What If Aging with HIV Is Just... Aging?

Aging with HIV may differ very little from aging without HIV— until you factor in the collateral damage from all the medicines.

April 2, 2024 By Mike Barr

2026 update: One of my companies, TruDiagnostics has this nifty “TruAge” diagnostic test that incorporates over 600 biomarkers, including telomere length. I am about to try it myself, but first I will try Cyrex Labs’ Lymphocyte MAP. Check out TruAge here, via Rupa Health. With the exception of NY state and sometimes also NJ and RI, they are DIY friendly. But for most of the Cyrex tests, you’ll need to find a phlebotomist.

A provocative paper from HIV (PhD) immunologist Alan Landay, forever involved with the NIH/NIAID/ACTG research enterprise, and (mostly what appear to be Covid researcher) colleagues from University College Dublin (Ireland), Rachel MacCann and Patrick Mallon, appears to ask just this question, applying what is known in the field as the "geroscience hypothesis" to aging with HIV.

(Optional AFAR detour: "What is geroscience?")

At the center of it all? Chronic, low-grade inflammation. (And underneath that? An imbalanced intestinal microfloral community.)

“Aging and HIV share features of intestinal damage, microbial translocation and alterations in bacterial composition that contribute to a pro-inflammatory state and development of age-related co-morbidities,” they write.

(Note: when researchers/scientists talk or write of “microbial translocation,” what they are referring to is what has come to be known colloquially as "leaky gut;“ that is, a challenged, atrophied or inflamed, worn-down mucus and epithelial barriers of the large intestine, where things that should be contained within the GI tract (incompletely digested food particles, fragments of dead gram-negative bacteria known as LPS, a few others), ”leak" into the bloodstream (up to and including the brain and joints and endothelial lining of blood vessels and heart) and cause all kinds of havoc. By “alterations in bacterial composition” (and they really should include fungi such as Candida), they are referring to overgrowths and undergrowths of various members of the gut microbial community— and every now and then, someone who doesn’t belong there at all.

In other words, being 55 or 65 with HIV might not be that different from being 55 or 65 (at least, in

the United States) without HIV: a crappy diet, crappy habits, loveless or stressful marriage (or said to be worse: loneliness), chronic money or work or eldercare worries, trouble sleeping, trouble pooping, trouble getting it up. Hours upon hours of sitting.

I would even go so far as to argue that, at least within the group of people I know, many or most of the folks aging with HIV are actually significantly healthier than many of their/our contemporaries aging without HIV. And while this second part is likely to be controversial, those who are faring the absolute best are the ones who have taken the proverbial driver's seat within the doctor-patient (or nurse practitioner-patient) relationship: saying no to bad advice (or maybe more politely, "Let me get back to you") and thinking for (and protecting) themselves. They are skeptical of lavishly promoted new drugs (and the U.S. medical system generally.) Many of them have found ways of taking even their ARVs that does not require daily dosing— mostly in order to minimize lifetime total drug exposure and the toll on their bodies (and gut flora/gut lining!). But more on that another day.

Epigenetic "clocks" notwithstanding, I would argue that many or most HIV+ folks in their 60s and 70s are very likely healthier than most of HIV- retirement-aged America. It's just that the healthy HIV+ folks rarely sign up to be studied.

It's admittedly a bit trendy right now. Just do a search for Gut-Liver Axis, Gut-Brain Axis, Gut-Skin Axis, Gut-Bone Axis, Gut-Heart Axis, Gut-Vagina, Gut-Prostate, Gut-Neuroendocrine, Gut-Joint, Gut-Lung, Gut-Fetal. You get the picture.

But in this particular instance, I would argue that just because it's a bit of a ubiquitous "hot topic" these days, doesn't mean they're not onto something.

And they extend their proposition:

"Therapeutically targeting fundamental aging processes along a common pathway of inflammation [italics mine] could have a greater impact on alleviating or delaying aging-associated comorbidities than addressing 'each disease' [quotes mine] individually."

In many ways it's what my Mom might call a hallelujah moment: chill on all the Whac-A-Mole approaches HIV clinicians (and to be fair, just about all conventionally trained physicians/NPs in

Western countries) have been applying to date— a pill for hypertension, a pill for high cholesterol, a pill for insulin/blood glucose issues, a pill for ED, a pill for insomnia, a pill for reflux, a pill for depression, an injection perhaps for sarcopenia or low libido— and instead dig a little deeper (take a breath, pause, look, think) and address the more fundamental underlying issues/imbalances. It's something the functional medicine field has (okay, admittedly a bit self-righteously) been doing for like twenty years now. (And, might I add, with fantastic success.)

Just do a web search for functional medicine, nutritional medicine, restorative medicine. Even precision medicine.

Rachel, Alan, Paddy: welcome to, er, the late 20th century— even if you've arrived 20-30 years tardy.

It's not all (yet) balloons and party streamers though.

> In many ways their proposal is what my mother might call a Hallelujah moment: ditch the Whac-A-Mole medicine you learned in med school– prescribing a different pill for each diagnosis– and dig a little deeper to discover (& correct) the common underlying cause.

They (and I'm hoping other like-minded folks who share their new interest/perspective) are going to need a little help expanding their thinking when it comes to therapeutics. Besides the yawn-inspiring candidates, metformin and rapamycin, they seem to be looking at (I kid you not) cancer drugs as senolytics or senomorphics! The list includes ruxolitinib, panobinostat, but they (and, to be fair, others) seem to be particularly keen on dasatinib. Apparently there is even an ACTG protocol on the drawing board that will test (as many other groups have already done) dasatinib in combination with quercetin. All out of ideas, guys? Or just playing it safe?

Don't get me started on what a colossal failure the immunology research effort of the ACTG has been over the past 35 years. Not only have they come up with not a single therapeutic for HIV, but they also completely missed the boat in terms of supporting the body as it weathers the daily onslaught not so much of HIV but of all the medicines thrown at it— and then their side effects, and their side effects, and their side effects, in a sort of hall of mirrors exercise in glimpsing infinity. And, dare I say, advanced our collective knowledge of HIV immunology by almost nothing. Any chance we can we get that money back?

And it's not just the failure of efforts, however bunglingly bureaucratic and token, taken. It's the many, many efforts untaken— the many opportunities lost.

Yes, the CRIs and CRAs and Health Groups were once going to fill this void. But with a few notable exceptions, for various reasons nothing really ever came of any of it.

One has to wonder where we might be today if clinicians and researchers (including from other medical traditions) who actually had experience and knowledge in these areas had been either included or independently funded to pursue healing strategies.

Please don't get me started on what a colossal failure the entire immunology research effort of the ACTG has been over the past 35 years. (Refund, anyone?)

The naturopathic and what, around 1990 or so, came to be known as the functional medicine community, as just two examples, have been doing "4R"-type gut restoration protocols for decades.

They knew about the importance of methylation: how to measure it; how to support it.

They knew about (thank you Lark Lands!) the degradation pathways of medicines (aka nutrient depletions caused by prescription drugs) and the need to restore vitamin, mineral, antioxidant and even protein stores depleted through drug metabolism. I could go on.

In Chinese and Ayurvedic medicine, just to close here, they have fantastic, millenia-tested, mostly culinary herbs-based formulas that support gut healing, gut barrier integrity, motility, microbiome diversity, and on and on and on. Heck, the entire world of Chinese herbal medicine was about only two things: fertility and longevity!

When I first began my study of what they still called at the time Oriental medicine in 2009, I tried to generate interest in some of these avenues of research, but the field had already been hijacked by you-know-who.

At the time, we were interested in Gui Pi Tang (sometimes called "Ginseng and Longan Formula" but contains 15 ingredients in all) and Bu Zhong Yi Qi Tang (sometimes called "Ginseng and Astragalus Formula" in English and contains 10 ingredients), as they had shown promise in folks with poor CD4 T-cell recovery after HAART. Later I discovered formulas like An Zhong San (Fennel and Cardamom Formula), Ping Wei San (Magnolia and Ginger Formula), Kan Ning Wan (Curing

Pills), and some antifungal/antimicrobial formulas (think oregano, thyme, dill, nutmeg, clove, garlic, ginger, and although not a culinary herb, berberine is often common in many formulas) that very gently performed the "weeding," alluded to at the beginning of this post, and restored vitality. To say nothing of the entire field of mycotherapies: Ganoderma, Cordyceps, Agaricus, others. All opportunities squandered.

That said, we welcome the late comers, their ideas, their paper(s) all the same. It's just that we don't have time for more bureaucratic befuddlement. Or stale ideas.

I imagine we will both agree and disagree on different bits of this. And I look forward to being able both to update and to move forward this fascinating (and I would add, vitally important) area of discussion and research.

> "The good news," quips Buck Institute president and CEO Eric Verdin, "is that over 90% of what causes aging comes from lifestyle"– diet, sleep, exercise, stress mgt– "and that means it's within your control."

One final thought: outside of the world of HIV, as is probably already well known, there is a vast industry of both research and thinkers in the field of anti-aging— and I would argue that 100% of it applies to HIV+ and HIV- alike.

Some of the most well-known or respected (some a bit far-out for my taste) include Eric Verdin (Buck Institute On Aging), Dale Bredesen, Valter Longo, Robert Lustig. (Dave Asprey, Liz Parrish and others are a bit too extreme for me. Peter Attia, too taken with himself (and as a result, blinkered). But I'm surely leaving some key folks out.

And just when this all starts to feel a bit overwhelming, I would remind you that— also potentially controversial— Weston A. Price and his organization bring it all back down to earth: eating and living and playing as we were designed to. It has been referred to as nourishing traditions. And since they have "chapters" in most communities, it might also be an opportunity to connect. You might check them out.

Further reading:

- Turning Back Time: Can Biological Aging Be Slowed, and Can Epigenetic Clocks Measure It? (Nature 2022)

- How Old Are You Really? New 'Aging' Clock Provides Clues ((Harvard Professor) William A. Haseltine in Forbes)
- Epigenetic clocks and research implications of the lack of data on whom they have been developed (2023)
- DNA methylation aging clocks: Challenges and recommendations (Genome Biology 2019)
- Aging clocks & mortality timers, methylation, glycomic, telomeric and more. A window to measuring biological age (Aging Medicine 2022)
- The relationship between epigenetic age and the hallmarks of aging in human cells (Nature Aging 2022)
- Epigenetic Clocks: In Aging-Related and Complex Diseases (Cytogenetic & Genome Research 2023)
- Stress, diet, exercise: Common environmental factors and their impact on epigenetic age (Ageing Research Reviews 2023)
- What Is Geroscience?
- The Emergence of Geroscience (2016 paper)
- 2021 interview with Dr. Felipe Sierra of the Alliance for Aging Research
- a February 2022 paper Dr. Landay collaborated on, "Chronic HIV Infection and Aging: Application of a Geroscience-Guided Approach"
- a September 2022 special issue dedicated to HIV & Aging from the (heavily pharma funded) IAVI, so just keep that in mind

---

Mike Barr, a longtime Poz Contributing Editor and founding member of and scribe for the Treatment Action Group (TAG), is a functional medicine practitioner and herbalist in NYC. Reach out to him here. Or sign up for his curated (and wildly discounted: 30% off first order; 25% off all auto-refills) professional grade supplement dispensary here.

© 2026 Smart + Strong All Rights Reserved.
http://beta.docker.poz.com/blog/aging-hiv-just-aging