

Miracle Drug? Everything They Don't Want You to Know About Ivermectin

Ivermectin, a Nobel Prize-Winning discovery that the media called "horse paste," not only effectively treats COVID-19 but also several other ailments — and possibly cancer.

By Dallas Ludlum



Ivermectin, a drug initially approved for use in the 1980s, has primarily been recognized for its role in combating parasitic infections, particularly in tropical regions. Given the drug's transformative impact on a myriad of parasitic diseases, its newfound prominence in global conversations warrants a deeper dive into its benefits and potential.

Historical Context and Uses

Originally developed by Merck & Co. in the late 1970s, Ivermectin was first used as a veterinary drug against worms in animals. In humans, its primary utility has been in the

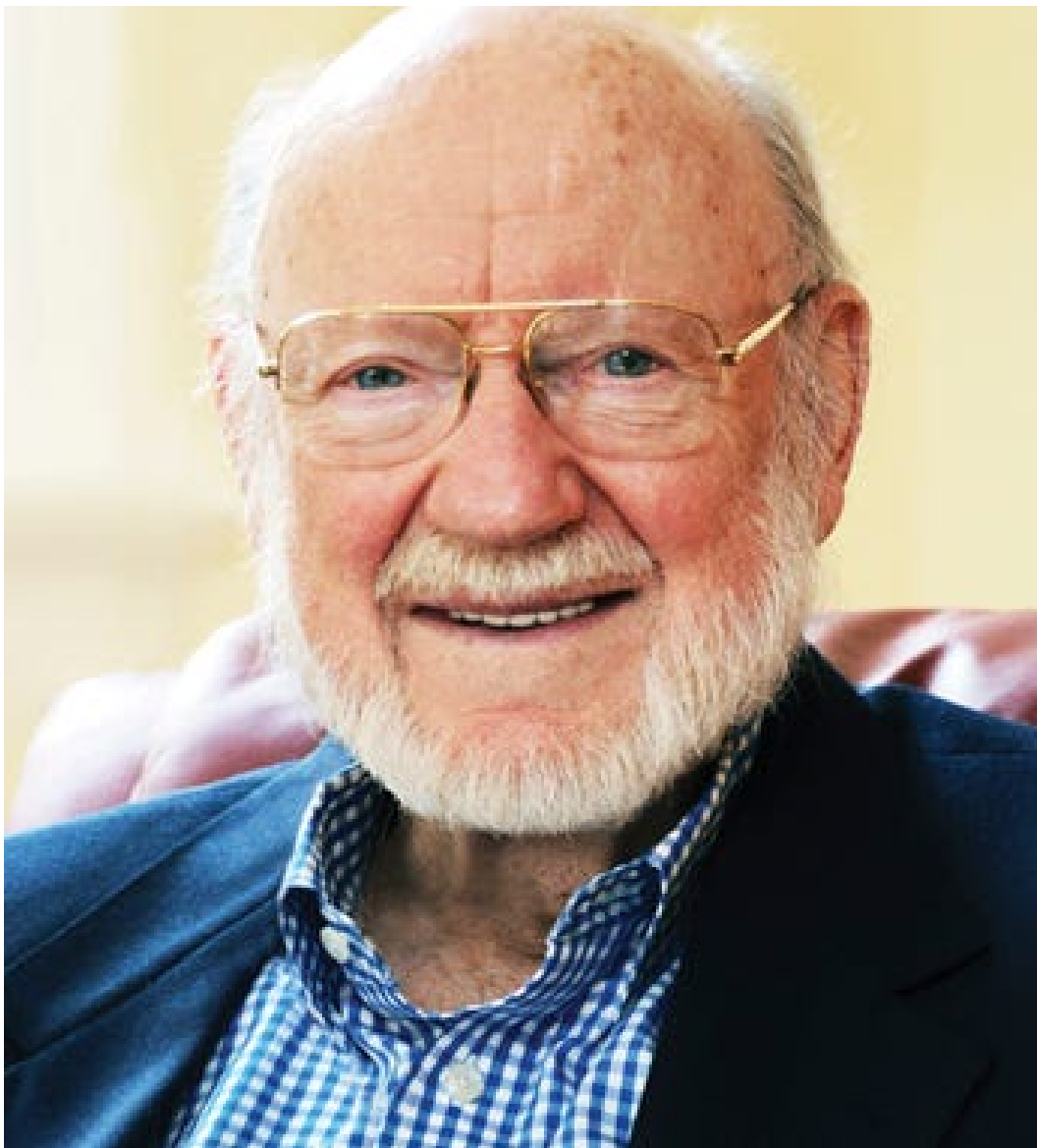
treatment of diseases caused by parasitic worms, like onchocerciasis (river blindness) and lymphatic filariasis. Due to its efficacy against these diseases, the World Health Organization (WHO) has listed Ivermectin on its list of essential medicines.

The Pioneers Behind Ivermectin:

The development of Ivermectin was not just a monumental leap in the field of medicine; it was also a testament to the perseverance and innovation of two eminent scientists – Dr. William C. Campbell and Professor Satoshi Ōmura.



Satoshi Ōmura: A distinguished Japanese microbiologist and bioorganic chemist, Professor Ōmura's work primarily focused on isolating naturally occurring microbes from the soil. His belief in the potential therapeutic applications of these microbes led him to identify and cultivate a unique strain of bacteria called **Streptomyces avermitilis**. This strain proved to be the foundation for the creation of Ivermectin.



William C. Campbell: An Irish-born biologist, Dr. Campbell's insights into the realm of parasitic diseases were pivotal. Working with Merck Institute for Therapeutic Research, Campbell identified the antiparasitic properties of the compounds derived from Professor Ōmura's bacterial strain. This collaboration eventually led to the development and commercial production of Ivermectin.

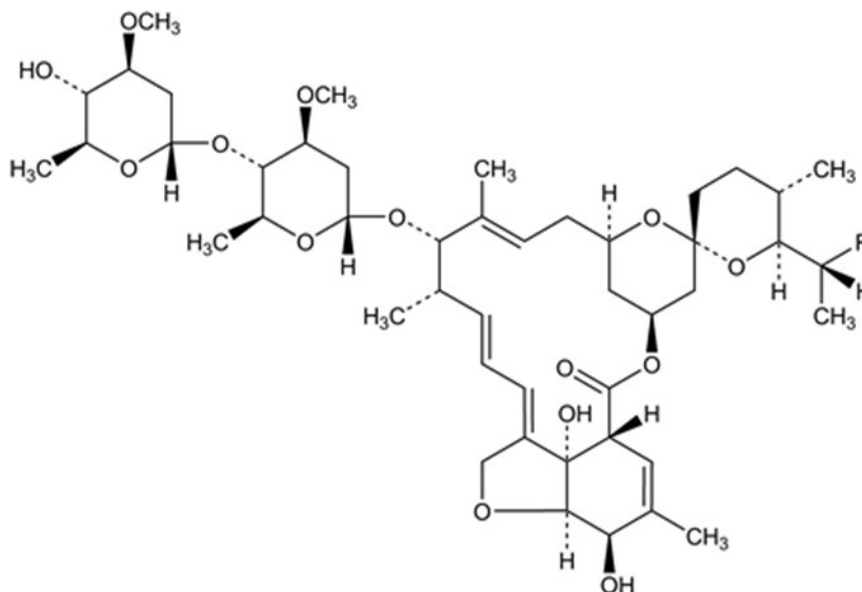
Awards and Recognition:



Their combined efforts culminated not only in the creation of a groundbreaking drug but also in accolades that celebrated their contribution to humankind. In 2015, their discoveries were honored with the Nobel Prize in Physiology or Medicine. The Nobel Assembly at the Karolinska Institute awarded half of the prize to Ōmura and Campbell, recognizing their work in developing a therapy against infections caused by roundworm parasites. Their discovery of Ivermectin and its applications brought about significant reductions in the incidence of river blindness and lymphatic filariasis, profoundly impacting global health.

Their legacy stands as a reminder of the transformative impact of scientific collaboration and exploration. Ivermectin, as a result of their combined endeavors, has and continues to bring relief to millions of individuals plagued by debilitating diseases worldwide.

Benefits of Ivermectin:



Component B_{1a}, R = C₂H₅

Component B_{1b}, R = CH₃

1. Broad Spectrum Antiparasitic:

One of the primary benefits of Ivermectin is its broad-spectrum activity against a variety of parasites. It disrupts the normal functioning of parasite nerve and muscle cells, leading to the parasite's paralysis and death.

2. The Established Safety Profile of Ivermectin



Photo by [Diana Polekhina](#) on [Unsplash](#)

Ivermectin's commendable safety record over the decades stands as a testament to its well-tolerated nature when used as prescribed. Since its discovery in the late 1970s and subsequent FDA approval in 1987, it has been administered to millions worldwide to combat a range of parasitic infections. Its effectiveness against diseases like river blindness and strongyloidiasis led to widespread distribution campaigns, especially in areas with limited medical infrastructure, further establishing its reputation as both an effective and safe medicine.

Adverse reactions to Ivermectin are generally rare and often mild, including symptoms such as dizziness, pruritus, and gastrointestinal upset. These effects are typically transient and resolve without the need for further medical intervention. Its broad therapeutic index further ensures that the drug remains within safe levels even if slightly higher doses are administered. However, like all medications, it's crucial to adhere to recommended dosages and seek professional guidance, especially when considering its use outside its primary indication. In summary, the track record of Ivermectin over the past four decades underscores its safety, making it a valuable tool in the global medical arsenal.

3. Community Impact:

Large-scale programs that distribute Ivermectin have significantly reduced the incidences of onchocerciasis and lymphatic filariasis in affected communities. This has allowed many individuals to live without the debilitating symptoms of these diseases and has had profound socioeconomic benefits.

4. Veterinary Benefits:



Photo by [Bharathi Kannan](#) on [Unsplash](#)

Beyond human health, Ivermectin has been a cornerstone in veterinary medicine, assisting in the management and prevention of various parasitic infections in livestock and pets.

Emerging Potential

In recent times, Ivermectin has entered discussions beyond parasitic diseases. Some laboratory studies have suggested that Ivermectin may possess antiviral properties. This has led to interest in its potential use against viruses, including the SARS-CoV-2 virus responsible for COVID-19.

The Promising Potential of Ivermectin in Viral Treatments

Ivermectin, a wonder drug with a stellar history of tackling parasitic diseases, has recently emerged as a beacon of hope in the fight against various viral diseases, including COVID-19. As the world grapples with the challenge of finding effective treatments against new and resurging viruses, the potential of Ivermectin has ignited a wave of excitement and optimism within the medical community.

Previous Successes Against Viruses:



Photo by [Lucas Vasques](#) on [Unsplash](#)

Even before the onset of the COVID-19 pandemic, research had highlighted Ivermectin's antiviral capabilities. Notably, studies pointed towards its effectiveness against viruses like the Dengue and West Nile virus. Ivermectin's mechanism, which involves targeting the host importin $\alpha/\beta 1$ nuclear transport proteins used by many viruses, has shown promise in bolstering the host's antiviral defenses and hindering viral proliferation.

Ivermectin's Emergence in the COVID-19 Fight:

An early Australian study during the pandemic brought Ivermectin into the spotlight by showcasing its ability to inhibit SARS-CoV-2 in cell cultures. This pioneering work provided a glimmer of hope during a time when effective treatments were desperately needed. While the concentrations used in the lab were higher than conventional human dosages, it set the stage for further exploration.

Numerous clinical trials sprang up worldwide, with many suggesting positive outcomes for patients treated with Ivermectin. Several patients reported quicker recovery, reduced severity of symptoms, and decreased viral load, fueling enthusiasm for its broader use.

The Global Embrace:



Photo by [Martin Sanchez](#) on [Unsplash](#)

Given the promising results and the drug's established safety profile when used for parasitic treatments, various regions and countries decided to proactively incorporate Ivermectin into their interim treatment guidelines. Their forward-thinking approach, driven by a combination of preliminary findings and public interest, represents a proactive stance in the face of the global health crisis.

Ivermectin's journey from an antiparasitic medication to a potential powerhouse against viral diseases is a testament to the innovative spirit of the medical community. The initial results and widespread interest in Ivermectin underscore the importance of keeping an open mind and exploring all avenues in the quest for effective treatments. As research continues, there is a growing hope that Ivermectin could play a pivotal role in the armamentarium against viral diseases, showcasing once again its versatility and life-saving potential.

The Expanding Horizons of Ivermectin's Potential Uses

Ivermectin, initially hailed for its unparalleled efficacy against parasitic infections, continues to pique the interest of researchers worldwide as they uncover its multifaceted potential. Beyond its well-documented use in treating various parasitic

diseases, recent discoveries have expanded its possible applications into realms previously uncharted for this drug.

Pest Control:



Photo by [CDC](#) on [Unsplash](#)

As noted, there's increasing evidence suggesting Ivermectin's role in combating pests like mosquitoes and bed bugs. Its unique action can reduce the lifespan of mosquitoes that consume it, potentially acting as a tool in the fight against mosquito-borne diseases. Likewise, its efficacy against bed bugs presents a novel avenue for addressing these resilient urban pests.

Anti-inflammatory Effects:



Photo by [Towfiqu barbhuiya](#) on [Unsplash](#)

Some studies have explored Ivermectin's potential anti-inflammatory benefits. Given that inflammation is a hallmark of numerous chronic conditions, ranging from cardiovascular diseases to certain neurological disorders, understanding Ivermectin's role in this context could reshape approaches to managing such conditions.

Potential in Oncology:



Photo by [National Cancer Institute](#) on [Unsplash](#)

Though still in early stages, there's budding interest in Ivermectin's potential application in cancer therapy. Its ability to regulate certain cellular processes might offer avenues for targeting malignant cells, presenting a hopeful prospect in the expansive field of oncology.

As science continues to delve deeper into the multifunctional capabilities of Ivermectin, it's crucial to approach these potential applications with rigorous research and clinical trials. Nonetheless, the expanding horizons of this drug underscore its versatility and the promise it holds for diverse medical and environmental challenges.

Considerations and Cautions

While Ivermectin's benefits in treating parasitic infections are well-documented, its use in contexts outside of approved indications should be approached with caution.

Preliminary research does not always translate to effectiveness in real-world scenarios, and there can be risks associated with inappropriate dosing or self-medication.

Especially given the intense public interest, it's crucial to distinguish between established uses and potential, yet unconfirmed, applications of the drug.

The Ivermectin Controversy: Media's Role in Shaping Perceptions

The debate surrounding Ivermectin, particularly its potential application against COVID-19, has emerged as one of the most divisive topics in recent medical discourse. While the scientific community naturally gravitates towards rigorous inquiry and debate when confronted with new treatment proposals, the Ivermectin discussion seems to have taken a turn that transcends typical scientific deliberation.

Mainstream media, in its role as a purveyor of information to the masses, has a responsibility to present data and perspectives in a balanced manner. However, with Ivermectin, many outlets appear to have adopted a decidedly dismissive stance from the outset. Reports often emphasize the drug's primary use as an anti-parasitic treatment for animals, sometimes invoking sensationalized headlines that label it as a "horse dewormer." Such framing can obfuscate the drug's long-established human

applications and its recognition by the World Health Organization as an essential medicine.

It's possible that the rapid spread of misinformation on social platforms and the heightened emotions around the global pandemic have contributed to media outlets taking a more aggressive stance against claims they perceive as potentially harmful. However, the conflation of fringe misuse with genuine research has created an environment where it's challenging to discuss the drug without encountering preconceived biases.

Furthermore, anecdotal reports of individuals self-administering veterinary formulations of Ivermectin have fueled a narrative that paints proponents of further research into the drug's antiviral capabilities as misguided or misinformed. While self-medication without expert guidance is unequivocally risky and not advisable, it's essential to separate these incidents from the broader scientific discourse surrounding the drug's potential.

As with many issues in the age of real-time reporting, the Ivermectin controversy underscores the need for balanced, evidence-based journalism that can educate the public while steering clear of sensationalism and undue bias.

Conclusion

Ivermectin has undoubtedly made a mark in the world of medicine, transforming the lives of millions who suffer from a multitude of diseases. As with any drug, its

applications should be based on robust scientific evidence, and while its potential continues to be explored in various domains, its proven track record against parasites remains its most significant contribution to global health. As research continues, the scientific community and the public alike await further insights into this multifaceted drug's full range of capabilities.