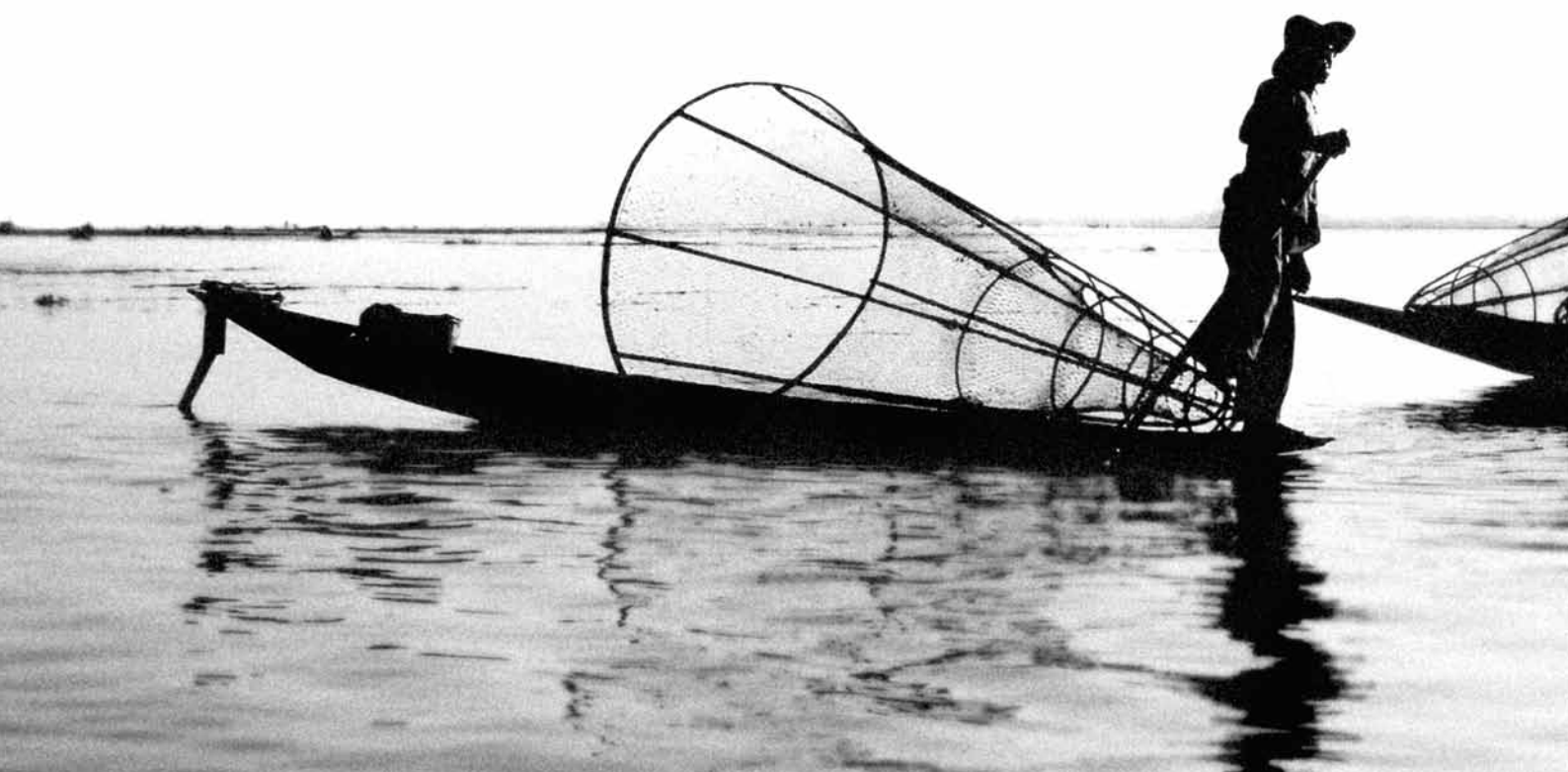


MONITORING MADE ACCESSIBLE



MEDICAL TESTING FOR THE REST OF THE WORLD

SILENT MAJORITY. Today over half of the world's population lives in settings where basic resources such as clean water, food and electricity are lacking. Many factors hamper development efforts in these regions. The most notable factor is the growing burden of chronic illness and death from infectious diseases. Providing adequate care to individuals while simultaneously coping with their absence from the workforce draws heavily on strained economies and perpetuates the cycle of hardship for entire nations.



Collective perspective

The World Health Organization together with the World Bank has developed a scale to quantify this economic impact. It is called the disability-adjusted life-year (DALY). This tool quantifies the years of productivity lost to premature death as well as chronic illness. If one were to look at the impact of the most common infectious diseases in the developing world, the toll is 350 million DALYs per year. That means these infectious diseases are robbing the developing world of almost a million years of productivity each day. Given the staggering proportions of that number, it is easy to see that plowing even a small percentage of that time back into the economy would contribute greatly.

Good intentions

Many of the infectious diseases that are common in the developing world are treatable. And thanks to the generosity of numerous funding initiatives, access to drugs has increased dramatically in recent years. What has not kept in step is access to the diagnostic tests required to administer those drugs properly. The result of this is a waste of these drugs on one hand and the far more ominous prospect of increased drug resistance on the other.

Reality check

For any test to provide reliable results in a resource-limited setting, it must be suited to the clinical reality found there. This includes everything from funding, transportation and

staffing issues to laboratory facilities, power supply and water purity. That's why many tests that were designed for use in developed nations encounter problems when introduced in a resource-limited setting. At Cavid, our aim is to bring reliable diagnostic tests to resource-limited settings by designing them to work in those environments from the start.

Cavid's contribution

We have a long road ahead of us. But our vision is a world where proper medical testing is resource-independent. That involves making medical tests more accessible by making them:

- A** – Affordable in the context of resource-limited settings
- C** – Clinically relevant to both the diseases and measurement parameters needed
- C** – Comparable to similar tests used in developed nations with regard to accuracy and reliability
- E** – Easy to run and read in the field
- S** – Swifter at showing results
- S** – Suited to the infrastructure limitations of resource-limited settings

To that end, we have launched the ExaVir™ product range. ExaVir Load and ExaVir Drug are practical tools that make reliable HIV viral load and drug susceptibility testing possible in resource-limited settings.



THE TIME FOR HIV VIRAL LOAD MONITORING IS NOW

ExaVir™ Load

RELIABLE AND AFFORDABLE VIRAL LOAD MONITORING COVERING ALL HIV TYPES AND SUBTYPES. Viral load data provides information that can't be seen with CD4 tests alone. Monitoring viral load helps physicians know when to start ARV therapy and when to switch drugs that are no longer working. This can help prolong a patient's productive years, make ARV supplies go further and help slow the emergence of drug-resistant strains of HIV. That's why viral load testing is a routine part of HIV management in developed nations. Now, for the first time, there is a viral load test that offers these advantages to the rest of the world.



Managing ART

Antiretroviral therapy (ART) is becoming increasingly available to more people in resource-limited settings. In order for doctors to make the most of these drugs, they must be able to manage their use. While CD4 is an excellent tool for seeing how the body reacts to HIV, it is less helpful for seeing how the virus is reacting to ART. That is where viral load testing excels. It allows doctors to observe HIV activity directly. And with ExaVir Load, doctors can monitor activity in all known HIV types and subtypes.

Practical and reliable

ExaVir Load does not require sophisticated machinery, dedicated rooms or special laboratory environments to protect against contamination. That's because it is specifically designed to function in the conditions found in the average resource-limited clinic. Working with standard ELISA equipment, the test measures HIV reverse transcriptase (RT) activity. Its reliability has been proven on the ground in Kenya, Botswana, Zambia and Zimbabwe. Benchmark studies have proven it to be as accurate as any HIV viral load test available today.



ADDRESSING A PROBLEM THAT KNOWS NO BORDERS

ExaVir™ Drug

BETTER MANAGEMENT. As more ARVs become available in resource-limited settings, managing the threat of drug resistance will continue to be a global priority. ExaVir Drug is on the front line of this effort by providing doctors in resource-limited settings with a tool they can use to test the phenotypic drug susceptibility of the virus circulating in the patient's plasma.



Timing is everything

One of the physicians' biggest challenges in treating HIV is the rate at which the virus mutates. This makes the emergence of viral resistance against any antiretroviral drug virtually inevitable. The doctor must carefully time when treatment with a particular ARV drug should start and when it should stop and be replaced with another drug. One way to help physicians manage this risk more effectively is by providing them with better information. When clinical symptoms, viral load and/or CD4 values cause a physician to suspect ARV treatment failure, ExaVir Drug can provide patient-specific information on the drug sensitivity of the active virus.

Ultra-fast phenotypic drug susceptibility testing

If the clinic is using the ExaVir Load test, the RT purified during the RT Viral Load procedure can also be used for direct phenotypic drug susceptibility testing with ExaVir Drug. Results are available in as little as three days with only a few hours of hands-on laboratory work. The level of susceptibility to a drug is given as an IC50 value and as fold-difference between the patient's virus and a wild type reference. The analysis gives a direct answer to the question of which treatment is effective in each individual case. The test can be performed at any laboratory currently using our viral load assay, ExaVir Load Version 2. Studies have established its usefulness in detecting susceptibility to Nevirapine and Efavirenz.



Cavidi was founded in 1984 by leading virologists from Uppsala University in Sweden. For over two decades the company has been devoted to developing innovative solutions for resource-limited settings. To that end, we have developed the ExaVir™ product line, which is designed to provide a reliable, robust and inexpensive platform for monitoring HIV patients. The ExaVir products are CE marked.

We also market front-line test kits for use in laboratory studies of HIV and other retroviruses. Customers include hospitals, private laboratories, the pharmaceutical industry and research institutions worldwide. Cavidi is ISO 9001 and 13485 certified for quality management systems.

If you would like more information about Cavidi or our products, please contact us directly.

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