Attribute	TallyAge™ Test	TruDiagnostic
Tissue Collection	Non-invasive, painless cheek swab	**Blood.** This might be slightly more difficult, however, over 99% of algorithms have been created in blood tissues. Additionally, blood controls are easier as we have advanced algorithms to control for immune cell changes. This means much better resolution and less error. For instance, if someone is sick, we don't want their immune cells to throw off readings of biological aging. It has recently become a point of emphasis across the scientific community as you can see at the following link as discussed by Eric Verdin of the Buck Institute. **Learn More**
Sample Size	Samples from more than 8,000 people	We have over 20,000+ patients tested and over 70,000 have been used to validate our algorithms.
DNA Methylation Technology	Built using the modern MethylationEPIC array that measures ~ 850,000 DNA sites	We use the EPIC 850k Array to train our samples. However, we also use this array to TEST our samples. They choose a cheaper, smaller, less robust testing to generate far less data.
Chronological Age Range	18-100 years	We want 2nd and 3rd generation trained clocks. Age validation datasets from 08-102 years of age. Our training datasets are from 11-100. However, this really doesn't matter if you can prove your clocks work in all ages! For this you need published validation studies.
Diversity	Balanced number of females and males; significant ethnic and racial diversity	Diverse patient populations equal distribution of sex. This includes validation **of** African American, Asian, Latino, and Caucasian cohorts!
Test Reliability	Optimized to be reliable across repeat measurements	ICC values >.96 for every algorithm that is less than a 4% variation. They don't publish their ICC value. They certainly don't have independent validation. See ours from published studies below. Also, see our internal validation of 300 + patients **here**.
Model Type	Next-generation model that was trained using a novel method and to incorporate holistic lifestyle factors	No first generation clocks, as they are not as predictive as 2nd or 3rd. First generation clocks have shown to go up with caloric restriction which we know is not correct! See the nature study which references this **here**.

What They Choose Not To Compare?

Immune Cell Controls	None	Published and patented Advanced12 cell immune deconvolution methods (cell changes won't impact accuracy). We even have a saliva deconvolution method. See ours **here**.
Studies which prove accuracy in different ethnic cohorts?	None	Yes, our data has been validated in many diverse cohorts like the Health and Retirement Study and Normative Aging Study.
Studies which show relationship to outcomes?	None	Yes, we have had our algorithms validated in the Health and Retirement Study, the Normative Aging Study, the Framington Heart cohort and more. Find all the referenced to the DunedinPACE literature **here**.
Studies which show change with validated anti-aging interventions?	No	Yes, the only algorithm proven to respond in a significant way to validated anti-aging interventions like Caloric Restriction. Published in Nature **here**. This criteria was outlined in this **article here**.
Types of Outputs/Analysis	Only Age	**We output the following:** - Intrinsic Age - 12 Cell Immune Subset Reporting - Immune Age (Extrinsic) - DunedinPACE - the only 3rd generation clock and only clock proven to significantly respond to validated aging interventions -Telomere Length - Mitotic Clock - Diabetes Risk - Obesity Risk - Weight Loss Response to Caloric Restriction - Smoking Status Report - Drinking Status Report **Soon we will report:** - Our OMICm Clock trained on 7500 proteins, 3500 metabolites, and 75 clinical variables (Developed with Harvard) - DNAmFitAge which predicts (Developed at UCLA) - Cardiovascular Disease Methylation Risk Score - Inflammatory Score Report (IL-6 and CRP prediction) - Age of Each Organ System Reporting
Include Clinical Covariates?	No	Yes, our OMICm Age will have over 100+ clinical covariates across algorithms.
Includes Metabolomics Data?	No	Yes, our OMICm Age was trained on 3500+ Metabolites.
Includes Proteomic Data?	No	Yes, our OMICm Age was trained on 8,000 different and unique proteins.
Have released data showing comparisons to other algorithms?	No	Yes, see comparisons in the FHS study **here** and in the Health and Retirement Study **here**.
Have released data on precision (ICC values) instead of making claims of others high retest error rates?	No	Yes, see comparisons in the FHS study **here**.
Time to receive data	Some patients have claimed over 6 months turnaround	2-3 weeks from receiving sample.
Performing analysis in their own lab?	3rd-Party Lab	CLIA certified lab