African Access Initiative (AAI)
Annual Report 2020
Driven by Africa - for Africa

Improving cancer care on the African continent
Dear Friends of AAI,

At the Biden Cancer Summit in 2018, I called for an increase in international partnership to mitigate the cancer crisis in Africa. Over the past two years, we have been privileged to work with so many African Access Initiative (AAI) partners from around the globe to support Africa’s ability to diagnose and treat cancer patients. In 2020 in particular, we have seen tremendous creativity and collaboration, especially in light of the challenges wrought by the COVID-19 pandemic. Now, more than ever, it is critically important that we come together to address the cancer crisis in Africa; we cannot afford to forget about cancer during the ongoing pandemic – especially in low- and middle-income countries where accessing quality cancer care is already so challenging.

Digitization and innovation took on new meaning for BVGH in 2020. Leveraging technology has allowed us to expand our impact on the African continent and reach more oncology healthcare professionals than ever before. Our team built a cohort of experts from industry and academia to lead virtual training programs that transferred knowledge and built skills for more than 1,000 oncology surgeons, nurses, pathologists, and radiotherapy specialists. Our programs directly connected African cancer leaders with experts from world-class institutions such as the University of Oxford, Dana-Farber Cancer Institute, and Takeda Pharmaceutical Co., Ltd., among others, to learn advanced diagnostic and treatment techniques and – most importantly – how to adapt these techniques to accurately diagnose cancers and effectively care for patients at every step along the treatment pathway.

One such virtual training program, co-developed with Ahmadu Bello University Teaching Hospital (ABUTH) faculty and held in partnership with the American Society for Clinical Pathology (ASCP), convened more than 85 pathologists from 35 hospitals across Nigeria. This training program engaged international subject area experts and was conducted over nine weeks, building the necessary histology and immunohistochemistry capacity to effectively diagnose Nigeria’s deadliest cancers. The program was a testament to the AAI model – adaptable, scalable, responsive, and resilient to meet the shifting needs and priorities of our partners on the continent.

Securing sustainable access to affordable cancer medicines remains a top priority across AAI countries. In 2020, our African partners executed the first AAI drug access agreements, enabling Congolese and Cameroonian cancer patients’ access to life-saving, high-quality, and affordable cancer medicines.

The pandemic has highlighted the fragility of health systems and the significant healthcare inequities prevalent globally. Africans and African Americans – in particular – are significantly underrepresented in cancer clinical research. BVGH launched the African Consortium for Cancer Clinical Trials (AC3T) in 2017 to help eliminate clinical trial disparities. In 2020, we launched the AC3T Online Platform, a first-of-its-kind platform that publicizes African hospitals’ clinical trial experience, infrastructure, and capacities to the international community that conducts oncology clinical trials. Through AC3T training programs, BVGH is catalyzing a community of African scientists positioned to conduct high-quality cancer clinical trials that demonstrate the safety and efficacy of cancer regimens among African populations.

AAI is disrupting the growing cancer crisis in Africa through its sustainable approach and with the support of our network of member country governments, private industry partners – Takeda Pharmaceutical Co., Ltd., Johnson & Johnson, GardaWorld, and Faber Daeufer & Ihrato PC – and nonprofit collaborators. Thank you for supporting us along the way.

Sincerely,

Jennifer Dent
President & CEO, BIO Ventures for Global Health
AAI at a Glance

BIO Ventures for Global Health (BVGH) launched the African Access Initiative (AAI) to empower African cancer leaders to improve the treatment outcomes of their cancer patients.

Since then, we have seen incredible progress toward our goals of:

- Accelerating access to cancer medicines and technologies
- Strengthening healthcare infrastructure
- Building oncology capacity
- Addressing the cancer data gap in Africa through clinical trials
- Expanding awareness of cancer in Africa

AAI now includes 40 partner hospitals across our member countries: Cameroon, Côte d’Ivoire, Kenya, Nigeria, Rwanda, and Senegal.

Without action, cancer mortality in Africa is expected to double by 2040.
Accelerating Access to Cancer Medicines and Technologies

Compared to all other leading causes of death, cancer causes the greatest economic loss worldwide. The economic burden of cancer is particularly profound for populations in low- and middle-income countries. In Nigeria alone, cancer deaths and disability result in an economic loss of $4.7 billion USD every year.

For many African cancer patients, accessing life-saving cancer treatment is limited by their ability to pay, inefficiencies within their country’s supply chain and procurement mechanisms, and regulatory agencies that are unable to prevent counterfeit and substandard medicines from flooding the market. In the absence of consistently-available stocks of high-quality, affordable drugs, many cancer patients and their families are forced to abandon treatment, opt for treatments other than the preferred regimen for their disease, or procure inexpensive, counterfeit medicines.

Recognizing Africa’s access challenges, BVGH works with AAI country stakeholders to identify prioritized cancer medicines and explore affordable access options with international pharmaceutical companies.

With pharmaceutical companies engaged, BVGH works within countries’ current supply chain and regulatory systems to coordinate drug shipments directly from companies to in-country stakeholders. On the behalf of hospitals and government procurement agencies, BVGH manages product selection, arranges shipping terms, and ensures that the necessary importation documents are secured ahead of every product delivery.

In 2020, BVGH delivered backbone chemotherapeutics and immunotherapy drugs used to treat breast, cervical, hematological, and pediatric cancer patients. Through BVGH’s AAI drug access program, more than 1,400 cancer patients in Cameroon and the Democratic Republic of the Congo will access the life-saving treatments that they require.
Building Oncology Capacity

In 2020, BVGH launched the AAI Virtual Training Series – a collection of six multi-week, accredited courses for African oncology professionals. The courses offered African clinicians the opportunity to dive deeper into their areas of expertise by connecting with an extensive network of industry and academic professionals – all from their socially-distanced home institutions.

Through the AAI Virtual Training Series:

- 1,000+ healthcare professionals were trained virtually
- 25+ countries represented
- 6 training programs completed

The courses included:

*Building on the support of AAI’s company partners (Pfizer and Takeda), Merck & Co., Inc. supported select AAI Virtual Training Series courses.
**Program Spotlight**

**AAI Virtual Training Series for Gynecologic-Oncology Management in Rwanda**

Gynecologic cancers are the most common cancers in Rwanda - and the deadliest. Over 1,300 Rwandan women develop cervical cancer each year, with 71% of those women dying from the disease. Like many low- and middle-income countries, Rwanda does not currently have subspecialized gynecologic-oncologists in-country; the burden of care falls upon the country’s obstetrician-gynecologists.

In response to Rwanda’s urgent gynecology-oncology needs and in close partnership with Rwandan leaders at the University of Rwanda, Rwanda Biomedical Centre, and Rwandan Society of Obstetricians & Gynecologists (RSOG), BVGH developed and led a seven-module virtual training course: “Gynecologic-Oncology Management in Rwanda.”

The course convened six expert gynecologic-oncologists and oncologists from four countries (Botswana, Canada, USA, and Rwanda) to train 44 Rwandan gynecologists from 18 institutions. The participating gynecologists represented all levels of Rwanda’s health system, including tertiary referral hospitals, district and provincial hospitals, private clinics, and University of Rwanda resident programs. Rwanda’s gynecologists overwhelmingly recognized the value of the materials taught, with almost all participants reporting that they planned to apply the content and learnings into their daily work.

“The number of women who are dying from this preventable cancer - which is also potentially curable when diagnosed early - is unacceptable. We as the Rwandan Society of Obstetricians & Gynecologists very much value international transfer of knowledge and skills. Proper management of cervical cancer requires much technical experience and training combined with consistent exposure and knowledge-sharing with experts such as these trainers. We are grateful to BVGH for organizing this training program as a key step along our continuous process of improvement to ensure that our patients get the best care possible.”

- Colonel, Dr. Eugene Ngoga, Obstetrics and Gynecology Specialist, RSOG President
Program Spotlight

Providing Advanced Training in Specialized Diagnostic Techniques for Women’s Cancers in Rwanda and Kenya

An accurate and timely diagnosis of cancer can mean the difference between survival and death. Late diagnosis of cancer is tragically common in Africa, partly due to the lack of trained pathologists and other laboratory professionals. Through a generous grant from the Adtalem Global Education Foundation, BVGH partnered with Dr. Mohamed Aziz at the American University of the Caribbean to train pathologists in Rwanda and Kenya on specialized diagnostic techniques for women’s cancers through a virtual, two-part training program.

The first section of the course – focusing on breast pathology – was held in November 2020. Twenty-seven healthcare providers successfully completed all assignments and graduated from the course (Kenya - 9 and Rwanda - 18). All course graduates received 40 continuing professional development units from the College of Pathologists of East, Central, and Southern Africa. The second component of the course, which focused on cervical cancer, was held in early 2021. Beyond the virtual lectures, Dr. Aziz provided online mentorship to the East African trainees. This virtual mentorship is already bearing fruit, with one Rwandan pathologist co-authoring a case publication.

“I have gained skills to morphologically distinguish fibroepithelial lesions and spindle cell lesions of the breast. This morphology-based diagnosis, rather than being dependent upon immunohistochemistry (IHC), is very important since IHC is sometimes limited in our setting.”

- Course graduate
Program Spotlight

On-Site Trainings and Consultations

In addition to the AAI Virtual Training Series, BVGH coordinated on-site trainings and consultations.

At the Machakos Cancer Care and Research Center (MCCRC) in Kenya, and in partnership with the American Society for Clinical Pathology and Pathologists Overseas, a histotechnologist worked with the MCCRC laboratory team to develop a quality improvement plan, provide hands-on training, and maintain ongoing virtual mentorship.

BVGH also supported the Jaramogi Oginga Odinga Teaching and Referral Hospital and Maseno University in Kenya to develop a robust business plan for the procurement of a linear accelerator, as part of the center’s plans to build a comprehensive cancer center. The business plan forecasts the costs and revenues associated with this endeavor, examines risks and pitfalls, and offers various financial models for how this project can reach profitability and sustainability in the long-term.
Addressing the Cancer Data Gap in Africa through Clinical Trials

High-income countries have been able to make significant progress against cancer mortality due, in part, to advancements in medicines emerging from clinical trials. To date, the vast majority of cancer clinical trials have taken place in North America and Europe – resulting in longstanding inequities that affect populations in low- and middle-income countries. Relatively little is known about the safety and efficacy of cancer medicines against Africans’ unique tumor biologies due to Africa’s underrepresentation in clinical trials.

In order to address this data gap, BVGH launched the African Consortium for Cancer Clinical Trials (AC\textsuperscript{3}T) with support from Takeda Pharmaceutical Co. Ltd., which aims to develop African hospitals’ clinical trial capabilities and catalyze their involvement in cancer clinical trials initiated by principal investigators and private industry around the globe.

Catalyzing Involvement in Clinical Trials around the World

In early 2020, BVGH launched the AC\textsuperscript{3}T Online Platform, an innovative online database that showcases hospitals’ clinical trial capabilities – from research and staff experience to systems and data management. The database enables external investigators to review and select promising sites for collaboration.

The profiles of 40+ institutes – including research centers and private and public hospitals – have been published on the AC\textsuperscript{3}T Online Platform.

Knowledge Exchange

The AC\textsuperscript{3}T profiles published to date demonstrate the range of clinical trial skills, infrastructure, and experience in Africa. To position sites to lead their own investigator-initiated studies, BVGH partnered with global clinical trial experts to build clinical trial capacity in Africa.

BVGH established a one-on-one virtual knowledge exchange program with Takeda scientists to support African oncologists conducting clinical research. The program has supported critical and foundational research processes, including clinical trial design, protocol development, biostatistics and sample sizing, patient recruitment, and budgeting processes in Rwanda.

Program Spotlight

Prostate Cancer Clinical Trial

With the mentorship of Takeda research experts, Rwandan oncologist Dr. Achille Manirakiza is preparing to study the efficacy of a cost-effective regimen in non-metastatic, castration-resistant prostate cancer patients. If successful, the study will lead to new, more affordable alternatives to treating prostate cancer patients.
Strengthening Healthcare Infrastructure and Developing Markets

AAI programming is designed by Africa – for Africa. All activities are directed by our in-country partners and key stakeholders and are focused on strengthening healthcare systems and markets in order to minimize inefficiencies and remove barriers that prevent patients from accessing cancer care.

African healthcare systems and markets are undergoing a massive shift as urbanization leads to more household purchasing power and quicker adoption of modern medicines. As such, the purchasing power of the African pharmaceutical market is climbing. BVGH develops custom reports to help pharmaceutical companies understand what drives growth on the continent, what challenges companies are likely to face when entering African markets for the first time, and how to work collaboratively within African healthcare systems.

In addition to generating in-depth market assessments and policy-shaping reports, BVGH works with AAI partner hospitals to address immediate gaps in healthcare infrastructure.

BVGH coordinated the placement of equipment and consumables at hospitals in 2020 that will enable the sites to properly diagnose and stage cancers, including:

- Pipelle placement for improved endometrial biopsy sampling in Rwanda
- Glass containers at Machakos Cancer Care and Research Center in Kenya to enable the pathology laboratory to process tissues overnight

Photo: University Hospital Center Treichville in Côte d’Ivoire
Program Spotlight

Cervical Cancer Educate, Screen, and Treat (EST)

Program in Rwanda

In partnership with the Rwandan Ministry of Health and Rwanda Biomedical Centre, BVGH developed its Cervical Cancer Educate, Screen, and Treat (EST) Program.

This program will bring necessary diagnostic equipment, training, and treatment techniques for pre-cancerous cervical lesions to five Rwandan district hospitals and more than 60 health centers across the country.

Following careful consideration of the COVID-19 pandemic, BVGH has restructured the program to screen 23,000 women for cervical cancer in a safe and socially-distant manner beginning in 2021. This initiative is made possible by generous contributions from Johnson & Johnson, GardaWorld, and Faber Daeufer & Itrato PC.

The EST Program will be launched in the following districts and health facilities:

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<th># health facilities</th>
<th># eligible women</th>
<th># women screened</th>
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Over 1,300 women develop cervical cancer in Rwanda every year

71% of women with cervical cancer die of the disease
Expanding Awareness of Cancer in Africa

Despite having dedicated, national-level cancer control programs, many African countries’ general populations have limited awareness about cancer, resulting in many patients presenting at late-stages of disease when treatment options are limited and prognoses are poor.

BVGH is expanding cancer awareness in Africa by organizing panel discussions and educational opportunities that address both the patient and provider perspectives of cancer patient management. In 2020, BVGH arranged a presentation of its first-of-its-kind program focused on improving Northern Nigeria’s access to affordable, gold-standard cancer drugs manufactured by multinational pharmaceutical companies.

BVGH’s access program was presented by Dr. Faruk Mohammed, BVGH’s partner and a cancer scientist at the Ahmadu Bello University Teaching Hospital. The presentation was hosted at the Skoll World Forum, which convenes influential social entrepreneurs, key thought leaders, and strategic partners to tackle issues of large-scale social change.

Dr. Tolulope Adewole, Chief Executive Officer of the NSIA-LUTH Cancer Center (NLCC) in Nigeria and NLCC oncologists presented their cancer center’s goals and capabilities for providing world-class cancer care comparable to what is offered in North America and Europe during the Society for Immunotherapy of Cancer (SITC) Global Access to Cancer Immunotherapy: Closing the Gaps digital workshop. NLCC recognizes immunotherapies as the next frontier in cancer treatment and is one of several African hospitals that is positioning itself to offer immunotherapy services to patients.

“Programs like AAI that enable affordable access to cancer drugs will revolutionize the services we are able to offer our patients.”

Dr. Faruk Mohammed
Cancer Scientist
Ahmadu Bello University Teaching Hospital, Nigeria

“Our goal is with more awareness and success stories, our patients will begin coming in with earlier stage disease.”

Dr. Tolulope Adewole
CEO
NSIA-LUTH Cancer Center, Nigeria
AAI Highlights and Impact

**February 2020**
Managed procurement, supply chain, and delivery of drugs to treat 1,000+ women with breast and cervical cancer in the DRC.

Advanced, in-person pathology training at PhenoPath/Quest Diagnostics for Côte d’Ivoire clinicians.

**April 2020**
Trained 85 Nigerian clinicians on cancer diagnosis and advanced pathology techniques in partnership with ASCP.

Presentation of Northern Nigeria drug access program at the 2020 Skoll World Forum.

**June 2020**
AC'I featured in a JCO Global Oncology publication.

Worked with industry experts to develop a business plan to build and operate a radiotherapy cancer center in Kenya.

**July 2020**
AAI cancer drug access program presented at the 9th Annual Symposium on Global Cancer Research at CUGH.

**October 2020**
8-week training program on oncology nursing skills for 560 Francophone nurses.

Coordinated IMRT training for 115 radiation oncologists and medical physicists with Rayos Contra Cancer.

Conducted an 8-week prostate cancer surgery program for 110 Francophone surgeons and urologists.

30 Rwandan & Kenyan pathologists trained on breast cancer pathology techniques.

**January 2020**
Conducted programs to improve histopathology capacity in Kenya.

Launched AC’I Online Platform featuring the clinical trial capacities of 40+ African institutes.

**March 2020**
Hands-on ENT surgical training observership in Senegal.

**May 2020**
Training program on advanced lymphoma pathology in Nigeria.

Training program on gastrointestinal cancer pathology in Kenya.

**July 2020**
AAI cancer drug access program presented at the 9th Annual Symposium on Global Cancer Research at CUGH.

**September 2020**
7-week oncology training program for 60 gynecologists in Rwanda.

Trained 430 Francophone pathologists on advanced diagnostic pathology methods.

**November 2020**
Managed procurement and delivery of multiple drugs to treat 450+ patients with breast, hematologic, and pediatric cancer in Cameroon.

AAI pathology capacity building programs presented at the Kenya International Cancer Conference.

**December 2020**
Training program for Kenyan pathologists on the pathology of hematolymphoid lesions.

Keynote presentation at the SITC workshop: Global Access to Cancer Immunotherapy: Closing the Gaps.
AAI is made possible with the partnership and commitment of our member country governments and hospitals, and the generous support of our private industry partners, philanthropists, foundations, and nonprofit collaborators.

To learn more about AAI and to get involved, please contact Katy Graef at kgraef@bvgh.org.