One Health and Low-Carbon Development towards Innovation-Driven Sustainable Future



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As we all know, the world we are living in today is facing significant challenges with issues like climate change, environmental pollution, and the COVID pandemic wreaking havoc on global health. Each year, an estimated 5million people die from extreme weather and a further 8.7 million deaths are associated with air pollution.

In this context, China's adoption of "Healthy China 2030" and "Dual Carbon Goals" initiatives not only demonstrates China's commitment to sustainable development, but also brings us greater confidence that we can tackle these global challenges together.

As a leading German biopharmaceutical company with a 27-year history in China, Boehringer Ingelheim is very honored to participate in this progress and share our experience. Particular attention is paid to three pillars, namely More health, More Green and More Potential, highlighted by the "Sustainable Development—for Generations" strategy.

1 Operationalize One Health Approach to Achieve "More Health" for People and Animals

Let's start with the first pillar: One Health approach and More Health for people and animals. The lives of humans and animals are interconnected in profound and complex ways. Over 75% of the emerging human infectious diseases are zoonotic, transmitted from animals to humans. Therefore, rather than focusing on human

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or animal health independently, we should understand health in a holistic view, addressing the health needs of both humans and animals, as well as their shared environment. That is what we mean by "One Health" approach.

At BI, we firmly embrace this concept and work ceaselessly over the past 136 years to improve both the health of humans and animals. In terms of human health, BI has developed novel therapies to help millions of patients suffering from respiratory diseases, oncology, cardiometabolic diseases and central nervous system disorders. Regarding animal health, BI has become the second-largest animal health business in the world since 2017 and ranks no.1 for swine, pet parasiticides and horses.

Beyond building on our strengths in these two areas, we aim to drive meaningful impact and deliver more health benefits by creating synergies and exploring unified scientific platforms.

2 Embrace Low-Carbon Development to Realize "More Green" for Planet

Now, let's move to the second pillar: low carbon development and More Green for the planet. Considering the 50 billion tons of greenhouse gas emissions per year, the decarbonization of industry has become increasingly imperative. Our pharmaceutical industry, as a critical development pillar, should take the responsibility and embed low-carbon development into the entire value chain.

At BI, we are committed to achieving carbon neutrality in operations by 2030 and in comprehensive value chain by 2040, and various actions have already been taken. For example, BI China launched BE GREEN program 10 years ago and has been optimizing our energy structure and building up photovoltaic power stations ever since. This year in 2021, BI China has cumulatively reduced carbon emissions by approximately 2000 metric tons and has become the 1st pharmaceutical company to be certified with the Waste Zero Landfill Management System.

3 Capitalize Innovation to Create "More Potential" for Healthy and Sustainable Communities

The third pillar, harnessing the value of innovation, offers More Potential for healthy sustainability. This is the most important one for communities in my personal opinion. Innovation could provide enduring impetus for public health, economic upgrading and sustainable development. With a corporate vision of delivering "Value through Innovation", BI has integrated innovative efforts throughout the entire lifecycle of our business.

In early-stage drug discovery, we supplement our in-house expertise by cooperating with academic institutions and other companies to co-develop scientific innovations. Integrating Research Beyond Borders, business development and licensing and venture capital, we dedicated to providing one-stop innovation collaboration solutions for innovators in China and Asia.

In clinical development, by including China in all early phases of global clinical trials, we have become the first multinational pharmaceutical company to transform this aspiration into reality. More importantly, through collaboration with our strategic hospital partners in China, we aim to accelerate new drug development to ultimately benefits Chinese patients.

On the commercial aspect, BI is the first international service provider of biopharmaceutical contract development and manufacturing solutions in China, providing Chinese biopharmaceutical companies with entire production chain from DNA to Fill and Finish by leveraging our global network.

Moreover, BI is actively adopting the latest digital technologies and solutions across the chain. For example, we have established the "BI X" digital lab in China to explore disruptive solutions for digital healthcare.

In one of our focus therapeutic areas—stroke care, we brought in an innovative disease management approach called "Total Stroke Solution" and already established one and preparing a second German gold-standard stroke rehabilitation center in China. This innovative health solution provides management of the whole patient journey, covering prevention, disease education, testing, first aid, diagnosis, treatment, and rehabilitation.

4 Policy Suggestions for the Health Innovation Ecosystem Upgrade

All these innovation efforts that BI has made wouldn't have been possible without the healthy and evolving innovation ecosystem in China. Since entering China in 1994, BI is excited to have contributed to and benefit from the development of China's healthcare innovation ecosystem. We sincerely look forward to seeing its continuous improvement in the following two aspects.

First, "protecting innovation". We believe that a robust intellectual property (IP) protection system is the cornerstone for innovation. In addition to an established legislative and regulatory framework, stronger enforcement and more coordinated interagency efforts are even more critical. It has also become more vital for China to benchmark its IP protection system with international standards, which will protect not only the foreign players in China but also Chinese companies in expanding their business into the global markets.

Second, "rewarding innovation". We believe it is critical to strike a balance between the patient accessibility and the funding for innovation. As China moves forward to improve the accessibility and affordability of universal healthcare, it 94 P. Dobrocky

is expected to optimize the mechanism and strengthen the industry's incentive for further investment in innovation in China.

5 Sustainable Development at Our Heart

As a family-owned company, we took a long-term and holistic perspective, establishing long-term growth goals. BI will stand ready to improve human and animal health in China and work closely with all stakeholders across the sector to continue this momentum. Together in partnership, we could deliver innovative health solutions faster and better, and create a healthier, greener, and more sustainable future for generations to come.