The Arising

OCTOBER 19, 2026

DAILY ISSUES



EDITORIAL ILLUSTRATION / AN ARTISTIC INTERPRETATION

The quiet work behind a thought.

COGNITION / DAILY RHYTHMS / MOVEMENT

The full original issue follows, with its articles and sources preserved.
Editorial review copy. This illustration update is not a new evidence audit.

ARISING HEALTH

The Arising

HEALTH INTELLIGENCE

LONGEVITY
SCIENCE
MARKETS
HUMAN HEALTH

Tracking emerging Medical Intelligence from a Physician's View

MONDAY, OCTOBER 19, 2026 | VOL 1 NO 17 | ARISING HEALTH

9 stories across 2 desks | ~21 minutes to read | 166 briefs grouped by topic

Checked before print. 240 claims in 9 articles and 166 briefs verified against their sources by a separate reviewer · 8 articles and 24 briefs corrected before publication

LONGEVITY & HEALTHSPAN

4 STORIES · 11 MIN →

1

Faulty Myelin-Making Brain Cells Linked to Faster Cognitive Decline After 70

Nearly everyone loses some thinking skill in later life, but the pace varies...

3 MIN READ

2

Sleep Scientists Say Permanent Standard Time Better Fits the Body Clock

If governments stop changing the clocks twice a year, which time should they...

3 MIN READ

3



Exercise Lowers Gene DEAF1 to Restore Aging Muscle in Animals

Exercise may protect aging muscle by turning down a single gene, according to...

3 MIN READ

4

Overlooked Peptide P3 May Help Drive Alzheimer's, UC Santa Cruz Chemist Argues

For decades, a small protein fragment called P3 was dismissed as harmless in...

2 MIN READ

MARKETS & STRATEGY

5 STORIES · 10 MIN →

1

Rubedo's Topical Drug Cut Skin Epigenetic Age by 2.1 Years, Company Says

2 MIN READ

2

Social Security Sets 3.6% Benefit Increase for 2027, Largest Since 2023

1 MIN READ

3

Unemployed Workers 55 to 64 Average Over Eight Months Without a Job

3 MIN READ

4

Alector Prices $75 Million Stock Offering to Fund Neurodegeneration Work

2 MIN READ

5



CMS Proposes Medicare Advantage Directory and Part D PBM Rules

2 MIN READ

BRIEFS

166 SHORT STORIES · 48 MIN →

Fasting, autophagy & metabolic health 12 | Sleep science & circadian biology 19 | Nitric oxide & vascular health 34 | Clinical trials 31 | Epigenetic reprogramming & age reversal 1 | Gut microbiome & brain axis 4 | Alzheimer's & cognitive decline prevention 38 | Women's health & hormonal transitions 15 | Mitochondria & cellular energy 1 | Longevity research 10 | In the news 1

The Arising

HEALTH INTELLIGENCE

MONDAY, OCTOBER 19, 2026 · LONGEVITY & HEALTHSPAN DESK

IN THIS EDITION · LONGEVITY & HEALTHSPAN

1. **Faulty Myelin-Making Brain Cells Linked to Faster Cognitive Decline After 70**
2. Sleep Scientists Say Permanent Standard Time Better Fits the Body Clock
3. Exercise Lowers Gene DEAF1 to Restore Aging Muscle in Animals
4. Overlooked Peptide P3 May Help Drive Alzheimer's, UC Santa Cruz Chemist Argues

LONGEVITY & HEALTHSPAN · STANDARD READ · 3 MIN NATURE MEDICINE · 2 SOURCES

Faulty Myelin-Making Brain Cells Linked to Faster Cognitive Decline After 70

Nearly everyone loses some thinking skill in later life, but the pace varies widely from person to person. A new study suggests that one reason may lie in brain cells long seen as purely helpful: the ones that build the insulation around nerve fibers.

The work, published in Nature Medicine in 2026 by Craig and colleagues, combines two kinds of evidence. First, it is an observational study of human brain white matter, which links the tissue's features to each person's own rate of cognitive decline. Second, it includes experiments in mice. An observational link in people cannot prove cause. The mouse work was designed to test cause. The abstract available to us does not give participant or animal numbers.

The cells are called oligodendrocytes. They make myelin, the fatty coating that helps nerve signals travel efficiently. The researchers examined changes in human white matter, the brain's wiring tracts, and compared them with how quickly each person's cognition had changed with age.

According to the study's abstract, worse cognitive trajectories were "unexpectedly" associated with smaller myelinated axons (the nerve fibers themselves), thicker myelin, and more oligodendrocytes. Those cells also showed lower activity of a gene pathway called NRF2.

To test whether that pathway matters, the team studied aged mice in which NRF2 was knocked out only in oligodendrocytes. These mice showed attenuated cognitive improvement over time. Their white matter changes mirrored those seen in the human brains with greater decline. The authors conclude that oligodendrocytes contribute to cognitive decline and that NRF2 is a possible therapeutic target.

ScienceDaily's coverage, drawing on a University of Edinburgh release, adds context the abstract does not. It says the human data came from the Lothian Birth Cohort 1936, in which 1,091 people were enrolled and 866 completed cognitive testing after age 70. It says brain tissue was examined after death in a subset of participants. It also says the pattern tracked how fast people declined, not how well they scored at one age. We could not verify these details from the abstract alone.

The coverage also says drugs that act on NRF2, including one prescribed for multiple sclerosis, might one day be repurposed. That goes further than the study shows. The abstract calls NRF2 a target but reports no drug test in older adults with cognitive decline. The coverage says further research is needed to learn whether such treatments would help. Readers should not start or stop any medication or supplement because of this study without talking to their clinician. Veronique Miron, a senior author, said in the coverage that no current treatments exist for this decline.

Why does this matter for ordinary ageing? If the finding holds, part of normal memory and thinking decline may come from faulty upkeep of the brain's wiring, not only from the plaques and protein clumps that dominate Alzheimer's research. The abstract does not mention amyloid, so it cannot say how the two relate. The weakest point is that the human evidence is observational and the mouse model is only one test of cause, so whether these white matter changes drive decline in people remains unproven.

This is a different line of research from the Arising's October 6 report on a gut bacterial molecule, ImP, linked to Alzheimer's-related brain changes. The two studies are unrelated, but both look at factors in cognitive decline beyond a single cause.

WHAT TO WATCH NEXT

Whether other groups find the same white matter pattern in different populations, and whether any NRF2-targeting drug is tested for effects on thinking in older adults.

Sources: Nature medicine (2026), ScienceDaily (University of Edinburgh / Nature Medicine)

IN THIS EDITION · LONGEVITY & HEALTHSPAN

1. Faulty Myelin-Making Brain Cells Linked to Faster Cognitive Decline After 70
2. **Sleep Scientists Say Permanent Standard Time Better Fits the Body Clock**
3. Exercise Lowers Gene DEAF1 to Restore Aging Muscle in Animals
4. Overlooked Peptide P3 May Help Drive Alzheimer's, UC Santa Cruz Chemist Argues

LONGEVITY & HEALTHSPAN · STANDARD READ · 3 MIN

CMAJ : CANADIAN MEDICAL ASSOCIATION JOURNAL = JOURNAL DE L'ASSOCIATION MEDICALE CANADIENNE · 2 SOURCES

Sleep Scientists Say Permanent Standard Time Better Fits the Body Clock

If governments stop changing the clocks twice a year, which time should they keep? A new analysis in the Canadian Medical Association Journal (CMAJ) says permanent standard time, because it keeps more morning light in the part of the day when the body clock needs it most.

This is not a new experiment. The paper, by Raymond Lam, Ralph Mistlberger, Patrick Baylis and Anita Choi, is a policy analysis that pulls together existing research. It has no participants of its own. Much of the evidence it cites is observational, meaning it finds links between light, sleep and health but cannot prove cause. The authors say the evidence for health effects is accumulated, and they call the effects on economic and education outcomes unclear.

The biology is straightforward. According to the paper, the master clock in the brain runs a little slow, about 24.2 hours per cycle. Daylight resets it each day. Morning light moves the clock earlier. Evening light moves it later. Morning light therefore helps body time match the time set by work and school, and evening light works against that.

Modern life already pushes the clock later, the authors write. Many people spend the day indoors and miss bright morning light. Electric lights and screens extend light into the evening. The result is what researchers call social jet lag: waking for work or school before the body is ready. Observational studies link it to short sleep, poorer mental health, metabolic risk and cognitive problems.

Permanent daylight saving time (pDST) would make this worse in winter, the authors argue. It shifts daylight an hour later, so winter mornings stay dark longer and evenings stay light longer. That works against the body clock at both ends of the day.

Mood is a particular concern. The paper estimates 1% to 3% of people in Canada live with seasonal affective disorder, and as many as 15% have milder winter changes in mood, sleep, appetite and energy. Teenagers aged 12 to 17 are most affected. The leading explanation is a delayed body clock. Early morning bright light is the standard treatment because it shifts the clock earlier. The authors say pDST pushes in the opposite direction.

Geography points the same way, though these are correlations. Seasonal affective disorder prevalence rises by 0.2% for each degree of latitude. In US county data, people living on the western edge of a time zone, where the clock-time sunrise is later, had up to 2 more suicide deaths per 100,000 people each year than those on the eastern edge. A 2025 modelling study found the health benefit of pDST was a third lower than that of permanent standard time (pST).

The paper also describes costs of later solar time. One study found an hour of later sunset reduced weekly sleep by nearly an hour and long-run earnings by about 5%. A Florida study linked an extra hour of morning sunlight to modestly higher adolescent math and reading scores. The authors stress the overall economic and education picture is unclear.

The analysis does not claim standard time is free of trade-offs. Earlier dusk limits evening activities. Earlier summer sunrise may wake some people too early. Light also varies by place, so the effect of either choice differs across Canada, and it matters less near the poles and equator.

The Irish Times, which reported on the paper, quoted Mistlberger: "Our biological clocks need morning light to stay synchronised with the 24-hour day. Permanent daylight saving time moves that light an hour later just when winter mornings are already darkest." The newspaper also cited a 2020 PLoS Computational Biology

report of more fatal traffic accidents (up to 30%) and about 4% more heart attacks around the spring change. Those figures come from the coverage, not from the CMAJ text reviewed here.

For individuals, the clock policy is out of their hands, and the CMAJ paper offers no personal advice or plan for adjusting to a clock change; its recommendations are aimed at policy. It describes early morning bright light therapy as the evidence-based treatment for seasonal affective disorder, but readers should not start or stop any treatment, including light therapy, without talking to their clinician. The Irish Times noted that clocks in Ireland move back on October 25.

Yukon adopted pDST in 2020. British Columbia followed in March 2026, then Alberta and the Northwest Territories. In July, the US House passed a bill for nationwide pDST. What to watch next is whether the US Senate takes up that bill, since the authors say Canada would likely be pressured to follow.

Sources: CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne (2026), The Irish Times (reporting on a Canadian Medical Association Journal analysis)

IN THIS EDITION · LONGEVITY & HEALTHSPAN

1. Faulty Myelin-Making Brain Cells Linked to Faster Cognitive Decline After 70
2. Sleep Scientists Say Permanent Standard Time Better Fits the Body Clock
3. **Exercise Lowers Gene DEAF1 to Restore Aging Muscle in Animals**
4. Overlooked Peptide P3 May Help Drive Alzheimer's, UC Santa Cruz Chemist Argues

LONGEVITY & HEALTHSPAN · STANDARD READ · 3 MIN

PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA · 2 SOURCES

Exercise Lowers Gene DEAF1 to Restore Aging Muscle in Animals

Exercise may protect aging muscle by turning down a single gene, according to a new study in fruit flies and mouse cells. The work is laboratory research, not a human trial, and it did not test when exercise should begin.



Photo: "Fitness programming Greenville Aquatics &", CC0

The work was published in the Proceedings of the National Academy of Sciences of the United States of America in 2025. The team used fruit flies and cultured mouse muscle cells called C2C12 myotubes. The full text we

reviewed did not give the number of flies per experiment. The study's abstract and the press coverage describe the findings as applying to animals, not people.

The gene is called DEAF1. Muscle needs a balance between making new proteins and clearing out damaged ones. A cell-growth pathway called mTORC1 helps run that balance. In aging muscle, the authors write, mTORC1 becomes overactive. That is linked to sarcopenia, the loss of muscle mass and function with age. What drives the overactivity was unclear.

The researchers report that DEAF1 is one driver. According to the study, DEAF1 binds the promoter of the mTOR gene and raises its activity. In the mouse muscle cells, they found 16,611 DEAF1 binding sites, about 75% at gene promoters. More DEAF1 meant more mTOR messenger RNA. Less DEAF1 meant less.

In flies, muscle strength was tracked by climbing ability at weeks 1, 3 and 6. Climbing declined by week 6. Lowering Deaf1 in muscle significantly preserved muscle function. Raising it had no effect early on but worsened defects at week 6.

Aged fly muscle showed more protein production, less clearing of damaged proteins, more protein clumps and more markers of cell senescence, a state in which cells stop dividing and can harm nearby tissue. Lowering Deaf1 reduced these changes. Raising it intensified them. The mTORC1-blocking drugs rapamycin and everolimus suppressed Deaf1-induced muscle defects in flies. This supports the idea that mTORC1 sits downstream of DEAF1. In the mouse cells, the same pattern held. These were experiments in animals and cells; nobody should start, stop or change any medication, treatment or exercise regimen without consulting their clinician.

Exercise enters through a family of proteins called FOXO. The abstract states that exercise suppresses Deaf1 by activating FOXO. That restores mTORC1 balance and eases muscle aging. When FOXO was inhibited, or Deaf1 was overexpressed, the benefits of exercise were blocked. This is the strongest evidence in the paper that the pathway is needed for exercise to work in these models.

Here is what it may mean for health, with caution. The study did not test when exercise should begin, and it did not study people. The press release from Duke-NUS Medical School, which led the work, says exercise may no longer fully restore muscle repair when DEAF1 is extremely high or FOXO activity is very low, and that the benefits may diminish when the system becomes too disrupted. The release also states that the findings do not suggest exercise loses its value with age. Whether any of this applies to people is untested, and this is where the argument is weakest: it rests on animal and cell work and says nothing about timing.

The release quotes lead author Tang Hong-Wen: "Exercise can reverse this process, correcting the imbalance." The study's own language is similarly strong: its title says exercise will reverse muscle aging, and the text says the pathway rejuvenates aging muscle. Its closing caution is that targeting the FOXO-DEAF1-mTORC1 axis may offer therapeutic potential.

One caveat on dates. The release is dated Oct. 15, 2026, but the paper is from 2025. Coverage of the mouse experiments comes from the release, since the portion of the paper we reviewed centered on flies and mouse muscle cells.

WHAT TO WATCH NEXT

Whether DEAF1 levels and FOXO activity can be measured in human muscle, and whether studies in older adults show that they predict who benefits most from exercise.

Sources: Proceedings of the National Academy of Sciences of the United States of America (2025), ScienceDaily (Duke-NUS Medical School release)

IN THIS EDITION · LONGEVITY & HEALTHSPAN

1. Faulty Myelin-Making Brain Cells Linked to Faster Cognitive Decline After 70
2. Sleep Scientists Say Permanent Standard Time Better Fits the Body Clock
3. Exercise Lowers Gene DEAF1 to Restore Aging Muscle in Animals
4. **Overlooked Peptide P3 May Help Drive Alzheimer's, UC Santa Cruz Chemist Argues**

LONGEVITY & HEALTHSPAN · STANDARD READ · 2 MIN

CHEMBIOCHEM : A EUROPEAN JOURNAL OF CHEMICAL BIOLOGY · 2 SOURCES

Overlooked Peptide P3 May Help Drive Alzheimer's, UC Santa Cruz Chemist Argues

For decades, a small protein fragment called P3 was dismissed as harmless in Alzheimer's disease. A chemist now argues it is "most likely, not an innocent bystander" and may be helping drive the condition.

The source is a perspective article in the journal ChemBioChem, written by Jevgenij Raskatov of the University of California, Santa Cruz. It is a review and opinion piece, not a new experiment. It sums up lab research, including work from Raskatov's own group, and it involves no patients. Only the abstract was available to us, so this report is limited to what the abstract says.

Here is the background. Alzheimer's research has centered on amyloid β (Aβ), a protein fragment that clumps in the brain. It is cut from a larger parent protein by an enzyme called β-secretase. If a different enzyme, α-secretase, cuts the parent protein instead, a shorter fragment called P3 can form.

According to the abstract, P3 has received little attention. It is often treated as "nonamyloidogenic and nontoxic," meaning it is assumed not to form the sticky clumps seen in Alzheimer's and not to harm nerve cells.

Raskatov writes that his research, and that of others, shows otherwise. His group named the peptide Amyloid α (Aα). The abstract says it readily forms oligomers, which are small clusters, and fibrils, which are long threads. It is "potentially neurotoxic." It may also interact with Aβ and change how Aβ clumps together and how toxic it is.

The wording matters. The abstract says "potentially" and "may." It does not say P3 causes Alzheimer's. It calls for revising the amyloid cascade hypothesis, the long-standing idea that Aβ buildup starts the disease, to include P3. The author calls that revision "urgently needed." The weakest point is that this is one chemist's argument built largely on his own group's lab work, and whether P3 matters in patients is still unknown.

The coverage on ScienceDaily, from UC Santa Cruz, adds more detail than the abstract gives. It says P3 forms clumps faster than Aβ and may be less toxic than Aβ. It also says an independent UK group confirmed the findings, according to Raskatov, and that at least four published papers cited his work as showing P3 was harmless. We could not check those points against the full paper. The coverage also quotes Raskatov: "There's still more research to be done. But this could turn Alzheimer's research on its head."

What does this mean for people worried about Alzheimer's? For now, nothing changes in daily life. The evidence is from lab studies, and the abstract offers no human treatment data. There is no basis here for any change in diet, supplements or habits. Nor should anyone start or stop any medication or treatment without talking to their clinician.

The longer-term question is about treatment. Raskatov argues that the benefits of Aβ-targeting drugs such as lecanemab and donanemab, which have been approved, remain limited. If P3 does contribute to disease in people, therapies that ignore it might miss part of the problem. If it does not, researchers will have ruled out one more suspect. Either answer would sharpen how the field chooses drug targets.

WHAT TO WATCH NEXT

Whether other labs confirm that P3 clumps and harms nerve cells, and whether studies in animals and people show that it plays a real role in Alzheimer's.

Sources: Chembiochem : a European journal of chemical biology (2026), ScienceDaily (University of California, Santa Cruz)

The Arising

HEALTH INTELLIGENCE

MONDAY, OCTOBER 19, 2026 · MARKETS & STRATEGY DESK

IN THIS EDITION · MARKETS & STRATEGY

1. **Rubedo's Topical Drug Cut Skin Epigenetic Age by 2.1 Years, Company Says**
2. Social Security Sets 3.6% Benefit Increase for 2027, Largest Since 2023
3. Unemployed Workers 55 to 64 Average Over Eight Months Without a Job
4. Alector Prices $75 Million Stock Offering to Fund Neurodegeneration Work
5. CMS Proposes Medicare Advantage Directory and Part D PBM Rules

MARKETS & STRATEGY · STANDARD READ · 2 MIN

COMPETITIVE LANDSCAPE · LONGEVITY.TECHNOLOGY

Rubedo's Topical Drug Cut Skin Epigenetic Age by 2.1 Years, Company Says

Rubedo Life Sciences says a topical drug lowered the epigenetic age of treated patients' skin by 2.1 years on average by one measure after just four weeks, according to Longevity.Technology. The report is a company presentation of a small early trial, and we could not read the original page.

The company presented Phase 1b results at the ARDD conference. Patients with atopic dermatitis used the topical drug, RLS-1496, for four weeks. Across 11 paired samples, average skin epigenetic age fell by 2.1 years, according to the MitraBio aging clock, run by an independent lab. The best responder measured 11.7 years younger at Day 63, about a month after the last application.

Rubedo also reported fewer senescence markers and more collagen in biopsies, including a 10% rise in type III collagen fibers. Senescent cells are aged cells that stop dividing. RLS-1496 targets a protein called GPX4 and pushes vulnerable

senescent cells toward ferroptosis, a form of cell death. Rubedo calls this approach "SenoAdaptive."

One finding stands out, and it comes with a caveat. Among about 10,800 blood proteins screened, the inflammatory marker CCL22 fell 17% in treated patients and rose 19% in the vehicle group. This happened even though most patients had no detectable drug in their blood. But the vehicle group had only four patients, so the comparison is thin.

For competitive positioning, the data show Rubedo reporting results beyond atopic dermatitis. The company also reported a 49% mean lesion reduction in 22 patients in its actinic keratosis program. A Phase 2a trial in androgenetic alopecia is slated to begin in October. The report does not say whether those programs use RLS-1496 or the same mechanism, how the results compare with rivals, or what regulators will accept as an endpoint.

That last point matters for the market. An epigenetic clock reading is not an established regulatory endpoint, and the report does not address it. The results come from a small trial in atopic dermatitis patients, and the report does not say whether the age change translates into clinical benefit. This is the weakest part of the story: a drop in a clock reading is not the same as healthier or better-looking skin.

RLS-1496 is an investigational drug. Readers should not start or stop any medication, treatment or supplement without consulting their clinician.

WHAT TO WATCH NEXT

The start of the alopecia Phase 2a trial, and whether Rubedo reports larger, controlled data showing the aging-clock change tracks real clinical outcomes.

Source: Longevity.Technology

IN THIS EDITION · MARKETS & STRATEGY

1. Rubedo's Topical Drug Cut Skin Epigenetic Age by 2.1 Years, Company Says
2. **Social Security Sets 3.6% Benefit Increase for 2027, Largest Since 2023**
3. Unemployed Workers 55 to 64 Average Over Eight Months Without a Job
4. Alector Prices $75 Million Stock Offering to Fund Neurodegeneration Work
5. CMS Proposes Medicare Advantage Directory and Part D PBM Rules

MARKETS & STRATEGY · STANDARD READ · 1 MIN SOCIAL SECURITY ADMINISTRATION

Social Security Sets 3.6% Benefit Increase for 2027, Largest Since 2023

Retiree households will have more money to spend in 2027, but how much of it reaches the market is less clear. The Social Security Administration announced on October 14, 2026, that benefits will rise 3.6% next year, the largest adjustment since the 8.7% increase for 2023.

According to the agency, the average retirement benefit goes up by about $75 a month. The Senior Citizens League estimates the figure at $75.15. Nearly 72 million Social Security beneficiaries receive the increase starting in January 2027. About 7.3 million Supplemental Security Income recipients see higher payments starting December 31, 2026.

The adjustment follows 2.8% in 2026, 2.5% in 2025 and 3.2% in 2024. It is tied to CPI-W inflation for July through September.

For businesses that serve older customers, the scale matters. Benefits are a steady income source for a very large group. NBC News, citing the Senior Citizens League, reports that about 44% of older adults rely on Social Security for all of their income. For those households, the increase is likely to go toward necessities before discretionary purchases. That is an interpretation, not a finding from the source.

Part of the raise may not reach household budgets. The Centers for Medicare & Medicaid Services has not yet announced the 2027 Medicare Part B premium. The Trustees project $209.50, up from $202.90. That would take part of the increase.

Senior advocates also question the measure itself. They say the inflation index understates costs that weigh most on older people, such as medical care, drugs, rent and energy. Shannon Benton of the Senior Citizens League said: "Seniors have spent years watching their expenses outpacing their benefits."

For firms selling to retirees, that suggests limited room to raise prices. If the index understates what older households pay, a 3.6% raise may not leave much new spending power. The notes do not say how households or companies will respond.

The next things to watch are the Medicare Part B premium announcement from CMS and whether it matches the Trustees' $209.50 projection.

Source: Social Security Administration

IN THIS EDITION · MARKETS & STRATEGY

1. Rubedo's Topical Drug Cut Skin Epigenetic Age by 2.1 Years, Company Says
2. Social Security Sets 3.6% Benefit Increase for 2027, Largest Since 2023
3. **Unemployed Workers 55 to 64 Average Over Eight Months Without a Job**
4. Alector Prices $75 Million Stock Offering to Fund Neurodegeneration Work
5. CMS Proposes Medicare Advantage Directory and Part D PBM Rules

MARKETS & STRATEGY · STANDARD READ · 3 MIN BUSINESS INSIDER

Unemployed Workers 55 to 64 Average Over Eight Months Without a Job

Half of unemployed Americans aged 55 to 64 had been out of work for about three months in September. Yet the group's average spell without a job ran past eight months. That gap suggests the longest searches among older job seekers may be getting longer, according to Business Insider.

The headline numbers look fine. As of September, older workers had lower unemployment rates than younger workers. When they were jobless, the median length of that spell was also shorter. Business Insider reports that these figures hide a worse trend at the long end.

A median of three months means half of unemployed older workers had been jobless for less than that so far. An average above eight months means a smaller group has been out far longer, pulling the average up. According to the report, the gap between the average and the median has widened in recent months. That suggests the longest searches may be getting longer.

The size of that group is not small. In September, about 173,000 unemployed Americans aged 55 to 64 had been out of work for at least six months, according to the report.

A Bureau of Labor Statistics analysis, cited by Business Insider, shows the rehiring gap. Among workers aged 55 to 64 who lost long-held jobs between 2023 and 2025, 57% had found new jobs as of January 2026. For workers aged 25 to 54 who lost long-

held jobs in the same period, the figure was 73%. The source notes that some older workers may have taken their job loss as a sign to retire, so not every displaced worker in the 57% comparison is still looking for work.

The article does not prove why this happens. Several older job seekers told Business Insider they suspect age discrimination. One Denver operations manager in his 60s said employers may worry he will not stay in the workforce long. Others pointed to pay. A former Big Tech employee in her early 60s said younger candidates may accept lower salaries and fewer benefits. These are personal accounts, not findings.

The report also says some research suggests age discrimination plays a role in hiring. It adds that proving it in any single case is extremely difficult, and that older job seekers often have no clear way to address it.

For employers, the strategic reading is a matter of risk and opportunity. The source describes experienced workers who are available and, in some cases, taking jobs far below their earlier pay. One 61-year-old former transformation lead now works as a prep cook and says she earns about an eighth of her previous salary. A software engineer in his early 60s took a part-time cashier job after 18 months of searching. The source does not say how employers value such candidates. It also does not show that any company has broken hiring law. Firms that screen on age, directly or through proxies such as salary history or expected tenure, may face legal and reputational exposure. That is an interpretation, not a finding in the article.

The costs to individuals are documented. The Denver job seeker said he struggled to pay bills and filed for bankruptcy this year. A 58-year-old tech communications worker, laid off more than five times, said repeated gaps left him with little savings. He is building AI skills to adapt.

WHAT TO WATCH NEXT

Whether the gap between average and median unemployment duration for workers 55 to 64 keeps widening in coming monthly data, and whether the share of long-held-job losers who find new work improves from the 57% reported in January.

Source: Business Insider (syndicated via AOL)

IN THIS EDITION · MARKETS & STRATEGY

1. Rubedo's Topical Drug Cut Skin Epigenetic Age by 2.1 Years, Company Says
2. Social Security Sets 3.6% Benefit Increase for 2027, Largest Since 2023
3. Unemployed Workers 55 to 64 Average Over Eight Months Without a Job
4. **Alector Prices $75 Million Stock Offering to Fund Neurodegeneration Work**
5. CMS Proposes Medicare Advantage Directory and Part D PBM Rules

MARKETS & STRATEGY · STANDARD READ · 2 MIN

ALECTOR, INC. , AS SUMMARIZED IN RESEARCH DESK NOTES; THE PAGE TEXT WAS NOT AVAILABLE

Alector Prices $75 Million Stock Offering to Fund Neurodegeneration Work

Alector priced an underwritten stock offering at a premium to the prior close on October 16, 2026. This account rests on research desk notes about the company's SEC press release; the release page itself could not be retrieved, so every detail below is attributed to the source as summarized in those notes and has not been checked against the full text.

According to those notes of the company's release, Alector sold 36.6 million shares at $2.05 each. Expected gross proceeds are $75,030,000 before fees. Closing is expected on or about October 19, 2026.

The price was about 7.3% above the October 15 closing price, according to the notes. Offerings of this kind are often priced below the last close, so a premium is notable. The source summary does not say why the price was set where it was.

Morgan Stanley and BTIG are the joint lead book-running managers. The notes list participating investors as TCGX, BVF Partners, ADAR1 Capital Management and Deep Track Capital. The notes describe several of the investors as specialist biotech investors; whether that wording is the company's own is not confirmed. If the description holds, dedicated funds, not only generalist buyers, supplied part of the capital.

Alector develops drugs for neurodegenerative diseases, including Alzheimer's and Parkinson's. According to the notes, its Alector Brain Carrier platform is designed to carry drugs across the blood-brain barrier.

The company says it will use the proceeds for research and development, manufacturing and working capital. It may also use them for acquisitions or strategic transactions. The summary gives no specifics on which programs will receive funds or on any deal under consideration.

Any read on what this means for the wider sector is interpretation. One offering does not show a trend, and this is the weakest point of the argument: we have only a summary of the release, and no figures on the company's market value. It does show that the named funds took part in an offering priced above the prior close.

Watch for the closing of the offering and for any detail from Alector on how it allocates the funds or whether it announces an acquisition or strategic deal.

Source: Alector, Inc. (SEC Form 8-K press release), as summarized in research desk notes; the page text was not available

IN THIS EDITION · MARKETS & STRATEGY

1. Rubedo's Topical Drug Cut Skin Epigenetic Age by 2.1 Years, Company Says
2. Social Security Sets 3.6% Benefit Increase for 2027, Largest Since 2023
3. Unemployed Workers 55 to 64 Average Over Eight Months Without a Job
4. Alector Prices $75 Million Stock Offering to Fund Neurodegeneration Work
5. **CMS Proposes Medicare Advantage Directory and Part D PBM Rules**

MARKETS & STRATEGY · STANDARD READ · 2 MIN ALSTON & BIRD

CMS Proposes Medicare Advantage Directory and Part D PBM Rules

Medicare Advantage plans may soon face new provider directory requirements, and pharmacy benefit managers in Part D may face new compensation and transparency rules. The Centers for Medicare & Medicaid Services (CMS) released a proposed rule in the week of October 16, 2026, that covers both. The specific provisions, including section numbers, update schedules, accuracy scores, copay amounts, payment standards, dates and the comment deadline, need confirmation from the CMS proposed rule or Federal Register notice. The page we relied on does not state them.

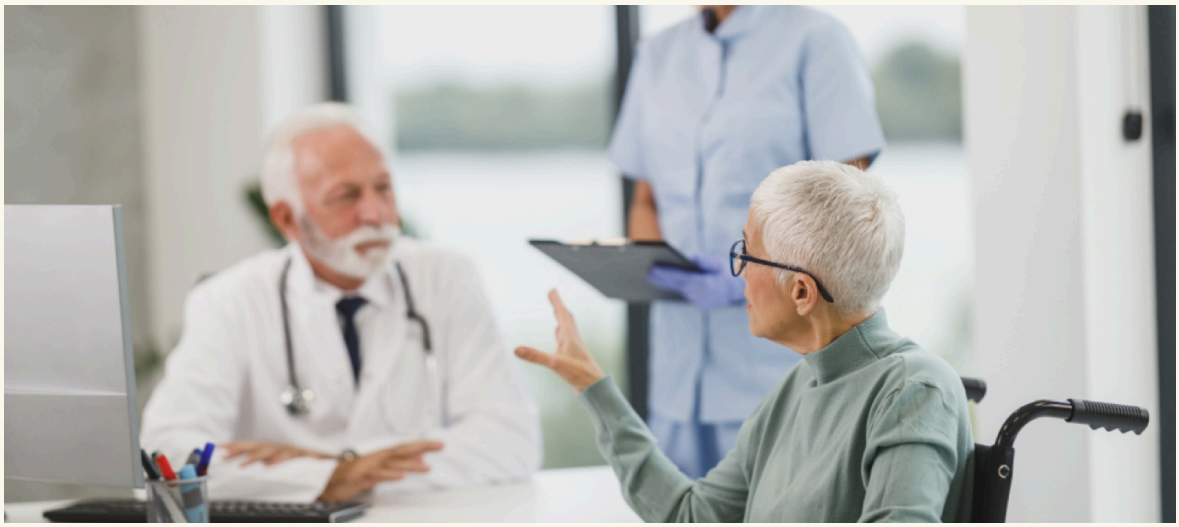


Photo: "Doctor Patient" by Direct Media, CC0

According to Alston & Bird's Health Care Week in Review, the rule implements sections of the Consolidated Appropriations Act, 2026. The firm describes three areas: provider directory requirements for Medicare Advantage organizations, adjustments to Part D cost-sharing reductions for low-income individuals, and new transparency and compensation requirements for PBMs.

The first change targets provider directories. The source says only that the rule would establish new directory requirements for Medicare Advantage organizations. It gives no detail on how often directories must be updated, whether accuracy would be scored or published, or what protections patients would have when a listing is wrong.

Because the source is thin here, we cannot say when any directory requirement would take effect or how compliance would be measured. Those are the details plans will care about most, and they must be checked against the rule itself.

The second change targets PBMs. The source says the rule would establish new transparency and compensation requirements for PBMs. It does not say what the compensation standard is, who would receive additional reporting, or which agreements would have to be disclosed.

The third change affects cost sharing. The source says the rule would adjust Medicare Part D cost-sharing reductions for low-income individuals. It does not give the amounts, the eligible groups or the start date. Copay changes do not alter anyone's prescriptions; they change who pays what at the pharmacy counter.

The market implications are a matter of interpretation, and the source does not quantify any of them. Stronger directory rules could raise the operational cost of keeping provider data current, and plans that already maintain clean data may be better placed than those that do not. This is our inference, not something the source states.

For PBMs and Part D sponsors, new compensation requirements could change how contracts are written and how much of a drug's price flows to intermediaries. Added transparency would give sponsors and regulators more visibility. How much revenue is affected will depend on the final standard and on current contract terms, neither of which the source describes.

Changes to low-income cost-sharing reductions could shift cost-sharing revenue between plans and enrollees. The size and direction cannot be judged without the rule's figures, so this is the weakest part of the analysis.

This is a proposal, not a final rule. The source gives no comment deadline for it, so readers should check the Federal Register notice. Watch what plans, PBMs and patient groups say in comments, and whether CMS changes its approach before finalizing.

Source: Alston & Bird (Health Care Week in Review)

The Arising

HEALTH INTELLIGENCE

MONDAY, OCTOBER 19, 2026 · BRIEFS

IN THIS EDITION · BRIEFS · 166 SHORT STORIES IN 11 TOPICS

Fasting, autophagy & metabolic health 12 · Sleep science & circadian biology 19 · Nitric oxide & vascular health 34 · Clinical trials 31 · Epigenetic reprogramming & age reversal 1 · Gut microbiome & brain axis 4 · Alzheimer's & cognitive decline prevention 38 · Women's health & hormonal transitions 15 · Mitochondria & cellular energy 1 · Longevity research 10 · In the news 1

Each brief is a short summary of one published study, preprint, registered trial or news report, checked against its source by a second reviewer. These are for information only and are not medical advice.

FASTING, AUTOPHAGY & METABOLIC HEALTH 12

Review links acupuncture to calmer brain inflammation in age-related cognitive decline

A review in Neurochemical Research looked at how acupuncture might ease age-related memory problems. It describes an inflammation pathway called NLRP3 that is overactive in aging brain models. The authors propose acupuncture may dampen it through several signalling routes. Much of the mechanism comes from preclinical models, so these are proposals, not proven effects in people.

NEUROCHEMICAL RESEARCH · 2026-10-05

Cyclin D1 buildup creates glutamine dependence in squamous cell cancer models

A study in Cancer Research looked at head and neck and oesophageal squamous cell cancers. Excess cyclin D1 changed how the cancer cells used energy and made them depend more on glutamine. Blocking both autophagy and glutamine metabolism slowed tumour growth in cell and animal models. These are laboratory findings, not human trial results.

CANCER RESEARCH · 2026-10-05

Review: lipoedema is often mistaken for obesity, and BMI may mislead on risk

A review in Clinical Obesity looked at lipoedema, a painful disorder with disproportionate limb fat. The evidence is limited and mostly observational, largely in women. Some studies found fewer metabolic problems than in women with similar BMI and obesity. The authors say this does not prove metabolic protection. They argue BMI should be read alongside other measures.

CLINICAL OBESITY · 2026-10-01

Plant compound eased diabetic heart damage in mice and heart cells

A study in Basic & Clinical Pharmacology & Toxicology tested eriocitrin, a natural flavonoid, in diabetic mice and cultured heart cells. Heart function and tissue structure improved. Copper handling in heart tissue also improved. The authors link these effects to a signalling pathway involving SIRT7. This is animal and cell work, not human evidence.

BASIC & CLINICAL PHARMACOLOGY & TOXICOLOGY · 2026-10-01

Partial social isolation and exercise did not change memory measures in young rats

A study in the International Journal of Developmental Neuroscience tested young male rats isolated for 6 hours daily over 6 weeks, with or without treadmill exercise. Isolation and exercise raised food and water intake. No significant group differences appeared in spatial memory or hippocampal synaptic plasticity. This was an animal study.

INTERNATIONAL JOURNAL OF DEVELOPMENTAL NEUROSCIENCE : THE OFFICIAL JOURNAL OF THE INTERNATIONAL SOCIETY FOR DEVELOPMENTAL NEUROSCIENCE · 2026-10-01

Myostatin inhibition counteracted muscle growth defect in mice with rare myopathy

A mouse study in the Journal of Cachexia, Sarcopenia and Muscle used a model of autosomal dominant centronuclear myopathy, a rare inherited muscle disease. Mice carrying the disease mutation showed impaired muscle growth. Researchers tested deleting the myostatin gene and injecting a myostatin-blocking protein. The authors conclude that myostatin inhibition counteracts the growth defect and call it proof of concept. It has not been tested in people.

JOURNAL OF CACHEXIA, SARCOPENIA AND MUSCLE · 2026-10-01

Gene regions tied to stress-related brain marker found in laying hens

A genetic study in Animal Genetics analysed 42 laying hens. It looked at a brain marker of stress experience, the density of plastic neurons in the hippocampus. The team flagged 19 genome regions and several candidate genes. The authors call the findings preliminary. This is animal research, not a study of human health or aging.

ANIMAL GENETICS · 2026-10-01

Mouse study links sugar metabolism to immune activation in liver blood-vessel cells

A study in Liver International used liver sinusoidal endothelial cells from mice, including a chronic hepatitis B model. Immune-stimulating signals increased glycolysis in these cells and boosted their immune activity. Blocking glycolysis with 2-DG reduced that activity. The authors link the effect to the mTORC1 pathway. This is animal and cell research.

LIVER INTERNATIONAL : OFFICIAL JOURNAL OF THE INTERNATIONAL ASSOCIATION FOR THE STUDY OF THE LIVER · 2026-10-01

Review: gut-microbe tryptophan products may support intestinal barrier in preclinical IBD work

A review in MicrobiologyOpen summarises how gut bacteria's tryptophan by-products activate the AhR receptor and strengthen the intestinal lining. Preclinical studies show barrier restoration that disappears when AhR is blocked. The authors caution that the benefit applies to specific microbial ligands, and that therapeutic use in IBD remains unproven.

MICROBIOLOGYOPEN · 2026-10-01

Tumour protein ADAMTSL4 linked to cancer wasting in mice and patients

A study in Cancer Discovery examined cancer cachexia, a wasting syndrome. In mice, tumours making the protein ADAMTSL4 caused more wasting, and removing it spared fat and muscle. In patients with colorectal and lung cancers, higher blood levels were associated with weight loss. The authors suggest it may be a future treatment target.

CANCER DISCOVERY · 2026-10-01

Boosting AS160 in mouse insulin cells helped preserve their function

A study in Acta Physiologica, done in mice and cells, looked at insulin-producing pancreatic beta cells. In hyperglycemic mice, raising AS160 in these cells was linked to better islet health and insulin levels. The work points to an interaction with a protein called HSPA8 that supports the clearing of damaged mitochondria. Human effects were not tested.

ACTA PHYSIOLOGICA (OXFORD, ENGLAND) · 2026-10-01

Review examines how E3 ubiquitin ligases shape liver scarring in MASH

A review in Liver International summarises the roles of E3 ubiquitin ligases in liver fibrosis linked to MASH, a fatty liver disease. These proteins can either promote or limit scarring, depending on cell type and disease stage. The authors discuss possible treatment approaches, including PROTACs and molecular glues. It is a review, not a clinical test.

LIVER INTERNATIONAL : OFFICIAL JOURNAL OF THE INTERNATIONAL ASSOCIATION FOR THE STUDY OF THE LIVER · 2026-10-01

SLEEP SCIENCE & CIRCADIAN BIOLOGY 19

No completed trial yet shows a drug protects the brain in Lewy body dementia

A structured review in Expert Review of Clinical Pharmacology examined twelve trials of drugs meant to slow dementia with Lewy bodies. None established neuroprotection or disease modification. The authors cite biological variety, Alzheimer-type co-pathology, short treatment, small samples and unclear endpoints. They call for longer trials with better biomarkers.

EXPERT REVIEW OF CLINICAL PHARMACOLOGY · 2026-10-08

Earlier seizure onset linked to lower brain signal entropy in epilepsy

According to a study in Biomedical Physics & Engineering Express, people whose epilepsy began at a younger age had lower average cortical entropy on resting brain scans. The analysis was retrospective and included 32 people. An exploratory test in five epileptic rats and five controls also found lower entropy after seizures began. Findings show association only.

BIOMEDICAL PHYSICS & ENGINEERING EXPRESS · 2026-10-06

Poor sleep linked to next-day eating disorder symptoms and suicidal thoughts

A pre-registered study in the International Journal of Eating Disorders followed 128 people with anorexia nervosa spectrum disorders through daily surveys. Worse sleep predicted more disordered eating behaviours and suicidal ideation the next day. The reverse was also seen: those symptoms predicted worse sleep the next night. The authors suggest sleep may be a shared target for treatment.

THE INTERNATIONAL JOURNAL OF EATING DISORDERS · 2026-10-05

Pilot trial planned to test delirium prevention program in older heart surgery patients

This is a study protocol published in Pilot and Feasibility Studies, so there are no results yet. Researchers plan to enrol 60 patients aged 65 or older having heart surgery. They will randomly assign them to a non-drug, multi-part program or usual care plus education. The main aim is to test feasibility and acceptability.

PILOT AND FEASIBILITY STUDIES · 2026-10-05

Review questions lung cancer CT screening for people who never smoked heavily

A review in Chest says low-dose CT screening lowers lung cancer deaths in heavy smokers, based on two large randomised trials. For people without heavy smoking history, the benefit is unproven. Data from China and South Korea suggest wider screening may increase overdiagnosis more than net benefit. The authors call for careful prospective evaluation before expanding eligibility.

CHEST · 2026-10-05

Anaesthetic linked to brain changes and memory deficits in aged mice

A study in Neurochemical Research used aged mice and hippocampal neuron cells. Exposure to the anaesthetic desflurane raised levels of certain kinase proteins and lowered the circadian protein CLOCK, alongside senescence markers and memory deficits. In aged mice, pretreatment with the cancer drug sorafenib restored CLOCK, reduced some senescence-related markers and improved cognitive performance. The authors describe a link. This is animal and cell research only.

NEUROCHEMICAL RESEARCH · 2026-10-05

Design of asthma trial testing dupilumab by gene variant published; no results yet

The Journal of Asthma published the design of the IDEA trial, a randomised, placebo-controlled study of dupilumab in people aged 12 and older with uncontrolled asthma. It will test whether response differs by IL-4Rα genotype. Enrollment is closed and the trial is ongoing. Clinical outcome results are not yet available.

THE JOURNAL OF ASTHMA : OFFICIAL JOURNAL OF THE ASSOCIATION FOR THE CARE OF ASTHMA · 2026-10-05

Study of 108 patients maps what is linked to abnormal α-synuclein test results

An observational study in Parkinsonism & Related Disorders tested 108 patients with cognitive impairment, most with motor parkinsonism. The α-synuclein seeding test was positive in 50. Positivity was associated with dementia with Lewy bodies, Alzheimer's disease, cognitive fluctuations, REM sleep behavior disorder, and lower posterior putamen dopamine transporter uptake. These are associations, not causes.

PARKINSONISM & RELATED DISORDERS · 2026-10-04

Authors urge clinical-state checks before using glioma brain connectivity maps on patients

A commentary in NMR in Biomedicine argues that brain connectivity maps in glioma can be shaped by motion, alertness, symptoms, seizures and medication. The authors propose defining the target, recording patient state, testing repeatability, and validating externally before patient-level use. It is a proposal, not a new trial or dataset.

NMR IN BIOMEDICINE · 2026-10-01

New mental health nurses describe pressure, violence and uneven preparation

A qualitative study in the International Journal of Mental Health Nursing interviewed 12 early-career mental health nurses at one Melbourne hospital. Four themes emerged, including practising under pressure. The authors highlight placement quality, exposure to workplace violence and organisational support as shaping preparedness and retention. The sample is small and from a single site.

INTERNATIONAL JOURNAL OF MENTAL HEALTH NURSING · 2026-10-01

Plant extract reduced clotting, swelling and pain signs in mice

According to a study in Biomedical Chromatography, an extract from the aerial parts of the plant Ferula ferulaeoides was analysed and tested in mice. It reduced tail thrombus proportion, ear swelling and writhing movements. Researchers identified 30 chemical constituents. Computer-based pathway analysis suggested possible mechanisms. This is early animal and laboratory work, not human evidence.

BIOMEDICAL CHROMATOGRAPHY : BMC · 2026-10-01

Oral fertility-treatment drug candidate shows favourable safety profile in animals

According to a study in Pharmacology Research & Perspectives, the experimental oral GnRH antagonist LPM7100328 was tested in rats, dogs and rabbits. It is being developed to prevent premature LH surges during controlled ovarian stimulation. The 28-day toxicity studies showed no apparent abnormalities. The drug was non-genotoxic, non-teratogenic and non-phototoxic, with a generally favorable reproductive safety profile. This is nonclinical work, not human evidence.

PHARMACOLOGY RESEARCH & PERSPECTIVES · 2026-10-01

Philosophy paper argues nursing presence can mean stepping back

A philosophical paper in Nursing Philosophy draws on Daoist ideas to question the view that nursing presence means visible action. It proposes a framework called Presence in Absence, arguing that deliberate withdrawal can be a deeper form of care. It draws on dementia care narratives. It is an argument, not a clinical study.

NURSING PHILOSOPHY : AN INTERNATIONAL JOURNAL FOR HEALTHCARE PROFESSIONALS · 2026-10-01

Review: eplerenone's evidence is strongest for heart failure after heart attack

A review in the Journal of Cardiovascular Pharmacology assessed eplerenone, a drug that blocks the mineralocorticoid receptor. The authors say its role is well established after heart attack with weakened heart function and in heart failure with reduced ejection fraction. Evidence for hypertension and kidney-related uses varies. Spironolactone and finerenone have stronger evidence in some areas.

JOURNAL OF CARDIOVASCULAR PHARMACOLOGY · 2026-10-01

Mice lacking the astrocyte body clock gene show altered brain structure and weaker learning

A study in mice, published in Glia, removed the clock gene Bmal1 from astrocytes, a type of brain support cell. In the hippocampus, the daily rhythm of perineuronal nets disappeared and their abundance fell. The mice had altered synaptic strength and plasticity and did worse on a memory task. This was animal research, not a human study.

GLIA · 2026-10-01

Review proposes a mitochondrial lens for reviewing and reducing medications

A narrative review in Pharmacology Research & Perspectives proposes using mitochondrial and redox biology to guide medication review in people taking many drugs. The authors say the framework is conceptual and not a validated clinical tool. They say it should be used only alongside established deprescribing methods and shared decision-making.

PHARMACOLOGY RESEARCH & PERSPECTIVES · 2026-10-01

Activating a signaling pathway in microglia shrank stroke damage in mice

A study in the journal Glia used mice engineered so that a signaling pathway, Gq, could be switched on in microglia, the brain's resident immune cells. Activating it before an experimental stroke reduced the size of the damaged area. The microglia also changed shape and activated interferon-related genes. This is animal research, not a human trial.

GLIA · 2026-10-01

Student volunteer program for hospital patients rated valuable by participating students

A mixed-methods evaluation in The Clinical Teacher looked at a program where medical students spent time socially, mentally and physically engaging hospitalized patients. It covered 424 encounters with 220 patients. Most responding students found it valuable and said it improved communication skills. Patient benefits were perceived, not measured in a trial.

THE CLINICAL TEACHER · 2026-10-01

Leg exercises after bypass surgery in diabetes did not improve leg blood flow

A randomised trial in Physiotherapy Research International tested Buerger-Allen exercises in 60 people with diabetes after heart bypass surgery. Added to standard rehabilitation, they did not change leg blood flow, measured by ankle-brachial index, compared with rehabilitation alone. Mild wound pain eased earlier on day 3 only. No exercise-related adverse events were reported.

PHYSIOTHERAPY RESEARCH INTERNATIONAL : THE JOURNAL FOR RESEARCHERS AND CLINICIANS IN PHYSICAL THERAPY · 2026-10-01

NITRIC OXIDE & VASCULAR HEALTH

34

Review explores how gut and vaginal microbes may shape drug effects in pregnancy

A mini-review in Clinical Pharmacology and Therapeutics discusses how a mother's microbiome may affect how medicines are metabolised during pregnancy. It also notes that some drugs may reshape these microbes. The authors describe emerging data linking microbial makeup to outcomes such as preterm birth, but these are early signals, not established causes.

CLINICAL PHARMACOLOGY AND THERAPEUTICS · 2026-10-09

Review examines oxygen and nitric oxide as possible chronic wound treatments

A review in Advanced Drug Delivery Reviews covers how oxygen and nitric oxide act across the four phases of wound healing. The authors suggest combining the two gases may work better than either alone. They note problems with delivery, dosage and stability, and call for large-scale clinical validation. This is a review, not a new trial.

ADVANCED DRUG DELIVERY REVIEWS · 2026-10-07

Known plant compound eased inflammation in cells and lung injury in mice

Researchers writing in Phytochemistry isolated 17 previously undescribed triterpenoids and eight known compounds from the leaves of Alangium salviifolium. Five compounds significantly reduced nitric oxide production in stimulated immune cells. The most potent, compound 19, is one of the known compounds. It eased inflammation in cells and lung injury in mice by modulating the AKT/MAPK pathway. This is laboratory and animal work only. No human results were reported.

PHYTOCHEMISTRY · 2026-10-07

Mouth bacteria that process nitrate linked to lower prediabetes prevalence

According to a study in Cell Reports Medicine, researchers analysed tongue microbiomes in 472 people. Bacteria that reduce nitrate, including Rothia mucilaginosa, were associated with less prediabetes. People without prediabetes had higher salivary nitrate and nitrite. This is an observational link. It does not show that the bacteria prevent prediabetes.

CELL REPORTS. MEDICINE · 2026-10-07

BMP signalling linked to retinal scarring in human samples, mice and cells

A study in PNAS examined retinal fibrosis, a blinding scarring complication of several eye diseases. BMP2 was detected in eye fluid from patients with three conditions. In mice, injecting BMP2 produced fibrous membranes on the retina. In a separate mouse model, a BMP inhibitor made such membranes regress. Experiments in rat and human cells pointed the same way. The work is mostly preclinical.

PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA · 2026-10-07

Light therapy modestly altered inflammatory activity in mouse immune cells in a dish

A cell study in Photochemical & Photobiological Sciences tested photobiomodulation, a light treatment, on mouse bone marrow-derived macrophages. The light selectively and temporarily changed inflammatory and metabolic markers, such as lower nitric oxide in pro-inflammatory cells. It did not push cells firmly toward a specific type. The work was done in vitro.

PHOTOCHEMICAL & PHOTOBIOLOGICAL SCIENCES : OFFICIAL JOURNAL OF THE EUROPEAN PHOTOCHEMISTRY ASSOCIATION AND THE EUROPEAN SOCIETY FOR PHOTOBIOLOGY · 2026-10-07

Small Iranian study finds nitrate and nitrite in breast milk below risk thresholds

A study in Environmental Science and Pollution Research tested breast milk from 93 mothers of exclusively breastfed infants aged up to six months in Hamadan, Iran. Nitrate and nitrite were found in every sample. Estimated infant exposure stayed below acceptable thresholds in all age groups. The authors recommend larger biomonitoring studies covering wider areas.

ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH INTERNATIONAL · 2026-10-07

Nanoparticle shows kidney protection in cell and animal models of acute injury

A study in ACS Applied Materials & Interfaces describes quercetin-manganese nanocomposites designed to target injured kidney tubule cells. In cisplatin-injured human kidney cells they reduced iron and reactive oxygen species. In macrophages they reduced inflammatory signals. In glycerol- and cisplatin-induced acute kidney injury models in live animals, they accumulated in injured kidneys and lowered markers of kidney dysfunction. The work is preclinical and was not tested in people.

ACS APPLIED MATERIALS & INTERFACES · 2026-10-07

Genetic risk of Kawasaki disease weakly linked to coronary atherosclerosis

A Mendelian randomisation study in Cardiology in the Young used genetic data to probe cause and effect. Genetic predisposition to Kawasaki disease showed a suggestive, small association with coronary atherosclerosis. No links appeared for other vascular outcomes, though the authors call those results inconclusive. The Kawasaki dataset was small, and replication is needed.

CARDIOLOGY IN THE YOUNG · 2026-10-07

Engineered particles shrank artery plaque in mice in early lab study

A study in ACS Applied Materials & Interfaces describes engineered microscopic particles designed to break down cholesterol and generate nitric oxide. In cells, they reduced foam cell formation and promoted endothelial repair. In mice prone to atherosclerosis, aortic plaque burden fell from 27.4% to 8.2%. The work is preclinical and has not been tested in people.

ACS APPLIED MATERIALS & INTERFACES · 2026-10-07

Layered scaffolds healed diabetic wounds with bone infection in animal tests

A study in the Journal of Materials Chemistry B tested a two-part treatment in an animal model of diabetic skin wounds with bone infection. It combined gas-releasing scaffolds, antibiotic bone cement and exosomes. The authors report healed wounds and restored tissue structure after 8 weeks. This was lab and animal work, not human testing.

JOURNAL OF MATERIALS CHEMISTRY. B · 2026-10-07

Altered VEGFR2 receptor kept blood-vessel signalling going under oxidative stress in cells

A cell study in Biochemical and Biophysical Research Communications examined human umbilical vein cells. Cells carrying a mutated VEGFR2 receptor kept vessel-forming signalling and migration under oxidative stress. The effect depended on a gene called DLL4. The authors say one receptor site makes VEGFR2 vulnerable to oxidative damage. This is early lab work, not human testing.

BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS · 2026-10-06

Resistance-trained adults show less arterial stiffness; brain blood flow responses to leg press similar

A study in Medicine and Science in Sports and Exercise compared 44 healthy young adults, some resistance-trained and some not. At rest, brain blood flow measures did not differ. Trained people had lower arterial stiffness and diastolic pressure. During heavy leg presses, their brain blood flow responses were similar to or smaller than those of untrained people.

MEDICINE AND SCIENCE IN SPORTS AND EXERCISE · 2026-10-06

Cinnamaldehyde in feed eased pesticide-related immune damage in tilapia

A study in fish, published in Developmental and Comparative Immunology, exposed Nile tilapia to the pesticide chlorpyrifos for 60 days. The exposure harmed blood counts, immune responses and the spleen. Fish fed cinnamaldehyde showed markedly less of this damage and gene activity closer to normal. The work was in fish, not people.

DEVELOPMENTAL AND COMPARATIVE IMMUNOLOGY · 2026-10-06

Raloxifene limited chemically induced liver injury in cells and animals

According to a study in Toxicology and Applied Pharmacology, raloxifene, a clinically used selective estrogen receptor modulator, suppressed ferroptosis in liver cells. Ferroptosis is a chemically triggered form of oxidative cell death. Raloxifene also mitigated acetaminophen-induced liver injury in animals. The effect appeared to work by directly inhibiting an enzyme called PDI. The work used cells and animals, not people.

TOXICOLOGY AND APPLIED PHARMACOLOGY · 2026-10-06

Oral rutin reduced snakebite damage in mice, with or without antivenom

According to a study in PLoS Neglected Tropical Diseases, mice given a fast-absorbing form of rutin by mouth after Bothrops jararaca venom injection had improved blood and inflammation measures. They also had less local bleeding and tissue death, even without antivenom. This was an animal study, so the results may not apply to people.

PLOS NEGLECTED TROPICAL DISEASES · 2026-10-06

Gum disease bacterium triggers immune cells to release a protein that harms blood vessel cells

A laboratory study in PLoS One looked at how gum disease might link to heart disease. Using human blood vessel cells and a mouse infection model, researchers found the bacterium Treponema denticola prompted neutrophils to release oncostatin M. This protein increased vessel-lining permeability and inflammation markers. These are cell and mouse findings, not results in people.

PLOS ONE · 2026-10-06

Oxidized fat molecule PGPC linked to poorer blood vessel growth in mice and cells

A study in Circulation examined PGPC, a fat oxidation product found in artery plaques. Blood levels were higher in people with coronary artery disease and tracked with severity, an association. In cultured cells and mice, PGPC impaired new blood vessel growth by disrupting cell recycling processes. The mechanism findings come from cells and mice.

CIRCULATION · 2026-10-06

Blood metabolite patterns differ in people with iron deficiency anemia

A case-control study in the journal Anemia compared serum from 47 people with iron deficiency anemia and 50 healthy controls. It found differences mainly in amino acid and related metabolic pathways, which held after adjusting for age, sex, albumin and total protein. In exploratory cross-validated testing, a three-metabolite model separated the groups well. The findings show associations, not causes.

ANEMIA · 2026-10-05

Orchid fruit compounds curb inflammation signals in lab-grown brain immune cells

A study in RSC Advances isolated six new compounds, plus thirteen known ones, from the fruits of the medicinal orchid Galeola nudifolia. Twelve compounds, including all six new ones, reduced nitric oxide production in stimulated microglial cells grown in the lab. One compound reduced iNOS expression and NF-κB p65 movement into the cell nucleus. This is cell-based work, with no tests in animals or people.

RSC ADVANCES · 2026-10-05

Vascular gene FAM43B linked to slower artery plaque growth in mice

A study in the journal Life Sciences used mice and cultured human cells. Mice lacking the gene FAM43B had worse artery plaque. Boosting it in blood vessels reduced inflammation and fat buildup and steadied plaques. The gene appeared to dampen Wnt signalling by acting on β-catenin. This is early lab work, not a human trial.

LIFE SCIENCES · 2026-10-05

Review finds trials undercut comorbidity-driven inflammation theory of heart failure

A review in the Journal of Cardiac Failure assessed a 2013 hypothesis that comorbidities trigger IL-6-driven inflammation leading to heart failure with preserved ejection fraction. In randomised trials, most comorbidities were not shown to cause systemic inflammation, and treating them, apart from obesity, did not improve the condition. Drugs boosting NO-cGMP signalling gave no symptom or exercise benefit. Other studies still link IL-6 itself to the disease.

JOURNAL OF CARDIAC FAILURE · 2026-10-05

Small study examines social exclusion, immune cells and artery stiffness in HIV

A study in Brain, Behavior, and Immunity included 25 people with HIV and 19 without. Researchers measured brain responses to a social exclusion task and tested, in lab cultures, how one type of immune cell's inflammatory response was dampened by a stress-hormone-like compound. They examined how this related to artery stiffness by HIV status. The available text does not report results.

BRAIN, BEHAVIOR, AND IMMUNITY · 2026-10-05

Paper proposes NAD+ shortage may keep inflammation going after stress ends

A paper in Free Radical Biology and Medicine proposes a hypothesis. It suggests that disrupted NAD+ and nucleotide balance could link mitochondrial DNA damage to lasting inflammatory priming. The authors call a central prediction about the PARP1 protein unproven. This is a theoretical framework, not a study showing the effect in people.

FREE RADICAL BIOLOGY & MEDICINE · 2026-10-05

In mice, UVB exposure raised skin blood flow; blocking nitric oxide synthase reduced it

A study in mice, published in Microvascular Research, used imaging to track skin blood vessels after UVB exposure. Skin blood flow rose at 48 hours compared with controls. A compound that inhibits nitric oxide synthase reduced that rise. The work was done in animals, so it does not show the same effect in people.

MICROVASCULAR RESEARCH · 2026-10-05

Oral bacteria linked to age and thinking performance in UK and Belgian adults

A small observational study in PLOS One compared 60 healthy adults, 15 young and 15 older at each of two sites in the UK and Belgium. Older adults had more Treponema and Tannerella in their mouths at both sites. Some nitrate-reducing bacteria were associated with cognitive test performance in both the UK and Belgian cohorts. These are associations only and do not show cause.

PLOS ONE · 2026-10-05

Review: NLRP3 inflammasome may drive artery changes in high blood pressure

A review in the American Journal of Hypertension discusses the NLRP3 inflammasome, an immune sensor, and artery remodeling in hypertension. Experimental models give causal evidence. Human evidence is largely associative. The authors say no trial has shown that blocking NLRP3 lowers blood pressure or reverses vascular remodeling in primary hypertension.

AMERICAN JOURNAL OF HYPERTENSION · 2026-10-05

Review looks at brain scans and AI for depression tied to small vessel disease

A review in CNS Neuroscience & Therapeutics covers how MRI scoring systems measure small vessel disease in the brain and how that relates to depressive symptoms. It also surveys AI imaging research. The authors say turning these advances into clinical tools for predicting or classifying depression is still at an early stage.

CNS NEUROSCIENCE & THERAPEUTICS · 2026-10-01

Review summarises carob's nutrients, plant compounds and possible health-related activities

A review in the Journal of Food Science covers carob, a Mediterranean tree. It describes its polyphenols, fibre, proteins and minerals, which have been associated with antioxidant, antidiabetic and cardiometabolic-related activities. The review also discusses food and industrial uses. It is a summary of existing research, not a new test in people.

JOURNAL OF FOOD SCIENCE · 2026-10-01

Review examines CAR-T cell therapy for autoimmune, aging-related and infectious diseases

A review in Signal Transduction and Targeted Therapy looks at CAR-T cell therapy beyond cancer, including autoimmune diseases, aging-related conditions and infections. It notes no such therapy is yet approved for these uses. Several clinical trials have started, some with interim successes, such as in rheumatic diseases. The review also covers challenges.

SIGNAL TRANSDUCTION AND TARGETED THERAPY · 2026-10-01

Lower Klotho levels tied to vascular damage in kidney disease patients

A small cross-sectional study in the Journal of Nephrology looked at 55 people with chronic kidney disease. Blood Klotho levels fell as the disease advanced. Lower levels were associated with vascular damage, apparently independent of aldosterone. A cross-sectional design shows a link at one point in time, not cause.

JOURNAL OF NEPHROLOGY · 2026-10-01

Review finds Senna alexandrina extracts show varied effects, mostly in lab studies

A review in Chemistry & Biodiversity compiled 219 chemical structures from the plant Senna alexandrina. Extracts showed laxative, anti-inflammatory, antioxidant and other activities in experimental studies. The authors say the evidence is largely preclinical and extract-based. They call for work to isolate specific compounds before clinical testing.

CHEMISTRY & BIODIVERSITY · 2026-10-01

Machine learning model uses diet nutrients to predict psoriasis risk

A study in the Asia Pacific Journal of Clinical Nutrition used survey data from 12,749 people to build models predicting psoriasis from dietary nutrients. An XGBoost model performed best. Theobromine, lycopene, caffeine, vitamin D, fiber and vitamin E influenced predictions most. This shows prediction, not that any nutrient causes or prevents psoriasis.

ASIA PACIFIC JOURNAL OF CLINICAL NUTRITION · 2026-10-01

Plasma-treated gas and water reduce oral bacteria in lab tests

A laboratory study in ChemPlusChem tested cold plasma gas and plasma-activated water on bacteria, including Streptococcus mutans, which is found in the mouth. Both cut bacterial numbers, and the water reduced biofilm formation. The authors describe potential as an oral-bacteria strategy. The work was done on bacteria in the lab, not in people.

CHEMPLUSCHEM · 2026-10-01

CLINICAL TRIALS

Dutch trial planned to study one-time breast MRI screening at age 45

A trial registry entry from Radboud University Medical Center describes a study that has not yet started recruiting. It plans to offer women aged 45 in the Netherlands a one-time breast MRI. Researchers will examine motivation, cancer-related worry and wellbeing. There are no results yet, and the study is not about cancer detection rates.

CLINICALTRIALS.GOV (NCT07878377) · 2026-10-16

Trial of blood flow restriction exercise in colorectal cancer survivors is recruiting

A trial registered on ClinicalTrials.gov is recruiting colorectal cancer survivors with probable sarcopenia, or muscle loss. It will test low-load resistance training with blood flow restriction. Outcomes include muscle strength, function and cancer-related fatigue. The entry lists a hypothesis of improvement. No results exist yet, so nothing about effectiveness is known.

CLINICALTRIALS.GOV (NCT07874035) · 2026-10-14

Registered trial will test two-drug combination for airway wart-like growths

A phase 2 trial registered on ClinicalTrials.gov, sponsored by the National Cancer Institute, is not yet recruiting. It will test a vaccine-based treatment, PRGN-2012, with the drug bevacizumab in adults with recurrent respiratory papillomatosis. The aim is to see whether the pair controls the growths and reduces regrowth. There are no results yet.

CLINICALTRIALS.GOV (NCT07756840) · 2026-10-14

Trial tests gene-based belinostat dosing in high-grade neuroendocrine cancer

This is a registered phase 2 trial from the National Cancer Institute, listed on ClinicalTrials.gov, and it is still recruiting. It will test higher or lower belinostat doses, given with etoposide and cisplatin, based on a gene variant in adults with high-grade neuroendocrine carcinoma. No results are available yet.

CLINICALTRIALS.GOV (NCT06406465) · 2026-10-14

Trial registered to compare two anesthesia methods in older hip fracture surgery

A registry entry on ClinicalTrials.gov describes an observational study in older patients having femoral neck fracture surgery. It will compare a lumbar and sacral plexus block with a fascia iliaca block plus low-dose spinal anesthesia. Researchers will look at severe low blood pressure during surgery and pain control afterward. No results have been reported.

CLINICALTRIALS.GOV (NCT07346885) · 2026-10-14

Registered trial will test brain stimulation with cognitive training after brain injury

A ClinicalTrials.gov entry describes a recruiting Phase II trial in Veterans with complex mild traumatic brain injury. It is randomised, double-blinded and sham-controlled. Participants will receive cognitive training with rTMS, HD-tDCS or sham stimulation over 16 sessions. The trial is registered and recruiting. It has no results yet.

CLINICALTRIALS.GOV (NCT05236010) · 2026-10-14

Planned trial will test mineral-infused clothing for muscle recovery after exercise

A trial registered on ClinicalTrials.gov has not yet started recruiting. It will compare mineral-infused garments with identical garments without minerals in healthy adults aged 18 to 45. Participants will do 100 drop jumps, then wear the garment for 72 hours. Leg strength is the main measure. There are no results yet.

CLINICALTRIALS.GOV (NCT07873866) · 2026-10-14

Peer support program for dementia caregivers is registered for a phase 2 trial

A trial registry entry from Ohio State University describes Pair 2 Care, a peer support program. Former caregivers act as mentors to current caregivers of people with dementia. The trial is not yet recruiting and has no results. The sponsors suggest the program may lower caregiver depressive symptoms, but this has not been tested yet.

CLINICALTRIALS.GOV (NCT07868718) · 2026-10-14

Phase 3 trial tests new yellow fever vaccine in children

A ClinicalTrials.gov entry from Sanofi describes a recruiting phase 3 trial of vYF, an investigational yellow fever vaccine. It plans to enrol 2,440 children and compare safety and antibody responses with two licensed vaccines. One group will also receive the MMR vaccine. The trial has no results yet.

CLINICALTRIALS.GOV (NCT07103148) · 2026-10-14

Pilot trial tests remote exercise for older men with urinary symptoms

A ClinicalTrials.gov entry lists a completed pilot randomised trial at the University of California, San Francisco. It enrolled 68 physically inactive older men with urinary symptoms attributed to benign prostate enlargement. A 12-week remote exercise programme is compared with a health education control. The entry lists no results, so nothing is known yet about whether it worked.

CLINICALTRIALS.GOV (NCT06225479) · 2026-10-14

Completed trial record examines chewing and balance in people with full-arch dental implants

A trial entry on ClinicalTrials.gov, sponsored by Beni-Suef University, is marked completed. It describes 16 men aged 50 to 60 with fixed All-on-4 dental implants. Researchers measured chewing efficiency and a walking balance test over six months to see whether the two are related. The entry lists no results.

CLINICALTRIALS.GOV (NCT07873983) · 2026-10-14

Planned trial will test a gut-health protein in travellers

A trial registered on ClinicalTrials.gov is not yet recruiting and has no results. Sponsored by Bactolife, it will randomise healthy adults aged 18 to 70 travelling to Africa, Asia or Latin America to a protein capsule or placebo. The main measure is change in a gut symptom score. It is not known whether the protein works.

CLINICALTRIALS.GOV (NCT07873957) · 2026-10-14

Phase 3 trial is testing marstacimab in children with hemophilia

A phase 3 trial sponsored by Pfizer and registered on ClinicalTrials.gov is recruiting males aged 1 to 17 with severe hemophilia A or moderately severe to severe hemophilia B, with or without inhibitors. All participants receive marstacimab as prophylaxis, given once a week as an injection under the skin. The trial is examining its safety and effects. No results have been reported.

CLINICALTRIALS.GOV (NCT05611801) · 2026-10-14

Long-term trial of lung drug BI 1291583 in bronchiectasis is underway

A registry entry from ClinicalTrials.gov describes a phase 2 extension trial of BI 1291583, sponsored by Boehringer Ingelheim. It enrolls adults with bronchiectasis, an inflammatory lung condition, who took part in earlier studies. Participants take a daily tablet for up to one year. The trial is active but not recruiting, and no results are posted yet.

CLINICALTRIALS.GOV (NCT05846230) · 2026-10-14

Observational study will examine what shapes physical function in women aged 45 to 60

A registry entry on ClinicalTrials.gov, sponsored by Kartal City Hospital, describes an observational study of women aged 45 to 60. It will assess how muscle strength, bone density, body composition, activity, sleep, depressive symptoms and menopause symptoms relate to functional health. It is enrolling by invitation, and no results are available yet.

CLINICALTRIALS.GOV (NCT07667699) · 2026-10-14

Trial compares alternate-day and daily iron tablets for iron deficiency anemia

A registry entry on ClinicalTrials.gov, sponsored by Phramongkutklao College of Medicine and Hospital, describes a multicenter, randomised, open-label trial. Adults aged 20 or older with iron deficiency anemia take either 200 mg of ferrous fumarate daily or 400 mg on alternate days for 8 weeks. Researchers will compare hemoglobin response and side effects. The trial is recruiting, and no results are available yet.

CLINICALTRIALS.GOV (NCT07014371) · 2026-10-14

Trial registered to test ruxolitinib in immune bone marrow failure; no results yet

A trial entry on ClinicalTrials.gov, sponsored by the National Heart, Lung, and Blood Institute, describes a phase 1/2 study of ruxolitinib in adults with immune bone marrow failure. Participants take the tablet twice daily for up to 6 months. The trial is active but not recruiting, and no results have been reported.

CLINICALTRIALS.GOV (NCT05998408) · 2026-10-14

Planned trial will test a childcare staff programme for healthier meals and more activity

A trial entry on ClinicalTrials.gov, sponsored by Harvard School of Public Health, describes a planned cluster-randomised trial. It will test whether a training programme for childcare educators improves meal quality and physical activity opportunities for children aged 2 to 5. The trial has not yet started recruiting, so there are no results.

CLINICALTRIALS.GOV (NCT07874295) · 2026-10-14

Trial registered to test swallowing treatments in critically ill adults; no results yet

A trial entry on ClinicalTrials.gov from Vanderbilt University Medical Center describes a planned study of three swallowing treatments in critically ill adults, including expiratory muscle strength training. It will assess breathing, cough, swallowing and frailty. The trial is not yet recruiting, so there are no results.

CLINICALTRIALS.GOV (NCT07736105) · 2026-10-14

Trial of bright light therapy for teen depression is recruiting

A multicentre, double-blind trial registered on ClinicalTrials.gov and sponsored by Peking University Sixth Hospital is recruiting. It plans to test bright light therapy in adolescents aged 13 to 17 with major depression. Participants will be randomly assigned to high-intensity light, medium-intensity light or dim red light for four weeks. There are no results yet.

CLINICALTRIALS.GOV (NCT06913309) · 2026-10-13

NIAID registers trial re-infecting volunteers with mild bird flu virus

A trial registered with ClinicalTrials.gov, run by the US National Institute of Allergy and Infectious Diseases, plans to infect healthy adults with H10N7 bird flu a second time. All took part in an earlier H10N7 study. The goal is to learn how bird flu viruses infect people. The trial is enrolling by invitation. No results are available yet.

CLINICALTRIALS.GOV (NCT07215871) · 2026-10-13

Pfizer registers long-term trial of abrocitinib in children with eczema

A Pfizer phase 3 trial, listed on ClinicalTrials.gov, will run for 24 months. It will assess the long-term safety and efficacy of liquid abrocitinib in children aged 2 and older with moderate-to-severe eczema. It is recruiting now. The entry reports no results, so nothing is known yet about how the drug performs.

CLINICALTRIALS.GOV (NCT06807281) · 2026-10-13

NIDDK registers study on childhood experiences and adult eating habits

A natural history study registered on ClinicalTrials.gov by the National Institute of Diabetes and Digestive and Kidney Diseases plans to explore how childhood experiences affect adult eating behaviours and weight gain. Healthy adults aged 18 to 60 will have body measurements, physical activity and glucose monitoring, and a lunch where they eat as much as they want. It has not yet begun recruiting, so there are no results.

CLINICALTRIALS.GOV (NCT06690294) · 2026-10-13

Cairo University registers trial comparing two child dental space regainers

A pilot randomised trial registered on ClinicalTrials.gov by Cairo University will compare two dental appliances, Banded Helical and Gerber regainers. They are for children aged 7 to 9 who lost space after losing a primary second molar early. It has not begun recruiting and has no results.

CLINICALTRIALS.GOV (NCT07853313) · 2026-10-13

Early-phase trial of cancer drug for long-COVID nerve symptoms is registered

A ClinicalTrials.gov entry sponsored by the National Institute of Neurological Disorders and Stroke describes a phase 1 trial of pembrolizumab, a drug approved for certain cancers. It will enrol adults with ongoing neurological symptoms at least six months after COVID-19, who will receive one intravenous dose. The trial is not yet recruiting and has no results. Researchers think the drug might reduce symptoms.

CLINICALTRIALS.GOV (NCT07388550) · 2026-10-13

Phase 2 trial planned for a vaccine in early prostate cancer

A trial registered on ClinicalTrials.gov, sponsored by the US National Cancer Institute, plans to test a three-target vaccine (TriAdeno) with a drug called N-803 in men with early-stage prostate cancer under active surveillance. It is not yet recruiting and has no results. The aim is to see whether it can help stop tumours growing.

CLINICALTRIALS.GOV (NCT07574541) · 2026-10-13

Planned trial will test online parent-led therapy for anxiety in young children

A trial registered on ClinicalTrials.gov, sponsored by Karolinska Institutet, plans to test Tiny Heroes. It is an internet-based, parent-directed therapy for anxiety in children aged 3 to 6. It will be compared with usual care in Stockholm. The trial is not yet recruiting, so there are no results.

CLINICALTRIALS.GOV (NCT07870213) · 2026-10-13

Phase 3 trial tests amlitelimab injections for hard-to-treat eczema

A registered phase 3 trial, sponsored by Sanofi, is testing amlitelimab injections against placebo. Participants are aged 12 or older with moderate-to-severe atopic dermatitis who responded poorly to earlier biologic or oral JAK inhibitor treatment. All use topical corticosteroids. The trial is active but no longer recruiting, and no results are listed.

CLINICALTRIALS.GOV (NCT06241118) · 2026-10-13

Trial recruiting to test nerandomilast in children with interstitial lung disease

A phase 3 trial registered on ClinicalTrials.gov, sponsored by Boehringer Ingelheim, is recruiting children aged 2 to 17 with interstitial lung disease. It will assess how nerandomilast is tolerated and whether it helps. Children aged 6 to 17 are randomly assigned to the drug or placebo for six months. No results are available.

CLINICALTRIALS.GOV (NCT07366034) · 2026-10-13

Study will track brain tau after hip or knee replacement surgery

An observational study registered on ClinicalTrials.gov by Uppsala University Hospital is recruiting adults aged 55 to 75. It will use brain scans to see whether tau, a protein tied to Alzheimer's disease, rises in the two years after joint replacement. A comparison group is not having surgery. No results yet.

CLINICALTRIALS.GOV (NCT07871487) · 2026-10-13

Planned trial will test ultrasound for muscle recovery after tiring handgrip exercise

A trial registered on ClinicalTrials.gov, sponsored by Universidade Federal de Santa Maria, has not yet begun recruiting and has no results. It plans to enrol 80 healthy adults aged 18 to 45. Some will get low-intensity therapeutic ultrasound after fatiguing handgrip exercise. Others will get a placebo with the intensity set to zero. The main outcome is pain.

CLINICALTRIALS.GOV (NCT07871942) · 2026-10-13

EPIGENETIC REPROGRAMMING & AGE REVERSAL 1

Review examines nanomaterials and AI for treating tooth pulp and gum disease

A review in the International Journal of Nanomedicine covers pulpitis and periodontitis, common oral infections linked in the text to diabetes and cardiovascular disease. It argues that nanomaterials could overcome limits of current treatment, and that AI could help tune them. The authors note current development remains inefficient. This is a review, not a clinical test.

INTERNATIONAL JOURNAL OF NANOMEDICINE · 2026-10-03

GUT MICROBIOME & BRAIN AXIS 4

Rises in gut-derived urolithins tracked with preserved cortical thickness in walnut-diet older adults

A sub-study of a randomised walnut trial, published in Food & Function, followed 104 cognitively healthy older adults with MRI over two years. Among 55 on the walnut diet, bigger increases in some urinary urolithins were associated with preserved cortical thickness. This is an association within a trial, so it does not show that urolithins cause the effect.

FOOD & FUNCTION · 2026-10-07

Review surveys drug delivery designed around the gut microbiome

A review in Daru examines how the human microbiome affects drug handling and how delivery systems can use microbes. It reports figures from earlier studies, including lower recurrence of C. difficile infection with SER-109 than placebo at 8 weeks. It also cites a small melanoma study of faecal transplant plus pembrolizumab. The text notes challenges remain.

DARU : JOURNAL OF FACULTY OF PHARMACY, TEHRAN UNIVERSITY OF MEDICAL SCIENCES · 2026-10-05

Meta-analysis: fibre supplements improved bowel movements in functional constipation

A meta-analysis of 14 randomised trials with 1,284 participants, published in Clinical and Translational Gastroenterology, found fibre increased weekly bowel movements and improved stool consistency. Fibre was also linked to changes in gut-related biomarkers. The authors say the clinical meaning of those biomarker changes is not established and the findings are hypothesis-generating.

CLINICAL AND TRANSLATIONAL GASTROENTEROLOGY · 2026-10-05

Fatty acid sciadonic acid improved memory in Alzheimer's-model mice

A study in Food & Function gave sciadonic acid, a fatty acid from Torreya grandis oil, to mice bred to model Alzheimer's disease. The mice did better on learning and memory tests and showed fewer amyloid plaques. Gut bacteria and brain metabolism also changed. This was in mice, so human benefit is unknown.

FOOD & FUNCTION · 2026-10-05

ALZHEIMER'S & COGNITIVE DECLINE PREVENTION 38

Eye scans may hint at diabetes complications, but evidence is still early

A review in Chronic Diseases and Translational Medicine considers the retina as a window on diabetes-related disease. Eye imaging can show changes before diabetic retinopathy appears. The authors stress that most data are observational. They call retinal measures candidate biomarkers, not validated predictors, and say more diabetes-specific prospective studies are needed.

CHRONIC DISEASES AND TRANSLATIONAL MEDICINE · 2026-10-08

Walnut-enriched diet reduced maze errors in rat study of brain aging

According to a study in the Journal of Medicinal Food, young and aged rats were fed diets with 0%, 6% or 9% walnut for 8 weeks. Walnut supplementation reduced errors in a water maze. Serum from walnut-fed rats lowered inflammatory markers in cultured microglial cells. Hippocampal BDNF expression was higher in aged than young rats on the 9% diet. This was an animal and cell study.

JOURNAL OF MEDICINAL FOOD · 2026-10-07

Real-world study finds neurologic measures stable on tafamidis in mixed-type amyloidosis

A retrospective observational study in Cardiology and Therapy followed 67 patients with mixed-phenotype transthyretin amyloidosis treated with tafamidis for at least 12 months. Neurologic scores showed a median change of zero. Cardiac measures changed little, though two heart measurements rose modestly. With no comparison group, the study cannot show the drug caused the stability.

CARDIOLOGY AND THERAPY · 2026-10-07

Bariatric surgery linked to lower dementia and Parkinson's rates in people with obesity

A cohort study in the International Journal of Obesity used health records of 32,552 matched pairs of people with severe obesity. Those who had bariatric surgery had lower rates of dementia and Parkinson's disease. They also had lower rates of heart disease and death. This is an association, so it cannot prove surgery caused these differences.

INTERNATIONAL JOURNAL OF OBESITY (2005) · 2026-10-07

Trial planned to test whether glasses slow cognitive decline in rural China

A protocol in BMJ Open describes a randomised trial that has not reported results. It will enrol 964 adults aged 60 to 79 in rural China with correctable vision problems. It will test whether providing glasses slows cognitive decline. The authors note that observational studies suggest a benefit, but causal evidence is lacking.

BMJ OPEN · 2026-10-07

Dementia linked to worse survival in older adults with preserved-EF heart failure

A prospective registry study in the Journal of Cardiology followed 965 older patients in Japan with a type of heart failure called HFpEF. Those with dementia had higher rates of death and of cardiovascular death or heart failure hospitalisation. Dementia progression at one year was also linked to death. This shows an association, not a cause.

JOURNAL OF CARDIOLOGY · 2026-10-07

Two scoring tools best flagged cardiac amyloidosis in patients with HFpEF

A retrospective study in the International Journal of Cardiology compared four scoring systems in 430 Australian patients with HFpEF. Transthyretin cardiac amyloidosis was diagnosed in 116 of them. The T-Amylo and ATTR-CM scores performed very well at identifying it. The AMY and AMYLI scores performed moderately.

INTERNATIONAL JOURNAL OF CARDIOLOGY · 2026-10-07

Higher GCase enzyme activity linked to slower cognitive decline in Parkinson's disease

An observational cohort study in the Journal of Clinical Neuroscience analysed Parkinson's participants from the PPMI study. Higher baseline glucocerebrosidase activity in spinal fluid (169 people) and plasma (132 people) was associated with slower decline on a cognitive test. The links held after adjusting for APOE and GBA status. Progranulin showed no association.

JOURNAL OF CLINICAL NEUROSCIENCE : OFFICIAL JOURNAL OF THE NEUROSURGICAL SOCIETY OF AUSTRALASIA · 2026-10-07

Scheduled acetaminophen did not clearly reduce pain in nursing home residents

A systematic review and meta-analysis in the Journal of the American Medical Directors Association pooled four randomised trials. They covered 482 long-term care residents, mostly with moderate-to-severe dementia. Regular acetaminophen did not significantly reduce pain compared with placebo or usual care. The authors rated the certainty of this evidence as moderate.

JOURNAL OF THE AMERICAN MEDICAL DIRECTORS ASSOCIATION · 2026-10-07

Review: siRNA drugs lower heart-related markers, but outcome benefits await trials

A review in the Annual Review of Pharmacology and Toxicology covers small interfering RNA therapies for cardiovascular disease. Agents aimed at targets such as PCSK9 have shown durable reductions in lipoproteins, blood pressure and amyloid precursors. Ongoing trials must show whether these changes improve heart outcomes. Delivery beyond the liver and long-term safety remain challenges.

ANNUAL REVIEW OF PHARMACOLOGY AND TOXICOLOGY · 2026-10-07

Planned review will examine caregivers' views on AI in dementia care

A protocol published in PLOS One outlines a planned qualitative evidence synthesis. It will gather studies on how family and informal caregivers feel about AI-enabled dementia care, including acceptance, concerns and expectations. Searches will cover five databases. This is a plan only. It reports no findings yet.

PLOS ONE · 2026-10-07

Small pilot finds dapagliflozin tolerated in cardiac amyloidosis, benefit unclear

A small pilot study in PLOS ONE gave dapagliflozin to people with transthyretin cardiac amyloidosis. It was open-label and not randomised. Seven of ten patients finished. Systolic blood pressure was lower during treatment. Changes in other heart and symptom measures were imprecise and did not show clear benefit. A larger randomised trial is still needed.

PLOS ONE · 2026-10-07

Weaker paternal bonds linked to late-life depression only with cognitive impairment

A cross-sectional study in Neuro-Degenerative Diseases analysed 120 people at Lausanne University Hospital's old-age psychiatric service. Lower secure paternal attachment, assessed retrospectively, was associated with more severe depressive symptoms, but only in participants with mild cognitive impairment. No significant link was found for maternal attachment or insecure paternal attachment. The design shows association, not cause.

NEURO-DEGENERATIVE DISEASES · 2026-10-07

Review finds dementia care environment tools miss psychosocial and cultural needs

A critical review in HERD examined how well tools for assessing dementia care environments match residents' needs. Existing tools cover physical safety, wayfinding and orientation fairly well. They cover emotional support, cultural adaptation, family roles and staff well-being less consistently. The authors call for broader, more person-centred tools, especially in non-Western settings such as China.

HERD · 2026-10-07

ADHD diagnosis linked to higher later risk of cognitive impairment in large cohort

A cohort study in JAMA Psychiatry followed 187,341 US adults aged 50 and older. Among those with ADHD, 6.7% developed mild cognitive impairment or dementia, versus 3.4% of those without. After adjustment, ADHD was associated with a more than four-fold higher hazard. This shows an association, not proof of cause.

JAMA PSYCHIATRY · 2026-10-07

Review examines engineered vesicles as a possible Alzheimer's drug delivery method

A review in Molecular Neurobiology looks at tiny natural particles, called extracellular vesicles, engineered to carry drugs to the brain. It notes that separate studies show benefits for Alzheimer's-related changes. It cites a phase I/II trial of nasal vesicles reporting safety and cognitive score improvements. The authors acknowledge major manufacturing and safety challenges remain.

MOLECULAR NEUROBIOLOGY · 2026-10-07

Sweet-tooth food preferences linked to higher dementia risk and faster biological aging

According to a prospective cohort study in GeroScience, people with a sweet-tooth food preference profile had a 79% higher risk of dementia than a health-aligned group. They also showed signs of faster biological aging. The link was stronger with high genetic risk. This is an association, so it does not show that sweet preferences cause dementia.

GEROSCIENCE · 2026-10-07

Review: depression and anxiety are common in vascular dementia and often undertreated

A review in the Journal of Neural Transmission looked at depression and anxiety in vascular dementia. Depression prevalence ranged from 20% to 86%, and anxiety up to 72%. Both appear more frequent and severe than in Alzheimer disease. The authors say depression is often underdiagnosed and undertreated, and that antidepressants give only a modest response.

JOURNAL OF NEURAL TRANSMISSION (VIENNA, AUSTRIA : 1996) · 2026-10-07

US death records show atrial fibrillation deaths shifting toward heart failure and dementia

A retrospective analysis of US death certificates, published in the Journal of Cardiovascular Electrophysiology, covered 1999 to 2023. Among people with atrial fibrillation listed on their certificate, heart failure became the leading contributing cause. Stroke rates were stable or falling, while dementia without stroke rose in adults aged 85 and older. This is observational data.

JOURNAL OF CARDIOVASCULAR ELECTROPHYSIOLOGY · 2026-10-07

Brain scan measures of white matter linked to later dementia risk in large cohort

An observational study in Imaging Neuroscience used the population-based Rotterdam Study to compare brain diffusion MRI markers. Among 5230 participants, 286 developed dementia over a median 9.8 years. Two markers, PSMD and mean diffusivity, fit best for predicting dementia risk, though differences between markers were small. PSMD did best for cognition.

IMAGING NEUROSCIENCE (CAMBRIDGE, MASS.) · 2026-10-06

Older pet dogs show early Alzheimer's-like brain changes linked to cognitive decline

According to a study in NPJ Dementia, brain tissue from 24 senior companion dogs showed early amyloid deposits. Dogs with cognitive impairment had more amyloid, and age was the strongest predictor. A blood marker, GFAP, tracked with amyloid burden. The authors say aged dogs may serve as a natural model of early Alzheimer's.

NPJ DEMENTIA · 2026-10-06

Alzheimer's-type spinal fluid markers appear in Lewy body dementia but not Parkinson's

A study in Alzheimer's & Dementia measured spinal fluid markers in 347 participants. Amyloid and tau levels were abnormal in dementia with Lewy bodies, but not in Parkinson's disease. In Lewy body dementia, amyloid and tau positivity were linked to worse thinking skills, but not to movement. Neurofilament light was raised across the diseases.

ALZHEIMER'S & DEMENTIA (AMSTERDAM, NETHERLANDS) · 2026-10-06

Gut microbe and metabolite patterns differ in people with mild cognitive impairment

According to a small study in MedComm, fecal samples from 35 people, including 16 spousal pairs, showed different gut bacteria and metabolites in those with mild cognitive impairment. Patterns also differed between faster and slower progressors. Models using these features distinguished cases from controls. The findings show associations, not causes.

MEDCOMM · 2026-10-06

Frailty and malnutrition more common in older surgery patients who developed delirium

A small prospective observational pilot study in BMC Anesthesiology followed 140 patients aged 65 or older after elective surgery. Delirium occurred in 5.0% of them. Frailty and malnutrition were more common in those with delirium. These are candidate risk factors, not proven causes, and the numbers with delirium were small.

BMC ANESTHESIOLOGY · 2026-10-06

Contact sport sessions raise blood markers of brain cell damage, review finds

A meta-analysis in Sports Medicine pooled 33 studies with 892 participants. Blood markers of neural damage rose clearly after a session of fight sports, American football and soccer. Experimental football heading showed no significant change. Few studies controlled for exercise effects, so the risk of bias was considerable. The findings show short-term changes, not long-term outcomes.

SPORTS MEDICINE (AUCKLAND, N.Z.) · 2026-10-06

Veterans with mild cognitive impairment or Alzheimer's had higher seizure rates

A retrospective cohort study in Neurology and Therapy used Veterans Affairs records. Compared with matched veterans without these conditions, seizure risk was higher with mild cognitive impairment (hazard ratio 2.89) and Alzheimer's disease (3.19). Traumatic brain injury and cerebrovascular disease were also linked to seizures. The authors stress these are associations, not proof of cause.

NEUROLOGY AND THERAPY · 2026-10-06

Gum disease linked to modestly higher dementia risk in pooled studies

A systematic review and meta-analysis in Evidence-Based Dentistry covered 13 longitudinal studies. Most found gum disease linked to worse cognitive outcomes. Pooling four studies showed a modest association with later dementia (hazard ratio about 1.12). The authors say causality cannot be inferred from these findings.

EVIDENCE-BASED DENTISTRY · 2026-10-06

Education-residence 'cognitive reserve' score linked to lower post-stroke impairment odds

A post hoc analysis of a Chinese stroke trial cohort, published in Stroke and Vascular Neurology, covered 1,682 acute ischaemic stroke patients without prior dementia. Cognitive impairment at three months occurred in 1,019 of them (60.6%). Higher cognitive reserve proxy scores, built from education and residential location, were associated with lower odds of impairment, mainly because of education. This is an association, and the authors urge cautious interpretation.

STROKE AND VASCULAR NEUROLOGY · 2026-10-06

Review weighs tafamidis benefits and limits in transthyretin amyloid heart disease

A review in the Indian Pacing and Electrophysiology Journal looks at tafamidis, approved in 2019 for transthyretin cardiac amyloidosis. It says the drug has been shown to reduce all-cause mortality and slow functional decline. It also lists limits, including high cost and reduced effectiveness in advanced disease. The authors say more research comparing newer therapies is needed.

INDIAN PACING AND ELECTROPHYSIOLOGY JOURNAL · 2026-10-06

Virtual reality sessions no better than cognitive stimulation for dementia symptoms in nursing homes

A randomised controlled trial in JMIR Formative Research enrolled 56 nursing home residents with dementia-related symptoms. They received virtual reality or non-digital cognitive stimulation for 6 weeks. There were no significant differences between groups in symptom reduction or overall well-being. Immediate well-being rose after sessions in both groups. Social interactions were more frequent in the control group.

JMIR FORMATIVE RESEARCH · 2026-10-06

Caregiver training raised confidence and positive experiences in dementia carers in a Chinese trial

A randomised controlled trial in Aging & Mental Health enrolled 100 family caregivers of people with dementia. At nine months, the training group scored better than controls on self-efficacy, positive caregiving experiences, mental-health quality of life and caregiving approaches. Physical quality of life and the quality of life of people with dementia did not differ between groups.

AGING & MENTAL HEALTH · 2026-10-06

Nasal artesunate eased Alzheimer's-like changes in mice and cultured neurons

A study in Molecular Neurobiology tested artesunate, given through the nose, in Alzheimer's model mice and in cultured brain cells. In mice, treatment was linked to better cognition, healthier hippocampal brain-wave patterns and less cell death. The cell experiments pointed to a signalling pathway involving GHRH. These are animal and cell findings, not human results.

MOLECULAR NEUROBIOLOGY · 2026-10-06

Epilepsy linked to higher risk of cognitive decline in cerebral amyloid angiopathy

An observational study in Seizure used health records from 2,717 patients with cerebral amyloid angiopathy, a small-vessel brain disease. Of these, 27.0% had epilepsy. After matching, epilepsy was associated with higher risk of cognitive dysfunction (hazard ratio 1.34). Death rates did not differ significantly. The design shows a link, not a cause.

SEIZURE · 2026-10-05

Blood pTau217 levels track brain pTau217 in a small autopsy study

A retrospective postmortem study in Neurology looked at 32 people with dementia, 19 with Alzheimer's disease. Blood pTau217 measures were strongly correlated with pTau217 in temporal cortex tissue, with correlations of 0.73 to 0.78. The sample is small, and the findings show a relationship between measurements.

NEUROLOGY · 2026-10-05

Marital status and cognitive screening risk diverge across two Taiwan study periods

An observational study in PLoS One analysed 103,863 Taipei adults aged 65 and over. Never-married people had higher risk of screen-positive cognitive impairment than married people in a 2005–2011 period using one questionnaire (HR 1.37), but lower risk in a 2012–2016 period using another (HR 0.60). The periods also differed in follow-up and population. The authors point to this measurement heterogeneity; the findings are associations.

PLOS ONE · 2026-10-05

Randomised trial tests sharing Alzheimer's blood test results earlier in memory clinic patients

A randomised trial in JAMA Neurology enrolled 220 people at one Spanish memory clinic. Some had blood biomarker results for Alzheimer's pathology (p-tau217 and NfL) disclosed at 3 months, others at 9 months. The main measure was how often doctors reached a very high-confidence diagnosis. The supplied text cuts off before the results.

JAMA NEUROLOGY · 2026-10-05

Genetic study links immune cell traits, brain white matter and dementia risk

A Mendelian randomization study in the European Archives of Psychiatry and Clinical Neuroscience used genetic data to look for causal links. It found possible pathways from immune cell traits to white matter structure to dementia risk. The authors call these potential causal associations. This is a genetic analysis, not a trial.

EUROPEAN ARCHIVES OF PSYCHIATRY AND CLINICAL NEUROSCIENCE · 2026-10-05

Gabapentin prescriptions linked to higher dementia rates in adults with back pain

A retrospective cohort study in Regional Anesthesia and Pain Medicine analysed 26,416 matched adults with chronic low back pain. Those with six or more gabapentin prescriptions had higher rates of dementia and mild cognitive impairment. The link was strongest in adults aged 18 to 64. This shows an association, not proof of cause.

REGIONAL ANESTHESIA AND PAIN MEDICINE · 2026-10-05

WOMEN'S HEALTH & HORMONAL TRANSITIONS 15

Workplace exercise for menopausal women was feasible in small uncontrolled study

A feasibility study in Maturitas enrolled 28 menopausal women in a 12-week workplace exercise programme. Twenty-two finished. Drop-out was 14.3% and compliance 79%. Participation was associated with favourable changes in trunk body fat, fitness, symptoms and mental health. With no control group, the study cannot show the programme caused these changes.

MATURITAS · 2026-10-08

Financial and food insecurity linked to poorer cognition in midlife women

A study in Menopause followed 492 women in the Project Viva cohort, averaging 55.5 years old. After adjustment, financial and food insecurity were associated with lower scores on several memory and thinking tests. Social support, perceived stress and discrimination were not. This observational study shows association, not cause.

MENOPAUSE (NEW YORK, N.Y.) · 2026-10-06

HIV linked to more carotid plaque in postmenopausal women

A cross-sectional study in Menopause compared 100 postmenopausal women with HIV and 100 without, in Manaus, Brazil. HIV was independently associated with more carotid plaque, though artery wall thickness was similar. Earlier menopause appeared to add risk in women with HIV. A snapshot study like this cannot show cause.

MENOPAUSE (NEW YORK, N.Y.) · 2026-10-06

Few women at one medical center received menopausal hormone therapy, with gaps by group

A retrospective observational study in Menopause reviewed records of 305,053 women aged 45 or older at one academic medical center from 2007 to 2024. About 7% had a hormone therapy prescription. African American, Hispanic and Asian women had lower odds of a prescription than White women. Higher comorbidity burden was also linked to lower odds.

MENOPAUSE (NEW YORK, N.Y.) · 2026-10-06

Review finds few menopause education programmes use technology

A scoping review in Menopause identified 50 publications describing patient-facing menopause education programmes. The programmes varied widely in teaching methods and content. Few used analogue or digital technology. The authors suggest future research should explore technology, including artificial intelligence, to potentially improve menopause education. It did not test whether any programme works.

MENOPAUSE (NEW YORK, N.Y.) · 2026-10-06

Early menopause linked to worse outcomes after heart attack-type events in women

A multicenter registry analysis in Menopause looked at 728 women with acute coronary syndrome. Women who went through menopause before age 45 had higher rates of later cardiovascular events and death. Some links weakened in extended models. The authors state that causality cannot be inferred from these findings.

MENOPAUSE (NEW YORK, N.Y.) · 2026-10-06

Prostate cancer survival gap between Black and white men appears in late stages

A study in The Prostate followed 976 men from a case-control study. Survival did not differ by race at Stage 1 or 2. Black men with Stage 3 or 4 disease had higher prostate cancer and overall mortality. Adjusting for PSA, Gleason score and treatment reduced but did not remove the gap.

THE PROSTATE · 2026-10-06

Review of 96 studies maps heart and metabolic effects of gender-affirming hormones

A systematic review in Cardiovascular Diabetology. Endocrinology Reports covered 96 studies on gender-affirming hormone therapy. Most followed people for under three years. Findings varied by group. Clot incidence was higher in transgender women than in cisgender women and men. Lipid and insulin resistance changes differed between transgender women and men. The authors note knowledge gaps.

CARDIOVASCULAR DIABETOLOGY. ENDOCRINOLOGY REPORTS · 2026-10-06

Young cancer patients: factors linked to wanting children and fertility consultations

A questionnaire study in Supportive Care in Cancer surveyed 4,847 patients aged 18 to 39 with cancer. Women, older patients and those who already had children were less likely to want future children. Among those wanting or unsure about children, interest in fertility consultations was linked to sex, age, cancer type and treatment. The findings are associations only.

SUPPORTIVE CARE IN CANCER : OFFICIAL JOURNAL OF THE MULTINATIONAL ASSOCIATION OF SUPPORTIVE CARE IN CANCER · 2026-10-06

Review of 90 trials compares drug treatments for menopausal hot flashes

A systematic review and meta-analysis in Annals of Internal Medicine pooled 90 randomised trials. Estrogens, conjugated estrogen with bazedoxifene, and oxybutynin reduced the frequency and severity of vasomotor symptoms versus placebo. Several other drug classes reduced frequency but not severity. Certainty of evidence was low to moderate for most comparisons. Few serious adverse events were reported.

ANNALS OF INTERNAL MEDICINE · 2026-10-06

Review links reproductive milestones to later asthma and COPD risk

A narrative review in Chest summarises research on female reproductive factors and chronic airway disease. Early menarche, adverse pregnancy outcomes and early menopause are each associated with worse lung outcomes or higher disease risk. Hormone effects appear complex. The authors note obesity is a major confounder. These are associations, not proof of cause.

CHEST · 2026-10-05

Review: low-dose vaginal estrogen not clearly linked to recurrence in cancer survivors

A narrative review in JCO Oncology Practice examined vaginal estrogen for menopause-related genitourinary symptoms in breast and gynecologic cancer survivors. Large observational studies and meta-analyses found no increased risk of breast cancer recurrence or death among users, including those with estrogen receptor-positive disease or taking tamoxifen. Data for people taking aromatase inhibitors are more limited, and the authors call for further prospective studies.

JCO ONCOLOGY PRACTICE · 2026-10-05

Large tumour spread at diagnosis linked to recurrence in childhood craniopharyngioma

A retrospective study in Annals of Pediatric Endocrinology & Metabolism followed 254 Korean patients diagnosed before age 18. The tumour recurred in 66 of them. Extensive spread on MRI at diagnosis was associated with recurrence. Growth hormone treatment after surgery was not significantly associated with recurrence. The design shows links, not cause.

ANNALS OF PEDIATRIC ENDOCRINOLOGY & METABOLISM · 2026-10-04

Network meta-analysis ranks anti-nausea drugs for children's gastroenteritis vomiting in emergency departments

A network meta-analysis of 33 randomised trials, published in Current Medical Research and Opinion, compared anti-vomiting drugs in children with gastroenteritis seen in emergency departments. In the short term, all forms of ondansetron reduced vomiting versus placebo, most strongly when given intravenously. Intravenous ondansetron also favoured stopping vomiting within 24 hours. Rectal dimenhydrinate showed some benefit too.

CURRENT MEDICAL RESEARCH AND OPINION · 2026-10-04

Korean patients with a adrenal hormone disorder often end up shorter than average

A retrospective study in Annals of Pediatric Endocrinology & Metabolism followed 119 Korean patients with congenital adrenal hyperplasia until adult height. Average final height was below the general population mean, and 31.9% had short stature. Early puberty and later diagnosis were linked to shorter stature. These are associations from an observational study.

ANNALS OF PEDIATRIC ENDOCRINOLOGY & METABOLISM · 2026-10-03

MITOCHONDRIA & CELLULAR ENERGY 1

Protein ATF5 helps drive heat-producing fat cells' energy use in lab models

A study in The Journal of Endocrinology used in vivo and cell models to examine brown fat, which burns energy to make heat. Cold and a stimulating signal raised levels of a protein called ATF5. Removing it weakened heat-related gene activity and fat burning in the cells. This is preclinical work, not a test in people.

THE JOURNAL OF ENDOCRINOLOGY · 2026-10-07

Faster biological aging and frailty linked to thinner macula in large UK study

According to a study in GeroScience, older biological age and greater frailty were linked to a thinner macula, the central part of the retina. The observational analysis used 45,542 UK Biobank participants. Blood metabolic signatures explained part of the link. Poor diet, smoking and air pollution were also associated with thinner macula. This shows association, not cause.

GEROSCIENCE · 2026-10-06

Cell study links protein p97/VCP to androgen-binding protein in Sertoli cells

A study in Reproductive Sciences used a Sertoli cell line to examine how the protein p97/VCP relates to androgen-binding protein, which supports sperm development. The authors report a direct relationship between the two. Some protein measures were not statistically significant. This is early cell-based work, not research in people.

REPRODUCTIVE SCIENCES (THOUSAND OAKS, CALIF.) · 2026-10-06

Shorter telomeres found in young people with relapsing-remitting multiple sclerosis

A cross-sectional study in Acta Neurologica Belgica compared 40 people with relapsing-remitting MS, aged 40 or younger, with 39 healthy controls. Leukocyte telomere length was shorter in the MS group. The authors read this as a sign of accelerated biological aging. The study is small and shows an association, not a cause.

ACTA NEUROLOGICA BELGICA · 2026-10-06

Protein USP8 tied to cell aging and death in chicken ovarian cells

A laboratory study in Theriogenology examined chicken ovarian follicle cells. The enzyme USP8 raised levels of ACSL4, which drove a form of iron-dependent cell death and an aging-like state. Reducing ACSL4 reversed these effects. The authors say the findings still need validation in living animals. The work is not in humans.

THERIOGENOLOGY · 2026-10-05

AI imaging tool detects stress-induced cell senescence in lab cell lines

Researchers report in Small Methods an AI model, BICAN-HT, that analyses label-free holotomography images to assess cellular senescence. Senescence was induced in two cell lines using three stressors. The authors say it outperformed other leading models. This is laboratory work in cells, not a test in people.

SMALL METHODS · 2026-10-05

Lab study finds drug classes that clear or calm UV-aged cells from XP patient

According to a study in Stem Cell Research & Therapy, researchers used melanocytes grown from stem cells of one xeroderma pigmentosum patient. UV damage triggered cell senescence. In drug screening, JAK inhibitors and curcuminoids reduced senescence signals, while BCL-2 and HSP90 inhibitors eliminated senescent cells. This is cell work only, not tested in people.

STEM CELL RESEARCH & THERAPY · 2026-10-05

Review finds early but limited human evidence for drugs targeting senescent cells

A systematic review in the British Journal of Clinical Pharmacology looked at human trials of drugs aimed at senescent cells. It included six completed studies. Dasatinib plus quercetin showed preliminary functional gains and lower senescence markers. Side effects were mostly mild. Small, short studies mean the evidence cannot yet establish clinical benefit or long-term safety.

BRITISH JOURNAL OF CLINICAL PHARMACOLOGY · 2026-10-05

Cell and mouse work links Nrf2 pathway to arsenic-induced lung cell ageing

A study in Cellular Signalling used mouse lung cells and mouse lung tissue. Inorganic arsenic exposure increased senescence markers and a cell-change process called EMT. Reducing Nrf2 made this worse. Dimethyl fumarate, which activates Nrf2, reversed arsenic-induced senescence in cells. This is laboratory and animal research, not human evidence.

CELLULAR SIGNALLING · 2026-10-05

Cancer drug sunitinib cleared aged cells in lab and mouse experiments

A laboratory study in Biomedicine & Pharmacotherapy screened drugs for senolytic effects, meaning killing worn-out senescent cells. Sunitinib triggered death of senescent human skin cells. In mice with lung fibrosis, it reduced senescent cells. The work points to a receptor called PDGFRβ. These are cell and mouse findings, not human results.

BIOMEDICINE & PHARMACOTHERAPY = BIOMEDECINE & PHARMACOTHERAPIE · 2026-10-05

Korean registry describes 86 women with a rare progressive lung disease

According to a study in Lung, researchers analysed registry data on 86 Korean women with lymphangioleiomyomatosis, a rare cystic lung disease. Half had no symptoms at diagnosis. Lung function was relatively preserved and showed no significant overall decline. About 55% received mTOR inhibitors, with no significant difference in decline between users and non-users. This was an observational registry analysis.

LUNG · 2026-10-05

IN THE NEWS 1

Female mouse skin stem cells work in sync; male cells act more independently

According to a ScienceDaily report, researchers tracked individual skin stem cells in living mice for five months. Female cells acted in a coordinated way, while male cells acted more independently. Sex hormones appear to drive this synchronization. It may help explain faster wound healing in female mice. This was a mouse study.

SCIENCEDAILY HEALTHY AGING · 2026-10-18