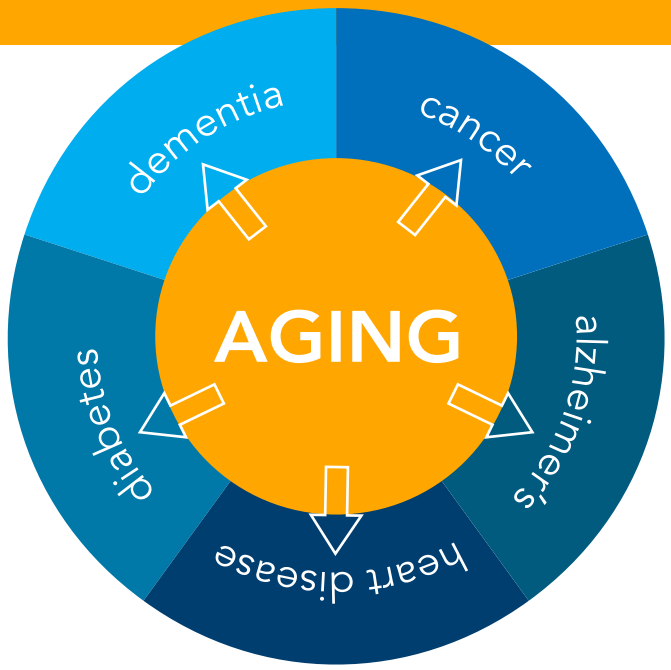
The TAME (Targeting Aging with Metformin) Trial

Extending Health, Decreasing Disease, and Increasing Savings as We Age



Healthspan—our amount of time living independently and free of disability—*can* be extended.

The key to living healthier longer is understanding the biology of how our bodies age.

During the last three decades, scientific research from around the world has demonstrated that the aging process itself is a catalyst for the most common, debilitating diseases, from cancer to diabetes to dementia and more—conditions that sap our health and well-being as we get older.

What if aging could be targeted so that diseases can be diminished and health can be extended?

Today, the scientific community has begun translating the basic science of aging into groundbreaking treatments that can extend our healthy years. One of the most promising efforts is a new study, the **TAME (Targeting Aging with Metformin) Trial.**

The TAME Trial is the first step in a four-step process that aims to:

1. **Establish proof of concept through metformin clinical trials**
2. **Gain indication status for aging from the FDA**
3. **Slow down major diseases by targeting aging**
4. **Develop the next-generation of drugs that target aging**

1. Establish proof of concept through metformin clinical trials | WHY METFORMIN

Metformin is an FDA-approved, first-line drug for the treatment of type-2 diabetes, used successfully for more than 60 years with an outstanding safety record.

Studies have already shown that metformin can delay aging in animals.

These findings point to the likelihood that metformin may influence fundamental aging factors that underlie multiple age-related conditions in humans.

Led by Nir Barzilai, MD, Deputy Scientific Director of AFAR, the TAME Trial is a series of nationwide, six-year clinical trials at 14 leading research institutions across the country that will engage over 3,000 individuals between the ages of 65-79.

These trials will test whether those taking metformin experience delayed development or progression of age-related chronic diseases—such as heart disease, cancer, and dementia—compared with those who take a placebo.

The TAME Trial starts with metformin, but the impact doesn't end with this drug.

2. Gain indication status for aging from the FDA | BEYOND METFORMIN

The TAME trial seeks FDA approval to consider aging as an indication.

In medical terminology, an "indication" for a drug refers to the use of that drug for treating a particular disease. For example, diabetes is an indication for insulin.

Put another way, an indication is a valid reason to use a certain test, medication, procedure, or surgery.

The TAME trial will offer the FDA the opportunity to review whether aging can be made an indication.

indication	intervention
diabetes	insulin
heart disease	statin
aging	**metformin**

If aging is made an indication, we can dramatically speed the development of new treatments for a whole range of age-related diseases.

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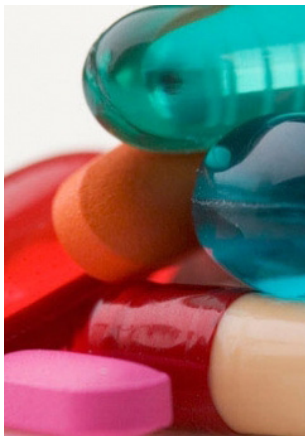
3. Slow down major diseases by targeting aging | BEYOND AGING

Science has helped us learn that the incidence of major diseases increases exponentially as we age. Research into the biology of aging, therefore, is a critical strategy towards helping us grow older, healthier.

Ultimately, drugs that target the basic biology of aging hold the promise of preventing a wide array of diseases.

If aging is made a medical indication and new drugs are developed, then age-related diseases can be treated more effectively and cost effectively.



4. Develop the next-generation drugs that target aging | WHAT'S AHEAD

Like metformin, several promising drugs show great potential and await trials. If successful, the TAME Trial would give the pharmaceutical industry impetus to advance these drugs and transform aging from a period of sickness to a time of extended vitality.

And the benefits of targeting aging extend well beyond us living healthier, longer.

A recent economic analysis showed that slowing or modifying age-related diseases by just 20 percent would save more than $7 trillion in health care spending in the United States alone over the next half-century.

The TAME Trial can extend healthy years and save health care costs by slowing the diseases of aging.

WHAT'S NEEDED | The cost of the TAME Trial is an estimated $55 million, but targeting aging and age-related diseases holds out the promise of **extending healthy life span while saving trillions of dollars.**

As the leader in aging research for more than 35 years, AFAR is spearheading the effort to raise the money needed to fund the TAME Trial and help us all live healthier as we grow older.