Pipeline Report » 2023

Long-Acting Therapies Trials Tracker for Hepatitis C, Opioid Use and Overdose Prevention Therapy, and Malaria





Long-Acting Therapies Trials Tracker for Hepatitis C, Opioid Use and Overdose Prevention Therapy, and Malaria

By Joelle Dountio Ofimboudem Edited by Mark Harrington

The last couple of years have witnessed increased interest in long-acting therapies. The U.S. Food and Drug Administration (FDA) approval of long-acting <u>cabotegravir/rilpivirine</u> (Cabenuva) in January 2021 followed by the approval of cabotegravir long-acting (CAB-LA) in December 2021 as the first long-acting HIV treatment and PrEP, respectively, led to the latter's inclusion into the <u>World Health Organization's updated 2022 guidelines for</u> <u>HIV prevention</u>. Earlier this year, the Medicines Patent Pool announced sublicenses with three generic developers for CAB-LA. These advances in HIV treatment and prevention have fueled the interest in long-acting therapies globally. Despite the global interest in these therapies and their proven public health benefits, these long-acting therapies are currently only available to a select few in high-income countries. In a bid to ensure equitable global access to these innovative and promising technologies, the <u>Unitaid-funded LONGEVITY</u> project seeks to develop long-acting formulations of an existing prophylaxis for malaria prevention, therapy for latent tuberculosis infection, and a curative therapy for hepatitis C virus (HCV) in high volumes and at lower prices for low- and middle-income countries (LMICs).

This trials tracker, an update of the 2022 Long-Acting Technologies Trials Tracker for Hepatitis C, Opioid Use and Overdose Prevention Therapy, and Malaria Pipeline Report, provides a compilation of ongoing clinical trials on long-acting therapies for these uses in the research and development (R&D) pipeline.

Long-acting therapies are formulations that allow for the slow release of medication into the bloodstream over prolonged periods of time. Long-acting formulations may use nano-formulation processes to package active pharmaceutical ingredients (i.e., the raw materials of a medicine) into "nano" particles, which enable a high mass to be condensed into smaller volumes that may be administered via various modes — syringe injections, microneedle patches, implants, and intravaginal rings, among others — providing sustained and gradual release of the active ingredient(s) into the bloodstream. Long-acting therapies offer people with chronic diseases requiring frequent oral intake of medicines a choice and an opportunity to replace this with alternative administrative routes and address pill/tablet fatigue. Given their ability to ensure the release of the active pharmaceutical ingredient of a medicine into the bloodstream in a sustained manner over protracted periods of time, long-acting therapies could be administered once a week, once a month, once every two or six months, and potentially even longer periods.

PIPELINE REPORT 2023

By eliminating the need for frequent oral intake of medicines, long-acting therapies could potentially improve treatment adherence, prevent relapses arising from treatment interruption, and lead to more constant plasma levels in the bloodstream. Long-acting therapies would also provide privacy to people with chronic diseases who must take oral medications frequently and may be vulnerable to stigma, pill fatigue, and drug resistance.

Leveraging these potential benefits of long-acting therapies, and with support from the Unitaid-funded LONGEVITY project, researchers are developing long-acting versions of atovaquone for malaria prevention, isoniazid and rifapentine for latent tuberculosis infection prevention, and glecaprevir/pibrentasvir for HCV cure as these diseases disproportionately affect children, poor and marginalized communities, people who use drugs, and people living with HIV in LMICs. The goal is to address current health equity gaps and accelerate efforts to control and end major global epidemics by ensuring equitable access to innovative health technologies that meet the elimination goals for these diseases.

As a partner in the LONGEVITY project, Treatment Action Group (TAG) supports the development of community surveys and ensures meaningful engagement with all stakeholders, including Unitaid, affected communities, civil society, research scientists, and medical providers, in the development of these long-acting formulations. Community engagement and participation in the R&D process is crucial to identifying and addressing potential barriers to demand and adoption of long-acting therapies once these become available. Effective community engagement in R&D is predicated on strengthening the technical capacity of research-literate activists who follow the science; advocate for community perspectives on the research needs, treatment preferences, and the acceptability of these treatments for malaria, HCV, and tuberculosis to research scientists, governments, and key decision-makers; and report back to affected communities.

While the LONGEVITY candidate treatments are still being evaluated preclinically, this trials tracker monitors ongoing or recently completed studies on long-acting treatments for HCV, malaria, and opioid use and overdose prevention. The trials in this tracker are listed on the United States <u>clinicaltrials.gov</u> website, the Pan African Clinical Trials Register, the European Union <u>clinicaltrialsregister.eu</u> registry website, the <u>WHO International</u> Clinical Trials Registry Platform website, and peer-reviewed literature.

The trial registry identifier numbers link directly to trial entries, which contain more detailed information on trial design, enrollment criteria, principal investigators, and locations.

Please communicate directly with the contact listed in the individual trial registry entries for all information about the status of the research. These HCV, malaria, and opioid use and overdose prevention long-acting therapies clinical trials were compiled between March 30 and May 30, 2023, and will be updated on an annual basis. Please send updates, corrections, or suggestions to Joelle Dountio Ofimboudem at jdountio@treatmentactiongroup.org.

	Other information	Trial registry identifier	Manufacturer/sponsor	Location	Phase	End date	Published/ presented data		
Malaria	Malaria								
Chemoprevention with Monthly IPTp with Dihydroartemisinin- piperaquine for Malaria in HIV-infected Pregnant Participants on Daily Cotrimoxazole in Kenya and Malawi: a Multi-centre Placebo- controlled Trial	Oral Sample size: 898 Objective: To compare daily cotrimoxazole plus monthly dihydroartemisinin- piperaquine (CTX-DP) vs daily CTX plus monthly placebo-DP	NCT04158713	Liverpool School of Tropical Medicine Kenya Medical Research Institute Kamuzu University of Health Sciences Kenya National AIDS & STI Control Programme KEMRI-Wellcome Trust Collaborative Research Program Centers for Disease Control and Prevention University of Copenhagen University of Cape Town University of Massachusetts Worcester University of Toronto University of Toronto University of Melbourne CardiaBase	Kenya	Phase 3	November 30, 2022	https://www.mesamalaria.org/mesa- track/chemoprevention-monthly- iptp-dihydroartemisinin-piperaquine- malaria-hiv-infected		

	Other information	Trial registry identifier	Manufacturer/sponsor	Location	Phase	End date	Published/ presented data	
нсу								
Nothing found								
Opioid use and overdose prevention therapy								
Anchoring Intermittent Long-acting Antimicrobials to Medication for Opioid Use Disorder Treatment to Facilitate Structured Transitions of Care for People Who Use Drugs Admitted to the Hospital with Invasive Infections	Injectable Sample size: 25 Objective: To determine the efficacy of an alternative strategy to the standard of care for patients with opioid use disorder and complicated infections using intermittent outpatient oritavancin therapy dosed weekly combined with initiation and continuation of medication assisted treatment for opioid use disorder for completion of antimicrobial therapy in a 12 week prospective, open-label study	NCT05521880	University of Maryland, Baltimore	No Location Provided	Phase 4	July 2024	https://www.medifind.com/conditions/ opioid-use-disorder/6344/clinical- trial/348122513	
A Phase II Multi-center Safety Study Examining the Use of the O'Neil Long- acting Naltrexone Implant (OLANI) in Opioid Dependent Persons Receiving Repeat Dosing	Implant (in abdominal region) Sample size: 250 Objective: To evaluate the safety profile and the efficacy of the OLANI in participants with opioid use disorder (OUD), and who will be voluntarily seeking relapse-prevention treatment using the naltrexone (NTX) implant	NCT05382091	National Institute on Drug Abuse (NIDA) New York State Psychiatric Institute Columbia University The Emmes Company, LLC University at Buffalo Go Medical Industries Pty Ltd	USA	Phase 2	May 2026	https://www.cdek.liu.edu/trial/ NCT05382091/	

	Other information	Trial registry identifier	Manufacturer/sponsor	Location	Phase	End date	Published/ presented data
A Randomized, Open- label, Single Dose Pharmacokinetic and Safety Study of Implantable Long-acting 3-month Naltrexone Subcutaneous Pellets Compared to Naltrexone IM Injection (Vivitrol) in Healthy Volunteers	Implant (subcutaneous) Sample size: 24 Objective: To evaluate the pharmacokinetics and safety of implantable subcutaneous naltrexone pellets (BICX104) vs Vivitrol intramuscular depot naltrexone injection	NCT04828694	BioCorRx Inc National Institute on Drug Abuse (NIDA)	USA	Phase 1	March 2023	https://ichgcp.net/clinical-trials- registry/NCT04828694
A Bioequivalence Study Comparing Vivitrol and O'Neil Long-acting Naltrexone Implant (OLANI) in Healthy Participants	Injectable Sample size: 9 Objective: To examine the pharmacokinetics profile of Vivitrol IM 380 mg over 6 doses for a treatment period of 196 days	NCT04716881	Go Medical Industries Pty Ltd National Institute on Drug Abuse (NIDA) New York State Psychiatric Institute Columbia University Clinilabs, Inc.	USA	Phase 1	April 2022	https://www.medifind.com/articles/ clinical-trial/240247906
Long-acting Buprenorphine vs. Naltrexone Opioid Treatments in Criminal Justice System-involved Adults	Injectable Sample size: 301 Objective: To compare the effectiveness of extended-release buprenorphine (XR-B) vs extended-release naltrexone (XR-NTX)	NCT04219540	NYU Langone Health National Institute on Drug Abuse (NIDA)	USA	Phase 4	April 2025	https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC8384640/

	Other information	Trial registry identifier	Manufacturer/sponsor	Location	Phase	End date	Published/ presented data
Long-acting Naltrexone for Opioid Addiction: the Importance of Mental, Physical, and Societal Factors for Sustained Abstinence and Recovery	Injectable Sample size: 317 Objective: To evaluate how treatment with extended- release naltrexone hydrochloride injectable suspension (XR-NTX) may influence the quality and speed of recovery of opioid dependent individuals	NCT03647774	Lars Tanum Haukeland University Hospital Hospital of Southern Norway Trust The Hospital of Vestfold Oslo University Hospital	Norway	Phase 4	October 2022	bit.ly/project_bank_behanding
Assessing the Safety and Feasibility of Long-acting Depot of Buprenorphine in Adults Requiring Treatment for Opioid Use Disorder in NSW Custodial Settings	Injection Sample size: 120 Objective: To compare long-acting depot buprenorphine (CAM2038) to standard of care (oral methadone) in adult males and females in custody with opioid use disorder to identify any unexpected safety and tolerability considerations specific to the adult custodial population in New South Wales	ACTRN12618000942257	NSW Ministry of Health Drug and Alcohol Service, Hunter New England Local Health District Drug Health Services, Sydney Local Health District	Australia	Phase 2 / Phase 3	November 2019	https://adisinsight.springer.com/ trials/700296372
CSP #2014 - Comparative Effectiveness of Two Formulations of Buprenorphine for Treating Opioid Use Disorder in Veterans (VA-BRAVE)	Injectable Sample size: 952 Objective: To compare a 28-day long-acting injectable sub- cutaneous formulation of buprenorphine is superior in retaining Veterans in opioid treatment and in sustaining opioid abstinence vs daily sublingual buprenorphine formulation	NCT04375033	VA Office of Research and Development	USA	Phase 4	November 2024	Addiction Science & Clinical Practice (2022) 17:6