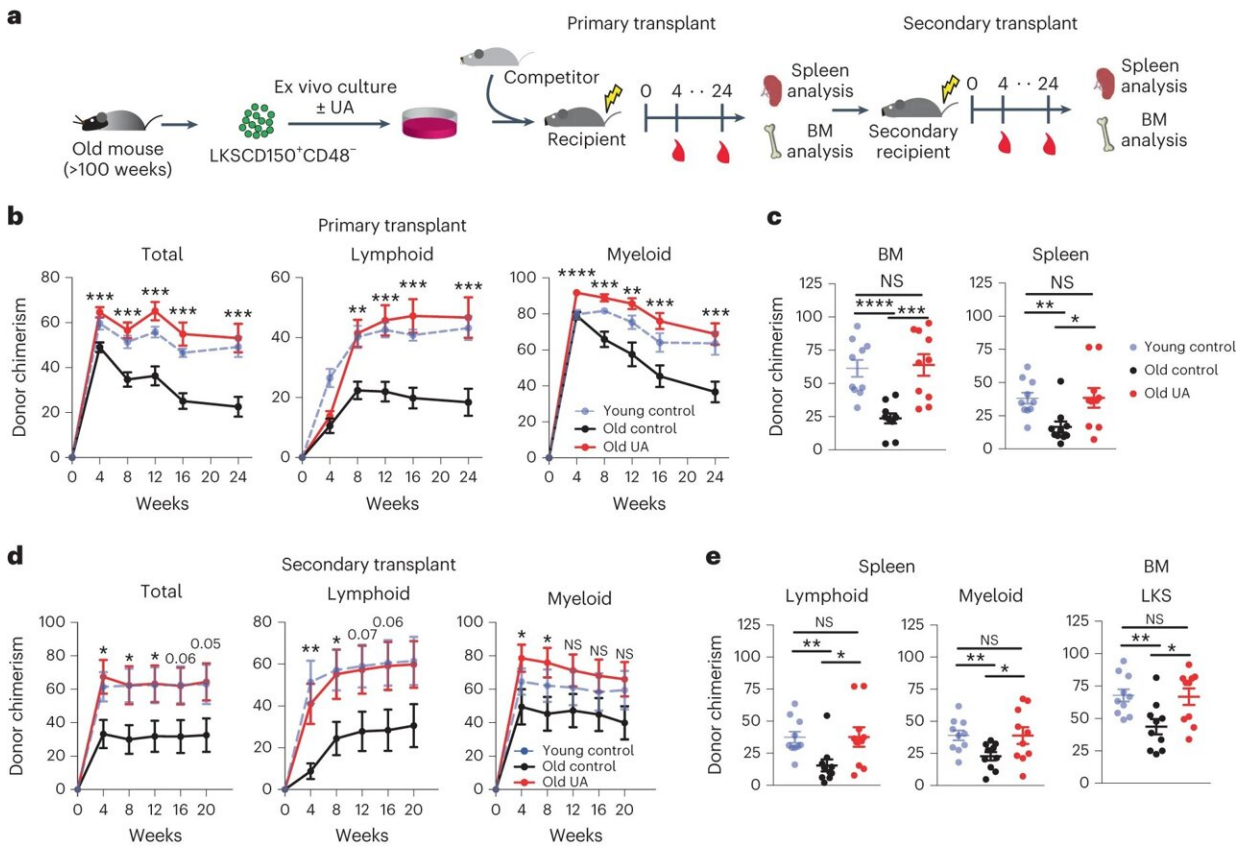

UA in vitro treatment reverses age-associated defects in HSCs. **a**, HSCs isolated from old mouse (100 weeks) BM were cultured for 3 days in the presence of 20 μM UA. After culture, 2,000 cells were transplanted in lethally irradiated primary recipient mice together with BM derived from competitor mice. At the endpoint, BM from primary recipient mice was transplanted into lethally irradiated secondary recipient mice. **b**, Blood donor chimerism analyses of primary transplant at the indicated time points (total: 4 weeks $P = 0.0001$; 8 weeks $P = 0.0002$; 12 weeks $P = 0.0001$; 16 weeks $P = 0.0001$; 24 weeks $P =$

0.0001; lymphoid: 8 weeks $P = 0.0023$; 12 weeks $P = 0.0009$; 16 weeks $P = 0.0006$; 24 weeks $P = 0.0006$; myeloid: 4 weeks P