

# MESSAGE FROM THE DIRECTOR

"A quarter of a century" and still growing every year; not a bad record for a public health initiative – especially one that depends on donated intervention.

This year we celebrate 25 years since Merck (known as MSD outside the US and Canada) announced that the company would donate Mectizan™, as much as needed for as long as needed, for onchocerciasis control.

Now, 25 years later, we're celebrating, but not so much that the donation continues, more that its led to remarkable advances in public health, which have been achieved as a direct or indirect result of this donation.

#### **Onchocerciasis**

Twenty five years ago we thought around 45 million people might be infected with onchocerciasis. The introduction of an effective medical intervention stimulated more interest in the disease and partners began mapping the disease in more detail. The result? More than twice as many people were at-risk – many of whom lived outside the Onchocerciasis Control Programme (OCP) for West Africa.

Mectizan distribution through non-governmental development organization partners in these countries progressively scaled up over the years. Then, OCP, WHO, the World Bank, non-governmental development organization (NGDO) implementing partners, and the Mectizan Donation Program (MDP) worked together to form the African Programme for Onchocerciasis Control in 2005. Thanks to APOC, and to research by WHO's Tropical Disease Research Program and others, strategies were developed to rapidly map the disease and to distribute the drug through a community-directed approach. These strategies led to many other successful health interventions at the community level. Empowering the communities has enabled the significant scale up and

the ability for countries to sustain treatment some for more than 20 years.

In the Americas where onchocerciasis was confined to 500,000 people living in 13 foci in 6 countries, the Onchocerciasis Elimination Program for the America's efforts to achieve high (85%+) coverage with Mectizan twice yearly has led to full control of the disease and, now, to the beginning of elimination of transmission of the disease from the region. Colombia is the first country to apply to WHO for the certification of elimination of onchocerciasis and other countries will soon do the same as they complete the 3-year post treatment surveillance phase. In fact, Mectizan treatment has been stopped in the Americas with the exception of the endemic foci in North East Venezuela and another that crosses the border between Venezuela and Brazil.

As recently as 2003 it was thought that elimination of onchocerciasis may only be possible in the Americas. However, we now know that in Africa, there is evidence of focal elimination in Senegal, Mali and Uganda. At the December 2011 meeting of the Joint Action Forum of APOC a recommendation was made to extend APOC to 2025 with the goal to achieve elimination in Africa where feasible.

As elimination is becoming the word of the day, perhaps we should consider changing the name APOC to APOE!



## Lymphatic Filariasis (LF)

What about LF? Mass drug administration (MDA) with Mectizan™ and albendazole (donated by Glaxo Smith Kline) has been ongoing for the elimination of LF since 2000 in countries where onchocerciasis and LF are coendemic. The WHO recommends 5-8 years of treatment with high coverage, so there are already countries that have completed MDA and are in the post treatment surveillance phase. In 2011, WHO prepared a new document on monitoring and evaluation using techniques for transmission assessment surveys (TAS) to clarify when elimination of transmission has been achieved. In Africa, though some countries have finished MDA, others continue to scale up as they obtain the resources necessary for implementation. The 2020 goal to stop treatment for LF in Africa is still attainable if these countries can quickly scale up MDA in the next two years.

### **Neglected Tropical Diseases (NTDs)**

When Mectizan was donated 25 years ago, MDA for parasitic disease was not a concept for public health. The success of the onchocerciasis control programs led to the development and implementation of MDA strategies for LF elimination in 1998, which then led to a new program to eliminate blinding trachoma using MDA with Zithromax. Since then, MDA is also being used for the control of soil transmitted helminthiasis and schistosomiasis. The resulting preventive chemotherapy strategy (PCT) developed by WHO and other partners has become the standard tool for the control and/or elimination of eligible NTDs armed with readily available, rapid impact tools. Without the donation of Mectizan and the resulting mass drug administration strategies that evolved through the work of multiple partners – PCT would not be where it is today.

#### The Future

What can we expect over the next 25 years? LF elimination remains a possibility for 2020. APOC's governing body has expanded the program through 2025. We hope that by then the onchocerciasis map will have shrunk to just a few countries where conflict or co-endemicity with loiasis has delayed progress – although partners are working hard to find a solution for people at-risk for onchocerciasis who live in loiasis endemic areas where Mectizan distribution is limited.



Using all the tools we have available we could well eliminate transmission in these difficult places. In addition to LF and onchocerciasis, pharmaceutical companies are increasing their drug donations for other diseases so other NTDs may very well be under control by 2020.

Finally, in 2011, MDP underwent an extensive external evaluation. The results are still being analysed and we look forward to sharing them with our partners. In the meantime, we would like to extend a big thank you to all of you who took part in the process. We may provide the tablets but the work done by all the partners to

implement the programs is what has made things work and is what has produced remarkable success in the fight against onchocerciasis. We will be using the recommendations from the external evaluation to develop a new strategic plan in 2012, which we hope will include the devolution of MDP in 2025. A quarter century ago, no one expected that this would be an option. No one could have anticipated that, through partnership and innovation, end goal would shift from control to elimination. But we are confident that is what the future holds.

In 2012 we look forward to celebrating the first 25 years – but optimistic that we will not be celebrating the first 50 years in 2037.

**Adrian Hopkins** 



## ONCHOCERCIASIS ACHIEVEMENTS

In 2011, MDP approved more than 140,000,000 treatments for onchocerciasis control/elimination through the approval of 55 Mectizan™ applications. Among these applications, 12 were joint applications for Mectizan and albendazole in countries where lymphatic filariasis (LF) and onchocerciasis are co-endemic. Some countries like Uganda, Cote d'Ivoire, and Cameroon applied for drugs twice during the 2011 calendar year for mass drug administration (MDA) to be implemented in 2011 and 2012, therefore, 18 million of the treatments approved in 2011 will be implemented in 2012. The additional increase in treatments approved is a result of continued program expansion in DRC, Angola, Ethiopia, CAR, Cameroon, Sudan, and Uganda.

the last year Mectizan will be distributed in Mexico. In 2012, the country will begin the 3-year post treatment surveillance phase. Ecuador and Guatemala are also in the post-treatment surveillance phase. Colombia has completed post-treatment surveillance and has applied to WHO for certification of elimination. Brazil and Venezuela are the only two remaining countries distributing Mectizan in the Americas.

From the inception of the Mectizan Donation Program in 1987 through 2011, more than 1 billion treatments have been approved for onchocerciasis.

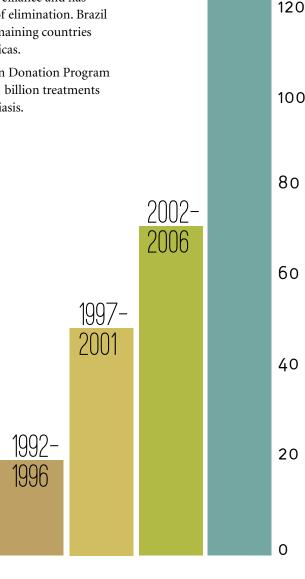
1987-

# 1 billion treatments approved since 1987

The majority of treatments approved were for Africa with a total of 139,265,010 treatments approved for the African Program for Onchocerciasis Control (APOC) and the former-Onchocerciasis Control Program (OCP) areas. APOC countries were approved for 112,856,958 treatments and 26,408,052 treatments for former OCP countries. The APOC region represents 80.27% of all approvals, while the ex-OCP or West African region represents 18.78%. The OEPA region represents 0.92% and Yemen represents the remaining 0.02% of the total treatments approved.

Although APOC has begun shifting from control to elimination, the African region is still undergoing the transition to elimination strategies.

In the Americas in 2011, the government of Mexico announced that transmission has been interrupted country-wide making 2011



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Figure 1: Average Number of Treatments Approved for Onchocerciasis from 1987-2011

## LYMPHATIC FILARIASIS ACHIEVEMENTS

Twenty eight countries in Africa and Yemen are eligible to use albendazole and Mectizan<sup>™</sup> for mass drug administration (MDA) to interrupt the transmission of lymphatic filariasis (LF). Since the beginning of the program in 2000, more than 665 million treatments have been approved in 20 African countries and Yemen. As shown in figure 1, the number of treatments approved continues to increase every year as new countries launch LF elimination (LFE) programs and others expand into new implementation units (IUs).

In 2011, 129.8 million treatments were approved for LF elimination (LFE) in 12 countries. Among the 17 re-applications received in 2011, 8 were approved for the continuation of treatment in existing program areas in Benin, Burkina Faso, Ghana, Malawi, Mali, Nigeria, Senegal, and Sierra Leone. Four re-applications were approved for program expansion in Cameroon, Mozambique, Tanzania, and Ethiopia. Four additional re- applications received from Cote d'Ivoire, Cameroon, Guinea Bissau, and Niger will be approved early in 2012 as well as the single initial application received from Liberia. No application was received from Sudan and Southern Sudan. For all 12 approved re-applications, 28% of the treatments will be distributed in areas co-endemic with onchocerciasis.

### Stopping MDA and Post Treatment Surveillance

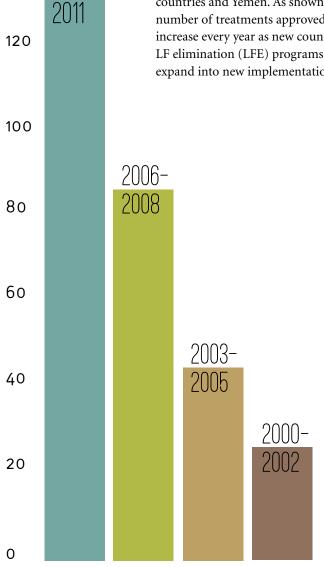
Following the required number of rounds of Mectizan and albendazole treatment, new implementation units are becoming eligible for transmission assessment surveys to determine their eligibility to stop mass drug administration for LFE.

# 665+ million treatments approved since 2000

In Africa, the Regional Program Review Group for Elimination of Lymphatic Filariasis (RPRG-LF) of WHO-AFRO, reviewed the data provided by countries and recommended that treatment assessment surveys be conducted in 23 IUs in Benin, 13 in Burkina Faso, and 2 in Mali.

In 2012, additional IUs in Ghana, Nigeria, Tanzania, and Uganda may be eligible for stopping MDA.

Post MDA activities will continue in Togo, Zanzibar, and Yemen. It was recommended that LF program coordinators in Burkina Faso work closely in partnership with the Malaria program in order to increase the coverage and use of insecticide-treated bed nets (ITNs) given the additional benefit ITNs have shown in affecting LF transmission.



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2009-

Figure 1: Average number of Treatments Approved for LF Elimination from 2000 to 2011





## MECTIZAN EXPERT COMMITTEE ALBENDAZOLE DONATION HIGHLIGHTS

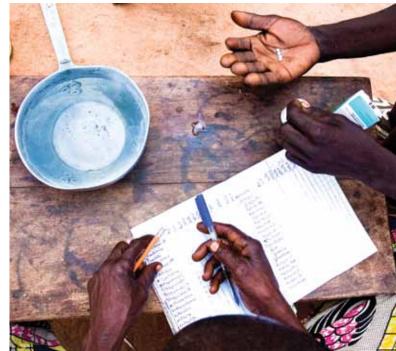
In April 2011, the Mectizan Donation Program convened a second meeting of the *Loa loa* Scientific Working Group (SWG). Some of the key recommendations included:

- The need for an accurate, up to date, and accessible integrated database with mapping information for onchocerciasis, RAPLOA, a tool used to rapidly assess whether *Loa loa* is present in communities, and LF mapping. Historical data should also be included. The Group appreciates that WHO AFRO are currently working with the London School of Tropical Medicine and Hygiene to coordinate this activity.
- LF Programme Managers should be reminded about the importance of continued vigilance in monitoring for serious adverse events (SAE) in community-directed treatment areas.
- The SWG approved the concept of the "Test and Treat" proposal where individuals will be tested for loiasis before being treated with ivermectin.

The Mectizan Expert Committee observed a moment of silence to honour Dr. Kwablah Awadzi, who spent much of his professional life fighting against onchocerciasis. The MEC also observed a silence to honor Dr. Likezo Mubila for her important contribution in the fight against LF and other NTDs in the WHO AFRO Region.

Two Mectizan Expert Committee (MEC) meetings were held in 2011: one in Baltimore, Maryland USA following the SWG for loiasis in April and one in Paris, France in October. Key conclusions and recommendations included:

- Though partners in Yemen are eager to make progress towards the elimination of onchocerciasis from Yemen, the MEC recommended that the program wait until the political situation has improved. In the meantime, Mectizan™ will be provided for ongoing case management.
- A subcommittee was formed by the MEC to establish a mechanism for the submission of operational/program research proposals to the Mectizan Donation Program and to the MEC for funding. Research priorities will be identified by the MEC and a review process put in place. Outside expertise will be sought in cases where MEC members did not have the required expertise. MDP does not have extensive funds available, but could contribute seed funds and encourage co-funding. Funding is available for the purchase of ICT cards for transmission assessment in some countries where 5 or



more rounds of treatment for LF have been undertaken.

- The MEC supports the concept of onchocerciasis elimination in West Africa in the former Onchocerciasis Control Program countries. The MEC requested that APOC inform the MEC of the outcome of annual meeting of these country managers.
- MEC reinforced the need to educate families to become involved in care of patients with SAEs.
- The request from Angola to expand into new *Loa loa* co-endemic areas was approved. The MEC emphasized the importance of strictly adhering to the MEC/TCC guidelines. Distribution must take place in small areas under close supervision and the technical advisor for SAEs must be present with a reliable means of transport.



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Through the Mectizan Donation Program, Merck donates Mectizan for the elimination of onchocerciasis as a public health problem in Africa, Latin America, and Yemen. For the elimination of lymphatic filariasis in Africa and Yemen where onchocerciasis is co-endemic, Mectizan is co-administered with albendazole, which is donated by GlaxoSmithKline.

Mectizan is not approved for use in the United States.

Africa photography by Peter DiCampo





