Humans and whales are the only animals to go through menopause. What can this tell us about aging and fertility?

Out of 5,000 mammals, just five species of whales with teeth – including killer whales, beluga whales and narwhals – are the only others known to have females that regularly live long after they stop reproducing.

By looking at the differences between these two groups, a UK-led team of researchers sought to discover why some whales evolved to get menopause – and what this could tell us about ourselves.

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Female killer whales “regularly live into their 60s and 70s, but the males are all dead by 40,” lead study author Samuel Ellis of the UK’s University of Exeter told an online press conference.

This supports what is known as the “grandmother hypothesis” – that older females care for their grandchildren, therefore helping their species survive in a different way.

But why would it be an evolutionary advantage for these grandmothers to stop having offspring?

“The second part of this story is about competition,” study co-author Darren Croft said.

When killer whale “mothers and daughters try and breed at the same time, the calves of the older females” have a significantly lower survival rate as they compete for resources, he said.

“So they have evolved a longer lifespan while keeping a short reproductive lifespan,” Croft added. “This is just the same pattern of life history we see in humans.”

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